

REPRODUCIBLE

Chapter 3: Principles of Learning

1. Learners actively use sensory inputs to construct knowledge and create meaning by connecting it to their prior knowledge and experiences.	
When working with teachers, coaches:	<ul style="list-style-type: none"> Engage adult learners in experiences that encourage their personal construction of knowledge and are personally meaningful
	<ul style="list-style-type: none"> Ensure that teachers are invited or challenged to build on prior knowledge, integrating new understandings with existing understandings
	<ul style="list-style-type: none"> Recognize, value, and use the great diversity of experiences and information teachers bring to the learning
	<ul style="list-style-type: none"> Get to know teachers—that is, know the content, pedagogical, and interpersonal needs of your colleagues and try to gauge how your adult learner colleagues work with children
2. Tasks are appropriate, relevant, practical, and problem or inquiry based.	
When working with teachers, coaches:	<ul style="list-style-type: none"> Recognize that learners are motivated by a problem-centered approach
	<ul style="list-style-type: none"> Understand that learning needs to be relevant for them; build this into your professional learning plans
	<ul style="list-style-type: none"> Create environments and plan experiences that foster investigating, questioning, predicting, exploring, collecting, and communicating
3. Learning takes place in a collaborative, supportive, and respectful environment.	
When working with teachers, coaches:	<ul style="list-style-type: none"> Provide learning opportunities that respect and support teachers' racial, cultural, and social identities
	<ul style="list-style-type: none"> Provide lead-time and an opportunity to discuss upcoming professional learning opportunities you will be providing
	<ul style="list-style-type: none"> Ensure that talk and collaborative ventures are central to coaching interactions and provide frequent opportunities to learn from and with other teachers
	<ul style="list-style-type: none"> Help teachers to see themselves as members of a community of learners
4. Learners see themselves as capable owners of their learning, building identity and agency as mathematicians.	
When working with teachers, coaches:	<ul style="list-style-type: none"> Provide activities, resources, and challenges that are at the next step in a teacher's professional development
	<ul style="list-style-type: none"> Communicate high expectations for teachers
	<ul style="list-style-type: none"> Encourage risk taking in learning and value experimentation
	<ul style="list-style-type: none"> Ensure that teachers experience and celebrate genuine success on a regular basis
	<ul style="list-style-type: none"> Provide learning experiences and resources that reflect the diversity of the local and global community

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5. Learners are provided with a variety of ways to acquire and represent knowledge and understanding.


When working with teachers, coaches:	<ul style="list-style-type: none"> Recognize each learner's preferred ways of constructing meaning and provide opportunities for exploring alternative ways
	<ul style="list-style-type: none"> Plan a wide variety of open-ended experiences
	<ul style="list-style-type: none"> Recognize, acknowledge, and build on teachers' diverse ways of knowing and representing their knowledge
	<ul style="list-style-type: none"> Plan opportunities to help teachers make connections across the curriculum and with the world outside and to solve problems in real situations

6. Learners receive regular, timely, specific, and actionable feedback.

When working with teachers, coaches:	<ul style="list-style-type: none"> Regularly build time for discussion and feedback into the interactions planned with teachers while accounting for the teachers' readiness to adopt change
	<ul style="list-style-type: none"> Discuss rules and/or norms regarding feedback in advance, so everyone is able to see feedback as a gift that will serve their growth
	<ul style="list-style-type: none"> Understand the purpose of the feedback and deliver the feedback with a specific, yet neutral and nonjudgmental approach
	<ul style="list-style-type: none"> Be open to questions
	<ul style="list-style-type: none"> Provide the time and space the teacher may need to process the feedback
	<ul style="list-style-type: none"> If a feedback session is not going well, rely on your interpersonal skills to attend to the relationship

7. Learners are given the time and encouragement required to reflect, monitor, and adjust their thinking and reasoning.

When working with teachers, coaches:	<ul style="list-style-type: none"> Challenge teachers to examine their own beliefs and practices based on continuous reflection
	<ul style="list-style-type: none"> Encourage teachers to reflect on their learning processes and experiences
	<ul style="list-style-type: none"> Encourage teachers to acknowledge and articulate their learnings
	<ul style="list-style-type: none"> Help teachers use their reflections to understand themselves as learners and make connections with other learnings
	<ul style="list-style-type: none"> Reflect on their own learning processes and experiences

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