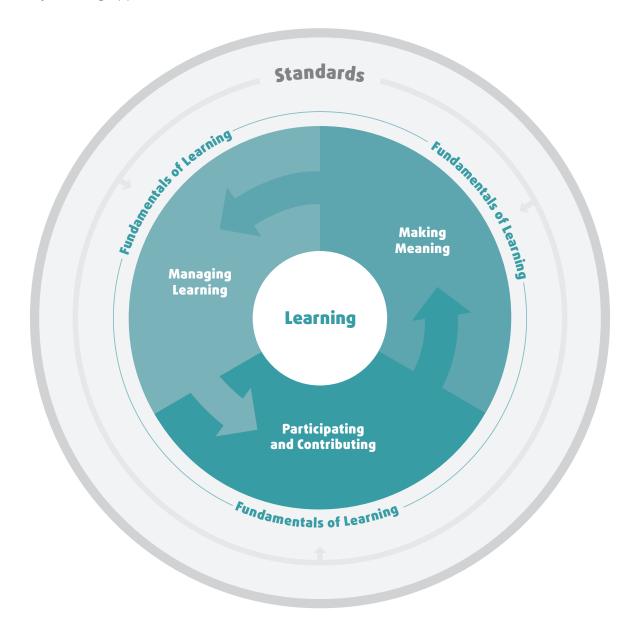
# FUNDAMENTALS OF LEARNING: STRUCTURING STUDENT LEARNING FOR FORMATIVE ASSESSMENT<sup>1</sup>

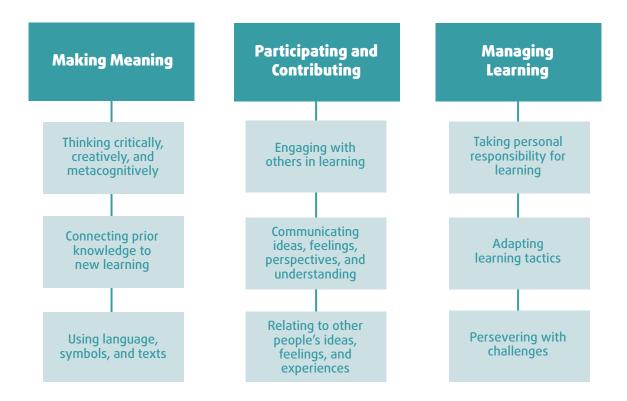
Three interdependent core ideas about learning provide a practical framework for thinking about how to structure student learning for formative assessment. We will refer to these ideas as the Fundamentals of Learning. They are the means through which students reach the Content Standards during their daily learning opportunities in the classroom.



<sup>&</sup>lt;sup>1</sup>Adapted from resources produced by the Center on Standards and Assessment Implementation and the Ministry of Education, New Zealand. See "Additional Resources" for more information.



Each of the Fundamentals has three main components that are foundational to learning. Formative assessment helps students engage in each one.



#### **Meaning Making**

Thinking critically, creatively, and metacognitively. When students use these thinking skills, they can evaluate information, reason, solve problems, analyze and construct arguments, make decisions, and take control of their own learning.

Connecting prior knowledge to new learning. When students are making meaning, they draw on their prior knowledge by asking themselves what they already know about a topic or concept and how this knowledge connects to what they are currently learning. As they activate this prior knowledge, it becomes the basis for creating new knowledge.

Using language, symbols, and texts. Students also make meaning of the different ways that knowledge is expressed. We use languages and symbols to represent and communicate information, experiences, and ideas, and we do this by creating a variety of different kinds of texts.



As you integrate formative assessment into your classroom practice, you gather evidence of how students are making meaning during the lesson. Once you know where they are in their learning, you can figure out how best to keep them on track.

### **Participating and Contributing**

Engaging with others in learning. When students learn together with others, they collaborate, discuss their ideas, share their interpretations, and obtain feedback. By explaining, clarifying, and critiquing their own and others' ideas, students become more engaged, and they develop a sense of belonging and shared responsibility for learning.

Communicating ideas, feelings, perspectives, and understanding. Students learn best when they have opportunities to communicate their ideas, feelings, perspectives, and understanding. Through thoughtful, extended discourse, by making suggestions, and by expressing their opinions and understanding, students actively participate in their learning and the learning of others.

Relating to other people's ideas, feelings, and experiences. By listening to others, by reading what others have written, by observing others, and by being open to others' viewpoints, students can develop empathy and benefit from learning that might be outside their experience.



As you integrate formative assessment into your classroom practice, you will see that you can obtain important insights into student thinking by observing and listening as students engage with others in learning.

## **Managing Learning**

Taking personal responsibility for learning. Managing learning means being self-directed and taking initiative, and students who do this see themselves as active, capable learners. They develop confidence to work on increasingly complex problems and take risks during the learning process. When working with others, they know when to lead, when to follow, and when and how to act independently.

Adapting learning tactics. Students who manage themselves are mindful, resourceful, reliable, and resilient. They establish personal goals, make plans, monitor their progress, and adapt their learning tactics when they need to.

Persevering with challenges. When students manage their own learning, they develop strategies for meeting challenges, and they gain satisfaction from persevering to meet the high expectations they set for themselves.



A primary goal of formative assessment is to involve students in the management of their own learning. When students understand where they are in their learning, they are better able to decide where they need to go next and to work out what steps to take to get there.



#### **Additional Resources**

Heritage, M., Jones, B., Tobiason, G., Chang, S., & Herman, J. (2014). Fundamentals of Learning. Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing. Retrieved from http://www.csai-online.org/sites/default/files/resources/3040/ Fundamentals\_of\_Learning\_v31.pdf

Key Competencies. (2014, April 4). Retrieved from http://nzcurriculum.tki.org.nz/Keycompetencies

My Refle	ections			