

Developing 21st Century Approaches

Watch two participants model the exercise before doing this as a whole group.

Exercise 2: Accepting Change

Now you and a partner will participate in an exercise about change. Listen to learn more about the exercise.

Change is a natural phenomenon, whether one likes it or not. However desirable change may be, it disrupts the normal state of affairs. Disruption is an essential element of growth. Look at the following table. Think about the various stages of change.

Stage of Change	Description of Stage
Awareness	People have had contact with the change. They know about it generally, without much detail.
<i>People must learn about change before they accept it.</i>	
Acceptance	People understand the details and have the opportunity to ask questions and toy with what the change will mean to them.
<i>DECISION POINT: People resist or accept the change.</i>	
Preparation	People are actively involved in deciding on and designing both the changes and the new behaviors that will be required.
Implementation	Change is actualized.
Adoption	After experiencing the change, people adopt it and are skilled enough in new behaviors not to need coaching for routine functions.
<i>People accept and commit to the change.</i>	

Excerpt from the *Handbook of Human Performance Technology*.

Exercise 3: Promoting Key Skills

Technology literacy, critical thinking, and collaboration are three broad areas of core skills that should be developed in 21st century classrooms. However, the question of how to teach 21st century skills is best answered by describing the characteristics of learning environments in which students can develop these skills. Effective learning environments for promoting 21st century skills often include the following core elements, all of which are also features of the Intel® Teach Getting Started Course.³

Developing 21st Century Approaches

- **Thematic instruction:** In thematic instruction, a set of exercises or activities focuses on a big idea or broad concept. A theme allows for the application of a wide variety of skills and the deepening, integration, and development of new knowledge.

What could be considered the theme of the exercises or activities featured in Getting Started?

- **Relevance:** Content that is relevant to the context of students' lives leads students to deeper engagement and deeper thinking. Relevance is enhanced by instruction that helps students draw connections between what they are learning and how they can put the knowledge to use, especially in developing solutions to challenges facing them or their communities.

In what ways has the content featured in Getting Started been relevant to you?

- **Active exploration:** Students are better prepared to acquire and remember new information, strategies, or skills once they have spent time exploring a challenge or problem for themselves—that is, without receiving explicit directions or answers at the outset of a lesson.

What opportunities for active exploration have been afforded to you in Getting Started?

Developing 21st Century Approaches

- **Choice and autonomy:** An environment that supports the development of 21st century skills provides students with a measure of choice in the activities they undertake, the strategies and tools they use, and the creative aspects of their plans, projects, or designs.

What opportunities for choice and autonomy have been afforded to you in Getting Started?

- **Cycles of creation:** Students' ability to use technology effectively, think critically, and collaborate meaningfully with others takes place best in a cycle of generating and improving their work—a cycle in which students plan, execute, revise, reflect on, and share their insights about the product or solution they are developing.

What cycles of creation have you experienced in Getting Started?

- **Authentic feedback:** In 21st century learning environments, students work on activities or projects that have no single, specific answers. Instead, students must assess their own work in relation to how well it serves the purposes for which it was intended. Feedback from teachers and peers helps students improve their work and develop their own critical perspective on it. Learning to give useful feedback to others also develops a student's critical thinking and collaboration capacity.

What opportunities for authentic feedback occur in Getting Started?

Developing 21st Century Approaches

- **Teacher as facilitator:** Rather than serving exclusively as an expert who provides information, the 21st century teacher facilitates students' own research, development and application of skills, and creation of original work products. The teacher as facilitator helps students actively build on their own strengths and incorporate their own interests into their work.

What examples of teacher as facilitator can be found in Getting Started?

³The characteristics of 21st century learning environments described in this section are from SRI International's *Review of Evaluation Findings for the Intel® Learn Program*, available at <http://ctl.sri.com/projects/displayProject.jsp?Nick=intellearn>. Used with permission.

Take-Home Exercise: Reflecting on Module 10

Reflect on the exercises, activities, skills, and approaches addressed in this module. Record your answers to the following questions and be prepared to share your answers at the beginning of the next module.

1. Which facilitation skills are you most interested in using with your students? How might the approaches support student learning?

2. Which 21st century, student-centered approaches might you accept or resist? Why? What additional information or experiences might you require before deciding? People must learn about change before they accept it.
