



TIM: Transformation Level of Technology Integration

This table contains the extended descriptors for Transformation level on the Technology Integration Matrix (TIM).

At the Transformation level, students use technology tools flexibly to achieve specific learning outcomes. The students have a conceptual understanding of the tools coupled with extensive practical knowledge about their use. Students apply that understanding and knowledge, and students may extend the use of technology tools. They are encouraged to use technology tools in unconventional ways and are self-directed in combining the use of various tools. The teacher serves as a guide, mentor, and model in the use of technology. At this level, technology tools are often used to facilitate higher order learning activities that would not otherwise have been possible, or would have been difficult to accomplish without the use of technology. Extended descriptors are provided below.

ACTIVE LEARNING <i>at the</i> Transformation Level	<p>Students. Students have options on how and why to use different technology tools, and often extend the use of tools in unconventional ways. Students are focused on what they are able to do with the technology. The technology tools become an invisible part of the learning.</p> <p>Teacher. The teacher serves as a guide, mentor, and model in the use of technology. The teacher encourages and supports the active engagement of students with technology resources. The teacher facilitates lessons in which students are engaged in higher order learning activities that may not have been possible without the use of technology tools. The teacher helps students locate appropriate resources to support student choices.</p> <p>Setting. The arrangement of the setting is flexible and varied, allowing different kinds of self-directed learning activities supported by various technologies, including robust access to online resources for all students simultaneously.</p>
COLLABORATIVE LEARNING <i>at the</i> Transformation Level	<p>Students. Students regularly use technology tools for collaboration, to work with peers and experts irrespective of time zone or physical distances.</p> <p>Teacher. The teacher seeks partnerships outside of the setting to allow students to access experts and peers in other locations, and encourages students to extend the use of collaborative technology tools in higher order learning activities that may not have been possible without the use of technology tools.</p> <p>Setting. Technology tools in this setting connect to text, voice, and video chat applications and network access has sufficient bandwidth to support the use of these technologies for all students simultaneously</p>
CONSTRUCTIVE LEARNING <i>at the</i> Transformation Level	<p>Students. Students use technology to construct and share knowledge in ways that may have been impossible without technology. They have a deep understanding of the technology tools that allows them to explore and extend the use of the tools to construct meaning.</p> <p>Teacher. The teacher facilitates higher order learning opportunities in which students regularly engage in activities that may have been impossible to achieve without the use of technology tools. The teacher encourages students to explore the use of technology tools in unconventional ways and to use the full capacity of multiple tools in order to build knowledge.</p> <p>Setting. The setting includes robust access to a wide variety of technology tools, robust access to online resources and communities, and the ability to publish new content online.</p>
AUTHENTIC LEARNING <i>at the</i> Transformation Level	<p>Students. Students explore and extend the use of technology tools to participate in projects and higher order learning activities that have meaning outside of school. Students regularly engage in these types of activities that may have been impossible to achieve without technology.</p> <p>Teacher. The teacher encourages innovative use of technology tools in higher order learning activities that support connections to the lives of the students and the world beyond the instructional setting.</p> <p>Setting. The setting includes technology tools and online resources that allow for student engagement with the local or global communities. A variety of technology tools are available with robust access for all students simultaneously to information outside of the school and primary source materials.</p>
GOAL-DIRECTED LEARNING <i>at the</i> Transformation Level	<p>Students. Students engage in ongoing metacognitive activities at a level that may have been unattainable without the support of technology tools. Students are empowered to extend the use of technology tools and have greater ownership and responsibility for learning.</p> <p>Teacher. The teacher creates a rich learning environment in which students regularly engage in higher order planning activities that may have been impossible to achieve without technology. The teacher sets a context in which students are encouraged to use technology tools in unconventional ways that best enable them to monitor their own learning.</p> <p>Setting. The setting includes access to a wide variety of technology tools and robust access to online resources for all students simultaneously.</p>