## Technology Integration Matrix

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<tr>
<th>Characteristics of the Learning Environment</th>
<th>Levels of Technology Integration into the Curriculum</th>
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<tbody>
<tr>
<td><strong>Entry:</strong> The teacher uses technology to deliver curriculum content to students.</td>
<td><strong>Adoption:</strong> The teacher directs students in the conventional use of tool-based software. If such software is available, this level is the recommended entry point.</td>
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<tr>
<td><strong>Active:</strong> Students are actively engaged in using technology as a tool rather than passively receiving information from the technology.</td>
<td><strong>Adaptation:</strong> The teacher encourages adaptation of tool-based software by allowing students to select a tool and modify its use to accomplish the task at hand.</td>
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<tr>
<td><strong>Collaborative:</strong> Students use technology tools to collaborate with others rather than working individually at all times.</td>
<td><strong>Infusion:</strong> The teacher creates a learning environment that infuses the power of technology tools throughout the day and across subject areas.</td>
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<tr>
<td><strong>Constructive:</strong> Students use technology tools to build understanding rather than simply receive information.</td>
<td><strong>Transformation:</strong> The teacher creates a rich learning environment in which students regularly engage in activities that would have been impossible to achieve without technology.</td>
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<td><strong>Authentic:</strong> Students use technology tools to solve real-world problems meaningful to them rather than working on artificial assignments.</td>
<td><strong>Goal Directed:</strong> Students use technology tools to set goals, plan activities, monitor progress, and evaluate results rather than simply completing assignments without reflection.</td>
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### Levels of Technology Integration into the Curriculum

**Entry:**
- The teacher uses technology to deliver curriculum content to students.

**Adoption:**
- Students begin to utilize technology tools to create products, for example using a word processor to create a report.

**Adaptation:**
- Students have opportunities to select and modify technology tools to accomplish specific purposes, for example using colored cells on a spreadsheet to plan a garden.

**Infusion:**
- Throughout the day, students are empowered to select appropriate technology tools and actively apply them to the tasks at hand.

**Transformation:**
- Given ongoing access to online resources, students actively select and pursue topics beyond the limitations of even the best school library.

### Characteristics of the Learning Environment

**Active:**
- Students primarily work alone when using technology.

**Collaborative:**
- Students have opportunities to utilize collaborative tools, such as email, in conventional ways.

**Constructive:**
- Technology is used to deliver information to students.

**Authentic:**
- Students have opportunities to apply technology tools to some content-specific activities that are based on real-world problems.

**Goal Directed:**
- From time to time, students have the opportunity to use technology to either plan, monitor, or evaluate an activity.

**Adoption:**
- Students have opportunities to select and modify technology tools to facilitate collaborative work.

**Infusion:**
- Students utilize technology to make connections and construct understanding across disciplines and throughout the day.

**Transformation:**
- Students use technology to construct, share, and publish knowledge to a worldwide audience.

**Entry:**
- By means of technology tools, students participate in outside-of-school projects and problem-solving activities that have meaning for the students and the community.

**Adoption:**
- Students select appropriate technology tools to complete authentic tasks across disciplines.

**Infusion:**
- Students use technology tools to set goals, plan activities, monitor progress, and evaluate results throughout the curriculum.

**Transformation:**
- Students engage in ongoing metacognitive activities at a level that would be unattainable without the support of technology tools.