### Practical ideas to support teaching and learning in a digitally rich learning environment

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<th>Complexity</th>
<th>Practising</th>
<th>Identifying</th>
<th>Reflecting</th>
<th>Personalising</th>
<th>Gathering</th>
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<th>Digital storytelling</th>
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<tbody>
<tr>
<td></td>
<td>Students record practise oral presentations with a digital audio recorder to reflect upon and analyse for fluency and expression.</td>
<td>Students use a digital camera to take photos of practical examples of key measurement and geometry concepts in the local school environment.</td>
<td>Students use a webcam to record a video reflection and upload to an edTube gallery to share with peers.</td>
<td>Students access teacher-created instructional tutorials on mobile or personal media devices encouraging self-directed and personalised learning.</td>
<td>Students use GPS-capable digital cameras to tag images as part of longitudinal investigations or scientific data collection.</td>
<td>With a partner, students use personal video cameras to capture demonstrations of competencies in manual arts for assessment.</td>
<td>Students use digital cameras to capture images to create a comic in Microsoft PowerPoint®.</td>
<td>Students use a digital camera with a green screen to create contextualised scenes to create a digital story in Microsoft Movie Maker® or Microsoft PhotoStory®.</td>
<td>Students use a document camera to share ideas or findings with peers over iConnect web conferencing as part of a cross-school collaborative online project.</td>
<td>Students produce and share audio advertisements or radio plays with sound effects using a digital voice recorder to demonstrate understanding of curriculum concepts.</td>
<td>Students use robotics equipment and work in groups to participate in programming challenges, apply knowledge of measurement or to develop oral language competencies.</td>
<td>Students create digital book trailers using Microsoft PowerPoint®, export as a video with narration and publish to edTube to share with peers.</td>
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<td></td>
<td>Sharing</td>
<td>Studying characters</td>
<td>Recording</td>
<td>Creating</td>
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<td>Students share their work on their laptop with peers using an interactive whiteboard.</td>
<td>Students use their webcam and avatar-creation software to record a monologue privileging the voice of a marginalised character or historical figure.</td>
<td>Students use digital microscopes to capture time-lapse photography to demonstrate key scientific concepts.</td>
<td>Students use handheld scanners to create interesting textures for use in visual art projects.</td>
<td>Students use a digital camera to record evidence and collate first-hand data to support an argument or position.</td>
<td>Students use a visualiser to record instructional tutorials for assessment in visual art or home economics or to demonstrate their understanding of procedural texts.</td>
<td>Students create digital book trailers using Microsoft PowerPoint®, export as a video with narration and publish to edTube to share with peers.</td>
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<td>Rehearsing</td>
<td>Digital storytelling</td>
<td>Providing evidence</td>
<td>Understanding</td>
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<td>Narrating</td>
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<td>Students use a digital video camera to capture rehearsals for dramatic performances and use for reflection and to make improvements.</td>
<td>Students take a series of photos with a digital camera and manipulate in Paint.NET to create a digital story, demonstrating visual literacy and to influence and position an audience.</td>
<td>Students use a scanner to take digital copies of hand-written work to add to their digital learning portfolios as evidence of their learning.</td>
<td>Students use an MP3 player with a multi-user audio adapter to engage with teacher-created instructional content.</td>
<td>Students engage with teacher-created interactive flash cards with images and pre-recorded video using Microsoft PowerPoint®.</td>
<td>Students use a pocket digital camera with a 360 degree lens to capture a physical space, save to their laptop and annotate planned modifications with Paint.NET.</td>
<td>Students use a digital camera to capture their own original images and use to tell a digital narrative using Microsoft PhotoStory®.</td>
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<td>Constructing</td>
<td>Collecting data</td>
<td>Annotating</td>
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<td>Students use digital tablets to accurately construct Asian language characters and annotate in a digital portfolio.</td>
<td>Students use data loggers to collect first-hand data to analyse and present in support of an argument or position.</td>
<td>Students use a digital camera to take photos of practical examples of key measurement and geometry concepts in the local school environment.</td>
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### Games-based learning
Students engage in play-based tasks or create their own games in order to develop knowledge and skills.

### Problem-based learning
Students work to solve challenging, real-world or life-like problems related to subject disciplines. Students leverage a range of traditional and digital tools to create and publish their work to state-wide audience using edTube and edStudio.

### Personalised learning community
Teams of teachers work together to facilitate a differentiated environment supported by dynamic learning spaces and eSpaces. Students create and publish digitally-rich products and continually demonstrate digital literacies and independently authenticate, critically evaluate and select relevant information and resources.

### Virtual roleplay
Students take on the role of a character or prominent figure and interact with others in an iConnect web conference or create a mock online profile within an edStudio.

### Peer tutoring
Students use expert peer tutors to develop aspects of their digital literacy and scaffold their completion of digital assessment tasks.

### Dialogue
After establishing working protocols, students participate in substantive conversations with peers using online discussion boards to develop and clarify understanding of concepts and receive constructive feedback.

### Online debate
Students engage in robust conversations to argue opinions and make decisions using the Learning Place student space blog tools. Students use hashtags to easily sort and access peer blogs relevant to their discussion.

### Digital learning portfolios
Students demonstrate their knowledge and skills by reflecting on their learning and adding artefacts to a digital portfolio. Students de-privatise their learning by sharing with peers, teachers and parents as part of student-led personalised learning conversations with explicit feedback.

### Backchannels
While engaging with teacher, peer or expert presentations or demonstrations, students contribute to a backchannel using the chat tools in an iConnect web conference to discuss relevant aspects, summarise key points or ask fellow audience members clarifying questions.

### Virtual field experiences
Students engage in virtual field trips through the Learning Place to participate in rich, real-world learning experiences.

### Group work
Students work in small groups where individuals are responsible for part of the learning, leveraging online resources and learning scaffolds. Students are responsible for teaching others in the group core knowledge and skills.

### Workshop
Students work over an extended period developing key competencies and digital literacies through intensive teaching, modelling and scaffolding. Students receive immediate feedback to promote sequential mastery of learning.

### Reverse instruction
Students develop core knowledge and skills for homework through teacher and student-captured explicit instruction, shared through edTube at the Learning Place. In-class, students focus on higher-order tasks, substantive conversations and monitoring assessment.

### Explicit instruction
Students engage with structured teacher modelling and delivery of core knowledge and skills enhanced by digital technology. Students are provided opportunity to practice and consolidate new competencies in different contexts.

### Drill and practice
Students develop understanding of essential knowledge through repetitive tasks supported by learning objects, online games or peer-created quizzes and interactive resources.

### Communicating with ICT

### Inquiring with ICT

### Higher-order thinking
Creating with ICT

### Skills and Knowledge

**Practical ideas for teaching in digitally rich environments**

**Simple**

**Complex**

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October 2011  
http://education.qld.gov.au/smartclassrooms