

# Accelerate Learning: How the Livescribe Pulse smartpen supports 21st century instruction



21st Century Skill Overview	Skill Details	How Pulse Enables Mastery of Skill(s)
Core Subjects	<ul style="list-style-type: none"> <li>• English, reading or language arts</li> <li>• World languages</li> <li>• Arts</li> <li>• Mathematics</li> <li>• Economics</li> <li>• Science</li> <li>• Geography</li> <li>• History</li> <li>• Government and Civics</li> </ul>	<ul style="list-style-type: none"> <li>• Pulse's core feature is Paper Replay, which links audio to handwriting. This allows students to capture the instruction of the teacher as well as their own thoughts and notes, and access them upon demand, as many times as needed to retain the information and use it functionally</li> </ul>
Learning & Innovation	Creativity and Innovation Communication & Collaboration	<ul style="list-style-type: none"> <li>• Pulse functions like regular pen and paper allowing students to employ a wide range of idea creation techniques including text, diagrams and pictures</li> <li>• Pulse captures both written and audio work allowing students to effectively develop both oral and written communication skills</li> <li>• The audio capture and "paper replay" features allow students to continuously develop, refine, and evaluate their own ideas in individual or group settings</li> <li>• The Livescribe Desktop and Community provides a means for extended collaboration as students can upload and share their notes as flash videos called "pencasts"</li> </ul>
Information, Media & Technology	<ul style="list-style-type: none"> <li>• Information Literacy</li> <li>• ICT Literacy</li> </ul>	<ul style="list-style-type: none"> <li>• Pulse Notebooks provides students with an easy, single-source solution to collecting and managing information from a variety of sources</li> <li>• There is little-to-no learning curve associated with the Pulse smartpen - If you can use pen and paper, you can use Pulse - making it a technology appropriate for all grade levels</li> </ul>
Life and Career Skills	<ul style="list-style-type: none"> <li>• Initiative and Self Direction</li> <li>• Productivity and Accountability</li> </ul>	<ul style="list-style-type: none"> <li>• Pulse provides a feedback mechanism so that students can actively participate in the learning process. The audio replay feature allows a teacher to provide "real-time" feedback to students to encourage self-monitoring</li> <li>• Pulse "paper replay" feature also provides students with the ability to reflect on past work in order to inform future progress</li> <li>• The Livescribe Desktop and Community provides students with an effective method for team collaboration and cooperation by allowing users to upload and share notes online</li> </ul>
21st Century Support Systems	<ul style="list-style-type: none"> <li>• Standards</li> <li>• Assessment</li> <li>• Curriculum and Instruction</li> <li>• Professional Development</li> <li>• Learning Environments</li> </ul>	<ul style="list-style-type: none"> <li>• Pulse provides educators and administrators with efficient monitoring and recording of student performance and progress for documentation purposes</li> <li>• Pulse provides means for capturing multiple measures of mastery and a balanced portfolio of measures [oral, written, graphical etc.] allowing for effective use of electronic portfolios</li> <li>• Pulse seamlessly integrates into the classroom- providing for immediate and useful feedback on performance that is embedded in everyday learning</li> <li>• Pulse cultivates teachers' ability to identify students' particular learning styles, intelligences, strengths and weaknesses through captured think-aloud activities</li> <li>• Pulse provides an effective method for embedded professional development and mentoring activities</li> <li>• Pulse and Livescribe Desktop enable educators to collaborate and share best practices</li> </ul>