

INTEGRATIVE INSTRUCTIONAL TOOLS for 21st CENTURY LEARNING

Inquiry	Problem-Based Learning	Project-Based Learning	Challenge-Based Learning	Design Process	The 4 C's Creativity Critical Thinking Collaboration Communication	Graphic Organizers + Visual Aids	Classroom Culture & Teaching Methods
<p>What is Inquiry? ARTICLE</p> <p>An Inquiry Primer ARTICLE</p> <p>Inquiry and Analysis Rubric</p> <p>The Keys to Inquiry ARTICLE</p> <p>Using "Think Time" and "Wait Time" Skillfully in the Classroom ARTICLE</p> <p>A Tool for Rethinking Questioning ARTICLE</p> <p>Asking Questions that Encourage Inquiry-Based Learning</p> <p>10 Facts About Inquiry-Based Learning VIDEO</p>	<p>Teaching Problem Finding Along with Problem Solving PODCAST</p> <p>Turning Kids into Problem Finders VIDEO</p> <p>How to Develop Students as Problem Finders ARTICLE</p> <p>Choose 2 Matter</p> <p>Sustainable Development Goals</p> <p>8 Ways to Spark Problem Finders POSTER</p> <p>Want to Kelp Kids Solve Problems? Have Them Design Their Own Solutions ARTICLE</p>	<p>Integrative STEM Education through Project-Based Learning ARTICLE</p> <p>High Tech High's Library of Project Examples</p> <p>Buck Institute for Education Project Learning Library</p> <p>Essential Project Design Elements Checklist</p> <p>Project-Based Learning: The 7s</p>	<p>Challenge Based Learning Guide</p>	<p>Design Thinking Process Guide</p> <p>Design Thinking for Educators Toolkit</p> <p>Innovator's Mindset ARTICLE</p> <p>Inventomania Booklet</p> <p>Inventomania Game Description</p> <p>Ready, Set, Design</p>	<p>The 4 C's Poster</p> <p>The 7 Norms of Collaborative Work ARTICLE</p> <p>7 Norms of Collaboration Poster</p> <p>Inside the Collaborative Classroom: The Core Principles ARTICLE</p> <p>Deeper Learning: A Collaborative Classroom is Key ARTICLE</p> <p>What can collaboration with students look like? ARTICLE</p> <p>Collaborative Teaching for Interdisciplinary Learning VIDEO</p> <p>The Seven Norms of Collaborative Work ARTICLE</p> <p>STEM Teachers in Professional Learning Communities: From Good Teachers to Great Teaching ARTICLE</p> <p>The Four C's Making 21st Century Education Happen VIDEO</p> <p>Thinking About Thinking ARTICLE</p>	<p>8 Mind Map Tools</p> <p>Top 10 Timeline Creation Tools</p> <p>Digital Poster Tools</p> <p>VISME</p> <p>Piktochart</p> <p>Canva</p> <p>Tackk</p> <p>ThingLink</p> <p>Buncee</p> <p>Smore</p> <p>Easel.ly</p> <p>21 Top Presentation Tools for Educators</p> <p>Ignite</p> <p>QFocus Graphic Organizer</p>	<p>Growth Mindsets for STEM Careers VIDEO</p> <p>Creating Space for Risk VIDEO</p> <p>Culture of Error ARTICLE</p> <p>Ability and Mathematics: The Mindset Revolution ARTICLE</p> <p>Boosting Math VIDEO</p> <p>Choice Boards</p> <p>Multiple Intelligences Self-Assessment Calendar</p> <p>The Learning Brain VIDEO</p> <p>Closing the Gap in STEM Education VIDEO</p> <p>Girls in STEM</p>

					<p>Cognitive Rigor Matrix</p> <p>Video Good Thinking! — That's so Meta(cognitive) VIDEO</p> <p>"Creativity is Not Innovation (But You Need Both)" ARTICLE</p> <p>"Innovation is NOT Creativity" ARTICLE</p> <p>"Creativity and Innovation: Your Keys to a Successful Organization" ARTICLE</p> <p>Metacognition: Learning about Learning</p> <p>Cooperation vs. Collaboration VIDEO</p>		
Integrative Assessment Tools				Integrative Curriculum	Differentiated Instruction	Career Exploration	
<p>Critical Friends VIDEO</p> <p>How Can We Teach and Assess Creativity and Innovation in PBL? ARTICLE</p> <p>Creativity and Innovation Rubrics</p> <p>BIE Teamwork and Collaborative Rubrics</p> <p>A Guide to Assessing Teamwork and Collaboration</p> <p>Formative (Informal) Assessment Strategies</p>				<p>Definition of STEM ARTICLE</p> <p>What is STEM Literacy? ARTICLE</p> <p>How to Read Next Generation Science Standards VIDEO</p> <p>Next Generation Science Standards</p>	<p>Differentiated Instruction and the 21st Century Learner PPT</p> <p>Inclusion in the 21st Century Classroom ARTICLE</p> <p>Station Rotation VIDEO</p> <p>Differentiated Classroom Strategies VIDEO</p>	<p>2016 U.S. News/Raytheon STEM Index Shows Uptick in Hiring, Education ARTICLE</p> <p>US News: Best STEM Jobs ARTICLE</p> <p>STEM Jobs - Do What You Love ARTICLE</p> <p>STEM 101: Intro to Tomorrow's Jobs ARTICLE</p> <p>STEM Career Lab</p> <p>STEM Jobs</p>	

<p>Examples of Open-Ended and Closed-Ended Questions</p> <p>Experiencing the Question Formulation Technique (QFT)</p> <p>The Question Formulation Technique (QFT)</p> <p>The QFT for Summative Assessment VIDEO</p> <p>Pre-Assessment Ideas</p> <p>Differentiation: It Starts with Pre-Assessment</p> <p>Shepardson STEM Elementary Website's Differentiation</p> <p>STEM Challenges - The Differentiating Magic of Criteria & Constraints Lists</p> <p>Creating a Formative Assessment System</p> <p>Supplemental Article: New Assessments Help Teachers Innovate in Classrooms</p> <p>How a Classroom Game Becomes an Embedded Assessment</p> <p>Using Games for Assessment</p> <p>The Who, What, When, Where, Why, How of Assessment VIDEO</p>	<p>Standards for Student Mathematical Practice POSTER</p> <p>PA Core Math Standards</p> <p>Illustrative Mathematics</p> <p>Teach Engineering</p> <p>Writing in the 21st Century ARTICLE</p> <p>Teaching Writing in the 21st Century ARTICLE</p> <p>Thinking Differently About Writing in the 21st Century Classroom ARTICLE</p>		
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