

## Disciplinary Literacy Approaches

**Introduction:** This document provides examples of discipline-specific approaches and resources<sup>1</sup> as related to disciplinary literacy.

Discipline	Approach	Practices	Vocabulary Examples	Resources
<b>Social Studies</b>	Historians consider multiple perspectives when reading and writing historical accounts and arguments.	<ul style="list-style-type: none"> <li>• Notice source and context.</li> <li>• Analyze accounts that present conflicting interpretations.</li> <li>• Reference language of causality and chronology</li> <li>• Determine how ideas are communicated.</li> <li>• Approach texts specific to purpose and text source.</li> <li>• Writing argumentative texts using accurate historical data.</li> </ul>	<ul style="list-style-type: none"> <li>• Primary</li> <li>• Secondary</li> <li>• Source</li> <li>• Causality</li> <li>• Chronology</li> </ul>	<p>Literacy in the Disciplines: A Teacher’s Guide for Grades 5-12: Chapter 2, pp. 30-35. (Wolsey, Lapp, 2017)</p> <p>Disciplinary Literacy Strategies in Content Area Classes (Shanahan, 2015, p. 8-15)</p> <p>Stanford History Education Group (SHEG): Historical Thinking Chart</p> <p>Thinking Like a Historian (Wineburg, 2010)</p>
<b>Mathematics</b>	<p>Mathematicians read carefully, evaluating the meaning of each word or symbol and apply logic to their reading.</p> <p>Mathematicians use precise vocabulary to describe and defend their work.</p>	<ul style="list-style-type: none"> <li>• Learn accurate definitions</li> <li>• Reread</li> <li>• Read equations with appropriate directionality</li> <li>• Detect errors</li> <li>• Read for evidence and interpret visuals</li> <li>• Identify representation</li> <li>• Express regularity in repeated reasoning</li> </ul>	<ul style="list-style-type: none"> <li>• Difference</li> <li>• Distribution</li> <li>• Properties</li> <li>• Expression</li> <li>• Terms</li> <li>• Factorization</li> <li>• Binomials</li> </ul>	<p>Literacy in the Disciplines: A Teacher’s Guide for Grades 5-12: Chapter 2, pp. 19-23. (Wolsey, Lapp, 2017).</p> <p>Disciplinary Literacy Strategies in Content Area Classes (Shanahan, 2015, p. 3-5)</p> <p><a href="#">A Literature Review on Disciplinary Literacy: How do Secondary Teachers Apprentice Students into Mathematical Literacy? (Hillman, 2013).</a></p> <p><a href="#">Tennessee Math Standards, pp. 9-12</a></p>

<sup>1</sup> Reference to any resource, organization, activity, product, or service does not constitute or imply endorsement by the Tennessee Department of Education.

Discipline	Approach	Practices	Vocabulary Examples	Resources
<b>Science</b>	<p>Scientists read information depicted in different forms-transformed from prose to figures/diagrams, equations, photographs, etc.</p> <p>Scientists navigate specific text features such as purposeful use of passive voice, long noun phrases, and nominalization of verbs.</p>	<ul style="list-style-type: none"> <li>• Explain information using several representations.</li> <li>• Provide evidence and justification in explanations.</li> <li>• Hedge findings (expressing limits of generalizability).</li> <li>• Write for different audiences and purposes.</li> <li>• Negotiate meaning of technical terms.</li> <li>• Read for evidence and interpreting visuals.</li> <li>• Use scientific knowledge in problem solving.</li> <li>• Understand the nature of science, including its relationship with culture.</li> <li>• Develop appreciation of and comfort with science, including its wonder and curiosity.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimate</li> <li>• Measure</li> <li>• Observe</li> <li>• Process</li> <li>• Hypothesis</li> <li>• Prediction</li> <li>• Tributary</li> <li>• Pangaea</li> </ul>	<p>Literacy in the Disciplines: A Teacher's Guide for Grades 5-12: Chapter 2, pp. 38-43. (Wolsey, Lapp, 2017).</p> <p>Disciplinary Literacy Strategies in Content Area Classes (Shanahan, 2015, p. 5-7)</p> <p><a href="#">Clarifying Literacy in Science (Wisconsin Department of Public Instruction)</a></p> <p><a href="#">Science and Engineering Practices</a> (National Science Teachers Association)</p>
<b>Physical Education</b>	<p>In physical education, individuals are more inclined to use perceptive, empathetic, non-verbal communication.</p>	<ul style="list-style-type: none"> <li>• Consider and identify necessary listening and speaking skills related to developing physical skills.</li> <li>• Map representations against explanations in text.</li> <li>• Use experiential observation, data collection, documentation, reflective, analytical and exploratory writing.</li> <li>• Use environment-based action strategies.</li> <li>• Assess the effects of physical education on health.</li> </ul>	<ul style="list-style-type: none"> <li>• Balance</li> <li>• Competent</li> <li>• Competitive</li> <li>• Flexibility</li> <li>• Strategy</li> <li>• Strength</li> <li>• Sustained</li> <li>• Technique</li> </ul>	<p><a href="#">Arkansas Department of Education Curriculum and Instruction Unit: Disciplinary Literacy PowerPoint, Slides 31-39</a></p> <p><a href="#">SHAPE America National Standards</a></p>

Discipline	Approach	Practices	Vocabulary Examples	Resources
<p><b>Fine Arts</b></p>	<p>Artistic expression is conveyed through messages that are written, drawn, spoken, heard, or seen.</p> <p>Fine art students use reading, writing, and verbal and non-verbal forms of communication to create, perform, present, or produce, respond, and connect.</p>	<p><i>Visual Arts</i></p> <ul style="list-style-type: none"> <li>• Build aesthetic development.</li> <li>• Use visual thinking strategies (VTS) (e.g., See Think Wonder).</li> </ul> <p><i>Music</i></p> <ul style="list-style-type: none"> <li>• Convey a message through word choice and sound.</li> <li>• Develop aural (audiation) and notation literacy.</li> </ul> <p><i>Dance</i></p> <ul style="list-style-type: none"> <li>• Develop dance skills and techniques.</li> <li>• Create movement.</li> <li>• Consider dance history, dance from different cultures, genres, repertory, performers and choreographers, notation and preservation.</li> </ul>	<ul style="list-style-type: none"> <li>• (Visual Arts)</li> <li>• Contemporary</li> <li>• Context</li> <li>• Curator</li> <li>• Expressive</li> <li>• Medium</li> <li>• Style</li> </ul> <ul style="list-style-type: none"> <li>• (Music)</li> <li>• Pitch</li> <li>• Rhythm</li> <li>• Tone</li> <li>• Notation</li> </ul> <ul style="list-style-type: none"> <li>• (Dance)</li> <li>• Choreography</li> <li>• Embody</li> <li>• Space</li> <li>• Rhythm</li> <li>• Tempo</li> </ul>	<p>Literacy in the Disciplines: A Teacher’s Guide for Grades 5-12: Chapter 2, pp. 44-47. (Wolsey, Lapp, 2017).</p> <p>Wisconsin Department of Public Instruction Disciplinary Literacy sites:</p> <ul style="list-style-type: none"> <li>• <a href="#">Art and Design</a></li> <li>• <a href="#">Dance</a></li> <li>• <a href="#">Music</a></li> <li>• <a href="#">Theatre</a></li> </ul>
<p><b>World Languages</b></p>	<p>While studying and learning a new language, communication, cultures, connections, comparisons, and communities stress the application of learning a language beyond the instructional setting.</p> <p>World language instructions prepare learners to apply the skills and understandings to bring a global competence to their future careers and experiences.</p>	<ul style="list-style-type: none"> <li>• Communicate effectively in more than one language to function in a variety of situations and for multiple purposes.</li> <li>• Connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations.</li> <li>• Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world.</li> </ul>	<ul style="list-style-type: none"> <li>• Dialect</li> <li>• Immersion</li> <li>• Native speaker</li> <li>• Interculturality</li> <li>• Cognates</li> </ul>	<p><a href="#">American Council on the Teaching of Foreign Languages (ACTFL): Can Do Statements</a></p> <p><a href="#">(ACTFL): World-Readiness Standards for Learning Languages</a></p>

Discipline	Approach	Practices	Vocabulary Examples	Resources
<b>CTE (Agricultural, Agriscience, Business Education, Family &amp; Consumer Science, Marketing)</b>	In career and technical fields, individuals navigate authentic texts to build work-based skills and use verbal and written information to solve a problem or complete a task.	<ul style="list-style-type: none"> <li>• Develop presentation and communication skills.</li> <li>• Develop verbal, nonverbal and collaborative communication skills.</li> <li>• Provide a claim with evidence to justify a new idea or design.</li> <li>• Ask critical questions.</li> </ul>	<ul style="list-style-type: none"> <li>• Bankruptcy</li> <li>• Collateral</li> <li>• Entrepreneurial</li> <li>• Deferred</li> <li>• Compensation</li> <li>• Interpersonal communication</li> <li>• Intergenerational</li> </ul>	<p><a href="#">ACTE: CTE's Role in Adolescent Literacy</a></p> <p><a href="#">But This Isn't English Class!</a> (Park, van der Mandele, &amp; Keene, 2009)</p> <p><a href="#">Reading in Marketing</a> (WI Department of Public Instruction)</p>
<b>Library Information Specialists</b>	Library information specialists create, analyze, and organize information. They view research as inquiry, scholarship as conversation, and searching as strategic exploration.	<ul style="list-style-type: none"> <li>• Analyze the organizational structures of information within texts.</li> <li>• Select texts representative of a wide range of diverse backgrounds and perspectives.</li> <li>• Enhance exposure and use of libraries within a community.</li> <li>• Create opportunities to engage in rich discussion about information searching and the organization of information.</li> </ul>	<ul style="list-style-type: none"> <li>• Access</li> <li>• Confidentiality</li> <li>• Pre-coordination</li> <li>• Post-coordination</li> <li>• Recall</li> <li>• Precision</li> <li>• Censorship</li> <li>• Intellectual freedom</li> </ul>	<p><a href="#">How Students Engage with News (Project Information Literacy, 2018)</a></p> <p><a href="#">Core Values of Librarianship (ALA)</a></p>