

Disciplinary Literacy Approaches

Introduction: This document provides examples of discipline-specific approaches and resources¹ as related to disciplinary literacy.

Discipline	Approach	Practices	Vocabulary Examples	Resources
Social Studies	Historians consider multiple perspectives when reading and writing historical accounts and arguments.	<ul style="list-style-type: none"> • Notice source and context. • Analyze accounts that present conflicting interpretations. • Reference language of causality and chronology • Determine how ideas are communicated. • Approach texts specific to purpose and text source. • Writing argumentative texts using accurate historical data. 	<ul style="list-style-type: none"> • Primary • Secondary • Source • Causality • Chronology 	<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>
Mathematics	<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"> • Learn accurate definitions • Reread • Read equations with appropriate directionality • Detect errors • Read for evidence and interpret visuals • Identify representation • Express regularity in repeated reasoning 	<ul style="list-style-type: none"> • Difference • Distribution • Properties • Expression • Terms • Factorization • Binomials 	<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 Literature Review on Disciplinary Literacy: How do Secondary Teachers Apprentice Students into Mathematical Literacy? (Hillman, 2013).</p> <p>Tennessee Math Standards, pp. 9-12</p>

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

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<p>Science</p>	<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"> • Explain information using several representations. • Provide evidence and justification in explanations. • Hedge findings (expressing limits of generalizability). • Write for different audiences and purposes. • Negotiate meaning of technical terms. • Read for evidence and interpreting visuals. • Use scientific knowledge in problem solving. • Understand the nature of science, including its relationship with culture. • Develop appreciation of and comfort with science, including its wonder and curiosity. 	<ul style="list-style-type: none"> • Estimate • Measure • Observe • Process • Hypothesis • Prediction • Tributary • Pangaea 	<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>Clarifying Literacy in Science (Wisconsin Department of Public Instruction)</p> <p>Science and Engineering Practices (National Science Teachers Association)</p>
<p>Physical Education</p>	<p>In physical education, individuals are more inclined to use perceptive, empathetic, non-verbal communication.</p>	<ul style="list-style-type: none"> • Consider and identify necessary listening and speaking skills related to developing physical skills. • Map representations against explanations in text. • Use experiential observation, data collection, documentation, reflective, analytical and exploratory writing. • Use environment-based action strategies. • Assess the effects of physical education on health. 	<ul style="list-style-type: none"> • Balance • Competent • Competitive • Flexibility • Strategy • Strength • Sustained • Technique 	<p>Arkansas Department of Education Curriculum and Instruction Unit: Disciplinary Literacy PowerPoint, Slides 31-39</p> <p>SHAPE America National Standards</p>

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Fine Arts	<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"> • Build aesthetic development. • Use visual thinking strategies (VTS) (e.g., See Think Wonder). <p><i>Music</i></p> <ul style="list-style-type: none"> • Convey a message through word choice and sound. • Develop aural (audiation) and notation literacy. <p><i>Dance</i></p> <ul style="list-style-type: none"> • Develop dance skills and techniques. • Create movement. • Consider dance history, dance from different cultures, genres, repertory, performers and choreographers, notation and preservation. 	<ul style="list-style-type: none"> • (Visual Arts) • Contemporary • Context • Curator • Expressive • Medium • Style <ul style="list-style-type: none"> • (Music) • Pitch • Rhythm • Tone • Notation <ul style="list-style-type: none"> • (Dance) • Choreography • Embody • Space • Rhythm • Tempo 	<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"> • Art and Design • Dance • Music • Theatre
World Languages	<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"> • Communicate effectively in more than one language to function in a variety of situations and for multiple purposes. • Connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations. • Communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world. 	<ul style="list-style-type: none"> • Dialect • Immersion • Native speaker • Interculturality • Cognates 	<p>American Council on the Teaching of Foreign Languages (ACTFL): Can Do Statements</p> <p>(ACTFL): World-Readiness Standards for Learning Languages</p>

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CTE (Agricultural, Agriscience, Business Education, Family & Consumer Science, Marketing)	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"> • Develop presentation and communication skills. • Develop verbal, nonverbal and collaborative communication skills. • Provide a claim with evidence to justify a new idea or design. • Ask critical questions. 	<ul style="list-style-type: none"> • Bankruptcy • Collateral • Entrepreneurial • Deferred • Compensation • Interpersonal communication • Intergenerational 	<p>ACTE: CTE's Role in Adolescent Literacy</p> <p>But This Isn't English Class! (Park, van der Mandele, & Keene, 2009)</p> <p>Reading in Marketing (WI Department of Public Instruction)</p>
Library Information Specialists	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"> • Analyze the organizational structures of information within texts. • Select texts representative of a wide range of diverse backgrounds and perspectives. • Enhance exposure and use of libraries within a community. • Create opportunities to engage in rich discussion about information searching and the organization of information. 	<ul style="list-style-type: none"> • Access • Confidentiality • Pre-coordination • Post-coordination • Recall • Precision • Censorship • Intellectual freedom 	<p>How Students Engage with News (Project Information Literacy, 2018)</p> <p>Core Values of Librarianship (ALA)</p>