Middle and High School Intervention Strategies

Literacy Strategies

Strategies to Help Secondary Students Struggling with Literacy:

This chart provides strategies to address both content and social/emotional/developmental needs. The recommended intensity and reoccurrence of these strategies for Tier I, II or III intervention is left to the SSPT and is not addressed here.

Social/Emotional/Developmental Needs	
Need:	**Strategy:**
• **Student Identity & Relationships**	To foster a successful environment at school, teachers have to address students' social-emotional needs as well. This support includes the process of developing social and academic interaction, which requires explicit and clear expectations from students. This process must include feedback (teacher to student/student to teacher) and modeling to ensure all participants share a common understanding of the process and the anticipated outcome. (What are we doing? What will it look like when it is done well?) As criteria is being developed, it needs to be charted and must remain visible in the classroom for reference. To implement a meaningful and purposeful collaboration in class, teachers must take into consideration that it is necessary to take small steps towards improving student interaction before attempting whole group activities. Students benefit from repeated practices in pairs and feedback within the pair group before engaging in a whole group activity. As students become acclimated to this process, they are able to move to whole group activities more directly. Below are examples of strategies to develop student capacity and sense of identity a teacher can use: <table><tr><td>Sentence Frames:</td><td>Provide students an opportunity to complete a sentence to help focus their thinking//// http://www.ode.state.or.us/wma/teachlearn/commoncore/structuring-acad-discuss-.pdf</td></tr><tr><td>Give One Get One</td><td>Provides students an opportunity to share ideas as they discuss a topic. http://www.scholastic.com/teachers/classroom-solutions/2009/11/give-one-get-one-engaging-shy-students</td></tr><tr><td>Think Pair Share</td><td>Provide students the time to think about the question/prompt, and share ideas with students to validate and expand on their own ideas. https://www.teachervision.com/group-work/cooperative-learning/48547.html</td></tr><tr><td>Flexible Grouping</td><td>Teachers set the class in purposeful groups to help students interact with proficient and less proficient partners.</td></tr></table>

		https://www.eduplace.com/science/profdev/articles/valentino.html
	Person of the Week	Assign a student to be the honorary class leader for a week. The student gets to be the teacher's helper. This strategy is one of many that directly address the sense of identity and provides students the opportunity to feel special.
	Group with Names and Logos	Before a project, divide the class into groups and let them choose a name and a mascot/logo for their group. It is another way to help promote a sense of identity.

• **Mindset and Social Emotional Learning**	As students gain capacity as learners, they must learn how to manage risk and see themselves as individuals who can improve through effort. To develop this growth mindset, students require consistent reinforcement and encouragement. Strategies recommended to be used to address the development of a growth mindset include:	
	Constructive Feedback	Teacher or peers provide feedback that helps refine their thinking. https://www.cabrillo.edu/services/jobs/pdfs/giving-feedback.pdf
	Peer Revision	Provides students an opportunity to improve performance as they critique/examine peer's work. Student find two positive qualities and one suggestion for a piece of student work. See "Two Stars and a Delta" protocol (also called Two Stars and a Wish) http://www.assessmentforlearning.edu.au/professional_learning/peer_feedback/peer_strategies_enhance.html
	Co-constructed Chart	To promote comprehension, teacher and class co design their thinking together and chart their thoughts for future reference. Co-Constructed Anchor Charts PPT PDF.pdf
	Think Aloud	To provide students a model of what good readers do, teacher models expert's thinking during reading. http://www.readingrockets.org/article/using-think-alouds-improve-reading-comprehension
• **Authentic Student Choice**	To address this area of need, students must be offered opportunities to evaluate choices and develop self-awareness. Strategies to be used in support of student choice include:	

	Cornell Notes	This method that allows students to interact with a text as they annotate, highlight, and question a text. This is also a way of recording, organizing notes, reflecting on the topic learned http://lsc.cornell.edu/study-skills/cornell-note-taking-system/
	Journal Writing	Student voice an opinion on a topic to help them focus their thinking as they address various thinking http://www.educationworld.com/a_curr/curr144.shtml
	Choose a Topic	Teacher provides various topics/titles to allow students to choose the one that appeals to them (especially as they prepare for a research). https://www.edutopia.org/blog/five-strategies-more-voice-choice-students-rebecca-alber
	Developing a Study Guide	Based on the student's learning experience, the student develops guidelines to help themselves and others. http://learningcenter.utah.edu/documents/creating-study-guides.pdf
	Current Events	Students select a current event that interests them. They discuss and write about it. (See Blast -Study Sync or FYI- Collections) https://www.studentnewsdaily.com/current-events-in-the-classroom/
• **Engagement**	In this area of need, the focus is on active involvement in learning that might include hands-on, project-based, and exploratory type learning environments. Teachers have to provide multiple opportunities to engage various types of learners. Classroom engagement is most effective when it is scaffolded to meet the needs of the activity and the learners. Some strategies include:	
	Four Corners	This strategy provides students the opportunity to engage in the learning material and explore alternate points of view. https://www.facinghistory.org/resource-library/teaching-strategies/four-corners
	Jigsaw Reading	Classes work collaboratively to read a longer or complicated text. In small groups, students develop expertise with one section of the text. Then they return to a large group setting, they share their findings. This strategy allows movement and promotes engagement in the content. www.teachingchannel.org/videos/jigsaw-method

		Paraphrasing	Paraphrasing promotes meaning making as it provides students an opportunity to clarify ideas. It can be done orally as students paraphrase others' ideas or in writing to avoid plagiarism. http://www.readwritethink.org/professional-development/professional-library/paraphrasing-effective-comprehension-strategy-20953.html
		Circle Chat	This strategy can be also called Inside-Outside Circle. It encourages students to share with various partners as they are facing them in the circle. http://www.theteachertoolkit.com/index.php/tool/inside-outside-circles
		Active Listening	Another way of ensuring engagement is by promoting active listening. It is a process that has to be taught (Kate Kinsella- the 4 Ls) and modeled for students. http://www.ceres.k12.ca.us/common/pages/DisplayFile.aspx?itemId=21380793
		Graphic Organizers	Using a graphic organizer is another way of directing students' learning; it helps students trace and create meaning. It supports visual learners as well as ELLs. https://www.teachervision.com/graphic-organizers/printable/6293.html
		Sentence Frames	Promotes the transfer of concept knowledge by encouraging syntactic complexity and allow students engagement in big ideas. http://www.nystce.nesinc.com/pdfs/edtpa_academiclanguage_ny_12_12_12.pdf
		Multiple Reads	Using multiple read when each read has a learning purpose fosters a better understanding of the text. http://www.kswla.org/Professional%20Development/Outreach%20Reading.pdf
		Close Reading	To deepen content understanding, students read closely to examine the word choice, structure, and syntax the writer is using to convey a message. https://www.engageny.org/search-site?search=close+reading
		Gallery Walk	Allow students to engage in the learning material as they move around the room and read peers' responses. http://www.theteachertoolkit.com/index.php/tool/gallery-walk

		Give One Get One	See Student Identity and Relationship
		Pair with More Proficient Partner	Pairing students by ability provides both students the opportunity to gain an understanding of the learning material; the strong students develop the ability to explain concepts and the weak student to clarify. https://www.scoe.org/files/el14-structured-student-talk-handout.pdf
• **Real World and Personal Connections**	To ensure student access to the core content, material should be relevant and reflect student interest. Students must the opportunity to personally connect and reflect on their learning. Some strategies include:		
		KWL	This is a graphic organizer that helps contextualize learning. https://www.facinghistory.org/resource-library/teaching-strategies/k-w-l-charts
		Exit Ticket	A reflective tool for teachers to formatively assess the learning process and for students to reflect on their own learning. http://www.theteachertoolkit.com/index.php/tool/exit-ticket
		Give One Get One	See Students Identity and Relationship
		Double Entry Journal Writing	Using a Double Entry journal students keep a record of their thinking to apply for a later conversation or writing. It helps connect with the material learned in class. http://reading.ecb.org/teacher/pdfs/lessons/mc_lp_double-entry_journal.pdf
		Self Assessment Rubric	Student self reflect on progress in class http://readingapprenticeship.org/wp-content/uploads/2014/01/RFU-append-rubric-self-assess2.pdf

READING	
Need:	**Strategy:**
Support with Decoding	**Teach** (From Kylene Beers) • Onset-rime patterns (r-ate, d-ate, m-ate; l-ime, t-ime, d-ime) • Chunking (have students look for parts of a long word that they already know/recognize and put the word together from there)

	- Word parts (prefixes/suffixes/Greek and Latin roots) in an engaging way
	    o Build a vocabulary tree with the root near the bottom, known words higher up the trunk, new words with definitions on the branches, and examples of the word in use as leaves or smaller branches
	    o Use graphic organizers (e.g., Frayer model)
	- Syllabification
	    o Long vowel sounds
	        ▪ CV – my
	        ▪ CVV – see
	        ▪ CCVV – flea
	        ▪ CVCe – cake
	        ▪ VCe – ice
	    o Short vowel sounds
	        ▪ VC – at
	        ▪ VCC – and
	        ▪ CVC – cat
	        ▪ CVCC – duck
	        ▪ CCVCC – chunk
	        ▪ CCVC – thin
	    o Point out exceptions (head, love, moon, sold, have…)
	- Fluency
	    o Provide practice with sight words
	    o Provide opportunities for student to hear text read aloud (recorded, by teacher, by peers) and to practice reading aloud (repeating same texts)
	    o Take running records to measure speed and accuracy, and provide student with recorded pace and a goal to increase speed per minute

Support with Vocabulary	**Teach** (From Kylene Beers)
	- Fewer words at a time, focus on using them in your own speech before formally introducing them
	- Academic language that crosses content areas (Tier 2 vocabulary)
	- How to use context as a clue (and practice regularly with different types of clues)
	    o Looking beyond a single sentence to a paragraph or passage to use relationships between words and ideas as clues
	    o Definition/explanation clues
	    o Restatement/synonym clues
	    o Contrast/antonym clues
	    o Gist clues
	- Word parts (prefixes/suffixes/Greek and Latin roots in an engaging way
	- Games with words
	    o Conduct a word hunt where students collect interesting/funny sounding/unfamiliar/descriptive/evocative words for a week and then share and discuss their found words as a class, choosing a few to use regularly for the next few weeks
	    o "Words Across Contexts" from Kylene Beers: *What would the word _____ mean to _____? (<u>book:</u> <u>a travel agent; a librarian; someone in a hurry?)</u>*
	- Logographic cues (visual symbols like pedestrian signs) – pictures that students create to remind themselves of the meaning and/or context of a

	word

Support with Comprehension	**Teach** (From Kylene Beers)
	
	Pre-Reading Strategies
	
	• Anticipation guide
	• K-W-L chart
	• Prompt analysis
	• Text structure analysis
	• Set a purpose for reading
	• Make predictions
	• Review key vocabulary
	   Activate prior knowledge
	
	During Reading Strategies
	Close Reading
	
	• Text marking/annotation techniques
	• Multiple reads for multiple purposes
	• *How* to make inferences
	    o Look for pronouns and figure out what to connect them to
	    o Figure out explanations for events
	    o Think about what you know about a topic and see how it fits with what's in the text
	    o As you read a section of text, look for clues that would tell you how the author might feel about the topic
	    o Model making inferences daily
	• Look for patterns in the text and ask questions like "how" and "why"
	• Look for signal words that indicate sequence, similarities, and differences
	• Read in small groups, pausing to "say something" (discuss the text, ask questions, make a prediction, etc.)
	• Model for students how to actively read
	• Use double entry journals
	• Build character bulletin boards to collect information on what characters look, sound and act like
	• Use "Syntax Surgery" with a think aloud to provide visual cues on an overhead for what you are saying as you model making sense of text, make connections, find relationships between words (e.g., nouns and pronouns), etc.
	
	After Reading Strategies
	
	• Methods for organizing thinking
	    o Likert Scales using questions with ambiguous answers
	    o Semantic Differential Scales placing opposite traits at opposite ends of a scale and having students decide on the degree to which the trait is present (in a character, in a conflict…)
	    o Somebody Wanted But So chart
	      (Character) (Plot) (Conflict) (Resolution)
	    o Use graphic organizers/charts (Question – It Says in the Text – I Say –

	And So)
	• Text Reformulation – transform one type of text into another type of text (e.g., reformulate expository text as narrative, poems into articles, "Fortunately-Unfortunately" stories, "If-Then" stories, ABC book structure, "Cumulative Tale" structure [*The House that Jack Built*], etc.) • Retelling – an oral summary based on a set of story elements (i.e., main character, setting, conflicts, etc.) • Save the Last Word strategy • Most Important Word strategy
SPEAKING AND LISTENING	

Support with Conversation/ Discussion	**Teach** (From Jeff Zwiers)
	• Conversation norms
	• Stems for initiating, prompting and responding that indicate
	    o Agreement
	    o Disagreement
	    o Connection
	    o Interest
	    o A need for clarification
	    o Appreciation
	• Active listening
	    o To understand
	    o Taking notes
	    o Attending to speaker
	    o Reflecting on what was said
	    o Eye contact
	• Use of body language to indicate interest and/or a desire to speak
	• Practice with a partner before speaking to the whole group
	• Invite questions and comments
	• Structured Interaction Activities (Jeff Zwiers)
	    o Stand and Converse
	    o Take a Side
	    o Conversation Lines and Circles
	• Model examples and non-examples of good and bad conversation behaviors
	• Core Academic Conversation Skills
	    o Elaborate and Clarify
	        ▪ Clarify with analogies and metaphors
	        ▪ Converse about graphic organizers/manipulatives
	        ▪ Opinion continuum
	        ▪ Journal jumpstarts
	    o Supporting Ideas with Examples
	        ▪ Hunting for deep quotations
	        ▪ Planning conversations on paper
	        ▪ Terms that trigger the need for examples (e.g., example, issue, aspects, processes, factors, etc.)
	        ▪ Supportive examples practice (e.g., for example, according to, as stated in, specifically, etc.)
	        ▪ Evaluating the support value (i.e., weak, some, strong) of examples

	- Building On and/or Challenging a Partner's Idea
	    - Idea building
	    - Conflicting texts and quotations
	    - Two-minute opinion share
	    - Norms for controversial conversations
	- Paraphrasing
	    - Understand and organize as a listener
	    - Paraphrase cards
	    - Interview grids
	- Synthesizing Conversation Points
	    - Parking, promoting and pruning ideas
	    - Converse at the computer

WRITING	

Support with Prewriting	**Teach**
	
	- How to generate ideas
	    - thinking maps
	    - visual images
	    - **Writing Strong Research Questions**
	- Task analysis
	    - **Color Coded Teaching Task**
	    - **Do What Chart and Exit Slip**

Support with Transitioning to Writing	**Teach**
	
	- How to structure writing
	    - **Basic Outline Structure**
	    - **Writing Body Paragraphs**
	    - **Compare and Contrast Argument Analysis**
	    - **Backwards Outline**
	    - **Defining the Essay Structure**
	- How to generate and collect ideas and information from reading
	    - **Chatting and Charting**
	    - **Write Around**
	    - **Writing Research Questions**
	    - **Writing Ideas**
	    - **Sticky Note Argument Plan**
	    - **Whole Group Text Talk – Info Texts**
	    - **Give One Get One**
	    - **Socratic Seminar**

Support with Writing Essays	**Teach**
	
	- How to begin
	    - **Controlling Idea and Introduction**
	    - **Thesis Generator**
	    - **Thesis Statement Using TVA**
	- How do develop writing
	    - **CER – Claim Evidence Reasoning**
	    - **Informational Text Recounts**
	    - **Linking Claims and Evidence with Analysis**
	    - **Refuting Competing Arguments**

	• How to end
	o **Conclusions - Text-to-Text, Text-to-Self, Text-to-World**
	• Revision and Editing
	o **Transitions**
	o **Using ARMS to Revise**
	o **Using CUPS to Edit**
	o **Varied Sentence Beginnings**

References for Content Strategies

Beers, Kylene. *When Kids Can't Read, What Teachers Can Do: A Guide for Teachers, 6-12*. Portsmouth, NH: Heinemann, 2003. Print.

Literacy Design Collaborative. https://coretools.ldc.org

Zwiers, Jeff, and Marie Crawford. *Academic Conversations: Classroom Talk That Fosters Critical Thinking and Content Understandings*. Portland, Me.: Stenhouse, 2011. Print.

MATH INTERVENTIONS FOR SECONDARY STUDENTS

Summary of Intervention Strategies to Support Students Struggling with Math:
1. Use of structured peer-assisted learning activities involving heterogeneous ability groupings.
2. Use systematic and explicit instruction using visual and graphic representations.
3. Modify instruction based on data from formative assessments of students (such as classroom discussions or quizzes).
4. Provide opportunities for students to think aloud while they work.
5. Share and discuss formative assessment data results with students.
6. Instruction during the intervention should be explicit and systematic.
7. Interventions should include instruction on solving word problems that are based on common underlying structures. This includes instruction on how to reading math problems.
8. Be intentional regarding teaching students the eight Standards of Mathematical Practices.
9. Increase opportunities for productive student discourse.
10. Provide explicit instruction on writing in mathematics. For example explaining answers and the processes taken to answer mathematical problems in writing.

Grade Level	Program/Resource	Description	Supports Provided
Textbook Publisher Intervention Resources			
9-12	Big Ideas	Big Ideas is one of the options that schools adopted as core curriculum adopted for Algebra 1, Geometry, and Algebra 2. The materials come with ancillary intervention resource.	Intervention supports such as: Differentiating the Lesson, Game Closet, Lesson Tutorial, and vocabulary flash cards provided for each subject area are available digitally for all teachers.
6-12	College Board SpringBoard	SpringBoard is one of the options that schools adopted as core curriculum adopted for Algebra 1, Geometry, and Algebra 2. The program comes with ancillary intervention resources.	Intervention supports such as: Getting Ready Practices, Math Mini Lessons, and Additional Practice Problem are provided for each math course and are available digitally for all teachers in schools that adopted SpringBoard. Additional resources are also available on the SpringBoard *Teacher Resources* tab.
6-12	College Preparatory Mathematics (CPM)	CPM is one of the options that schools adopted as core curriculum adopted for Algebra 1, Geometry, and Algebra 2. The program comes with ancillary intervention resource.	Additional resources are available to support both students, parents and teachers. These resources include eTools and videos, homework help, resource pages with a toolkit, and a parent guide with extra practice. Most of these resources are also available in Spanish in addition to English.
6-8	CA Math	CA Math is one of the options that schools adopted as core curriculum adopted for CC Math 6, CC Math 7, CC Math 8 and the related middle school accelerated courses. The program comes with ancillary intervention resources.	CA Math Targeted Intervention booklet, along with a Response to Intervention booklet is available online. To access these resources you can either look under Resources or you can type in Targeted Intervention within the Search field of ConnectEd.
6-8	Go Math	Go Math is one of the core curriculum adopted for CC Math 6, CC Math 7, CC Math 8 and the related middle school accelerated courses. The program comes with ancillary intervention resources.	Intervention supports are provided such as: Common Core Readiness and Practice and Skills Fluency workbooks.
Additional Resources			
6-12	Engage New York	Engage NY curriculum modules	Engage NY is a full curriculum that is

	(curriculum developed by the State of New York, which is free to the public)	are marked by in-depth focus on fewer topics. They integrate rigorous classroom reasoning, extended classroom time devoted to practice and reflection through extensive problem sets, and high expectations for mastery.	available free online. Schools may choose to use parts or all of this resource.
6-9	Transmath	Transmath is a math intervention curriculum that targets middle and high school students who lack the foundational skills necessary for entry into algebra and are two or more years below grade-level in math. The program engages students in real-world math from number sense to algebra.	Accelerated Math Intervention (AMI) *Currently available for students with special needs.*
6-9	ST Math	ST Math is game-based instructional software for K-12 and is designed to boost math comprehension and proficiency through visual learning.	Spatial-Temporal (ST) Math® by MIND Research Institute *Available for purchase with school funds*
3-8	RtI Practice Guide	Can be requested from the USDE (National Center for Educational Evaluation and Regional Assistance) "Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle School	Free resource
6-12	Math Tutorial Courses	Math Tutorial Lab classes are offered for Math 6, 7 and 8, and for Algebra 1, Geometry and Algebra 2.	Curriculum maps and placement guidelines can be found on the LAUSD Division of Instruction math department website. Middle school: http://achieve.lausd.net/Page/5772 High school: http://achieve.lausd.net/Page/5795
3-12	ALEKS Mathematics Intervention optional	ALEKS is a web-based assessment and learning system that differentiates for each individual student's needs, including students with	*Available for purchase with school funds*

		disabilities.	
K-12	Khan Academy	On-line tutorials	Khan Academy offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. The site uses state-of-the-art, adaptive technology that identifies strengths and learning gaps.
K-12	*Effective Strategies for Teaching Students with Difficulties* *National Council of Teachers of Mathematics*	The meta-analysis of research on supporting struggling students has pointed to several strategies that have been consistently effective.	- The use of structured peer-assisted learning activities involving heterogeneous ability groupings - Systematic and explicit instruction using visual and graphic representations - Modifying instruction based on data from formative assessments of students (such as classroom discussions or quizzes) - Providing opportunities for students to think aloud while they work - Formative assessment data provided directly to students The above recommendations are found in their research clip, and are part of the larger report *Effective Strategies for Teaching Students with Difficulties in Mathematics* and *What Are the Characteristics of Students with Learning Difficulties in Mathematics?* (The full reports are available to NCTM members only.)
K-12	*Assisting Students Struggling with Mathematics* *What Works Clearinghouse*	A report from the What Works Clearinghouse has identified research-based math intervention strategies that support struggling middle school students in their report "Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle Schools."	You can download the full report here. The strategies identified in the report as having the strongest evidence are as follows: Recommendation 3: *Instruction during the intervention should be explicit and systematic.* Learn more about this recommendation. Recommendation 4: *Interventions should*

			include instruction on solving word problems that is based on common underlying structures. [Learn more about this recommendation.](#) You can read more detail about each strategy, including information on implementing the strategies and short video clips highlighting each strategy on their [Assisting Students Struggling with Mathematics website](#)
K-8	*Putting the Practices Into Action: Implementing The Common Core Standards for Mathematical Practice K-8* Susan O'Connell and John SanGiovanni (published by Heinemann)	Students who are struggling with mathematics are often missing more than basic skills or content knowledge. Very often they struggle with the mathematical practices, such as perseverance, making sense of problems, explaining their reasoning, and modeling problems. This book can help teachers support students with growing their ability to use and apply the mathematical practices to class.	Each mathematical practice is discussed in depth, reviewing why that practice is important, providing a deep dive into understanding the practice, and discussing how to get students proficient with the practice.
K-12	*5 Practices for Orchestrating Productive Mathematics Discussions* Margaret S. Smith and Mary Kay Stein (published by NCTM)	This short book describes a series of five practices that help structure discussions in class in a way that promotes deep learning. The steps help teachers anticipate students' solutions, monitor work during the lesson, select student work to share, sequence the student work purposefully and connect the students work to the underlying mathematics. Students are more engaged in the work, and different methods for solving problems and addressing common misconceptions are highlighted through this process. Therefore, students are engaged and supported in their learning at all levels.	This book can be used individually by math teachers or with a whole department (Professional Development guide is included in the book).
K-6	*Helping Students Struggling with Math* Elizabeth G. Shellard (published in *Principal*	"A critical instructional component is to make sure they understand a skill or concept	[Read the full article.](#)

	magazine by the National Association of Elementary School Principals)	before being asked to practice it."	
K-12	*A Guide to the 8 Mathematical Practice Standards*	Free On-line guide from	http://www.scholastic.com/teachers/top-teaching/2013/03/guide-8-mathematical-practice-standards