

## Region XIII ELL Instructional Strategies - Math

Student: \_\_\_\_\_ Grade: \_\_\_\_\_ Lang. Proficiency Level \_\_\_\_\_

Teacher: \_\_\_\_\_ Grading Period: \_\_\_\_\_ Date: \_\_\_\_\_

Methods:		Current Strategies
Build vocabulary card files, word walls, glossaries, notebooks		
Introduce cognates when applicable		
Incorporate content and language objectives in each lesson		
Model methods for problem solving using manipulatives		
Repeat information/methods using gestures and visuals		
Use demonstrations & diagrams to illustrate relationships		
Limit number of variables		
Build/review specific Math vocab. through demonstrations/explanations, compare and contrast ( <i>i.e., square, ordinal, etc.</i> )		
Use journal writing to explain/illustrate mathematical processes		
Rewrite problems in simpler form, including pictures; use cognates; paraphrase; highlight key concepts/terms		
Read aloud to students words, phrases, sentences		
Simplify/clarify/restate language		
Provide oral translation of written texts		
Incorporate structured response starters		
Provide alternative methods for completing assignments: <i>Cooperative grouping; peer support; instructional aide; visual/oral/physical responses; cross-age tutoring; individual administration of exams</i>		
Teach quantitative words and prefixes common to math ( <i>i.e., deci, centi, milli; more, less, larger, twice</i> )		
Pacing:		
Assign reading and other tasks in smaller chunks, emphasizing thoughtful, quality products/responses		
Avoid writing in a timed situation		
Extend response/processing/completion time		
Materials:		
Make textbooks available in native language when possible		
Have students prepare personal glossaries		
Maintain a library of supplementary reference materials in native language and simple English with visuals: <i>bilingual dictionaries/glossaries</i>		
Allow side-by-side Spanish/English texts when available		
Provide visuals/manipulatives: <i>Graphic organizers; charts; slides; graphs; demonstrations; pictures; realia</i>		
Utilize number games that reinforce concepts		
Use word walls, word banks and games: <i>Content specific vocabulary, symbols, and processes</i>		
Provide structured study/note-takings guides		
Grading:		
Avoid penalizing for local errors that do not interfere with communication: <i>Spelling, grammar, etc.</i>		
Utilize rubrics, checklists, anecdotal notes, and portfolios		
Alternative methods: <i>Group projects, oral or physical responses, either/or and yes/no responses</i>		
Learning Environment:		
Label classroom objects in native language and English		
Highlight mathematicians from all cultures		
Post classroom procedures/schedules		
Response to Instructional Strategies:		
Pre-Assessment	Post Assessment	