One of the major tenets of culturally responsive pedagogy is that all students must learn, which means the purpose of including cultural-ethnic norms is to help students who are dependent learners become independent learners. When it comes to mathematics, there are many issues that confuse and de-motivate dependent learners. Below are some of those issues, why they are confusing, and how to address them.

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| **Problem 1: To some students, math seems like a foreign language.** | | |
| Unit: | | |
| Course: | | |
| Lesson: | | |
| Math Problem/ unknown or weirdly used words | Students must know… | Strategies for teaching it and making it stick! |
| Natural numbers | Natural numbers are 1,2,3,4,5, etc.  They are also called counting numbers. | 1. Count your fingers. Which number did you start with? You probably started at 1 because this is the “natural” way we count. |
| Whole numbers | Whole numbers are natural numbers with a 0 (zero) placed in front of them 0,1,2,3, etc. | 1. The “o” in whole numbers should reminds us to adding a “0” before counting natural numbers makes them whole numbers. |

[Use these 5 practical strategies to grow students' math vocabulary (luminouslearning.com)](https://luminouslearning.com/blogs/sped-math/teaching-math-vocabulary#:~:text=5%20high%20impact%20strategies%20to%20teach%20math%20vocabulary%3A,of%20math%20words.%20...%205%20Use%20math%20journals)

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| **Problem 2: For some students, the individual math steps in certain problems are a mystery.** | | |
| Unit: | | |
| Course: | | |
| Lesson: | | |
| Math Problem | Students must know… | Strategies for teaching it and making it stick! |
| 2x-1 = x -3 | 1. the significance of the = sign 2. the difference between an equation or expression 3. what x means. 4. that the sign and the number go together 5. how 2x can be manipulated | 1. Gamify it Demonstrate the superpower of the =. Whatever is done on the left, must be done on the right. 2. if a number problem has an =, then it is an equation. 3. Why did Malcolm Little change his name to Malcolm X? 4. Who’s my best bud! 5. 2x is x times x and can be separated to solve the problem |

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| **Problem** | | |
| **Unit:** | | |
| **Course:** | | |
| **Lesson:** | | |
| **Math Problem** | **Students must know…** | **Strategies for teaching it and making it stick!** |
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| **Problem** | | |
| **Unit:** | | |
| **Course:** | | |
| **Lesson:** | | |
| **Math Problem** | **Students must know…** | **Strategies for teaching it and making it stick!** |
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