Changing Perspectives
Promoting Awareness & Inspiring Empathy

Lesson	Dyscalculia in the World		
Disability Category	Learning Disabilities		
Grade	6-8	**Program Track**	Track 2
Learning Intention	Students will gain awareness of the challenges that a person with dyscalculia faces when trying to do everyday tasks.		
Common Core Standard(s)	CCSS.ELA-LITERACY.SL.6.1, 6.1.B, 6.1.C, 6.1.D CCSS.ELA-LITERACY.SL.7.1, 7.1.B, 7.1.C, 7.1.D CCSS.ELA-LITERACY.SL.8.1, 8.1.B, 8.1.C, 8.1.D		
Duration	25 minutes		
Materials Needed	• Chart paper or whiteboard and markers • Dyscalculia Scenarios worksheet		

Lesson Structure

Open the lesson by writing the word "dyscalculia" on the chart paper or whiteboard. Ask, "Does anyone know what this word means?" Allow student a few moments to think and answer. Reinforce students' answers and/or clarify that dyscalculia is a learning difference related to how a person's brain processes and interprets numbers.

TIP: If you have done lessons about dyslexia with your students, ask if the word "dyscalculia" reminds them of another words. Many students may connect the "dys" in dyslexia and the "calc" in calculator. Guide students to the conclusion that dyscalculia is the term for a math learning disability. You can compare dyscalculia to dyslexia, but for math instead of reading.

People with dyscalculia might have difficulty with a range of number-related tasks, such as:

- Remembering the value related to a number symbol: How much is a nickel worth? What does the symbol 8 mean?
- Completing math functions: How can you work out math problems when you're not sure what each number symbols mean?
- Putting numbers in order (sequencing) or skip counting (counting by 2s, 5s, 10s, etc.): How can you put numbers in order if you have difficulty remembering symbol/value correlations?

Pair up students and explain that they will work together on the Dyscalculia Scenarios worksheet to help them understand the kinds of challenges someone with dyscalculia may have with everyday tasks. Hand out the worksheets and give students 8-10 minutes to work before bringing the group back together.

When the class is back together, initiate a discussion with questions such as:

- Could you imagine how you might have felt in each of the scenarios? How did you feel?
- How do you think it would feel to have these kinds of challenges all of the time?
- Have you ever been in a situation like these scenarios, where you were having trouble doing something and there was a lot of pressure for you to do it quickly? Describe what happened.

Assessment

Hand out index cards and ask students to write their names and which scenario they thought would be the most challenging for someone with dyscalculia and why. Use this response, their pair work, and participation in discussions to assess understanding.

Extensions

Have students work in pairs to research some of the strategies that someone with dyscalculia might learn to help them manage everyday challenges at school, home, and in their communities. To further extend this activity, ask students to write scenarios in which a person with dyscalculia uses some of those strategies to be successful at various tasks.

Dyscalculia Scenarios

Work together to imagine yourself in the following scenarios. For each one, write down how you think you'd feel and/or what you might do in each situation. Be ready to share your thoughts with the class.

What's Happening?	How Do You Feel? What Do You Do?
It's Friday night and it's finally your turn at the busy movie theater snack bar. You know you have $15 to spend, but you've been looking at the menu board for several minutes and can't figure out how much each item costs. The guy behind the counter keeps asking what you want and the line behind you is growing. Finally, you point to a large popcorn bag, a small drink cup, and a candy bar. The guy rings you up and you hand him the money. He counts it and tells you that you don't have enough. He looks at you expectantly and the person behind you sighs loudly.	
You're at a pizza parlor with your grandpa. When your name is called, your grandpa hands you one $5 bill, five $1 bills, and one $10 bill and asks you to pay and get the food. The lady at the counter rings up your pizza and says, "That'll be $16.57." You look at the money in your hand, unsure of which bills to give her or if you even have enough. You hand her all of the bills and she hands back three $1 bills to you. Thinking you're done, you pick up the pizza and start to walk away, but she calls out that you forgot your change. She comes over and hands you some coins and a receipt. Your grandpa asks how much the pizza cost, but you don't know what to tell him.	

There's a new student at school who you've been getting to know. One day, he asks if you want to come over to hang out. When you say yes, he suggests that you put his number in your phone so you can talk about plans more specifically that evening. You take out your phone. You try to remember the number pattern you've practiced for the keypad so you can enter the numbers he's rattling off, but you can't keep up with him.	
You've been invited to a new friend's party. The invitation has her address on it: 3710 Pine Street. As you turn onto Pine Street, your mom asks you to help watch for the house number. You start looking at numbers on mailboxes and doors, but none of them look like the number on the invitation. You hope that there will be a lot of cars or another way to figure out which house belongs to her.	
It's your turn to be at the ticket table for the fall fair. The tickets are counted out in strips of 10 and each strip costs $3. At first, your partner is handling the money and counting out the tickets, but when she has to go to the rest room, you're left alone. A family approaches the table and asks for $30 worth of tickets. When you hesitate, the woman holds out a bill, but you're not sure what its value is, how many ticket strips they need, and how much change to give.	