

Lesson Plan

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| Title of the Lesson | Design Your Inclusive Makerspace |
| Duration | 1 hour |
| Teaching methods and strategies | <ul style="list-style-type: none"> • Storytelling: Begin with a short, engaging story about a makerspace that includes everyone. This will help create a fun, relatable way to introduce the lesson. • Demonstration: Show clear examples of inclusive design, using simple visual aids, props, or videos to ensure understanding. Focus on showing accessible features, such as wide spaces or sensory zones. • Hands-on Activities: Allow students to create tactile representations of their designs, using accessible materials like foam, fabric, or large markers. • Peer Collaboration: Encourage students to work in pairs or small groups, supporting each other's ideas and learning from one another. • Simplified Group Discussions: Break down discussions into small, simple prompts, encouraging every student to contribute, either verbally or through drawing. |
| Learning Outcomes | <ul style="list-style-type: none"> • Understand what an inclusive makerspace is and why it's important. • Create a basic design for a makerspace that includes accessible features. • Use textures and simple materials to represent their ideas for inclusivity. • Share their ideas and designs with peers in a supportive, collaborative environment. • Appreciate how everyone, no matter their ability, can benefit from an inclusive space. |
| Steps to be Followed | 1. Introduction (5-10 minutes) |

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- Share a short story or video about a friendly, inclusive makerspace. You could use a character who faces challenges but finds ways to make a space welcoming for everyone (e.g., using ramps, signs, and special tools).
- Use simple language to explain what "inclusive" means, for example: "An inclusive space is one where everyone can come, play, learn, and feel happy, no matter how they move or see things."
- Ask a Question: "What are some things we could do to make sure everyone can join in?"

2. Main Content (30-40 minutes)

- Demonstration with Examples: Show pictures or small models of inclusive makerspaces. Point out accessible features like wide doors, soft textures, or easy-to-read signs. Make sure to use simple language to explain the features.
- Activity – Design a Makerspace:
 - Task: Provide students with large paper and accessible materials like textured fabric, soft foam, or colorful markers. Each group will work on designing their version of an inclusive makerspace.
 - Guidance: Help students by asking them to think about the following questions while designing:
 - "How can we make sure that everyone can use the space?"
 - "What things can we add to help people who might have trouble seeing, hearing, or moving?"
 - "What textures could we add to make the space fun and easy for everyone to touch?"
 - Support: Walk around to offer individual or group support, especially for students who may need extra assistance with fine motor skills or understanding the concept

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| | <p>of accessibility.</p> <p>3. Wrap-Up/Review (5 minutes)</p> <ul style="list-style-type: none"> • Sharing Ideas: Have each group share their design with the class, showing off the textures and features they've added for accessibility. • Reflective Questions: Ask questions such as, "How can everyone use your space? What makes your space special for different people?" • Encourage Participation: Allow students to express themselves however they feel comfortable—whether that's through words, drawings, or actions. |
| Required material and resources | <ul style="list-style-type: none"> • Large paper or poster boards for drawing and sketching. • Textured materials (foam, fabric, rough paper, soft paper) for tactile experiences. • Markers, crayons, or coloured pencils. • Visual aids (pictures or videos of inclusive spaces). • Small models or props to represent accessible design features (e.g., ramps, signs, or tactile materials). • Large-print or easy-to-read labels for students with visual impairments. <p><u>Extra resources:</u></p> <ul style="list-style-type: none"> • Inclusive Makerspace Design – MakerEd • DIY Accessible Makerspace Tools – Instructables • Teaching Accessibility to Kids – Microsoft Educator Center |
| Assessment or evaluation techniques | <p>Design Communication: Evaluate students on their ability to clearly explain or present the intention behind their design choices, especially in relation to accessibility and inclusivity.</p> <p>Creativity and Empathy: Assess the originality of the project and the degree to</p> |

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| | <p>which students show empathy by considering the needs of diverse users in their design.</p> <p>Hands-On Participation: Monitor how actively students engage during group work and discussions, and how effectively they use materials to explore and express their ideas.</p> <p>Feedback and Responsiveness: Provide simple, constructive feedback on the inclusivity of their design features, and observe how students respond or make improvements based on suggestions.</p> <p>Final Reflection: Evaluate how well students articulate their understanding of inclusivity during the wrap-up, including how their project addresses real-world accessibility needs.</p> |
| Ethical Considerations | <ul style="list-style-type: none"> ● Respect for All Abilities: Encourage and model respect for all students, making sure to affirm all contributions. Some students may need more time or different ways to express their ideas. ● Positive Reinforcement: Offer praise for effort and creativity, ensuring that every student feels confident sharing their thoughts and designs. ● Inclusive Language: Use language that is simple and inclusive, avoiding any language that could unintentionally exclude students or make them feel different. <p><u>Additional Support Considerations:</u></p> <ul style="list-style-type: none"> ● Visual Support: For students with visual impairments, make sure materials are larger or in high-contrast colours. Offer tactile support like textured fabric swatches to represent different materials. ● Physical Assistance: If any students have mobility challenges, make sure to provide assistance for |

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| | <p>handling materials or encourage peer support.</p> <ul style="list-style-type: none"> ● Simplify Concepts: Some students may need a simplified explanation or a little extra time to understand abstract concepts like "inclusivity." Provide extra guidance as needed. |
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