

LESSON PLAN

Design Your Inclusive Makerspace

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MAKE U IN Lesson Plan

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Lesson Plan

| Title of the Lesson | Design Your Inclusive Makerspace |
|---------------------------------|---|
| Duration | 1 hour |
| Teaching methods and strategies | 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 | 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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of accessibility.

| | 3. Wrap-Up/Review (5 minutes) 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 | 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. |
| | Extra resources: Inclusive Makerspace Design – MakerEd DIY Accessible Makerspace Tools – Instructables Teaching Accessibility to Kids – Microsoft Educator Center |
| Assessment or evaluation techniques | 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. Creativity and Empathy: Assess the originality of the project and the degree to |

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| | which students show empathy by considering the needs of |
|------------------------|--|
| | diverse users in their design. |
| | |
| | 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. |
| | |
| | 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. |
| | |
| | Final Reflection: |
| | Evaluate how well students articulate their understanding |
| | of inclusivity during the wrap-up, including how their |
| | project addresses real-world accessibility needs. |
| Ethical Considerations | |
| | 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. |
| | Additional Support Considerations: |
| | Visual Support: For students with visual |
| | visual support. For students with visual impairments, make sure materials are larger or in |
| | high contract 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 |
| | sharenges, make sure to provide assistance for |

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handling materials or encourage peer support.

 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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