

Building Communication with STEM

How science skills promote communication

Curriculum Connections

- A1.** Oral and Non-Verbal Communication (A1.1, A1.2)
- A3.** Understanding and Responding to Texts (A3.4, A3.5)
- A4.** Expressing Ideas and Creating Texts
- D24.** Responding to Art (D24.1, D24.2, D24.3)
- D25.** Exploring and Creating Art (D25.4)

Key Takeaways

- Communication plays a key role in STEM and math processes in addition to the foundations of language.
- The classroom learning space is the third teacher and best supports students when it is put together with intention.
- Loose part representation, hands-on learning experiences and incorporation of the Arts enrich both STEM and communication skills development.
- Art-based activities provide opportunities for non-verbal communication.



Strategies & Tips

- **Provide question starters for inspiration.**
Who, what, when, where, why and how are the starting points of scientific inquiry.
- **Think-Pair-Share story solutions.**
When reading texts, pause when obstacles occur and have students think-pair-share solutions the characters could use. (Extend their learning by setting up learning centres where students can build and test their ideas.)
- **Build pedagogical documentation throughout.**
Use Frayer Models, drawings, oral communication and/or anecdotal observations at all phases of the STEAM journey to capture student growth and learning.
- **Choose a wide variety of materials purposefully.**
Diverse materials provide more entry points for students to communicate their feelings and ideas.
- **Select culturally relevant and responsive texts.**
Students are more likely to engage when they see themselves represented in stories.

