

MODULE 1: Riko-chan Cosplay Toolkit

International Day of the Girl Child STEM Outreach Activity

The key is that the cosplay should not be treated as entertainment alone. It should be framed as **"bringing a STEM role model to life."** The goal is for children to meet Riko-chan as if she were a young engineer, inventor, and problem-solver.

What's Inside This Toolkit?

This toolkit provides practical guidance for using Riko-chan cosplay as a STEM outreach activity, particularly during International Day of the Girl Child celebrations and STAR Program events.

Inside You Will Find

1. Why Riko-chan Cosplay?

How character-based outreach can inspire young learners, create STEM role models, and increase engagement.

2. Meet Riko-chan

An introduction to the character, her values, and her role as a young STEM problem-solver.

3. Cosplay Guide

Tips for recreating Riko-chan's appearance and bringing the character to life.

4. School Visit Activities

Step-by-step ideas for storytelling, discussions, and hands-on STEM activities.

5. STEM Conversation Starters

Questions and prompts that encourage critical thinking and imagination.

6. Event Planning Checklist

A simple checklist to help volunteers prepare for successful outreach visits.

Toolkit Goal

To help volunteers use storytelling, role models, and creativity to inspire children—especially girls—to see themselves as future scientists, engineers, innovators, and problem-solvers.

Why Use Riko-chan Cosplay?

The International Day of the Girl Child celebrates girls' rights, potential, and opportunities. One challenge in STEM outreach is that many girls do not see themselves represented as scientists, engineers, inventors, or technology leaders.

When volunteers dress as Riko-chan and other manga characters, they transform a fictional story into a real-world role model experience.

Children are often more likely to remember a character they meet than a presentation they watch. A volunteer dressed as Riko-chan creates an immediate connection and makes STEM feel approachable, friendly, and exciting.

The cosplay activity supports several educational goals:

1. Creates Visible STEM Role Models

Children see a girl character who solves problems through creativity, science, engineering, and teamwork. This helps challenge stereotypes about who belongs in STEM.

2. Increases Engagement

Many students are naturally curious about costumes and characters. Cosplay attracts attention and creates excitement before educational activities begin.

3. Makes STEM More Relatable

Instead of introducing STEM as a school subject, volunteers can introduce it through stories and real-life challenges that Riko-chan solves.

4. Supports Confidence in Girls

Girls can imagine themselves as inventors, engineers, and innovators when they interact with a character who demonstrates those qualities.

5. Encourages Creativity Alongside STEM

The character represents both imagination and technical thinking, reinforcing that innovation requires creativity as well as scientific knowledge.

Character Cosplay Guide

The goal of this initiative is recognizability, creativity, and engagement rather than perfect character accuracy. Volunteers are encouraged to represent any character from the manga stories, including Riko-chan, Reizei, Arisa, Aiko, or other story characters.

The cosplay initiative is designed to be flexible and inclusive so that volunteers can participate regardless of costume-making experience, available resources, or personal preferences.

Signature Style Elements

Rather than focusing on exact physical features, volunteers can emphasize recognizable character elements such as:

- Large round glasses
- Colorful hair accessories
- Bows, ribbons, or character-inspired accessories
- Character-themed clothing colors
- STEM-themed props related to the story

Examples include:

- A drone model for *Midnight Drone Rescue*
- A robot sketch or prototype for *Shopping Assistant Robot*
- A coding worksheet for *Knitting the Perfect Code*
- An accessibility-themed prop for *AI Vision*

Simple, creative interpretations are encouraged. A volunteer does not need to exactly match a character's appearance to successfully participate.

The most important part of the cosplay is representing the character's curiosity, creativity, kindness, and passion for problem-solving.

Acting as Riko-chan

Cosplayers should not simply wear the costume. They should embody the character's values.

Riko-chan is:

- Curious
- Kind
- Creative

- Helpful
- Determined
- Interested in science and engineering

Example Behaviors

Instead of saying:

"I am here to teach engineering."

Say:

"Hi! I'm Riko-chan. I love solving problems. What problem would you like to solve?"

Instead of:

"Today we will learn about robotics."

Say:

"Have you ever wished you had a robot helper? Let's imagine one together!"

School Visit Activity Flow

Step 1: Character Introduction (5 minutes)

Riko-chan introduces herself and explains that she loves solving problems through STEM.

Step 2: Story Time (10 minutes)

Read one manga story together.

Step 3: STEM Challenge Discussion (10 minutes)

Ask:

- What was the problem?
- Why was it important?
- How did STEM help?
- What would you do differently?

Step 4: Creative Activity (20 minutes)

Choose one:

- Coloring activity
- Fill-in-the-dialogue manga

Step 5: Design Your Own STEM Hero Challenge (15–20 Minutes)

As part of the International Day of the Girl Child celebration, participants are invited to create their own STEM hero.

Students can design:

- A character name
- A STEM superpower or specialty
- A problem they want to solve
- An invention or innovation they would create
- A costume or visual identity

Participants may draw their character, describe their invention, or share their ideas with the group.

This activity encourages creativity, self-expression, problem-solving, and helps students imagine themselves as future innovators, engineers, scientists, and technology leaders.

Extra Guidelines

Remember that children may see you as a role model.

Always:

- Encourage questions
- Celebrate creativity
- Praise effort rather than correct answers
- Include all participants
- Promote teamwork
- Emphasize that STEM is for everyone

The most important message is:

"You do not need to be a genius to become an engineer. You only need curiosity, creativity, and a willingness to keep trying."

One thing I particularly like is having the volunteers introduce themselves *in character*. For example:

- "I'm Riko-chan from AI Vision. I built technology to help my friend navigate independently."
- "I'm Riko-chan from Midnight Drone Rescue. I used engineering to deliver medicine during an emergency."
- "I'm Riko-chan from Shopping Assistant Robot. I designed a robot to help my grandmother."

That immediately connects the cosplay to a specific STEM challenge rather than making it feel like a costume appearance.

Module 2: STEM Coloring Workshop

Objective

Use coloring activities to increase engagement and STEM curiosity.

Materials

1. Black-and-white Riko-chan pages
2. Colored pencils or markers

Steps

1. Distribute pages.
2. Read the related story.
3. Color while discussing the STEM concept.
4. Share observations.
5. Connect visuals to real-world technology.

Learning Benefits

1. Improved attention
 2. Better memory retention
 3. Observation skills
 4. STEM vocabulary
 5. Creativity and visual thinking
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Module 3: Create Your Own Manga

Objective

Transform participants from readers into creators.

Materials

1. Manga pages with blank dialogue bubbles
2. Pencils and markers

Steps

Beginner

Fill in missing dialogue.

Intermediate

Write a new ending.

Advanced

Create a new STEM challenge for Riko-chan.

Prompt Examples

1. What should Riko do next?
2. Why isn't the robot working?
3. How can the drone reach its destination?
4. What would you invent to help your community?

Skills Developed

1. Observation
2. Scientific reasoning
3. Communication
4. Creativity
5. Problem-solving

Workshop Evaluation

Before Activity

Ask:

1. What is engineering?
2. Can technology help communities?

After Activity

Ask:

1. What STEM idea did you learn today?
2. What problem would you like to solve?
3. Which Riko-chan story inspired you most?

Success Indicators

- ☐ Active participation
- ☐ Questions asked
- ☐ Creative solutions proposed
- ☐ Interest in STEM careers
- ☐ Completed manga/coloring activities

Module 4: Digital Participation

Not all volunteers will be able to participate in school visits or in-person events. To support global participation, volunteers are encouraged to celebrate the initiative online.

Ways to participate digitally include:

- Sharing photos of character-inspired cosplay
- Creating short videos introducing a favorite manga character
- Posting STEM-themed messages inspired by the stories
- Highlighting how the character uses science, technology, engineering, or mathematics to solve problems
- Encouraging girls to explore STEM fields through social media campaigns

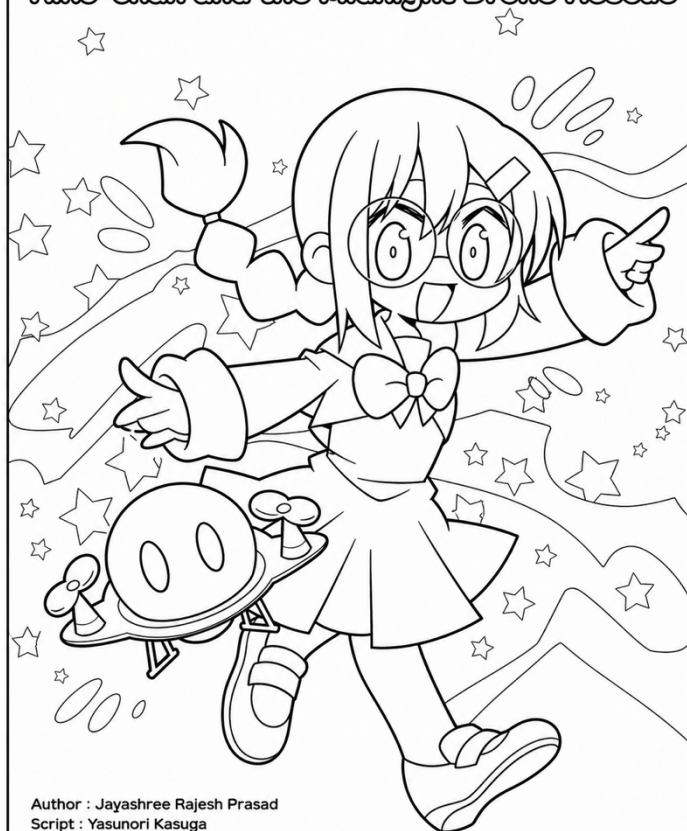
When posting online, volunteers are encouraged to use the official hashtags.

Hashtag that must be used is #GirlChildInSTEM

Digital participation helps increase the visibility of STEM role models and allows volunteers around the world to celebrate the International Day of the Girl Child together.

Example pages for Module 2:

Riko-chan and the Midnight Drone Rescue



Author : Jayashree Rajesh Prasad
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