

1) What we are doing in this project.

In this project, we are exploring the benefits of the 4x4 Challenge for students. The 4x4 Challenge is a STEM competition that challenges students to design, build, and race a four-wheel drive vehicle made from scratch.

2) What the 4x4 Challenge is.

The 4x4 Challenge is a STEM competition that challenges students to design, build, and race a four-wheel drive vehicle made from scratch. The competition is open to students of all ages and skill levels, and it is a great way for students to learn about engineering, design, and teamwork.

3) Why it is good for students to do this competition.

The 4x4 Challenge is a great way for students to develop practical skills and IB Learner profile traits. Practical skills that students develop include:

- Engineering skills
- Design skills
- Problem-solving skills
- Teamwork skills

IB Learner profile traits that students develop include:

- Inquirers: Students learn to ask questions and explore new ideas.
- Knowledgeable: Students learn to acquire and apply knowledge.
- Thinkers: Students learn to think critically and creatively.
- Communicators: Students learn to communicate effectively.
- Risk-takers: Students learn to take risks and persevere in the face of challenges.
- Open-minded: Students learn to be open to new ideas and perspectives.
- Principled: Students learn to act with integrity and respect for others.
- Caring: Students learn to be compassionate and empathetic.
- Balanced: Students learn to manage their time and resources effectively.
- Reflective: Students learn to reflect on their experiences and learn from their mistakes.

4) Why the skills above are good for students to learn.

The skills that students develop in the 4x4 Challenge are essential for success in school and in the workplace. According to a study by the World Economic Forum, the top skills required for the future of work include problem-solving, critical thinking, creativity, and collaboration. ([weforum.org/reports/the-future-of-jobs-report-2020](https://www.weforum.org/reports/the-future-of-jobs-report-2020))

The IB Learner profile traits are also highly valued by employers. According to a study by the Association of Colleges and Employers, the top qualities that employers look for in job candidates are communication skills, problem-solving skills, and teamwork skills. ([naceweb.org/career-development/job-search/employers-look-for-soft-skills-in-job-candidates](https://www.naceweb.org/career-development/job-search/employers-look-for-soft-skills-in-job-candidates))

In conclusion, the 4x4 Challenge is a great way for students to develop practical skills and IB Learner profile traits that are essential for success in school and in the workplace.