

Year 9 Ways of Doing- STEAM

Versatile

Evolutionary

Collaborative

Exceeding

Students are able to confidently use prior knowledge to enhance projects and ideas, demonstrating a clear understanding of how it can benefit their work.

Students adapt positively to the changing nature of STEAM projects, welcome feedback from peers and teachers and approach problems from a range of perspectives.

Students can articulate clearly how they have used knowledge and skills from different subject areas in their projects. They seek out concepts from multiple disciplines to explore and demonstrate their own learning

Students are able to think beyond their own community or personal gain and produce solutions and ideas which would have a meaningful impact on the wider society.

Students instinctively work through the design thinking process, demonstrating evidence of progression at each stage. They reflect on the development of their solutions and are able to revisit each stage where necessary.

Students produce multiple solutions and can justify the merits of all, before deciding on which to take forward as the solution most likely to benefit all.

Students look into the future, rather than thinking only about the problems that affect us now. They demonstrate foresight and are developing solutions based on their predictions.

Students see the value in adapting their views and ideas, based on group discussion, to resolve issues and achieve shared goals.

Students are aware that, in different situations, they need to take on different roles to develop and build on the strengths of others.

Students are able to communicate in a manner to minimize conflict, and are flexible to possible change or compromises required to benefit the wider community.

Students encourage and welcome opposing viewpoints and recognise success comes from sharing their ideas in order to achieve outstanding outcomes.

Expected

Students are able to confidently use prior knowledge and can articulate how it may benefit their work.

Students adapt positively to the changing nature of STEAM projects, welcoming feedback from peers and teachers, they consider several ways of forming solutions

Students can articulate clearly how they have used knowledge and skills from different subject areas in their projects and seek out concepts from multiple disciplines.

Students are able to think beyond their own community or personal gain and produce solutions and ideas which would have a meaningful impact on others.

Students work through the design thinking process, demonstrating evidence of progression at each stage, and are able to revisit each stage where necessary.

Students produce multiple solutions, before deciding on which to take forward as the solution most likely to benefit all.

Students are using STEAM as an opportunity to design solutions that will make a difference.

Students demonstrate the ability to identify the need and seamlessly take on different roles within a group in order to achieve an effective dynamic.

Students are able to communicate in a manner to minimize conflict, and are flexible to possible change or compromises required to benefit the wider community.

Students encourage and welcome opposing viewpoints and recognise success comes from sharing their ideas in order to achieve outstanding outcomes.

Developing

Students are able to confidently use prior knowledge to enhance projects and ideas

Students adapt positively to the changing nature of STEAM projects and welcome feedback from peers and teachers.

They can articulate clearly how they have used knowledge and skills from different subject areas in their projects.

Students can apply their own experience to react empathetically to others, and can modify their design and solutions to reflect this.

Students work through the design thinking process, demonstrating evidence of progression at each stage, and are able to revisit each stage where necessary.

Students are using STEAM as an opportunity to design solutions that will make a difference to the wider community.

Students demonstrate the ability to identify the need and often take on different roles within a group in order to achieve the intended result.

Students are able to communicate in a manner to minimize conflict, and demonstrate some flexibility to the change required to benefit the wider community.

Students recognise success comes from sharing their ideas in order to achieve outstanding outcomes.

Supported

When prompted, students are able to use prior knowledge to develop ideas in their projects.

Students can demonstrate knowledge acquired from other subjects when discussing with peers and teachers.

Students ask questions about connections in subjects and seek validation of their ideas in new contexts.

When prompted, students can think beyond their own personal experience. With support, they begin to explore ways in which they can approach problem solving.

Students are able to create prototypes but struggle to empathise and think about how it solves the problem.

Students struggle to make the links between the design thinking process and how careful, thorough planning will contribute to effective solutions.

Students articulate their own ideas and can listen to the ideas of others, even if they don't agree with them. They can begin to see the advantage of working in groups but sometimes find this difficult.

Students can agree on a shared idea and appreciate how working with others can be more effective in reaching a successful solution but still find this difficult when tasks are distributed.

With teacher guidance, students take on different roles within a group, and are willing to be challenged.