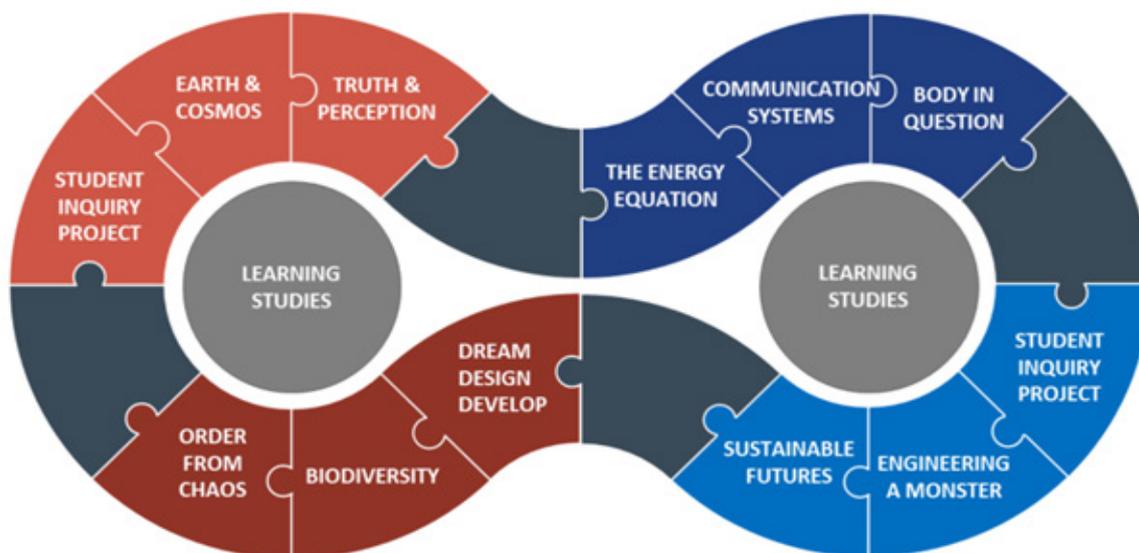


Interdisciplinary Curriculum

In the longer run and for wide-reaching issues, more creative solutions tend to come from imaginative interdisciplinary collaboration." –Robert J. Shiller, Nobel Laureate 2013

Context

In years 10 and 11, learning is based on a series of unique, interdisciplinary courses called Central Studies. Each Central Study features a core theme, weaving multiple subjects together to bring the theme to life, including English, Mathematics, Science, History, Health & PE and Humanities. Central Studies are taught in a two-year cycle, where students undertake three courses each semester.



Why learn this way?

Here at the ASMS, our purpose is to authentically prepare our students for their futures. "Learners should be able to link their learning experiences to the real world and have a sense of purpose in their learning. This requires interdisciplinary and collaborative learning..." –OECD 2030, 2018

"Increasingly, new knowledge is generated through the synthesis of knowledge from different specialised disciplinary fields. Thus, ways of understanding and dealing with societal issues and problems can only be achieved if the fundamental unity of knowledge is appreciated, and people are able to work across disciplinary boundaries. The capacity to combine disciplines (interdisciplinary), or draw from a number of disciplines (multidisciplinary), or blend disciplinary knowledge (transdisciplinary) is, therefore, a fundamental capacity in the 21st century. Interdisciplinary knowledge has a symbiotic relationship with disciplinary knowledge." –Beyond Certainty, 2018





Examples of how we do it:

In our Central Study titled 'Communication Systems', the theme is 'sending and receiving information'. We cover the English curriculum through a study of Shakespeare's Macbeth, where information is transmitted via the script of the play. We cover Mathematics through a study of linear equations, where the information communicated is used to storm the castle and capture Macbeth from the Great Hall. We cover Science through a study of neural biochemistry, where messages of elation, fear, anxiety, and joy are transmitted through the characters in the play.

In our Central Study titled 'Body in Question' we explore the dynamic complexities of the human body. The learning was designed as a smooth and powerful synthesis of health, anatomy, physiology, physics, immunology, psychology, mathematics, language, and literacy. Students examine the nature of health and disease from the physiological, mental, social, emotional, and immunological aspects and investigate the role of physics in describing and explaining movement of the human body.

Summary:

- + Interdisciplinary learning allows students to tackle real world problems using multiple approaches, making learning more meaningful and authentic.
- + Current big issues (like climate change) need a multidisciplinary approach to develop innovative solutions for the future.

- + Students develop their ability to synthesise and transfer knowledge and skills between contexts to progress to a more advanced understanding of big ideas.
- + Students find this learning more valuable and more relevant to their futures.

"Having our subjects combined and meshed together helped us understand more aspects of the theme of the course. We get more of an involved understanding, like how to use all the different elements or subjects in a specific situation. Being able to examine statistics while learning about the spread of COVID was extremely relevant to us in 'Body in Question' course." - Parmida, Yr11 BiQ student 2021

Resources

- + Fadel C, Bialik, M, Trilling, B (2015) Four Dimensional Education – The competencies learners need to succeed Centre for Curriculum Redesign
- + Reid AM, A 2018, Beyond Certainty: A Process for Thinking About Futures for Australian Education, SASPA, pdf, viewed 1 June 2022, <https://www.saspa.com.au/wp-content/uploads/2018/08/aspa0001_Monograph_digital.pdf>.
- + The Future of Education and Skills 2018, OECD, pdf, viewed 1 June 2022, <[https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)>.

