Overview

Commencing in 2008, Lachlan Macquarie College, a dynamic centre of excellence in mathematics and science, develops and provides high quality and innovative programs to improve learning outcomes for public school students of Western Sydney.

These programs are developed to address identified teaching and learning needs within three major strands and their delivery is supported by the availability and application of new, cutting edge technologies in a unique school and tertiary education partnership.

Outcomes and Future Directions:

Lachlan Macquarie College provides the hub and test bed for applications of innovative teaching and learning methodologies within the key curriculum areas of Mathematics and Science, providing important building blocks for the future life experiences and careers of our students.

Strand 1: Applied Mathematics and Science

Programs feature “hands-on” and “on the job” opportunities and experiences, through partnerships developed with Western Sydney Institute of TAFE, local industry, business and community leaders and groups. Student understanding of concepts are reinforced by the demonstration of important aspects of Mathematics and Science theory in practice.

Strand 2: Specialist Mathematics and Science

Lachlan Macquarie College will offer extension courses to cater for students who intend to undertake tertiary study that involves particular demands in Mathematics and / or Science. Unique opportunities will be available within this strand for the involvement of University of Western Sydney academics and other leading Mathematics and Science experts (from local to international) in the design and delivery of specialist programs.

Strand 3 (S3): Mathematics and Science Teaching

Lachlan Macquarie College, particularly through its close working relationship with the University of Western Sydney, is in a unique position to assess and respond to the professional learning needs of local Mathematics and Science teachers. Cooperative action research undertakings, together with the analysis of local, regional and state-wide Mathematics and Science program evaluations and student performance data, will shape the development and delivery of relevant professional learning programs and activities for local teachers.
Samples of 2008 Programs

- Statistics and Astronomy online master classes developed in collaboration with the Centre for Learning Innovation
- Gifted and Talented Mathematics Days
- Experience Science Day @ UWS
- The AAS Team Challenge @ UWS
- Stage 3 Mathematics and Science forums via video conferencing
- HSC lecture days
- Tall Poppy Seminars
- Professional Learning Activities via video conferencing
- ESSA Test Report in service

Lucy Snowball from BOCSAR assists Lachlan Macquarie College students manipulate statistical data during the master class, filmed at the Centre for Learning Innovation

Professor Fred Watson with Lachlan Macquarie College students at the Astronomy master class, filmed at the University of Western Sydney.