HEAD OF STEM AND TECHNOLOGY





Reporting to: Director of Teaching and Learning

Teaching: Ongoing
Employment Fraction: Fulltime
Teaching Fraction: 0.6FTE

Leadership time release: 0.4FTE plus Homeroom or its equivalent

Leadership Tenure: 3 years

Leadership Salary: Category 5

Last modified: September 2023

Position Context

Hume Anglican Grammar is an independent, multi-campus, co-educational and Anglican Diocesan School offering education from Prep to Year 12 in the Northern growth corridor of Melbourne. We aim to provide our students with an education that prepares them for the challenges of life, equips them to contribute to the community in an environment based on Christian values and at a cost affordable to as many families as possible. It is our fundamental belief that young people who are genuinely happy will engage, aspire and thrive within our learning community. By establishing high standards in all that we do, every student is encouraged and supported to discover and fulfil their unique potential.

Hume Anglican Grammar has an open enrolment policy so educates children from many faiths and with a diverse range of backgrounds and abilities. It has a strong sense of inclusivity and a community-minded focus. We are a progressive school, not just in the development of buildings and grounds, but also in innovative thinking and advancements in our approach to teaching and learning. This is led by a group of dedicated and expert teachers who practise their craft with skill, and by building the strongest of relationships with our students. It is not by chance that we have young people who readily display warmth, humour and respect for one another and their teachers.

Since 2011, the School has occupied the Mt Ridley P-12 campus of 10 hectares, this site will ultimately have some 1,400 students. In 2019, it opened an 8-hectare second campus in Donnybrook. Commencing with junior primary, each year additional classes and year levels are added so the campus will ultimately have an enrolment of 1,300 from Prep to Year 12. At Donnybrook, the first cohort of Year 7 have commenced, so inaugural secondary students.

In 2023, the School will open its third campus in Kalkallo, as a Primary (P-6) school and as feeder to the Mt Ridley and Donnybrook Secondary schools, it will follow a similar growth pattern to Donnybrook with eventually some 600 students. Last year, the first classes for the new campus commenced and are accommodated at the Donnybrook campus, to soon move to the new site in Term 2.

This year, the school has 2,287 students and employs some 240 staff - 163 teaching and 77 non-teaching. Currently, the student enrolment at each campus is: Mt Ridley 1,400, Donnybrook 672 & Kalkallo 215.

The school is on a growth trajectory and in 2024 is projected to increase to 2,573 students (Mt Ridley 1,400, Donnybrook 840 & Kalkallo 305) and ultimately will have some 3,600 students (Mt Ridley 1,400, Donnybrook 1,600 and Kalkallo 600) with a corresponding cohort of teaching and general staff on its three campuses with plans for further expansion.

Purpose of the Position

With expertise, experience, and contemporary knowledge within the domains of Science, Technology, Engineering and Mathematics (STEM), the Head of STEM and Technology designs, implements, develops, and evaluates STEM programs for students. They play a pivotal role in the overall coordination of programs being run across the school.

The Head of STEM and Technology ensures stimulating, innovative, relevant, enriching, and equitable programs are provided for students that promote interest and engagement in STEM disciplines and careers.

The Head of STEM and Technology forms strong partnerships with a wide range of school and community stakeholders. They work closely with the Heads of Teaching and Learning - Primary/Secondary, Heads of Curriculum (Primary), Heads of Faculty (Secondary), the STEM Centre Manager and Laboratory Manager. They have a particularly strong relationship with curriculum leaders and teachers within the disciplines of science, technology, and mathematics. Working with staff across all campuses, the Head of STEM and Technology exhibits the highest level of judgement to calmly manage conflicting demands to ensure that all programs being developed and implemented in STEM run smoothly. They foresee the impact of future activities and can anticipate demands upon STEM resources. They exhibit a high level of personal judgement and have the confidence and capability to make timely and workable decisions. The Head of STEM and Technology reports to the Director of Teaching and Learning and operates closely with the Risk and Compliance Manager.

Nature of the Position

Responsibilities encompass the whole school; hence the Coordinator of STEM Programs will create, implement, and nurture strategies for weaving STEM experiences into a multi-disciplinary curriculum from Prep to Year 12.

Upon commencement, this position will be based in the STEM Centre at the Mt Ridley Campus with a requirement to travel to the other campuses. In the future there may be the requirement to perform part or all this role at other locations.

Responsibilities and Duties

Subject to the discretion of the Principal, the Coordinator of STEM Programs is responsible for:

STEM Program implementation and enhancement:

- Planning, organising, and coordinating initiatives, projects, and activities that support and extend existing STEM programs
- Researching, implementing, monitoring, and enhancing new STEM programs
- Leading the development of integrated STEM programs that are challenging, exploratory, dynamic, and relevant to learners
- Collaborating with Coordinators of Learning Enhancement to design and implement stimulating STEM programs that cater for students with additional needs
- Actively promoting STEM awareness, programs, engagement, career opportunities and subjects to the school community
- Evaluating and reporting program effectiveness through the collection and analysis of data to increase STEM participation rates and predetermined goals
- Providing leadership, including professional development opportunities that encourage and support inquiry-based learning in STEM
- Cultivating suitable extension opportunities for students through the creation of clubs, forums, competitions, workshops, and projects related to STEM
- Working with the Careers Counsellor, VCE Coordinator, teaching and learning leaders to develop pathways in STEM fields that lead to further education and career readiness
- Engaging existing partners and seek out new connections to provide a robust set of STEM, career, and school learning opportunities for students
- Acting as the school and STEM program ambassador during school visits and promotional events, in particular Open Days and Discovery Tours
- Organising and coordinating STEM-related incursions, excursions, activities, and events

- Effectively conduct presentations to a variety of students, staff, and parents
- Providing regular reports, including student learning outcomes, program review, equity planning, and other assessment activities

STEM Centre coordination:

- Contributing to a welcoming, stimulating, and contemporary STEM Centre learning space
- Coordinating and overseeing projects in the STEM Centre as required
- Supporting the STEM Centre manager in overseeing the maintenance and good/safe working order of STEM Centres
- Operating with the OHS staff and the HSR to ensure compliance with applicable codes, regulations, or legislation
- Ensuring effective risk mitigation practices are established with a high degree of attention to safety of students, staff and visitors to the STEM Centres
- Coordinating with the Coordinator of School Organisation any out-of-hours programming and all facets involving the hire or use of the STEM Centres by external groups
- Supporting the outfitting of new STEM centres on the Donnybrook and Kalkallo campuses

Coordination of Technology Faculty:

- Developing, implementing, evaluating and revising the selection and sequencing of curriculum within their subject area
- Monitoring and directing teachers to ensure that the key principles of teaching and learning in the subject are implemented
- Supporting teachers with resourcing and advising as appropriate
- Collaborating with colleagues, in particular other Subject Coordinators and Heads of Faculty, to develop consistent pedagogy and documentation
- Leading curriculum-mapping processes and activities as relevant to their subject area
- Creating, reviewing and amending as necessary, relevant sections of curriculum guides
- Ensuring systems are in place for tracking student progress over time in relevant learning
- Evaluating and updating annually the relevant component of assessment schedules in conjunction with their Head of Curriculum
- Leading regular scheduled subject area meetings that inform subject teachers and provide a collaborative setting for essential administrative tasks and professional learning
- Providing subject area input into the analysis of student results and other diagnostic data and ensure recommendations are understood and acted upon by subject teachers
- Facilitating communication between teachers in all year levels of the subject great
- Working with the subject teachers to review planners and providing feedback
- Coordinating the reporting process within their subject area
- Facilitating community awareness of best practice e.g. organise, as appropriate, parent information evenings, curriculum nights, newsletter articles, etc
- Being an active member and contributor of their Curriculum Committee
- Providing advice to their Head of Curriculum and Assistant Principal in the construction of the timetable as it pertains to the subject area, in particular the allocation of staff
- Overseeing the allocation of subject prizes and subject area awards
- Managing booklists and resources within their subject area
- Overseeing the professional development of staff in their subject area
- Formulating and managing the budget for their subject area
- Assisting their Head of Teaching and Learning and Assistant Principal in the selection, appointment and management of staff
- If a Secondary Subject Coordinator, operating in close liaison with the VCE Coordinator

General:

- Overseeing the implementation of school policy in relation to their area of responsibility, and where applicable ensuring new policies and procedures are developed
- Maintaining records and all documents pertaining to the role
- Undertaking the duties of a teacher as defined by the Position Description for a Teacher
- Carrying out other duties as directed by the Principal

Qualifications and Experience

Essential:

- Relevant experience in a similar role
- Knowledge, awareness, and experience in contemporary trends in STEM, research, and pedagogy
- Practical understanding of the role STEM programs has in enriching the educational experience for students, with a fundamental appreciation of the inter-connection between the four elements of STEM
- Demonstrated ability and willingness to work collaboratively with a diverse school community to promote STEM awareness and engagement
- Demonstrated excellence in interpersonal skills which include both verbal and written communication
- Demonstrated technical skills: Microsoft Office (Word, Excel, PowerPoint) and data management/analysis tools
- Knowledge of occupational health and safety issues in the workplace
- Valid Driver's Licence

Desirable:

- Post graduate qualifications in education or a STEM related discipline
- Involvement in relevant professional communities

Personal Qualities

- Evident passion for and commitment to serving students
- Outstanding organisational skills, planning, analytical and high order thinking capabilities
- Personal sense of initiative, enthusiasm, and high energy to engage and empower students with a rich and rewarding STEM experience
- Predisposition to be proactive, a self-starter and autonomous worker with the ability to troubleshoot and devise practical and targeted solutions
- Ability to prioritise and manage conflicting demands, often competing for finite or shared resources
- Ability to complete duties in a timely fashion
- Outstanding attention to detail and commitment to ongoing improvement
- The ability to build and maintain strong relationships with staff
- Demonstrated interest in ongoing personal professional development

Key Selection Criteria

- 1. Demonstrable knowledge, awareness and experience in contemporary STEM trends, research, and pedagogy.
- 2. An inspirational leader with excellent interpersonal skills to effectively communicate, lead, and motivate others.
- 3. Outstanding organisational competence, planning capabilities, project management skills and the ability to prioritise demands.