



HIGH POTENTIAL GIFTED EDUCATION
PROGRAM @ PLUMPTON HIGH SCHOOL



2024

PLUMPTON HIGH SCHOOL HIGH POTENTIAL GIFTED EDUCATION

PREVIOUSLY KNOWN AS THE GIFTED & TALENTED (GAT) PROGRAM



Dear Students, Parents and Carers,

Plumpton High School offers a significant number of High Potential Gifted Education (HPGE) (Gifted and Talented GAT) programs available to students that are directly linked to a future focused world and employment. To support the link to the world beyond school most of these programs are taught by industry experts who are teachers with links to a university, industry and an employer. Many of the programs have industry business partners working with the teachers and students such as Citi Group and the ABC.

These programs build and develop a student's intellectual capacity, ensuring that they have attained the necessary skills and ability to solve complex problems, develop and understand concepts and be the leaders of tomorrow. Many of the courses are at a university level with the students excelling through a highly supportive structure.

There is a significant focus on Science, Technology, Engineering and Mathematics (STEM) an area of significant need in the world, Media and Communications, the Creative and Performing Arts (Dance, Drama, Music, Art & Design) and development of leadership, courage and resilience through the Duke of Edinburgh International Award Scheme.

All courses ensure students build the essential skills and capacity to develop quality professional and personal relationships that are essential for life success. Successful employment as stated by great leaders, entrepreneurs, businesspeople and research requires our young people to have the ability to; collaborate and work successfully as part of a group or team within an organisation; develop solid positive, productive partnerships with clients or customers; and build a network to mutually benefit the individual and business.

Students who have participated in these courses have received State, National and international recognition. Examples of this includes National Computer Science in Schools, NSW State Championships, International recognition through the Duke of Edinburgh Award Scheme, Mentorships by national and multinational organisations such as Lend Lease, AXA Investment Managers, Citi Group/Bank, AMEX, The Australian Business Community Network (ABCN) and Microsoft.

All HPGE programs at Plumpton focus on the development of a Growth Mindset. For students to have a Growth Mindset, they should understand that trying harder - and trying new strategies – not helps them succeed at the current task but also assists them succeed in the future by strengthening their brain and confidence.

Tim Lloyd

Principal | Plumpton High School | NSW Department of Education

Former National Coach Gymnastics Australia | Coach of World Champion | Former Australian Principal of Year 2019

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Application Form Information

The Plumpton High School Gifted and Talented Clubs have a generic online application, scan the QR Code to open the online application.



Each club will require an individual version of the generic application form to be completed. If you do not have access to the online application, there are application forms at the back of the book to complete and submit to your school.

Please read the information and submit the application forms back as per the due date.

Take a look at what we do:

Check out the school website to see **students** and **teachers** speaking about each of our **GAT programs**.



Plumpton High School Gifted and Talented Programs 2024 APPLICATION FORM PROCESS

How to Apply

Please complete AND submit **ONE APPLICATION FORM PER GROUP/CLUB**

Complete the online application form at the QR Code below (**preferred method**):



If you are unable to access the form please complete the application form at the back of the book and return to **Plumpton High Schools Front Office** or **your Schools Front Office by Wednesday 24th February 2024**.

Please make sure all information is correct and a **valid email address** is supplied as this will be the main form of contact.

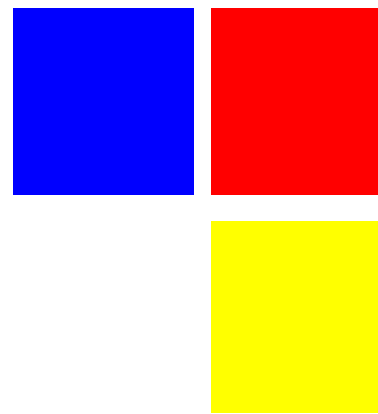
Successful applicants will be notified of their place by email during week 5

PLEASE NOTE CLUBS PROGRAMS WILL COMMENCE BY TERM 1 WEEK 6

Please check emails for details

If you have any questions please contact the **GAT Coordinator Hayley O'Brien** on 96257020 or via email hayley.obrien13@det.nsw.edu.au

Art & Design



Rationale

The study of Art and Design is a combination of elements of both the Visual Arts course and Visual Design course where the students will be completing artworks. Each term the students will be working towards completing an artwork or designed work, where they will be working towards achieving learning outcomes which will develop their skills in researching and organising information, communicating ideas, planning and organising and working with others. This will require the students to work collaboratively and develop their communication and problem-solving skills where the students will be developing their understanding of and skills in art making and art appreciation.

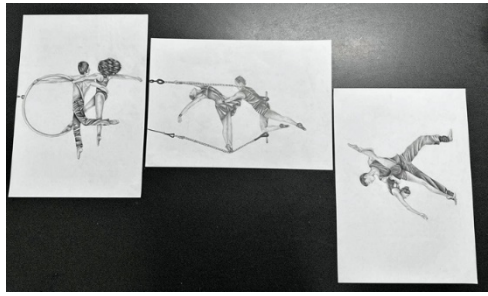
The High Potential Gifted Education Program for Art and Design (HPGEAD) as a part of the Plumpton Education Community aims to provide students with a deeper understanding and knowledge of Art and Design as an opportunity for self-expression and exploration of the world as a source of ideas. The students will be investigating the world as a source of ideas to make artworks for an audience, through this they will learn the value of art making and art appreciation and how as an artist the importance of the intention of the work for a specific audience. The students will learn how to engage with and work in contribute to the school and the wider community while working with clients for their projects.

The Art and Design program will provide the students involved with a range of experiences where they will focus on art making and appreciation and develop new skills across a range of modes such as Drawing, Painting, Printmaking, Sculpture, Ceramics Photography and Digital Media. In the Art and Design course students will be provided with the opportunity to experience Art and Design with a focus on either making projects in a range of forms, appreciating art, understanding subject matter, learning about influential artists to the project, analysing and interpreting artworks, understanding how the audiences or the world interpret art differently and how they are able to take on the role of the audience. The approaches to teaching and learning of Art and Design will be varied over the entire program so that the student's experiences working across a range of art making modes over the duration of the course. These opportunities also lead to culturally rich and imaginative learning experiences that assist students to enjoy and value the visual arts in their own lives.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills in Art and Design through:



1. Art Making

Students will learn how to investigate and experience a range of material in art making and how to make artworks for the enjoyment of different audiences.

Students will learn how to make artworks informed by their investigations of the world as subject matter, use of expressive forms, and consideration of the audience for their works

2. Art Appreciation

Students realise the role of the artists and what artists do and the artists' intentions

Students learn about appreciating their own artworks and those of others, recognising the roles of artists, audiences and how the world can be interpreted.

Value and Attitudes

Students will value and appreciate their engagement in the study of Art and Design and working collaboratively with others how the visual arts, as a field of practice and understanding, is subject to different interpretations.

Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

Teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes. These are descriptors of what students will know and be able to do as a result of studying the art and design program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Visual Art and Design, as an area of the curriculum, is based on students learning about the Artist, Practice, Representation, Critiquing and Appreciation. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- observing students during the process of making the work and the final product
- discussing with students their own work and the work of others
- interviewing individual students about their involvement in the collaborative work and the process of making
- collecting and analysing written work in art and design journals
- peer assessment and self-assessment

Teachers will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected for the program through expression of interest.

Students who show expression of interest will be required to submit an artistic creation of their own making.

Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Have artistic and design ability.
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance

What will each

lesson look like?

3:00pm – 3:20pm:

Warm up art and design activity

3:20pm – 4:00pm:

Art making on projects

4:00pm – 4:15pm:

Drink/Snack Break

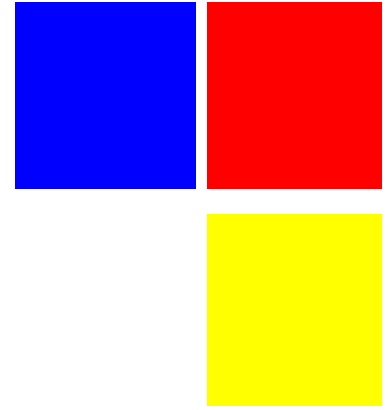
4:15pm – 5:00pm:

Art marking and Pack up

Application Information

Who is able to Apply?	Any student in years 5-10 from the Plumpton Education Community, with a passion to learn Art and Design Skills.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return to their schools front office by the cut-off date. Sit a practical drawing and design assessment. Students will be notified in regards to their application.
What is required?	Students will be required to participate in the full two hour class every week.
What does my child wear?	Normal school uniform is appropriate and there will be aprons made available however, if you would like to send your child with a spare shirt to paint to avoid their school uniform potentially being damaged.
How do I find out if my child was successful?	Students will be notified in writing one week after the application process whether they were successful or not for the program.

Why will the HPGE Art and Design be beneficial for my Child?



This program offers the opportunity for students to develop their individual skills in understanding and appreciating art.

Your child will develop skills in:

- Art appreciation
- Problem solving skills
- Developing critical thinking skills
- Developing design skills
- Enhancing communication skills
- Working collaboratively.

The program will develop your child's interpersonal skills and communication with others by working in consultation with other students and the teacher. Your child will benefit from learning how to turn their ideas into a final product in collaboration with others to develop a product from their art and design brief.

Meet the Teacher

Miss Georgia Henry- Bachelor of Education / Bachelor of Arts (Visual Arts)

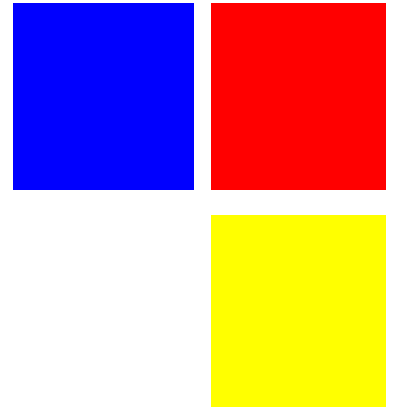
Graduate of Australian Catholic University

Miss Henry is new addition to Plumpton High School as of 2022. Miss Henry specialises in Visual Arts, Visual design , Photography & Digital Media. She has new and creative ideas surrounding art forms, materials, techniques, with an extensive knowledge in art history, and art making skills. Miss Henry is passionate to be passing on her knowledge and skills to future generations, and she is excited to help students develop independent, critical thinking and problem-solving skills through creative art making, developing each student's individual artistic practice.

Miss Henry ensures a safe, warm and welcoming classroom where students can flourish to form positive relationships with other student's across varying year levels. She ensures the value and importance of each students emotional, social and educational needs are being met at all times. The creative arts cater to each student's self-expression in artmaking.

Miss Henry ensures students build lifelong skills that are transferable to other subjects, and beyond the classroom.

Dance



Rationale

The study of dance as an artform is the philosophical base of the *Dance Years 7-10 and HSC Dance Syllabi*. 'Dance as an artform' determines the content and teaching approaches that are used in the teaching of dance as art in education and underpins the students' artistic, aesthetic and cultural education through dance. The Primary Dance syllabus provides students with a unique medium for learning and addresses a range of different learning styles. Dance provides students the opportunity to express their feelings, moods and ideas symbolically through movement.

The High Potential and Gifted Education Program for Dance (HPGED) as a part of the Plumpton Education Community aims to provide students with a deeper understanding and knowledge of dance as an artform. The HPGE will provide students with a personal expression and enjoyment through dance, learning about oneself, other people and the world and confirming cultural identity. Students will learn to value dance as a form of cultural expression related to cultural understanding, tradition, location, gender and through social and technological issues.

The program will develop student's knowledge, understanding and experience of dance as an artform through equal emphasis on the process of experience and end products. Students will learn both movement principles and stylised techniques, through problem solving and directed teaching. The development of creativity, imagination and individuality is emphasised equally with knowledge of theatre dance.

The integration of the practices of performance, composition and appreciation is a key feature of the dance syllabi and the elements of dance are the components that link the study of the practices. Students will learn the three elements of dance, being space, time and dynamics and will learn how to use these elements to increase their dance technique, performance quality and dance knowledge.

Safe dance practice is embedded through the practices to ensure that students are able to maintain safe, healthy and rewarding lives.

The HPGE provides students with a high quality performing arts education, with a focus on the development of a strong dance technique and performance skills and aims to educate, train and prepare students for the study of dance in years 7-12. The HPGE is an exclusive program offered by Plumpton High School with a fully qualified DEC Dance Teacher.

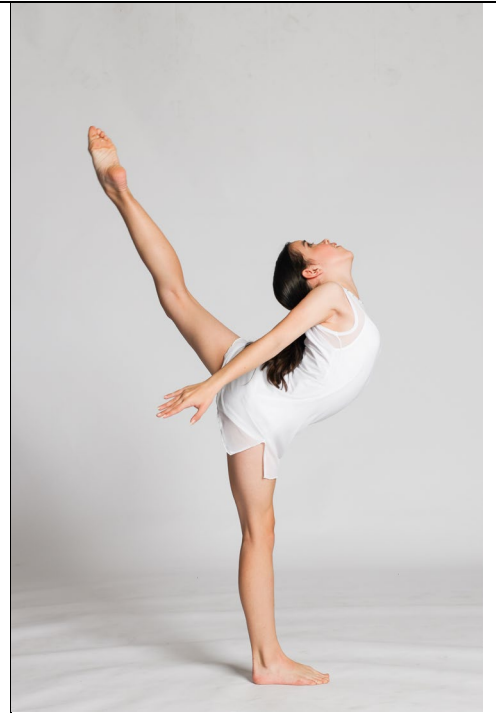
At Plumpton High School, students have the opportunity to study dance as an elective from years 7-12, this program gives students the opportunity to access the program earlier.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills about dance as an artform through:





1 Dance Performance

as a means of developing dance technique and performance quality to communicate ideas.

Students learn about the technical and performance elements of dance.

2 Dance Composition

as a means of creating and structuring movement to express and communicate ideas.

Students learn how to create a dance with a theme or idea.

3 Dance Appreciation

as a means of describing and analysing dance as an expression of ideas within a social, cultural or historical context.

Students learn to evaluate and discuss a dance work.

Value and attitudes

Students will value and appreciate their engagement in the study of dance as an artform.

Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

Teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes. These are descriptors of what students will know and be able to do as a result of studying the dance program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Dance, as an area of the curriculum, is based on students learning about performance, composition and appreciation, and learning to perform, compose and appreciate. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- observing students performing dance sequences
- observing students during the process of composition
- discussing with students their own work and the work of others
- interviewing individual students about their own performance and their involvement in composing dance
- collecting and analysing written work in dance journals
- peer assessment and self-assessment

Teachers will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected into the program through **audition only**.

Students who audition will be selected on the following criteria:

Performance

- Intermediate/Advanced Dance Technique and Performance Quality
- Experience in a range of dance styles including classical ballet, contemporary, lyrical and jazz
- Experience in performing on stage or in front of an audience
- Ability to work both independently and as part of a team
- Understanding of their bodies and how they move in space

Academic

- Demonstrates consistent attendance in school
- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline in class, during rehearsals and performances

What will each lesson look like?

3:00pm – 3:20pm:

Warm Up

3:20pm – 3:55pm:

Technique Exercises

3:55pm – 4:05pm:

Drink/Snack Break

4:05pm – 4:45pm:

Choreography

4:45pm – 4:55pm:

Performances

Analysing a dance work

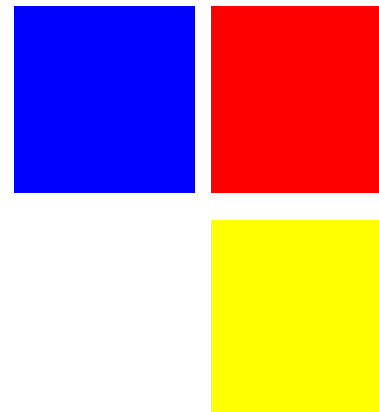
4:55pm – 5:00pm:

Cool Down

Audition Information

Who is able to Audition?	Any student in years 5-12 from the Plumpton Education Community, who wish to excel, be challenged, and be a part of a dedicated school Dance group.
How to Audition?	Students will need to submit a signed permission note to your school office which will be collected. The students will be contacted by the teacher with an audition time that must attend to be considered for the course.
What is required?	Students will be required to participate in the full two-hour class.
What does my child wear?	Students are required to wear any clothing they are most comfortable in to be able to move around in.
How do I find out if my child was successful?	Students will be notified in writing one week after the audition whether they were successful or not for the program.
Where will the Audition take place?	The audition will take place at Plumpton High School in the Performing Arts Centre.
Are parents able to watch the application process?	The application process is a closed audition and as such parents will not be permitted to watch the audition. There will be teacher supervision during the audition.

Why will the GATD program be beneficial for my child



This year, HPGE Dance will have two separate groups: **Junior Dance Ensemble** offered to students from **years 5 to 8** and **Senior Dance Ensemble** offered for students from **years 9 to 12**. This will give students the opportunity to experience dance in a professional and educational setting with other likeminded students. Dance involves the development of physical skill as well as aesthetic, artistic and cultural understanding.

Learning in dance and learning through dance enables students to apply their own experiences to their study of dance. They learn to express ideas creatively as they make and perform dances, and analyse dance as works of art. They think imaginatively and share ideas, feelings, values and attitudes, while physically and intellectually exploring the communication of ideas through movement.

The HPGE is designed to complement and enhance the student's prior knowledge of dance and to work with the students towards their individual and goals. The program will provide students with; knowledge, skills and understanding about dance as an artform, the capacity for students to manage their own learning, the facility to work together with their peers towards a goal and respect for dance as an artform. Each lesson will be personalised to the students in the class and differentiation of the lesson content is available for student's individual learning needs.

The HPGE staff work in a nurturing environment provide students with the highest quality of teaching available.



Meet the Teacher

Ms Kylie Nguyen – Bachelor of Arts (Major in Dance and Theatre with Distinction) and Bachelor of Secondary Education

- Graduate of the University of New South Wales
- UNSW Arts and Social Sciences Dean's List for Academic Excellence

Ms Nguyen is a Dance and Drama teacher who enjoys sharing her passion, knowledge and skills of the performing arts with students to instil a deeper sense of appreciation in creative learning.

Ms Nguyen is trained across a range of dance styles including classical ballet, modern, contemporary, lyrical, jazz and hip-hop. She specialises in teaching modern and contemporary dance techniques including Cunningham, Horton and Release. She was a member of the UNSW Cheerleading and Dance society and won awards in the contemporary, jazz and hip-hop category at the Australian All Stars National Championships.

Performance Opportunities

The HPGE Dance group participates in a variety of performance opportunities every year including:

- Formal School Assemblies
- PULSE Alive Festival
- Synergy Dance Festival
- MADD Night
- Schools Spectacular
- State Dance



Drama



Rationale

Drama is an artform with a discrete body of knowledge including conventions, history, skills and methods of working. It is an integral aspect of our society and is taught in school curricula worldwide. Drama fosters an understanding of continuity and change, and of the connections between different times and cultures. It provides opportunities to explore social, cultural, ethical and spiritual beliefs, including the diverse values of Australian culture.

Drama encourages a cooperative approach to exploring the world through enactment. The collaborative nature of this artform engages students in a creative process of sharing, developing, and expressing emotions and ideas. It is a form of action in which students take on a role as a means of exploring both familiar and unfamiliar aspects of their world. They portray aspects of human experience while exploring the ways people react and respond to different situations, issues, and ideas.

In Drama, students can communicate in complex and powerful ways how they perceive the world. They can investigate, shape and symbolically represent ideas, interests, concerns, feelings, attitudes, beliefs and their consequences. Drama can reflect the external world and the inner world of thoughts and feelings through fictional contexts. Learning experiences in Drama are provided which involve the intellect, emotions, imagination and body, and engage the whole person. Self-confidence, motivation, and self-esteem are developed through the devising, work shopping, rehearsing, and performing of individual and collaborative works. This syllabus draws on the contemporary drama and theatre practices of making, performing, and appreciating drama. These practices are active, experiential, critical and reflective. While students develop knowledge, understanding and skills that pertain to each of these practices, it is vital to integrate experiences in these areas in order to effectively realise the outcomes. In their appreciation of drama and theatre, students are aware of the collaborative contribution of actors, directors, playwrights, designers and technicians to productions.

The GTPD provides students with a high-quality performing arts education, with a focus on the development of a strong understanding of dramatic styles, techniques and performance skills and aims to educate, train, and prepare students for the study of drama in Years 8-12. The GTPD is an exclusive program offered by Plumpton High School with a fully qualified DEC Drama Teacher.

At Plumpton High School students have the opportunity to study drama as an elective from Years 8-12, this program gives students the opportunity to access the program earlier.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills about Drama as an artform through the below:



2023 HPGE Drama students exploring the playbuilding process of devising performances.



A 2022 HPGE Drama student production shot from their MADD Night performance of "The Burn Book".



Student Assistant Directors and Assistant Stage Managers running a Shrek: The Musical rehearsal.

1. Making Drama

Making processes that explores a range of imagined and created situations in a collaborative drama and theatre environment.

2. Performing Drama

Performing devised and scripted drama using a variety of performance techniques, dramatic forms and theatrical conventions to engage an audience.

3. Appreciating Drama

Appreciating the meaning and function of drama and theatre in reflecting the personal, social, cultural, aesthetic and political aspects of the human experience.

Value and attitudes

The collaborative and diverse nature of drama and theatre
The contribution of drama and theatre to enriching and sustaining cultures and societies.
Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes. These are descriptors of what students will know and be able to do as a result of studying the drama program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Drama, as an area of the curriculum, is based on students learning about making, performing and appreciating, and learning to make, perform, and appreciate. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made, based on evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing students performing
- Observing students during the process of making
- Discussing with students their own work and the work of others
- Interviewing individual students about their own performance and their involvement in making drama
- Collecting and analysing written work in drama logbooks
- Peer assessment and self-assessment

Teachers will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected into the program exclusively through an audition process.

Students who audition will be considered and selected based on the following criteria:

Practical

- Level of performance skills
- Level of dramatic technique
- Movement style
- Ability to collaborate on and off stage as part of a team
- Understanding of their bodies and how they move in space

Academic

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline in class and during rehearsals and performances

What will each lesson look like?

HPGE Drama will run for 2 hours after school from 3-5pm. Students will be given a short 15min drink and snack break from roughly 4pm to 4:15pm.

Students should bring a drink bottle of water to lessons as activities include physical work.

Students will engage in individual and collaborative tasks exploring Making, Performing and Appreciation aspects of Drama, as well as developing theatrical skills through warm up activities and skill-based games. Work on the aspects of Drama will include exploring scripted and unscripted work as well as watching and discussing other dramatic works.

Audition Information

Who is able to Audition?	Any student in Years 5-10 from the Plumpton Education Community, with a passion to learn Drama.
How to Audition?	Students will need to submit a signed permission note to your school office which will be collected. The students will be contacted by the teacher with an audition time that must attend to be considered for the course.
What is required?	Students will be required to participate in the full two-hour class. No preparation is required. Auditions will be in a workshop format of warm-up; movement and improvisation skills.
What does my child wear?	Students are required to wear any clothing they are most comfortable in to be able to move around in.
How do I find out if my child was successful?	Students will be notified in writing one week after the audition whether they were successful or not for the program.
Where will the Audition take place?	The audition will take place at Plumpton High School in the Greater Western Sydney Performing Arts Centre (GWS).
Are parents able to watch the application process?	The application process is a closed audition and as such parents will not be permitted to watch the audition. There will be teacher supervision during the audition. Please note that the outcome of the audition process is final.

Why will HPGE Drama be beneficial for my child



The HPGE Drama offers students from Years 5 to 10 the opportunity to experience drama in a professional and educational setting with other likeminded students.

Drama involves the development of physical skill as well as aesthetic, artistic and cultural understanding.

Learning in drama and learning through drama enables students to apply their own experiences to their study of drama. They learn to express ideas creatively as they make and perform drama, and analyse drama as works of art. They think imaginatively and share ideas, feelings, values and attitudes while physically and intellectually exploring the communication of ideas.

HPGE Drama is designed to complement and enhance student's prior knowledge of drama and to work with the students towards their individual and group goals.

The program will provide students with; knowledge, skills and understanding about drama as an artform, the capacity for students to manage their own learning, the facility to work together with their peers towards a goal and respect for drama as an artform. Each lesson will be personalised to the students in the class and differentiated to develop their own personal skills.

Meet the Teacher

Mr Tyson Moon – Bachelor of Secondary Education and Performing Arts (Drama and Music), Certificate III in Live Production and Services (VET Entertainment), Certificate III in Musical Theatre

Graduate of the University of Notre Dame Australia and National Institute of Dramatic Arts (NIDA).

Mr Tyson Moon is a passionate and dedicated teacher who joined Plumpton High School in 2021 as a Music, Drama and Entertainment teacher in the Creative and Performing Arts faculty.

Prior to training to become a teacher, Mr Moon worked in several professional Musical Theatre productions, most notably the DGR production of *Wicked: The Musical*, an experience that allowed him to refine his performance skills to a professional level whilst surviving and maintaining performance stamina throughout a tough eight show a week cycle. Last year, Mr. Moon Directed and Production Managed Plumpton High School's first major production in fourteen years; *Shrek: The Musical*. He has also directed several musicals for theatre companies outside of school including shows such as *Shrek JR*, *Frozen JR*, and *The Lion King JR*.

Mr Moons professional experience in the theatre industry has assisted in the mentoring and guidance of his students to assist in their own success in performing arts subjects whilst experiencing a glimpse of what the professional theatre industry is like throughout his Drama lessons in the classroom. Mr Moon is thrilled to be sharing his passion of performing with his students whilst watching them grow and thrive in the performing arts.

Performance Opportunities

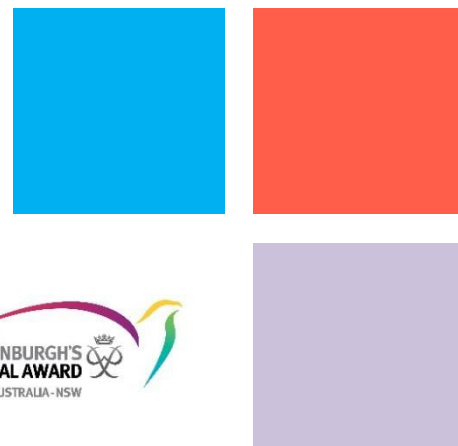
There is a variety of performance opportunities available for the PEC drama group including:

- Mount Druitt – Minchinbury Public Education Concert Formal Assemblies
- MADD Night
- PULSE
- School Spectacular
- Drama Showcases
- 2025 Plumpton High School Musical
- Musical Theatre Club
- Performance based excursions
- Access to outside of school performance opportunities
- School Performances



Plumpton High School's cast of Shrek: The Musical in 2023

Duke of Edinburgh



Rationale

The Duke of Ed is an enriching program that invites young people between the ages of 14 and 25 to participate in a number of activities over a set length of time and has three levels to achieve Bronze, Silver and Gold. Participation in the Bronze level is mandatory in Year 9 and is structured so participants can design their own unique program centred on their interests and passions within their PDHPE class.

The Duke of Edinburgh program provides opportunities for all students regardless of their abilities, to develop individual goals based on their interests and ambitions. It engages over 35,000 young people annually to challenge, motivate and explore student potential. It is not easy, but is very rewarding.

The purpose of the Duke of Ed program is to promote and preserve a framework of Award participation that equips, engages, and empowers all young people to explore their potential in areas of adventure journeys, community service, developing a skill and continuing to build physical activity. This program aims to move students beyond their comfort zone to gain a sense of real-life achievement and self-confidence.

Throughout the year students will be provided the opportunity to achieve the Bronze level that will include two, 1 night 2-day adventurous journeys. Which Plumpton High School encourages all individual regardless of ability, gender, culture, background, or location, with the right guidance and inspiration to achieve an Award. Alongside the journey participants complete an hour a week on physical recreation, building a chosen skill and community service. These all get achieved within activities and programs coached through the year together in groups or of their individual accord.

The Duke of Ed at Plumpton High School will deliver a balanced framework to develop the students mind, body, and community spirit by engaging them in a range of different activities and skills.

The Duke of Ed Award inspires individuals to exceed their expectations. Plumpton High School encourages students to set their own challenges and goals before starting an activity, aim for these goals and by showing improvement to achieve the Award.

The Duke of Ed National Office is committed to monitoring the processes, policies, and procedures to maximize the safety of The Duke of Ed for all participants and volunteers. As such, Plumpton High School embeds strict child protection policies to all assessors, adopts detailed Risk Management plans and provides brand new cellular emergency equipment for adventurous journeys.

At Plumpton High School students can utilise the skills and knowledge they have learnt throughout the program to help them with the School Executive Council and HSC courses. The Duke of Ed also compliments many other activities that young people may already be doing which could include: Surf Life Saving, Scouts or Guides, music lessons and team or individual sport.



Objectives

Students will foster personal and social development, gain valuable experiences and life skills, grow in confidence and become more aware of their environment and community, transforming them into responsible young adults. This is achieved through:

			
<p>5. Community Service</p> <p>To connect with your community and give service to others and their communities.</p> <p>Students give back to the surrounding community whether it is care and concern for the environment, love of animals or a desire to make a difference to the lives of the less fortunate.</p>	<p>2. Physical Recreation</p> <p>To improve your physical fitness and wellbeing by becoming active.</p> <p>Students participate in regular physical activity, either alone or in competition, to develop healthy fitness habits.</p>	<p>3. Skill</p> <p>To unleash your talents and broaden your personal interests and skills.</p> <p>Students explore and discover talents based on individual interests or passions such as artistic, creative, musical, academic or technical.</p>	<p>4. Adventurous Journey</p> <p>To discover a spirit of adventure and discovery whilst undertaking a journey in a group.</p> <p>Students will undertake an expedition or exploration in an unfamiliar and challenging environment. This is about team work and social connections with the group</p>
<p>5. Residential Project</p> <p>At the heart of the Gold Residential Project is the undertaking of purposeful experience with people who are not their usual companions, working towards a common goal! Adding to this, the young person is also outside of their usual place of residence, often in an unfamiliar environment. It is hoped that the Gold Residential Project rewards Gold Award Participants with a sense of personal achievement, enhanced social connection with new and interesting people, and a truly life changing experience! This The level is aimed at students of a minimum age of 16.</p>			

Bronze Level

Plumpton High School is offering completion of the Bronze Award in 2021 for all year 9 students. The Duke of Edinburgh Bronze Award program will provide students enough confidence, resources, experience, and knowledge to achieve the award within the first year. Students meeting the age requirements below can participate in the Bronze Level. The minimum age to start – 14 Years and the maximum age to start – 24 Years 6 Months. The Bronze level program includes the time requirements shown below which need to be met prior to completing the level.

Silver Level

The Silver Award is the second level of the Duke of Edinburgh's International Award, which involves continual work in the four areas for a longer period and starts during year 10 for students of a minimum age of 15. The progression into the Silver Award recognises that every individual learner is different and as such encourages students to look at themselves, their interests, abilities, and ambitions to then set challenges in the four different sections. Students can continue expanding on their skills throughout the sections of the award they completed in the Bronze level or use this level as a new opportunity to start something new and fresh. Students are required to further explore the outdoors with longer, more student focused, Adventurous Journeys. The Silver Award will be running as an after-school class for 1-2 hours per week. This will include teaching required topics, learning skills and monitoring progress online being a more student driven level compared to Bronze. Once the Silver level is completed the Gold level is next to complete. Ask the Duke of Ed coordinator of this when you are ready!

Gold Level

The Gold Award is the third and final level of the Duke of Edinburgh's International Award which involves continual work in the four areas for a minimum of 12 months and starts at the beginning of year 11 and carries into year 12. During the Gold Award participants are also tasked with an additional section called the "Residential Project". The transition to the Gold Award acknowledges the unique qualities of each learner, encouraging them to reflect on their individuality, interests, talents, and aspirations. It inspires students to establish challenges across five distinct sections based on these aspects. Participants can build upon skills from the Silver level or embark on new endeavors. The Gold level mandates more extensive and student-centered Adventurous Journeys, emphasizing outdoor exploration. The Gold Award will be offered as an after-school class, meeting 1-2 hours weekly. It will cover essential topics, teach skills, and monitor progress online, fostering a student-driven approach distinct from the Silver level.

Qualifying

For both awards regular commitment is defined as 1 hour per week or 2 hours per fortnight spent completing physical recreation and practicing a skill. This regular participation will be monitored by a teacher assessor. The service component of the Bronze Award will offer students work as a team to implement and run a program within the school. The service component of the Silver Award will be discussed with a teacher assessor at the beginning of the course.

Bronze Award

- Physical Recreation – Minimum of 6 months
- Skill – Minimum of 3 months
- Service – Minimum of 3 months
- Practice Adventurous Journey – 2 days + 1 night
- Qualify Adventurous Journey – 2 days + 1 night

Gold Award

- Physical Recreation – Minimum of 12 months
- Skill – Minimum of 12 months
- Service – Minimum of 12 months
- Practice Adventurous Journey – 4 days + 3 nights
- Qualify Adventurous Journey – 4 days + 3 nights

Silver Award

- Physical Recreation – Minimum of 6 months
- Skill – Minimum of 6 months
- Service – Minimum of 6 months
- Practice Adventurous Journey – 3 days + 2 nights
- Qualify Adventurous Journey – 3 days + 2 nights



Selection Process

Bronze Award students will be completing the level within their PDHPE class at the beginning of the year and throughout. Silver and Gold Award students will be selected for the program through expression of interest. Students who show expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance
- Completed Silver (Gold Award only)

What topics are taught?

- *First Aid*
- *Leadership skills*
- *Group Management*
- *Dangers in explorations*
- *Route Planning*
- *Navigation*
- *Shelter/Fire*
- *Knots*
- *Food/water Preparation*
- *Cooking*
- *Interpreting weather*
- *Equipment/clothing*
- *Communication*
- *Emergency procedures*
- *Environmental care*

Additional Information

Who can apply?	Any student from Plumpton High School in Year 9 to Year 12, with a passion to learn outdoor skills, become active and discover exciting new adventures.
How to Apply?	Year 9 students will be offered the course Term 1 2023. Silver Award students will need to submit an expression of interest to the Duke of Edinburgh coordinator at the conclusion of their Bronze level. Gold Award students will need to submit an expression of interest to the Duke of Edinburgh coordinator at the conclusion of their Silver level.
How much is the Duke of Ed registration?	Bronze – Year 9 registration fee covered by the school. Silver – Year 10 Onwards = \$250.00. Gold – Year 11 Onwards = \$250.00.
When will the course run?	Year 9 Bronze level students – during selected classes unless the students wishes to use an outside assessor. Silver/Gold Award students - Wednesday afternoon between 2:45 - 4:00pm each week. (Subject to change due to other GAT programs running simultaneously)
What personal equipment is required for the adventurous Journey?	Basic camping equipment such as tents and cooking gear will be supplied for students without access to gear. However, students are encouraged to start purchasing their own equipment for better comfort and hygienic purposes. As a minimum all students will be required to supply their own items such as: <ul style="list-style-type: none"> • Sleeping Bag • Appropriate Clothing • Walking Shoes • Backpack • Sunscreen • Water Bottle • Appropriate Food

**further information will be provided before the adventurous journey*



2016 - 2023 Activities and Achievements

There are a variety of activities that were undertaken and achievements that were made throughout

2016 - 2023 as part of the Duke of Edinburgh Scheme program, including:

Navigational Photo Challenge

Assessed Adventurous Journey

Basic First Aid and Camp-craft Training

After School Sports Programs

Bronze Hike- Heathcote National Park

Premier's Volunteer Recognition Program Award

Silver Hike – The Great North Walk

Gold Hike – Nothern Territory/Alice Springs

Student Achievement: 165 students have successfully received their Bronze Award between 2021-2023

Previous Year 9 students attending their adventurous journey for their Bronze Awards



Why the Duke of Edinburgh Award?



- Develop leadership and thinking skills
- Enhance your ability to attend University
- Enhance your CV through development of enterprise skills
- Increase your self-confidence and courage
- Design your own individual program
- Challenge yourself and have an adventure to assist in developing your natural curiosity
- Learn new skills and follow interests to understand the importance of intellectual, physical and emotional balance to achieve personal wellbeing
- Develop communication skills and make some more friends
- Have great fun!
- Meet new people and develop a personal commitment to service, and act to make a positive difference to the lives of others
- Receive a prestigious and highly valued International Award

This program offers the opportunity for students to maintain physical recreation that they are currently participating in. It allows students to expand their knowledge, attitude and to adopt new types of physical recreation and/or sports.

Students will be provided the opportunity to adopt, perfect or continue learning a type of skill. This skill type is completely up to the students' interest and can range from many aspects of the student's interest. The Duke of Ed encourages students to try something new to experience versatility in learning and applying a new skill set.

Plumpton High School encourages all students to give back to the community. This program compliments this through the requirement of volunteering. Student will be giving back to the local community through charity work.

Meet our Coordinators

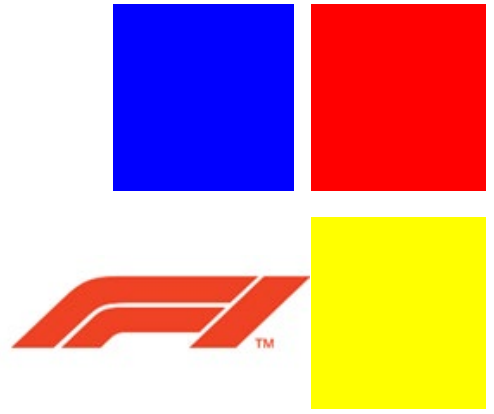
Mr Liam Canning is a PDHPE & Positive Psychology teacher at Plumpton High School. His passion and drive focusses on student development in physical activity, health, and student wellbeing. He is keen to encourage students to develop personal skills, contribute to the community and attain a sense of achievement through the Duke of Edinburgh Scheme.



Ms Tahlia McKenzie is a PDHPE, Science & Positive Psychology teacher at Plumpton High School. She seeks to create innovative learning environments by encouraging questioning, supportive culture emphasising students' wellbeing, never limiting our goals for improvement, and focusing on finding the path that suits individuals. She is excited to build students capacities, as individuals, groups and positive members of the community through the Duke of Edinburgh Scheme.



Engineering Studies (STEM)



Rationale

Engineering studies is fundamental to our society today. It has shaped the way we work, the way we live and the way we do business. The *Industrial Technology* (stages 4 and 5) and the *Engineering Studies* (Stage 6) syllabi provide a framework for students to explore engineering concepts and theories and apply them to real world scenarios. This includes the interaction of mechanisms, systems, social and environmental aspects.

As part of the Plumpton Educational Community, the High Potential Gifted Education Engineering Studies program (HPGEES) aims to provide students with deeper knowledge and understanding of engineering systems and the way these can be manipulated and interacted with. This will help students to have a broader understanding of the world and *why* the world is the way, it is. It will help students to see how we came to this place in the world and provide them with a method to understand where we are headed and why.

The program will allow students to explore the concept of design and apply ideas to a variety of contexts and projects that will expand on different aspects of design implementation and help students to assess the world using engineering concepts, scientific principles, functionality and aesthetics.

The integration of the design principles, computer software, time management and manufacturing processes will broaden student knowledge of the production cycle and industrial systems. This knowledge will also allow students a greater understanding of career paths in these fields.

The HPGEES program will offer students a high quality engineering studies program with a focus on design process, mechanisms and software that will prepare students for further study in Industrial Technology – Engineering in Stage 5 (Years 9-10), Engineering Studies in Stage 6 (Years 11-12) and in preparation to study Engineering at University with the F1 in Schools Program equivalent to 2nd year university. The HPGEES program is an exclusive program offered by Plumpton High School.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills of Engineering through:





1. Mechatronics

Mechatronics is the study of mechanical and electrical systems. These systems can include robots and production lines.

Students will build working mechanical systems in Lego and use the Mindstorms interface to control the system. Each system can be programmed to undertake a series of tasks such as following a line, picking and placing a ball and playing soccer.

Students will learn about control systems, inputs and output and mechanisms.



2. F1 in Schools

F1 in Schools is a program that is run by the REA foundation. This is a competition that allows schools to compete with each other in the building of CO₂ powered racing cars.

Students will use a number of software packages, including Autodesk Inventor, to design a racing car that can be machined on a CNC router. This car needs to meet a number of criteria and the goal is to compete at the local competition. If successful students may be able to compete at the state level.

Students will learn about aerodynamics, CAD, CAM and practical skills.



Assessors will report to parents on the students' competencies under the above criteria.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes, which are descriptors of what students will know and be able to do as a result of participating in the HPGEEES. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Engineering, as an area of curriculum, is based on students learning about how mechanisms and machines work, how the design process work and how to apply analysis of data to practical situations. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgments about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single project. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome in a number of different activities.

Judgments about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing a student's application of techniques in a practical project
- Examining the quality of the student's product
- Examining the functionality of the student's product
- Student self and peer assessment
- Collecting and analysing project folios

The teacher will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected for the program through expression of interest.

Students who show expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance
- **When and Where?**

This class will held in the workshops at Plumpton High School on Wednesday afternoon From 3.00pm to 5.00pm

What topics are taught?

- *Design Skills*
- *Computer Aided Design (CAD)*
- *Computer Aided Manufacture (CAM)*
- *Autodesk Inventor*
- *Timber finishing skills*

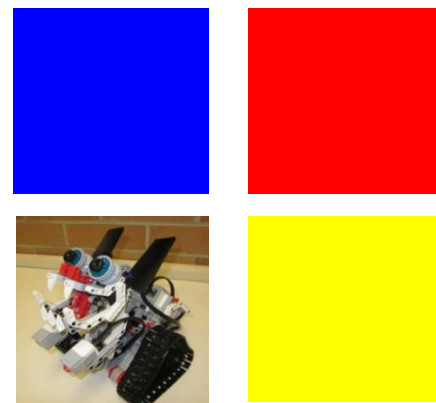
Students will do the following:

- *Build and program Lego Robots to perform a variety of challenges/tasks*
- *Compete in the Local F1 in Schools Competition*

Application Information

Who is able to apply?	Any student in Year 5 to Year 9 in the Plumpton Educational Community, with a passion for engineering and how the world works is able to apply.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cutoff date on the form or return to their school's front office by the cutoff date. Students will be notified in regards to their application.
What is required?	Students will be required to participate in an engineering workshop and will need to complete 2 practical projects. These are used as part of the assessment. Students will also need to be aware that the F1 in Schools program is conducted externally and the competition will be held at a specified date and time. It is intended that the students will compete in the F1 in Schools competition at a school level and regional level with the possibility of competing at the state level.
What does my child wear?	Normal school uniform is appropriate however, it is essential that students wear leather shoes for WHS reasons in the workshop.
How do I find out if my child was successful?	Students will be notified in writing after the application whether they were successful or not for the program.

Why will the HPGEES be beneficial for my Child?



This program offers the opportunity for students to engage in complex intellectual pursuits with guidance and direction.

Students will be able to explore facets of design including aesthetics and time management in the process of producing projects.

Students will be provided the opportunity to learn new skills and these skills will focus on a variety of 'smarts' including visual, kinaesthetic and logic. This will cater for a variety of learning styles and help students to gain new experiences and skills.

- **Challenge yourself and explore your intellect**
- **Work with like-minded people**
- **Learn new and interesting skills**
- **Have fun**
- **Compete with fellow students**

Meet the Teacher

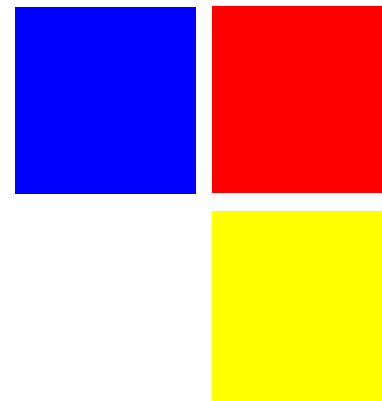
Mr Benjamin Clark Bachelor of Arts (Humanities) – Western Sydney University Bachelor of Education Studies (Technical and Applied Studies) - Charles Sturt University Masters of Teaching Secondary - Western Sydney University Certificate III in Hospitality Operations (Commercial Cookery)

Mr Clark started off as a History/ English teacher before retraining as a TAS teacher. He has a passion for the practical application of science after spending several years working as a chef in a variety of restaurants in the upper mountains.

He is a strong believer in the value of public education and works hard to deliver the best outcome for students. The creation of a safe supportive environment is a cornerstone of helping students achieve at their full potential. He is looking forward to joining the engineering and technology program as it will allow him to share his passion for solving problems in a creative fashion.



Experimenting with STEM



Rationale

STEM is an all-encompassing term referring to a range of fields (Science, Technology, Engineering and Mathematics). The study of STEM is often broken down, with a strong focus on one of the four subject areas. The aim of the experimenting with STEM is to expose students to a variety of skills and knowledge from across these subject areas, with no particular focus on one area or the other.

The global economy is changing. Current jobs are disappearing due to automation and new jobs are emerging every day as a result of technological advances. Employer demand for STEM qualifications and skills is high and will continue to increase in the future. Currently, 75% of jobs in the fastest growing industries require workers with STEM skills and 50% of current jobs with skill shortages are in STEM fields. STEM empowers individuals with the skills to succeed and adapt to this changing world.

The High Potential and Gifted Education Program for Experimenting with STEM, as a part of the Plumpton Education Community, aims to provide students with a deeper understanding of the interconnectedness of STEM disciplines and to develop student's capabilities across these areas. Students will be exposed to a range of theoretical and practical experiences with a focus on developing skills which can be applied across fields, including problem solving, creativity, critical analysis, initiative, communication skills, collaborative skills and independent thinking.

Each term students will work collaboratively and independently to apply scientific principles to the design process in the development of solutions which respond to real world problems. Students who have participated in experimenting with STEM have had much success by developing a range of technological solutions to contemporary problems by developing electrical circuits, constructing models, utilizing renewable energy sources, and many scientific based problem-solving activities including tackling global warming and managing resources. Students learn about how the world around them is affected by a range of factors and how we gain access to and develop materials for use. In experimenting with STEM, students are encouraged to demonstrate their own creativity and problem-solving skills, with the opportunity to then develop these ideas into a real product or solution.

Objectives

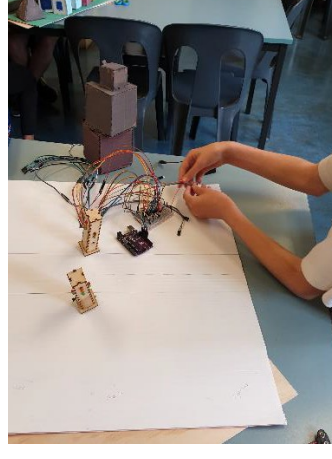
Knowledge, understanding and skills

Students will develop knowledge, understanding and skills in STEM through:



SCIENCE

Science is the study of the natural world. With the understanding what already is, we can inform our thinking towards the future. Students will develop an understanding of existing systems in the development of their projects.



TECHNOLOGY

Technology is the tools we develop from scientific understanding to overcome problems or simplify our lives. Students will be exposed to a range of technologies in the development of their solutions.



ENGINEERING

Engineering focuses on designing and building things to solve real world problems. Students will be given the opportunity to turn their ideas and solutions into real world products through design and building.



MATHEMATICS

Mathematics is a language used to describe the world we live in. Students will utilise mathematics to describe the theoretical underpinnings of their designed solutions, including measurements and calculations.

Value and attitudes

Students will value and appreciate their engagement in the study of Problem solving and Data Science. Working collaboratively with others, as a field of practice and understanding, is subject to different interpretations.

Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes, which are descriptors of what students will know and be able to because of participating in the HPGE STEM. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

STEM, as an area of curriculum, is based on students learning about how mechanisms and machines work, how the design process works and how to apply scientific principles across a range of contexts to develop real world solutions. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit. It is important to make judgments about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single project. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome in several different activities. In completion of this course students have earned success in a multitude of problem-solving activities and a range of Science and Engineering challenges and projects.

Judgements about student achievement of outcomes are made based on evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing a student's application of techniques in a practical project
- Examining the quality of the student's product
- Examining the functionality of the student's product
- Student self and peer assessment
- Collecting and analysing project folios

The teacher will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected for the program through expression of interest.

Students who show expression of interest will be required to complete a short entry form.

Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance

What will each

lesson look like?

3:10pm – 3:30pm:

New learning related to the science and technology topic

OR Group Challenges

3:30pm – 4:00pm:

Group/Individual activities

4:00pm – 4:15pm:

Drink/Snack Break

4:15pm – 4:55pm:

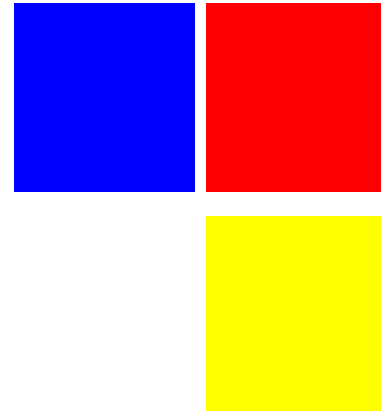
Continuation of activities

and group discussions

Application Information

Who is able to Apply?	Any student in years 5-8 from the Plumpton Education Community, with a passion for learning about a range of STEM areas.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return to their schools front office by the cut-off date. Students will be notified in regards to their application.
What is required?	Students will be required to participate in the full two-hour class every week.
What does my child wear?	School uniform and leather shoes.
How do I find out if my child was successful?	Students will be notified in writing one week after the application due date, whether they were successful or not for the program.

Why will HPGE STEM be beneficial for my Child?



Experimenting with STEM program offers the opportunity for students to use 21st century tools related to all things science and technology. It allows students to expand their knowledge, attitude and to gain new skills that will enable them to build relationships within the school and the wider community. This Program will give an opportunity for students to learn a range of different skills in Science, Technology, Engineering and Mathematics to develop way of thinking which can be used in everyday life and strengthen student's problem solving and analytical skills.

Your child will develop skills in;

- Reasoning
- Problem solving
- Developing critical thinking
- Logical thinking
- Developing design skills
- Enhancing communication skills
- Working collaboratively
- A range of areas of STEM including Science and Engineering.

The program will be developed for your child to develop their interpersonal skills and communication with others by working in consultation with others. Your child will benefit from learning to identify patterns, thinking logically and communicate recommendations.

Meet the Teacher

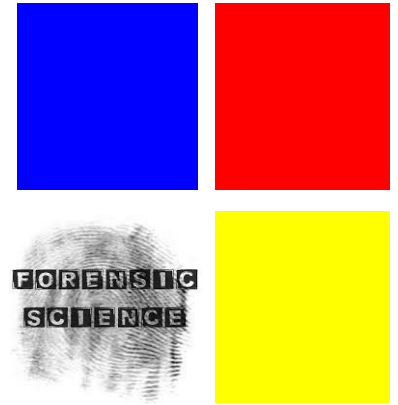
Mr Nikolaus Eder – Bachelor of Education (Distinction) / Bachelor of Science from the University of New South Wales

Mr Eder has been working at Plumpton High School for 4 years teaching a range of senior and junior sciences. He is a Science graduate with a huge passion for science and technology particularly in the areas of chemistry and earth and environmental sciences.

He is thrilled to have the opportunities to share his passion of all things STEM with all students. Mr Eder hopes to strengthen connections between school work and how the world around them actually works, from the smallest atoms to the largest structures on the planet. He believes creating a safe environment for students to explore, experiment, and discover, is key to effective learning.

He hopes that he can spark the same interest in STEM that he has and is excited about the possibility of helping students discover their passion.

Forensic Science (STEM)



Science Technology Engineering Mathematics

Rationale

Forensic Science is a vital component in our legal system in society. There are several types of forensic scientists all with a common goal; to use their knowledge to collect, examine and report on evidence for legal proceedings. In order to do so, they must develop analytical and problem-solving skills.

As part of the Plumpton Educational Community, the High Potential Gifted Education Forensic Science program aims to allow students to delve deeper into the career of a forensic chemist and biologist as well as explore technologies in forensics used in modern society using a STEM (Science, Technology, Engineering and Mathematics) approach. In doing so, they will acquire an understanding of scientific investigations, legal proceedings and will debunk myths portrayed in crime shows. This will allow students to perceive how a range of different forensic scientists work and how this field has developed over history as well as where it is headed for the future. They will be able to analyse the importance of the development of this field to its role in legal proceedings.

The program will allow students to explore the idea of forensics from the perspective of the four disciplines of STEM.

Looking at the range of divisions of scientists involved in forensic science will give students an understanding of how a crime is solved in the real world in real time. The knowledge that they attain will give students an understanding of a career path in these fields.

This program will offer students a high-quality Forensic Science experience with a focus on forensic chemistry, forensic biology and technologies that will prepare students for further study in Science (Years 7-10) and Chemistry & Biology (Years 11-12). The High Potential Gifted Education Forensic Science program is an exclusive program offered by Plumpton High School and will be taught by a qualified DEC Science teacher.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills of Forensic Science through:

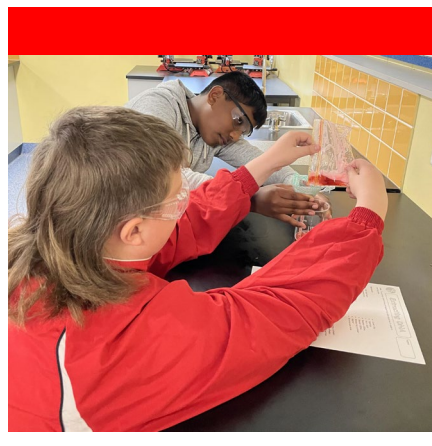


1. Forensic Chemistry

Forensic chemistry is the application of chemistry in a legal setting.

Students will be exploring a range of techniques to analyse evidence in the context of a chemist. They will see how these techniques are used to collect specific information from evidence to aid in legal proceedings.

Students will learn about toxicology, chromatography, DNA fingerprinting, flame tests and chemical analysis of powders, paints and fuels.

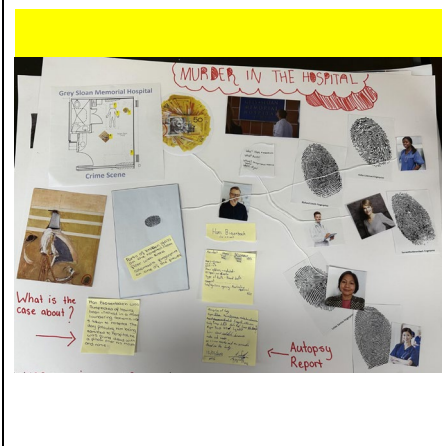


2. Forensic Biology

Forensic biologists use scientific techniques in the laboratory to examine evidence such as hairs, insects, bones, bodily fluids, plant and animal remains in order to provide information of a case in a legal setting.

Students will be examining some of the evidence listed using a variety of different techniques in order to see what information can be collected and used for a case.

Students will learn about DNA analysis, examination of bones, entomology, and botany.



3. Analysing Data and Information

To make breakthroughs in cases, forensic scientists need to be able to analyse a range of evidence such as testimonies, records, letters, social media messages/posts and much more.

Students will look at how different types of information about suspects, victims, and witnesses of a case, as well as the importance of this information in an investigation.

Students will learn about different data and information are collected, analysed, and used to progress in an investigation and how they are used to solve cases.

Assessors will report to parents on the students' competencies under the above criteria.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes, which are descriptors of what students will know and be able to do as a result of participating in the High Potential Gifted Education Forensic Science program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Science, as an area of curriculum, is based on students learning about physical, chemical and biological phenomena and how they apply to the world around us. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgments about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single investigation. Similarly, a student will demonstrate that they can achieve the requirements of an outcome in a number of different activities.

Judgments about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing a student's application of techniques in several investigations
- Examining the quality of the student's reports
- Student self and peer assessment
- Collecting and analysing student investigation notes

The teacher will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected for the program through expression of interest.

Students who show expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance

When and Where?

This class will held in the Science laboratories at Plumpton High School on Thursday afternoon from 3.00pm to 5.00pm



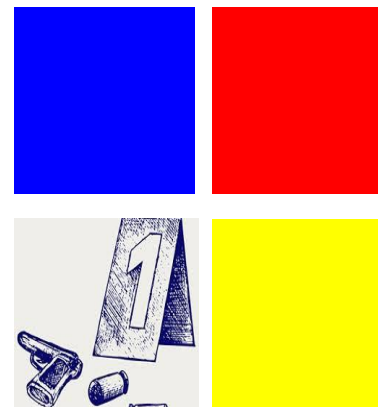
What topics are taught?

- Toxicology
- Pathology
- Computer Forensics
- DNA Fingerprinting
- Entomology
- Forensic Anthropology
- Forgery Detection
- Flame Tests
- Fibre Analysis
- Fluids Analysis
- Blood Spatter Analysis
- Chromatography
- Organic/Inorganic Properties of Soils
- Decomposition of Biological Matter
- Fingerprint Analysis

Application Information

Who is able to Apply?	Any student in Year 5 to Year 8 in the Plumpton Educational Community, with a passion for science is able to apply.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return to their school's front office by the cut-off date. Students will be notified in regards to their application.
What is required?	Students will be required to participate in several forensic science investigations combined with theory related to these investigations. Some of these will be used as part of the assessment. Students will also be provided with a case study at the completion of this program to solve which will act as their final assessment. There may be some independent work that the students will need to complete at home.
What does my child wear?	Normal school uniform is appropriate however it is essential that students wear leather shoes for WHS reasons in the science laboratories.
How do I find out if my child was successful?	Students will be notified in writing after the application whether they were successful or not for the program.

Why the High Potential Gifted Education Forensic Science Program?



This program offers the opportunity for students to engage in complex intellectual pursuits with guidance and direction.

Students will be provided the opportunity to learn new skills and these skills will focus on a variety of 'smarts' including visual, kinaesthetic and logic. This will cater for a variety of learning styles and help students to gain new experiences and skill

- Challenge yourself and explore your intellect
- Work with like-minded people
- Learn new and interesting skills
- Have fun
- Compete with fellow students

Meet the Teacher

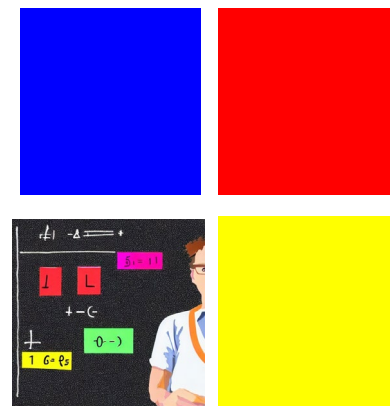
Ms Mirachael Racela – Bachelor of Science / Bachelor of Education (Secondary) - with Distinction

Graduate of University of New South Wales

Ms Racela completed a science degree where she studied biology, chemistry, and physics. Throughout her schooling she has enjoyed learning about the different branches of science and wants to pass on her love of science to those around her.

Growing up in Western Sydney, Ms Racela has built up her passion to provide students in Western Sydney the best education possible. She works to provide a safe environment to help build her students' capacity to be able to explore complex concepts and ideas so they can extend themselves and value the knowledge they are working for.

Mathematics Extension



Rationale

Studying Mathematics Extension courses offers students the opportunity to enhance their problem-solving skills, develop logical thinking, and prepare for advanced academic pursuits. It not only provides a strong foundation for future studies but also widens career prospects in fields requiring strong mathematical skills.

Additionally, excelling in this course can give students a competitive edge in senior Mathematics courses, fostering personal growth and adaptability.

Objectives

This course aims to deepen students' understanding of advanced mathematical concepts, fostering critical thinking and problem-solving abilities through challenging problems.

They emphasise mathematical rigor, precision, and clarity while preparing students for senior years of Mathematics.

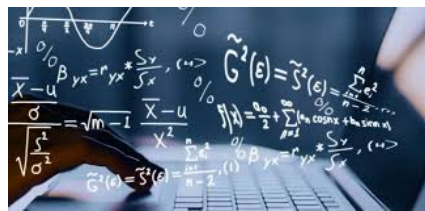
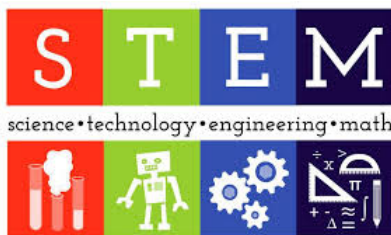
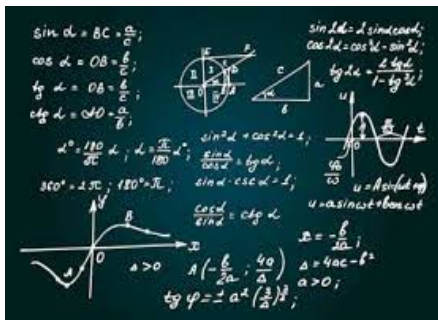
Additionally, Mathematics Extension course aims to promote adaptive learning, encouraging students to tackle unfamiliar problems with confidence and creativity.

Effective communication of complex mathematical ideas is also a goal, and students are introduced to a broader spectrum of mathematical topics.

Ultimately, this course further aims to equip students for success in standardised exams.

This program will:

- Deepen mathematical understanding: Extension courses go beyond the standard mathematics curriculum to explore more advanced topics. This can help students develop a deeper understanding of mathematical concepts and principles, which can be beneficial for a wide range of academic and professional pursuits.
- Enhance problem-solving skills: Extension courses emphasise problem-solving skills, teaching students how to approach complex mathematical problems and find creative solutions. These skills are transferable to many other areas of life, including science, engineering, business, and even everyday decision-making.
- Improve analytical thinking: Mathematics is a language of logic and reasoning, and Extension courses help students develop their analytical thinking skills. This means they can learn to break down complex problems into smaller, more manageable parts, evaluate evidence objectively, and draw sound conclusions.
- Prepares for Higher level courses in Years 11 and 12: Taking an Extension course can give students a competitive edge and prepare them for the rigors of higher-level mathematics.
- Boosts confidence and self-esteem: Succeeding in a challenging subject like Mathematics Extension can be a significant confidence booster for students. It can also help them develop a strong sense of self-belief and a positive attitude towards challenging tasks.



In addition to these general benefits, Mathematics Extension course can also be valuable for students who are interested in pursuing specific careers.

For example, students who want to become engineers, scientists, or mathematicians will likely need strong mathematical skills. Taking an Extension course can help them develop the foundation they need for success in future mathematics course.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes.

These are descriptors of what students will know and be able to do because of studying the Mathematics Extension course.

The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration.

Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made, based on evidence. A variety of strategies may be used to collect evidence on student achievement.

Some examples include:

- observing students answering questions for the class tasks.
- observing students during the process of problem solving.
- discussing with students their own work and the work of others
- analysing student performance in external competitions.
- Summative assessment.

Teachers will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected for the program through expression of interest.

Students who show expression of interest will be required to complete a short entry form and get supporting statements from one of their teachers.

They will be required to attach one evidence of their high achievement in Mathematics. You will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies.
- Demonstrates exemplary behaviour and self-discipline.
- High level of school attendance

When and where?

This class will be held in the Open Learning Space on Thursday from 3.00pm to 5.00pm.



What topics are taught?

- *Problem Solving*
- *Advanced Algebra*

Students will do the following:

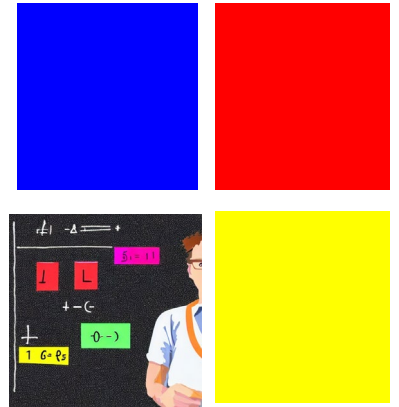
- *Complete mathematical challenges/tasks*
- *Take part in external mathematics competitions.*



Application Information

Who is able to Apply?	Any student in Year 5 to Year 10 in the Plumpton Educational Community, with a passion for Maths is able to apply.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return to their school's front office by the cut-off date. Students will be notified in regards to their application.
What is required?	Students will be required to participate in several forensic science investigations combined with theory related to these investigations. Some of these will be used as part of the assessment. Students will also be provided with a case study at the completion of this program to solve which will act as their final assessment. There may be some independent work that the students will need to complete at home.
How do I find out if my child was successful?	Students will be notified in writing after the application whether they were successful or not for the program.

Mathematics High Achievers 2023




CONGRATULATIONS



YSABELA MARASIGAN

**HIGH DISTINCTION
2023 AUSTRALIAN MATHEMATICS
COMPETITION**


CONGRATULATIONS



ZAIN AL-SHIBLE

**DISTINCTION
ICAS MATHEMATICS 2023**


CONGRATULATIONS



JANNALYN BARBUCO

**CREDIT
2023 AUSTRALIAN MATHEMATICS
COMPETITION**

CONGRATULATIONS



CAIDEN BOND

**CREDIT
2023 AUSTRALIAN MATHEMATICS
COMPETITION**

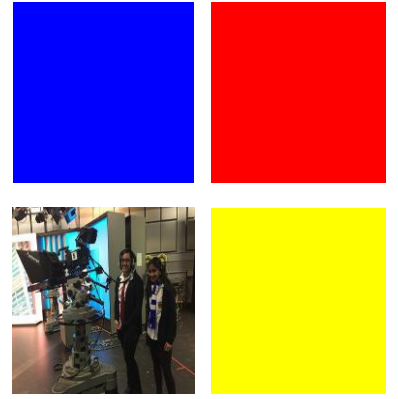
CONGRATULATIONS



LOCHLAN FALZON

**CREDIT
2023 AUSTRALIAN MATHEMATICS
COMPETITION**

Media and Communications Team



Rationale

Communicating with one another effectively is an essential part of our everyday life, and only grows in significance as we live in a contemporary and globalised world. The world has witnessed astronomical changes as we move deeper into the 21st Century. Communicating has moved beyond face-to-face discussions, and now, people communicate in countless mediums, platforms and modes.

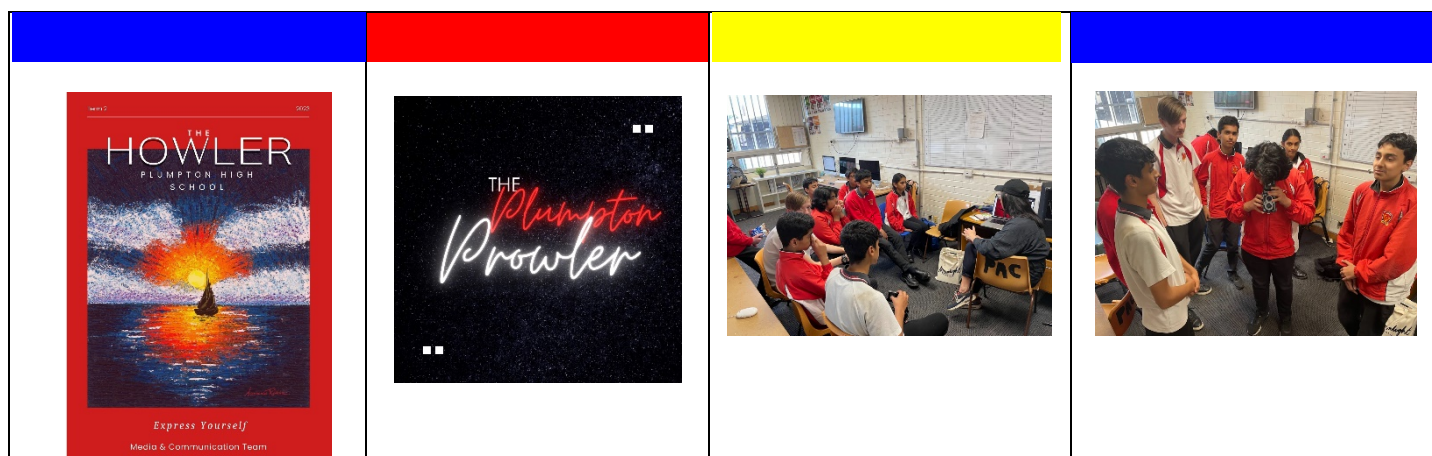
Plumpton High School is moving with these ever-advancing times by delivering a Media and Communications course, which will provide students with the opportunity to demonstrate as well as develop their communicative skills in order to be successful 21st Century learners. This program aims to provide students with deeper knowledge and understanding of the ways in which messages and information can be conveyed, as well as the appropriate format in which to do so, and why that is. Students will learn the theory behind effective communication, engaging with academic coursework before extending themselves into the practical world of media and communications.

Being a part of this venture will allow students to increase their relational skills within the Communications and Media Team, Plumpton High School, and the wider Plumpton community. Students will be provided additional learning opportunities to equip them with the tools to harness their potential as future leaders of the modern world. Selected students will be working across a variety of communicative mediums from paper to online platforms, including newsletters, social media, and emerging software programs. Students will also be given the opportunity to podcast their ideas, collaborating with industry professionals in order to deliver engaging and relevant content. This knowledge and skill-set will also provide additional insight into potential career paths in life after school.

The Media and Communications course is an exciting and unique program being offered by Plumpton High School, and as such, the selected student team will have strong input into its creation and evolution. Therefore, skills outside of technological and communicative ones will also be valued and developed, such as creative thinking, innovation, and commitment. Being an effective communicator is one of the most valued skills both within the schooling environment, and the world beyond school. Being a member of the Communications Team provides students the opportunity to develop and engage with their communicative abilities in an innovative, supportive, and structured way.

Objectives

Students will appreciate the complexity and depth of communication, while also fostering personal, social and intellectual development, gain valuable experiences in school and workplace situations as well as life skills. Students will grow in confidence and become more aware of their local and global community, transforming them into responsible and informed young adults.



<p><u>1. School Magazine</u></p> <p>To build school community and engage in broadening personal interests and skills</p> <p>Students participate in the design and creation of the school magazine from the ground up. Students build the magazine’s frameworks and engage in journalism surrounding issues that are important to Plumpton and its specific context.</p>	<p><u>2. Podcast</u></p> <p>To connect with the community and inform them of the great work being done at Plumpton.</p> <p>Students participate in reporting on key issues that impact student learning and the experience of being a Plumpton High School community member.</p>	<p><u>3. Website design</u></p> <p>To unleash your talents and broaden your personal interests and skills.</p> <p>Students explore and discover talents based exploring the power of digital media as an educational tool for learning and celebration of school achievement.</p>	<p><u>4. Industry Skills and Opportunities</u></p> <p>Every term, you will have opportunities to build your technical skills. You will learn camera skills, graphic design, podcasting, conducting interviews and public speaking skills.</p>
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Application Information

<p>Who is able to apply?</p>	<p>Any student from Plumpton High School in Year 7 to Year 11, with a passion to learn journalism skills, become active in the school community and learn exciting new skills.</p>
<p>How to Apply?</p>	<p>Students will need to submit an expression of interest to apply by Monday Week 2, Term 1 2023. Students will be notified in regards to their application and then provided an opportunity to sit for the interview.</p>
<p>How much will it cost?</p>	<p>There is no initial cost to being a member of the Media and Communications Team. Students will be encouraged to go on numerous excursions and this will incur fees for students. However, they will be given sufficient notice of such events in line with the school excursion policies.</p>
<p>When will the course run?</p>	<p>Media and Communications will begin work in early 2024 and will function as a working part of Plumpton High School all year round. The program will run after school, with the day being determined and communicated at the start of 2024.</p>

Assessors will report to parents on the students’ competencies under the above criteria.

Selection Process

Students will be selected for the program through an expression of interest process.

Students who show expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:

1. Demonstrates a high work ethic in their academic studies
2. Demonstrates exemplary behaviour and self-discipline
3. High level of school attendance

Students will be required to sit a short interview where the following two questions will be asked:

4. *What do you wish to achieve as a member of the Plumpton High School Media and Communications team?*
5. *How will participating in Plumpton High School Media and Communications team benefit you and your future studies?*

What will I be involved in?

What's in it for me?

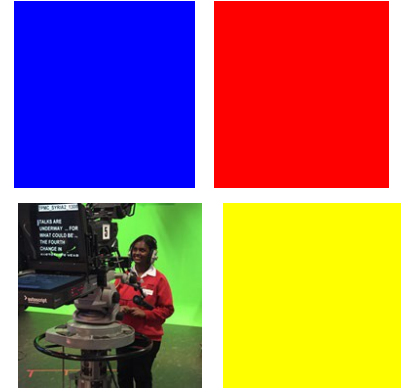
- *Media Literacy Skills*
- *Leadership Skills*
- *Team Management*
- *Celebrating Achievement*
- *Reporting & Journalism*
- *Time Management*
- *Photography*
- *Visual Literacy*
- *Journalism based literacy skills*
- *Latest technology*

2016 – 2023 Activities and Achievements

There are a variety of activities that were undertaken and achievements that were made from 2016- 2019 as part of the Media and Communications Team, including:

- Four students who were selected by the NSW Department of Education to intern as journalists and cover the Game Changers event for Education Week 2019.
- A student who was selected as the 2020 Media Champion, by the University of Western Sydney.
- Successful establishing of the MAC room with industry standard equipment. Successful publishing of editions of the Plumpton Howler
- Creating and launching the online editions of the Plumpton Howler
- Creating and launching of the school podcast, The Plumpton Prowler
- Numerous contributions to the school social media sites
- ABC excursions to the Ultimo studios
- PHS takes over Triple J Unearthed for Unearthed High
- Mentorship programs with ABC senior executive, public speaking coach's journalists and photographers
- Close mentorship with industry professionals, such as Rudi Bremer (Radio National), Jane Southward (journalist), and Theresa Tan (ABC photojournalist)

Why the Plumpton Media and Communications Team?



- Develop leadership and thinking skills
- Enhance your CV through development of enterprise skills
- Challenge yourself and have an adventure to assist in developing a school newspaper and school community
- Learn new skills and follow interests to understand the importance of intellectual, physical and emotional balance to achieve personal wellbeing
- Develop communication skills and make some more friends
- Increase your self-confidence and courage
- Have great fun!
- Meet new people and develop a personal commitment to service, and act to make a positive difference to the lives of others

This program offers the opportunity for students to maintain engagement in programs that they are currently participating in. It allows students to expand their knowledge, attitude and to gain new skills that will enable them to build relationships within the school and the wider community. Students will be provided the opportunity to adopt, perfect or continue learning skills that will enable them to work as part of the Media Team. Plumpton High School encourages all students to give back to the community.

Meet the Teacher.

Ms Gabrielle Maait

Bachelor of Arts in Communication (Writing and Cultural Studies)

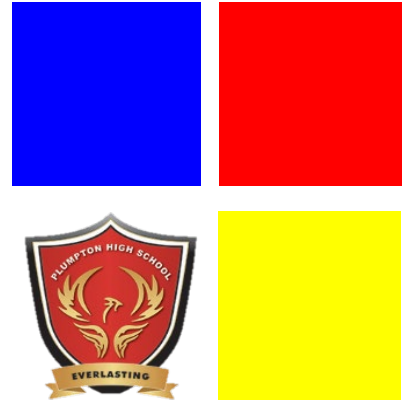
Bachelor of Arts in International Studies (Germany)

Bachelor of Arts (Honours) in Communication

Master of Teaching in Secondary Education

Ms Maait is an English and Society & Culture Teacher with seven years of teaching experience. Prior to her foray into education, Ms Maait worked in Publishing, involved in editing, social media management and acquisition of local manuscripts. Ms Maait's education background in Communications has equipped her with the skills and knowledge of the media landscape in the 21st Century. She has been published in the NSW Writers' Magazine, NSW Emerging Writers' Reader, and more. She is passionate about the power of communication and understands the responsibility of an ethical, fair and just media. As a teacher, Ms Maait has worked in both NSW and international school settings. Her experience as an EAL/D teacher in South Korea gave her an insight into the competitive and dynamic nature of an education system focused on academic excellence. She has applied this to her roles in NSW public schools. Ms Maait is excited to collaborate with the students of Plumpton High School to deliver high quality journalism that values integrity and professionalism.

Music Performance Program



Opportunities in the Program:

Plumpton High School is now taking expressions of interest for ensemble/solo music lessons to start in Beginning of Term 1 2024. Lessons will be facilitated by Mrs O'Brien who is a Music teacher at Plumpton High School in the Creative and Performing Arts Faculty. Music tuition lessons are available on the following instruments:

- Guitar
- Ukulele
- Bass
- Keyboard
- Voice
- Drums

This program aims to develop and refine student performance skills in a professional environment that caters to students of all year groups, abilities and walks of life. This program takes great care to cater lessons to each student's abilities and interests, offering relevant and engaging musical knowledge and material in a variety of styles and instruments. Students will develop their practical skills while gaining confidence and developing quality performance skills. Students will participate in a range of performance opportunities ranging from performing in front of their peers, to working their way up to a live audience at a range of school and community events.

Students participating in the program are expected to:

- Turn up to all lessons (unless there is a valid reason)
- Do home practice on a regular basis
- Perform at School Events

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills about music as an artform through:

Performance, Composition and Listening activities



Performance

as a means of self-expression, interpreting musical symbols and developing solo and/or ensemble techniques.

Students will learn how to perform music on an instrument of their choice

Composition

as a means of self-expression, musical creation and problem-solving.

Students will learn how to compose music in different formats

Listening

as a means of extending aural awareness and communicating ideas about music in social, cultural and historical contexts.

Students learn to discuss and explore music works relevant to their instrument

Value and attitudes

Students will value and appreciate their engagement in the study of music as an artform.

Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

Mrs O'Brien will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes. These are descriptors of what students will know and be able to do as a result of studying the music tuition program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Music, as an area of the curriculum, is based on students learning about performance, composition and listening, and learning to perform, compose and appreciate. Mrs O'Brien uses a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- performance goal setting and reflecting
- observing students performing musical pieces solo and in front of an audience
- observing students create and arrange musical pieces
- discussing with students their own work and the work of others
- collecting and recording performance work
- peer assessment and self-assessment

Mrs O'Brien will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Tuition Available

The Plumpton High School Music Performance program will provide students with the opportunity to develop and refine skills on any of the following instruments;

- **Guitar**
- **Ukulele**
- **Bass**
- **Voice**
- **Keyboard**
- **Drums**

We are currently offering an amazing opportunity for students to have group after school lessons to work towards their performance goals.

Lessons will commence **beginning of Term 1.**

Tuition Structure

The tuition will be arranged into instrumental / vocal solo and ensemble groups where the student's will receive tuition in areas of their interests and abilities, with a focus on developing and refining performance skills.

The tuition will be for 2 hours after school, running from 3-5pm.

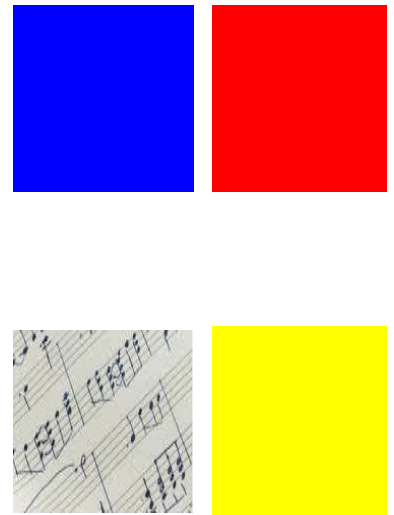
Students are able to access the music room to practice during lunchtimes and before school.

Students will have the opportunity to learn songs of their own interest throughout the year, and complete set tasks and activities based on their skill level.

Application Information

Who is able to Apply?	Any student at Plumpton High School in years 7 – 12
How to Apply?	Students will need to complete the application form and submit it by the due date
What is expected?	Students will be required to participate in their full tuition class every week.
What does my child wear and bring?	Normal school uniform is appropriate and the students do not need to bring their own instruments for the classes.
How do I find out if my child was successful?	Students will be notified in writing one week after the application whether they were successful or not for the program.

Why will HPGE Music Performance be beneficial for my Child?



This year GAT Music Performance program will run as a 2 hour workshop where the students will be given the opportunity to experience private solo and ensemble tuition. This will give students the opportunity to experience music in a professional and educational setting with other likeminded students.

Students will develop their skills on an instrument of their choice and learn to perform pieces suited to their ability. Students will also be given the opportunity to compose music if that is something that interests them. Students will learn to express ideas creatively as they make and perform musical pieces while analysing different pieces of music and studying performance etiquette. This program is designed to complement and enhance the student's prior knowledge of music and to work with the students towards their individual goals.

The program will provide students with; knowledge, skills and understanding about Music and the capacity for students to manage their own learning, the facility to work together with their peers towards a goal. Each lesson will be personalised to the students in the class and differentiation of the lesson content is available for student's individual learning needs. The GATMP staff work in a nurturing environment providing students with the highest quality of teaching available.

Your child will develop skills in:

- Music appreciation
- Problem solving skills
- Developing critical thinking skills
- Enhancing communication skills
- Working collaboratively.

The program will be developed for your child to develop their interpersonal skills and communication with others by working in consultation with others. Your child will benefit from learning how to play an instrument and refine their skills.

Meet the Teacher

Mrs Hayley O'Brien

Bachelor of Music / Bachelor of Education Graduate of Western Sydney University AMEB 8th Grade Piano

Mrs O'Brien has 18 years experience teaching Music in the classroom and 5 years experience teaching private lessons for AMEB piano. In that time Mrs O'Brien has been developing student's skills in the area of performance and composition. Mrs O'Brien has a deep passion for Music and has experience with piano, guitar and vocals. Mrs O'Brien aims to develop student's individual skills and their technique to suit the style they wish to learn. Mrs O'Brien caters for individual solo performances and group ensemble pieces, also working on performance practice. Mrs O'Brien also hopes to cater for students wishing to compose Music to perform or record. Mrs O'Brien believes music is beneficial for student learning by developing academic skills, social skills, and boosting self-esteem and confidence.

Performance Opportunities

There are a variety of performance opportunities available for GAT Music students, including:

- ♪ *Music Night @ Plumpton High*
- ♪ *Education Week at Westfields Mount Druitt*
- ♪ *Formal Assemblies*
- ♪ *MADD Night @ Plumpton High*
- ♪ *Schools Spectacular*
- ♪ *PULSE*
- ♪ *Musical Opportunities*
- ♪ *Performing Arts initiatives and events*



Student Executive Council



Rationale

At Plumpton High School we continue building and developing student's intellectual capacity, ensuring that they have the necessary skills and ability to solve complex problems, develop and understand concepts and to be the leaders of tomorrow in our future focused world. Plumpton believes in a Growth Mindset and for students to have a growth mindset, they understand that trying harder - and trying new strategies - not only helps them succeed at the current task but also helps them succeed in the future by strengthening their brain.

The Plumpton High School Student Executive Council, or SEC, is a team of students that strives for and leads the constant improvement and growth of our school. It consists of representatives from each Year level, as well as the Year 12 leadership team elected that year. Our supervising teachers lead these students. Plumpton High School has implemented the Student Executive Council instead of a 'Representative Council' as we believe our students should have a role in the changes and decisions made within the school and push for the improvements they desire. Our students have the capacity to do so much more than simply represent the school in public forums, as they are future leaders of Australia. Leadership capacity can be built when students are provided the necessary skills and experiences, combined with the setting of high expectations and encouragement. Additional responsibility that is placed upon students encourages them to be more courageous, learn more and achieve more. The students that become a part of this team are expected to fulfil their roles with a high level of responsibility and professionalism in a Project Management based Learning model, teaching them skills they can carry on for a lifetime.

In 2017, the SEC decided to aim to unite our school by building school spirit, fostering connections with the community and embracing diversity, among our other goals. They began various initiatives, aiming to achieve these goals and know that future junior members will be able to bring more to the table and allow us to reach these goals quickly and efficiently. SEC members are not the only ones that can bring a change to the school or suggest improvements. Part of the role of the SEC is to receive suggestions from the student body and incorporate their ideas into our agenda and our decisions. This can be done by approaching any of the SEC members and suggesting their innovative and creative ideas that begin as undiscovered solutions, with the potential to improve the school environment. As a whole, the Plumpton High School Student Executive Council is a team that empowers the students and allows them to be involved in making decisions that will affect them, their environment and their peers.

Selection Process

- Students interested in the running of their school and in making their learning environment the best it can be should consider applying for the Student Executive Council.
- Students should consider if they have such leadership qualities as commitment, communication skills, and cooperation.
- To apply for the SEC students will need to fill in an application form that addresses their commitment to attendance, uniform and school activities.
- The next step of the process is to answer several questions about how you can be a helpful member of the SEC.
- These responses will be used by the current SEC to make a decision about your suitability to join the SEC.

What will each lesson

look like?

SEC meetings for Prefects are held once a week after school from 3:00 to 4:00 PM.

Years 7- 10 occur during Lunch 1 on Wednesdays and are run by the Prefect Team Leadership.

During this time students will collaborate to plan projects for the improvement of the school and community.

These projects focus on the areas of inclusion, charity, community, media, and sustainability.

Application Information

Who is able to apply?	Any year 7-12 student who wishes to contribute to their school community.
How to apply ?	Apply by filling out an application form and answer the relevant questions.
What is required?	A positive and outgoing personality, along with a desire to help others.
How do I find out if my child was successful?	Students will be notified in person one week after the application whether they were successful or not for the program.
Where will the application process take place?	Students will be required to submit their applications by a designated due date. These applications will be reviewed and a decision will be made.
Are parents able to watch the application process?	The application process is closed and as such parents will not be able to watch the process.

Why will the SEC be beneficial for my Child?



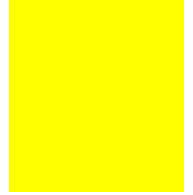
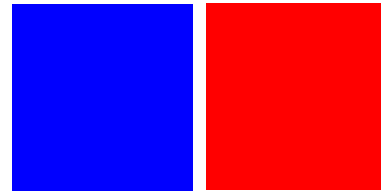
The SEC has been designed to allow students the ability to drive their own community, through a process of self-determination.

The thoughts and voices of the students are lead and managed by the students to direct future decision making towards enhancing not only the community of Plumpton High School, but also of the greater Plumpton Community. In this sense, the SEC is not just an activity for positive or outgoing students, but more a role centred upon the building of future leaders.

Leadership skills and responsibilities are an integral part of the SEC program and when combined with the philosophy egalitarianism, provides a multitude of benefits to the development of all students involved.

Meet the SEC

<p>Mr Lloyd, Ms Racela, Ms Caramacion and Ms Maait</p> <p><u>Year 7 2023</u> Samaira Ali Zoya Ali Haaris Anwaar Syed Bukhari Matthew D'Angelo Gianna Esguerra Mariam Jahangir Noreen Joyia Inaya Shirazi Mia Tenorio Lokesh Yalamanchili Aladdin Zraika</p> <p><u>Year 8 2023</u> Jannalyn Barbuco Isabelle Campbell Shanika Dimri Ysabella Marasigan Anna-Belle Tanielu</p> <p><u>Year 9 2023</u> Zain Al-Shible Muhammad Ali Haaziq Anwaar Amber Avillanoza Nigina Azimi Thomas D'Angelo</p>	<p>Lilith Dartnell Sandra Dela Rosa Belinda Hughes Anisha Joyia Attia Joyia Awais Joyia Tanvir Kaur Fatima Malik Mike Marfil Leila Mirian Masooma Mohammadi Annacemone Nashid Ewen Neoh Shanum Nisa Rhea Prasad Inara Quazi Ashton Mathieu Quizon Ahmad Raza Kris Santos Nathaniel Santos Daniel Sramek Carissa Tagra Michelle Tan</p> <p><u>Year 10 2023</u> Students have moved up to Senior SEC</p>	<p><u>Year 11 2023-2024</u> Suamata Ae Su'a Nadira Ali Sumairaa Ali Nabeela Ather Jiya Barot Jack Barton Martin Basta Emily Caperal Lara Cerit Skye Dernelley Kristine Devi Elaine Garces Komal Ilyas Shamanta Islam Maryam Ahmad Joyia Gianna Jumongong Kyleiah Kennedy Ballos Alisha Makkar Mariyam Malik Jayden Manriquez Arsalan Mumtaz Arozo Jan Salari Isabella Southerwood Faryal Tayyab</p> <p><u>Year 12 2023-2024</u> Hibah Ahmad Maaz Ahmad</p>	<p>atifah Ali Fatima Bundu Kyan Byrnes Shivesh Chand Jaron David Bushra Iram Sumaya Joyia Cedric Jumongong Kavleen Kaur Abdullah Khan Andrew Klimo Jcelle Legaspi Areeba Moheed Nielle Napoles Judith Okereafor Nicole Ram Kristiana Ramos Joshua Richards Nikhat Rishad Sid Sajith Thao-Nghi Tran Yasmin Trotsch</p> <p><u>Vice Captains 2023-2024</u> Ugochinyere Duru Ella Parker Therese Tagra</p> <p><u>Captains 2023-2024</u> Anis Ali Ayma Chaudhry</p>
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Meet the Teachers:

Ms Mirachael Racela

Bachelor of Science / Bachelor of Education (Secondary) - with Distinction

Graduate of the University of New South Wales

Ms Racela is a passionate secondary Science teacher with a background in biology, chemistry, and physics. She brings a wealth of expertise to her role. Whilst studying in university, she worked as a part of the Student Representative Council at the University of New South Wales, and has worked as a part of student groups such as the Womens' Collective, Ethno-Cultural Collective, and Education Society. She was provided many opportunities to run projects and events to raise awareness for key issues and also created systems and policies focused on making the university more inclusive for students and staff.

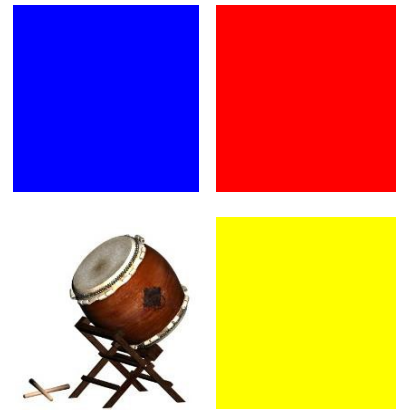
She believes in an inquiry-based approach in both her teaching and in working with the Student Executive Council. Following this approach allows students the opportunities to build their own understanding of the world around them and to use critical thinking to solve problems. It also helps to develop their capacity and independence in planning events and projects to make a difference in their community.

Graduate of Macquarie University

Ms Caramancion is a strong advocate of the public education system teaching in public schools for close to 18 years. She believes that every student deserves to receive a high-quality education in order to grow, thrive and succeed in all aspects of life. With extensive experience, Ms Caramancion has been able to support students in leadership roles having been the coordinator for the prefect charity team at Homebush Boys High School, leading and coordinating the peer-reading program as well as coordinating and training peer-support leaders for incoming Year 7 students.

She believes that being a member of the SEC provides valuable real-world experiences for students who want to develop their potential to be effective leaders as well as providing students the opportunity to work collaboratively as a team. The student projects will not only provide a significant impact on the learning outcomes of the students but will further enhance the profile of the school whilst making a positive impact on the community. These are important skills that can be used outside of school and in a student's future endeavours.

Taiko Drumming



Rationale

All students should have the opportunity to develop their musical abilities and potential. As an artform, music pervades society and occupies a significant place in world cultures and in the oral and recorded history of all civilisations. It uses a unique symbol system that uses sound to imply meaning and convey information, and has the capacity to cross cultural and societal boundaries. Music plays important roles in the social, cultural, aesthetic and spiritual lives of people. At an individual level, music is a medium of personal expression. It enables the sharing of ideas, feelings and experiences.

The study of music combines the development of affective, cognitive and psychomotor domains in the act of making music. It allows for the expression of emotion and imagination, the intellect and the exploration of values. Music fosters an understanding of continuity and change, and of the connections between different times and cultures. The nature of musical study also allows students to develop their capacity to manage their own learning, engage in problem-solving, work collaboratively and engage in activity that reflects the real-world practice of performers, composers and audiences. The study of music fosters knowledge, understanding and skills that contribute to lifelong processes of learning and to the appreciation and enjoyment of music.

While students will develop knowledge and skills in each of the individual areas of performing, composing and listening, the integration of experiences in these areas enhances the understanding and manipulation of the concepts of music in differing musical contexts.

The curriculum structure is adaptable enough to meet the needs and abilities of students whose interests range from the broadly based to the pursuit of specialised musical knowledge and skills.

The HGPETD provides students with a high-quality performing arts education, with a focus on the development of a strong understanding of Taiko styles, techniques and performance skills and is an exclusive program offered by Plumpton High School with a fully qualified DEC Music Teacher.

At Plumpton High School, students participate in Music in year 7, and have the opportunity to study Music an elective from years 8-12. This program gives students the opportunity to access the programs earlier.

Objectives

Knowledge, understanding and skills

Students will develop knowledge, understanding and skills about Taiko Drumming as an artform through:



1. Performing as a soloist

As a means of self-expression, interpreting musical symbols and developing solo techniques

2. Performing as a Group

As a means of group music making, combining blending and ensemble techniques

3. Composing

As a means of self-expression and collaboration between a Taiko ensemble

Value and attitudes

The aesthetic value of music and enjoyment of engaging in performing, composing and listening.

Teachers will report to parents on the student's competencies in the above facets.

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes. These are descriptors of what students will know and be able to do as a result of studying the Taiko program. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Music, as an area of the curriculum, is based on students learning about making, performing and appreciating, and learning to make, perform, and appreciate. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgements about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single demonstration. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome, in a number of different activities.

Judgements about student achievement of outcomes are made, based on evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- observing students performing
- observing students during the process of making music
- discussing with students their own work and the work of others
- interviewing individual students about their own performance and their involvement in making music
- collecting and analysing written work in music workbooks
- peer assessment and self-assessment

Teachers will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

Students will be selected into the program through expression of interest. Students who show an expression of interest will be required to complete a short entry form.

Students will be selected based on the following criteria:

- Demonstrates a high work ethic in their academic studies
- Demonstrates exemplary behaviour and self-discipline
- High level of school attendance

What will each lesson look like?

3:00pm – 3:15pm:

Warm Up

3:15pm – 4:00pm:

Drills/Skills Practice

4:00pm – 4:15pm:

Drink/Snack Break

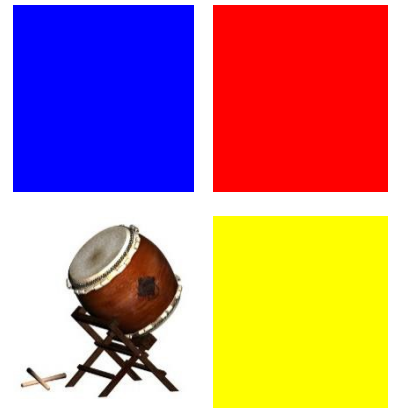
4:15pm – 5:00pm:

Performance Practice

Application Information

Who is able to Apply?	Any student in years 5-10 from the Plumpton Education Community, with a passion to learn Music, with a focus on Taiko Drumming, as an artform.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return to their school's front office by the cut-off dates. Students will be notified in regards to their application.
What is required?	Students will be required to participate in the full two-hour class.
What does my child wear?	Students are required to wear any clothing they are most comfortable in to be able to move around in.
How do I find out if my child was successful?	Students will be notified in writing after the application as to whether they were successful or not for the program.

Why will the HGPETD be beneficial for my Child?



The HGPETD offers students from years 5 to 7 the opportunity to experience Music, focusing on Taiko Drumming, in a professional and educational setting with other likeminded students.

The GTPD is designed to complement and enhance student's prior knowledge of music and to work with the students towards their individual and group goals. The program will provide students with; knowledge, skills and understanding about Music and Taiko Drumming as an artform, the capacity for students to manage their own learning, the facility to work together with their peers towards a goal.

Each lesson will be personalised to the students in the class and differentiation of the lesson content will be made available for students individual learning needs.

The HGPETD staff work in a nurturing environment and provide students with the highest quality of teaching available.

Meet the Teacher

Mr Timothy Symes

Bachelor of Music (Performance) , Associate Bachelor of Arts (Historical and Political Thought)

Master of Education (Secondary)

Certificate III Live Production and Services

Certificate IV Teaching and Adult Education

Mr Timothy Symes is a passionate educator that joined Plumpton High School in 2018 as a music teacher in the Creative and Performing Arts Faculty.

Mr Symes is an accomplished percussionist playing across a variety of musical styles including Funk, Rock, Classical, African and Jazz. He has played across the east coast of Australia in a variety of award winning ensembles and has been part of session projects for multiple musicians. He is now using his rhythmic experience to educate students about the joy of Taiko Drumming.

Mr Symes brings a wealth of experience from his classroom teaching, current industry knowledge and an in depth understanding of rhythm and movement that will encourage others to become the best musicians they can be.

Performance Opportunities

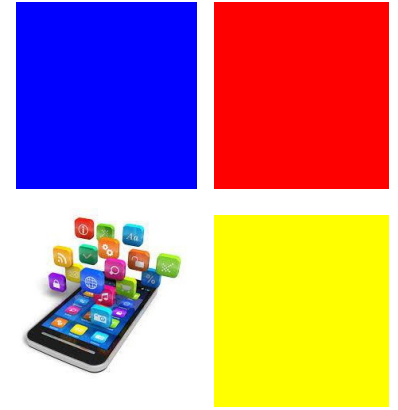
There are a variety of performance opportunities available for the Taiko Drumming Students including:

*Music Night @ Plumpton High
School Education Week
Formal Assemblies
Schools Spectacular
Education Ministers Awards
ABCN Awards*

*MADD Night @ Plumpton High
School Performing Arts
initiatives and events*



Computer Science (STEM)



Science Technology Engineering Mathematics

Rationale

The High Potential Gifted Education for Computer Science program that is offered at Plumpton High School has been developed by the Carnegie Mellon Institute in the United States. The Computer Science course that has been designed, aligns with the Australian Curriculum's general capabilities.

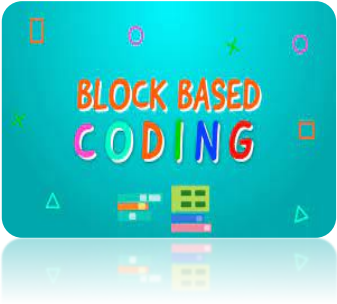


In the 21st century, scientific and technological innovations have become increasingly important as we face the benefits and challenges of globalisation and a knowledge-based economy. To succeed in this new information-based and highly specialised society, students need to develop their capabilities in STEM to levels much beyond what was considered acceptable in the past. People can expect to work and live in environments requiring highly developed computing and technological literacy levels. Current technologies are becoming obsolete rapidly, and new generations will need to be flexible to accommodate changes as they emerge. Students must learn about, choose and use appropriate information and software technology and develop an informed awareness of its capacities, scope, limitations and implications. Technological competence in the rapidly evolving information and software technology area will require lifelong learning.

Students can build the capacity to understand, reference, apply and engage themselves in 21st-century learning tools. Students should learn how to program a computer because it teaches them how to think. Through experiential and collaborative tasks, students analyse, design, produce, test, implement and evaluate software technology-based solutions. Creative, critical and mega-cognitive thinking skills are developed through students' practical involvement in projects. Students will be able to enhance their skills of developing an algorithm (a step-by-step process to solve a problem) through learning of Computer Science skills.

Objectives

Students will grow in confidence about the Information & Technology Industry and become more aware of the global progress in this field. The aim is to develop students' knowledge, understanding, confidence and creativity in analysing, designing, developing and evaluating web-based solutions.

Computer science program development includes an organised series of activities to design, produce and evaluate web-based solutions for an identified need or problem. The content for apps focuses on problem-solving, generating ideas, modelling, managing, communicating, collaborating and assessing solutions. The benefits of this course are:

		
<p>1. Block-based Coding</p> <p>A Block-based interface will be used to teach students how to code and how to comprehend programming concepts.</p>	<p>2. HTML (Hyper Text Markup Language)</p> <p>Students will learn to write code in HTML language to build a static website.</p>	<p>1. Python Programming</p> <p>Students will learn how to develop a software project using Python programming.</p>
<p>Value and attitudes</p> <p><i>Students will value and appreciate technology and how to work with it.</i></p> <p><u>Teachers will report to parents on the student’s competencies in the above facets.</u></p>		

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes, which are descriptors of what students will know and be able to do as a result of participating in Computer Science Programming. The assessment aims to provide information on students’ achievement and progress and set the direction for ongoing teaching and learning.

The Computer Science program is based on students learning about how web applications work, how their design process works and how to apply analysis of data to practical situations. Teachers use a range of strategies to collect information on the demonstration of skills and understanding students exhibit in various contexts. It is important to make judgments about students’ achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single project. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome in a number of different activities.

Judgments about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing a student’s application of techniques in the practical work.
- Examining the quality of the student’s product.
- Examining the functionality of the student’s product.
- Student self and peer assessment.

The teacher will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

- *Students will be selected for the program through an expression of interest process.*
- *Students who show an expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:*
 - *Demonstrated a high-work ethic in their academic studies.*
 - *Demonstrates exemplary behavior and self-discipline.*
- *High level of school attendance.*

What will I be learning

in this program?

- **Software designing.**
- **Python Programming.**
- **HTML (Hyper Text Markup Language)**

Application Information

Who is able to Apply?	Any student in years 5-8 from the Plumpton Education Community and any student from Plumpton High School in years 7 & 8, with a passion for learning application development for mobile devices.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cut-off date on the form or return it to their schools' front office by the cut-off date. Students will be notified in regard to their application.
What does my child wear?	Normal school uniform is appropriate however, it is essential that students wear leather shoes for WHS reasons in the workshop.
How do I find out if my child was successful?	Students will be notified in writing one week after the audition whether they were successful or not in the program.

Opportunities from this course

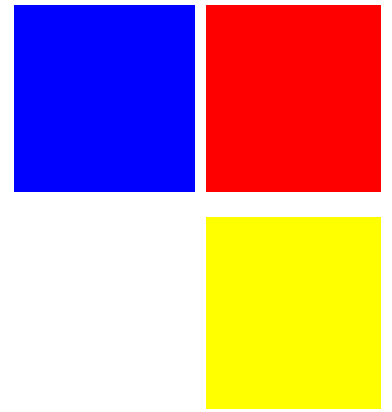
There are no prerequisites for the study of Computer Science Course.

Where this course could take you?

- Stage 5 (Computing Technology)
- Foundation for Stage 6 (Software Engineering)
- Software Developer as a career
- Applications Developer as a career.



Why will the HPGE (Computer Science) be beneficial for my Child?



This program offers the opportunity for students to learn about 21st-century tools of the Information and technology industry. It allows students to expand their knowledge, attitude and to gain new skills that will enable them to build relationships within the school and the wider community.

Plumpton High School encourages all students to give back to the community. This program compliments this through Computer Science HPGE program as students can utilise this skill to serve their community in a better way.

- **Develop leadership and thinking skills**
- **Enhance your software development skills**
- **challenge yourself and have an adventure**
- **Develop communication skills**
- **Make new friends**
- **Increase self-confidence and courage**
- **Make a positive difference to lives**



Meet the Teacher

**Mr. Sudhir Jaswal - Masters in Computer Applications
Masters in Secondary Education
Graduate of the University of Western Sydney**

Mr. Jaswal is teaching in Plumpton High School as an IST (Information and Software Technology) & SDD (Software Design and Development) teacher since 2016, he has established himself as a quality teacher and colleague.

He is a firm believer in the notion that everyone is brilliant at something and is capable of making a difference in the world.

STEM with Computer Science

Fact Sheet

Years 2 - 10

eduSTEM

World-class, tried & tested STEM curricula

Developed by researchers from Carnegie Mellon University, one of the world's leading universities for robotics, artificial intelligence and computer science, eduSTEM's STEM curricula are research-backed, tried and tested. Used by over 16,000 schools and 1,000,000 students internationally, eduSTEM's curricula represent the gold standard in global STEM education.

Ready-made curricula

100 hours of curriculum per year level, reinforcing learning outcomes from the Mathematics, Science and Digital Technologies National Curriculum. Programs are sequential, running from Year 3 to Year 10.



Easy to follow lesson plans

eduSTEM's curriculum is easy to implement in the classroom with ready made lesson plans, guidance videos, and provision of student portals.



STEM Professional Development & Certification

Designated staff members from your school go through eduSTEM's professional development program, receiving certification from Carnegie Mellon Robotics Academy. eduSTEM's PD program has already trained 11,000 educators internationally and ensures smooth and easy implementation within the school.



Practical, hands-on & engaging

Students interact with the curriculum through hands-on exercises with robotics, simulated virtual worlds and coding challenges, making the curriculum practical and engaging.



Student Certification

All students who successfully complete the eduSTEM program receive STEM certification from the Carnegie Mellon Robotics Academy.



Parent Sessions

eduSTEM also conducts seminars with parents, helping them understand the importance of STEM education and building support for the program amongst the school community.

eduSTEM

COMPUTER SCIENCE CURRICULUM

Course Description

IDEAS: Iterate, Design, Engage, Apply, Synthesize

- 10 courses that progress through higher levels of complexity
- Courses available starting with grade 2 (7 year olds) through high school
- Up to 64 hours of activity and instruction per course

IDEAS 1: Exploring Computer Science

As an introduction to the broad range of computer science topics and skills, students learn the basics of the computer, its parts and its functions, how to use the computer's interface, how to draw, how to type using age-appropriate applications, and how the computer's local memory is organized.

IDEAS 2: Creativity in Computer Science

Creativity in Computer Science introduces students to new applications and also deepens the understandings and skills that were introduced in Exploring Computer Science.

IDEAS 3: Interactive Quizzes and Games

In Interactive Quizzes and Games, students learn to use Scratch as a tool for communication through four in-class design challenges that involve cross-disciplinary quizzes and games.

IDEAS Accelerator: Catch-Up Course

The Computer Science Accelerator course provides an entry point for older students to begin the IDEAS curriculum. Students begin with the basic computer skills that were taught in Exploring Computer Science and Creativity in Computer Science and are then introduced to Scratch programming and begin to make their own programs in animations.

IDEAS 4: Introduction to Algorithms

Introduction to Algorithms positions Scratch as a tool for computations by showing students how to use lists, functions, and algorithms to create a basic, descriptive statistical application within Scratch.

IDEAS 5: Thinking in Terms of Objects

Thinking in Terms of Objects introduces students to object oriented programming and Sandbloqs, a new programming language designed for students who have never programmed before, or only have experience with visual programming.

IDEAS 6: Designing with Objects

Students learn new applications within Sandbloqs and deepen their knowledge of object-oriented programming.

IDEAS 7: Creating with Java

Creating with Java introduces students to text-based programming and programming in the Android Studio as students apply object-oriented programming concepts to the Java programming language.

IDEAS 8: App Building

This course introduces students to new applications within Java and the Android Studio while also deepening understandings and skills introduced in Creating with Java.

IDEAS 9: Creating a Virtual World

Creating a Virtual World introduces students to the C# programming language, the Unity 3d editor, and many of the concepts that are used in successful game design and the game creation process.

IDEAS 10: Game Design

Game Design presents students with a deeper exploration of game design theory as they further explore more advanced game design principles; such as, genres, goals, mechanics, player motivation, structure and game play.

Broad curriculum outcomes

Big ideas

- Creativity
- Abstraction
- Data
- Algorithmic Thinking
- Programming
- The Internet
- The impact of computing

Computational thinking practices

- Connecting computing
- Developing computational artifacts
- Using abstraction and models
- Structured Problem-Solving
- Analysing problems and artifacts
- Effective communications
- Collaboration

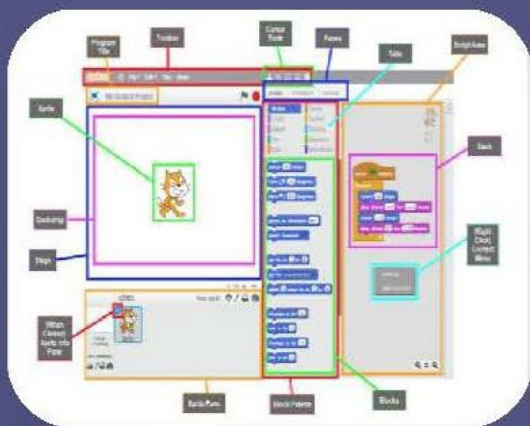
Core concepts

- Computer Science Knowledge and Fundamentals
- The 21st Century Skills of Teamwork
- Collaboration, project planning and problem solving
- Computational Thinking Skills and Logic
- Cybersecurity

Student Resources

SCRATCH Software

Students learn to code and program using SCRATCH, a visual, block programming language that allows students to drag and drop parts of a code into a stack and then quickly run their code to test its effectiveness. SCRATCH allows students to design and program games, quizzes and animations, whilst building the foundation to move to more complex programming languages



Resolvers Computer Game

Students are provided with access to *Resolvers*, a computer game which helps students develop an understanding of the elements of computer game design and game play. *The Resolvers* also includes functionality allowing students to code their own levels within the game, providing a highly gamified environment for students to put their new coding skills to the test.

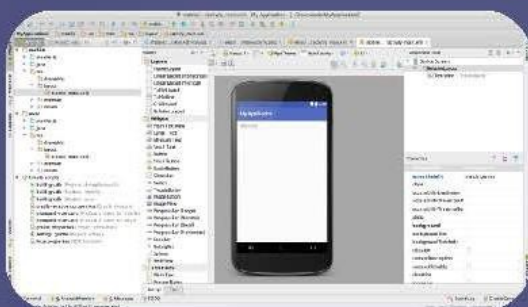


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Student Resources

Android Studio

Students will create an app using Android Studio that will incorporate photos and/or videos. The projects will require the students to dive further into layouts and list views while designing their apps. Students will investigate how to dynamically populate lists and also how to format those lists. After students have mastered these concepts, students will move towards learning how to incorporate games and animations into their app development.



Unity Editor

Students are introduced to the Unity 3D Editor and many of the concepts that are used in successful game design and the game creation process. Learners will be introduced to various game genres during this unit. They will also become familiar with elements of game play and project management concepts, as related to interactive application and video game creation. Students will apply 21st century skills as they begin to apply the design process to the creation of their own interactive, three dimensional games.



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Teacher Resources

Lesson Plans



Each module contains step-by-step lesson plans and includes instructional videos, walking teachers through each component of the in-class exercises.

Staff PD



Up to 4 members of your school's STEM team attend the Professional Development and STEM Training program to orient themselves with the curricula, best-practice for implementing in the classroom, and eduSTEM's hardware and software packages. Staff members successfully passing the final exam receive certification from **Carnegie Mellon's Robotics Academy** and are accredited to train other members of the school staff.

Phone Support



Access to eduSTEM's trained staff for phone based support to trouble shooting and advice on implementation.

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Robotics (STEM)



Science Technology Engineering Mathematics

Rationale

The High Potential Gifted Education Robotics program that is offered at Plumpton High School has been developed to supplement the powerful Industrial Technology, Problem Solving and STEM links in the current syllabi taught across NSW. The Robotics course that has been developed aligns with the Australian Curriculum's general capabilities.

Problem solving is a widespread skill companies often look for from employees. Executions of the simplest and most basic problems in all sectors of life today can be aided with the use of designing, prototyping, and manufacturing. Different material backgrounds will act as a vehicle for humans to design and develop a rapid prototype to solve an issue and then once solved move into larger scale manufacturing. It is evident that everyone will need to learn how to design, and problem solve for a variety of problems and issues.

Our High Potential Gifted Education Robotics program aims to provide students with deep knowledge and comprehensive exposure to Mechanical, Mechatronics, new and emerging technology, and the use of computer Aided design programs. Better understanding of these key concepts will allow an individual to make better decisions, develop better judgement, logically approach problems, and hence enjoy the solution to the problem.

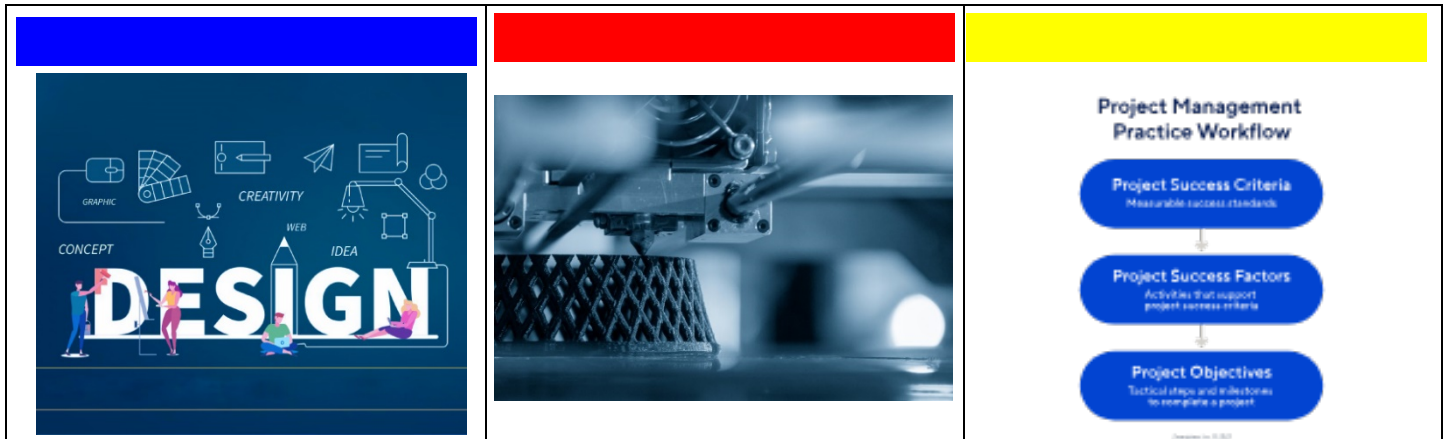
Students will be developing skills in assembly of mechanical parts which will be design and created by them in 3D modelling software and then constructed using real world materials. Experience in building structures will also enhance their knowledge and understanding of how physical aspects of nature influence our solutions to problems. Exposure to computer-based software and emerging technology will not only enable development to their computer skills but also direct their intellect to deduce solutions based on logic of design.

Early exposure to design skills, STEM projects and problem solving is crucial for every student. The Robotics program at Plumpton High School will allow students to explore their interest by experiencing a variety of problems where the students will have the opportunity to work together in teams or self-manage their own ideas, projects, and rapid prototypes. A wider and comprehensive understanding will lead to higher logical thinking and solid expression and creativity which will deem success inevitable.

Objectives

Knowledge, Understanding and skills

Students will develop knowledge understanding in the use and role of new technology within society. A focus on emerging technology within automated field. The working scientifically outcomes are also integrated into this program, to ensure students are using a wide range of thinking and communication skills



1. Designing
 Learning to design can increase one's sense of creation and develop a more imaginative person. The High-level designing acts as a bridge for communication between real world products and not yet thought of ideas.
 Student will primarily be using a variety of ICT software to develop different idea generations. Programs like Flash forge, ink scape, fusion 360 and google sketch up. Students will also learn how to create hand sketches and drawings sheets to showcase their designs to perspective clients.

2. Rapid Prototyping
 Prototyping allows the students the freedom to start bringing their creations to life by using the emerging technology Plumpton has to offer.
 Students will have the opportunity to use 3D printers, Laser cutters, Plasma cutters, Resin Printers and create their products and designs. These machines will develop their skills on these machines which can translate into employable skills.

3. Evaluation and Testing
 Students will need to evaluate and trail their designs once a prototype has been made we can get real world humans to test them.
 Learning how to create success criteria based off the client's needs or problem will allow students to identify themselves where they were successful and what their downfalls were.

Topics Taught
Digital Citizenship, Computer aided Manufacturing - 3D design and printing, Manufacturing to meet needs and Various coding languages

Reporting Procedure

The teacher will report to parents on the achievements of students in this program through a semester report. Students will be assessed on their knowledge and skills outcomes, which are descriptors of what students will know and be able to do as a result of participating in the GATES. The purpose of the assessment is to provide information on students' achievement and progress and set the direction for ongoing teaching and learning.

Robotics and prototyping, is an area of curriculum, is based on students learning about how mechanisms and machines work, how the design process work and how to apply analysis of data to practical situations. Teachers use a range of strategies to collect information on the demonstration of skills and understanding which students exhibit in a variety of contexts. It is important to make judgments about students' achievement of outcomes, understanding that evidence relating to a number of outcomes might be embedded in a single project. Similarly, a student will demonstrate that he or she can achieve the requirements of an outcome in a number of different activities.

Judgments about student achievement of outcomes are made on the basis of evidence. A variety of strategies may be used to collect evidence on student achievement. Some examples include:

- Observing a student's application of techniques in a practical project
- Examining the quality of the student's product
- Examining the functionality of the student's product
- Student self and peer assessment
- Collecting and analysing project folios

The teacher will record student achievement for reference when providing feedback to students and others and when formally reporting to parents and caregivers.

Selection Process

- *Students will be selected for the program through an expression of interest process.*
 - *Students who show expression of interest will be required to complete a short entry form. Students will be selected based on the following criteria:*
 - *Shows an interest in the field of STEM.*
 - *Demonstrates exemplary behaviour and self-discipline.*
- High level of school attendance.*



What will each lesson look like?

3:00 – 3:15 pm

Concept Explanation

3:15 – 3:30 pm

Demonstration

3:30 – 4:00 pm

Planning and organization of projects and skills building activities

(Break 4:00-4:10)

4:10 – 5:00 pm

Observe student practical progress, planning activity/conclusion

Application Information

Who is able to Apply?	Any student in years 5-10 from the Plumpton Education Community, with a passion to learn about Rapid prototyping and robotics.
How to Apply?	Students will need to submit an application to attend through Plumpton High School by the cutoff date on the form or return to their school's front office by the cutoff date. Students will be notified in regards to their application.
What is required?	Students will be required to participate in the full two-hour class.
What does my child wear?	Normal school uniform is appropriate however it is essential that students wear leather shoes for WHS reasons in the workshop.
How do I find out if my child was successful?	Students will be notified in writing after the application whether they were successful or not for the program.

Why will GAT be beneficial for my Child?



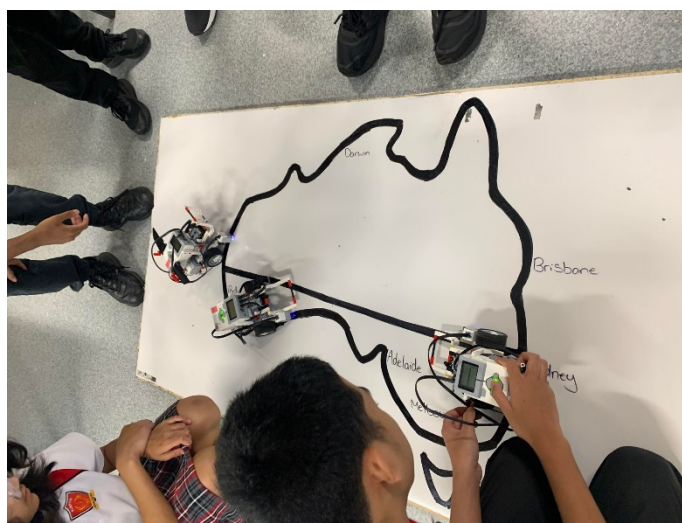
Plumpton High Potential Gifted Education Robotics program aims to provide exposure to valuable skills and knowledge which will prepare students to cope with today's challenging workforce. One of the biggest challenges for graduates, is choosing the right career path which will be both fulfilling and are in demand in current marketplace. At the same time at school they do not always get the opportunity or exposure to experiences that allows them to be wise decision makers.

The Robotics program will test student's ability in mathematics, science and technology. The program will allow the development of a physical platform for a direct application of mathematics. Students will explore engineering through levers, pulleys, gears while learning about the science and maths involved. The variety of activities and tasks will help students become logical thinkers.

Students who will complete the Robotics program will develop ability to find solutions to problems based on facts, knowledge and understanding.

These are skills are highly valued in all professions.

The High Potential Gifted Education Robotics program allows students to work in a safe and nurturing environment that can enable the exploration of their deepest curiosity involving Science and Engineering by obtaining meaningful understandi



Meet the Teacher

**Mr Cameron Honeysett– Bachelor of Arts
(Technology), Bachelor of Secondary Education**

Mr Honeysett has been working at Plumpton High School since 2021 as an Industrial Arts teacher, across all year groups. He has extensive knowledge, understandings and skills with Timber, Metal, Plastics, and robotics and is passionate about guiding and mentoring students to develop independent critical thinking and problem-solving skills.

He has a deep understanding of how STEM can be introduced into different sectors and utilized in a meaningful way.

Mr Honeysett is excited to share his passion with you and hopefully develop exciting projects students are proud of and can take home to showcase their newly learnt skills and knowledge.

STEM with Robotics

Fact Sheet

Years 2 - 10

eduSTEM

World-class, tried & tested STEM curricula

Developed by researchers from Carnegie Mellon University, one of the world's leading universities for robotics, artificial intelligence and computer science, eduSTEM's STEM curricula are research-backed, tried and tested. Used by over 16,000 schools and 1,000,000 students internationally, eduSTEM's curricula represent the gold standard in global STEM education.

Ready-made curricula

100 hours of curriculum per year level, reinforcing learning outcomes from the Mathematics, Science and Digital Technologies National Curriculum. Programs are sequential, running from Year 3 to Year 10.



Easy to follow lesson plans

eduSTEM's curriculum is easy to implement in the classroom with ready made lesson plans, guidance videos, and provision of student portals.



STEM Professional Development & Certification

Designated staff members from your school go through eduSTEM's professional development program receiving certification from Carnegie Mellon Robotics Academy. eduSTEM's PD program has already trained 11,000 educators internationally and ensures smooth and easy implementation within the school.



Practical, hands-on & engaging

Students interact with the curriculum through hands-on exercises with robotics, simulated virtual worlds and coding challenges, making the curriculum practical and engaging.



Student Certification

All students who successfully complete the eduSTEM program receive STEM certification from the Carnegie Mellon Robotics Academy.



Parent Sessions

eduSTEM also conducts seminars with parents and the school community, helping them understand the importance of STEM education and building support for the program amongst the school community.

eduSTEM

About eduSTEM's curricula

16,000 Schools using the curricula

11,000 STEM certified teachers

1,000,000 Students engaged

“With the help of [eduSTEM's] STEM curriculum my students are more active in class, participate more, are more collaborative and dare to share their ideas with others”

“With the new methodology, students are learning not only programming but also project management, research and analytical skills. Government and Industry need students with the right skills and [the] program will provide them with such that they would be able to work anywhere in the world.”

eduSTEM

ROBOTICS CURRICULUM

Course Description

TREC: Technology, Robotics, Engineering, Coding

- 10 courses that progress through higher levels of complexity
- Courses available starting with grade 2 (7 year olds) through high school
- Up to 100 hours of activity and instruction per course

TREC 1: Sense, Plan, Act

Students learn about mechanical construction systems using educational building systems such as LEGO MINDSTORMS or VEX Robotics. Through age-appropriate activities, students learn how to build basic mechanical systems and complete a number of activities and exercises around computational thinking the fundamentals of robotics.

TREC 2: Mechanisms

Students will use their robotics kits to explore elementary math concepts, the properties of different objects, and the concept of Force.

TREC 3: Mobility and Sequence

Students build and program robots to complete basic dead-reckoning navigation tasks in themed worlds. Age-appropriate handling of robot-drive geometry and distance-rate problems, and physical drive design constraints round out the engineering experiences.

TREC 4: Sensing and Logic

Students build and program robots to complete sensor-assisted navigation tasks in themed worlds.

TREC 5: Experiments and Analysis

Students build and program robots in applications focused around responsive real-time autonomy through Repeated Decisions (looped conditionals).

For use with VEX IQ and LEGO EV3 hardware platforms.

Portions of this product are manufactured under license from Carnegie Mellon University.

Courses subject to change.

TREC On Ramp: Catch-Up Course

Students learn or review the fundamental programming concepts covered in previous years during a single-year catch-up curriculum. This curriculum component allows middle and high schools to “on-ramp” students who are transferring in from schools that did not offer robotics training.

TREC 6: Engineering Explorations

Students will be introduced to engineering principles as they use their previous knowledge of programming and robotic design to solve real-world problems.

TREC 7: Data and the World

Students undertake engineering projects that require them to model the physical world using data abstraction.

TREC 8: Algorithmic Thinking

Students undertake programming and engineering projects that require their robots to manipulate data abstractions of substantial complexity.

TREC 9: Engineering Collaborations

Using the Engineering Process, students will complete second-level engineering challenges requiring them to apply all programming, engineering, and design knowledge learned to date to develop effective designs.

TREC 10: Internet of Things

This capstone level course is designed to bring the concepts of industrial design, electronics, programming and connectivity together in a course focused around developing “smart” devices for everyday life.

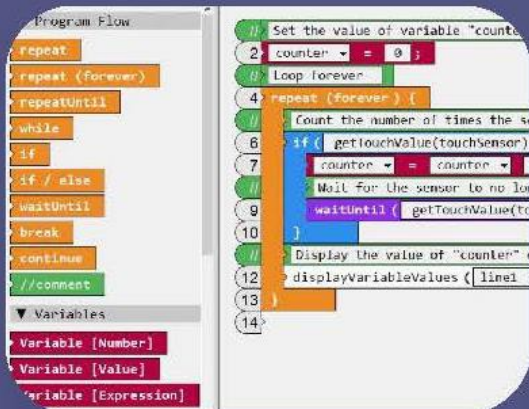
ed**u**STEM

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1. Student Resources

Robot C Software

eduSTEM virtual and physical robots run off Robot C software designed by Carnegie Mellon University's Robotics Academy. This software has been designed to introduce students to programming using a simple drag and drop interface that quickly allows them master the basic language structure of programming and provides them with the basic tools to perform more complex programming over the later years.



Physical Robots

Students apply the mathematical and computational thinking skills that they learn by programming and performing activities and games with physical robots. These robots make the program hands-on and engaging, effectively bringing the content to life. Students work in groups to perform activities and challenges such as navigating robots through mazes uses pre-programmed instructions, which provides a sense of gamification and competition to increase engagement. Robot C runs on both Vex and Lego robots.



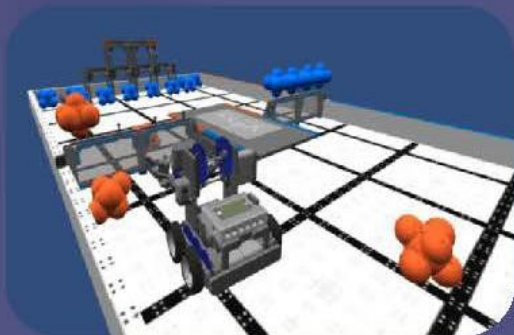
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Student Resources cont...

Virtual World

The eduSTEM student portal contains a **3D Virtual Worlds** program in which students can test and run their programmed instructions in a simulated, computer game-like environment. This makes activities more efficient in the classroom, as students can run a greater number of tests virtually to perfect their code, before running it on a physical robot.

In addition, the ability to test programs virtual removes the risk of students failing in front of a group, increasing students' willingness to take risks and try something new. Finally, the virtual worlds provides schools with a cost effective option for introducing robotics in the classroom by decreasing the number of physical robots that a school has to purchase.



Expedition Atlantis

All students are provided with access to **Expedition Atlantis**, a computer game in which students discover and explore the remains of the lost city of Atlantis using submersible robots. **Expedition Atlantis** combines gaming quality graphics and narrative with basic introductory robotic programming skills, maths reasoning and fraction exercises in order to help students build the basic knowledge and competency to perform the unit's later tasks.



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PLUMPTON EDUCATION COMMUNITY

GIFTED AND TALENTED PROGRAMS 2024

APPLICATION FORM – Please fill out AND submit ONE PER GROUP/CLUB



Student Name: _____ School Year: _____

Address: _____

School: _____

Parent/Carer Name: _____

Phone: _____ Work Phone: _____

Email Address (THIS WILL BE POINT OF CONTACT): _____

Emergency Contact name and number: _____

Medical Conditions and Medication: _____

Do you give Permission to Publish: Yes or No (Please Circle)

Which club are you applying for? (Please tick ONE ONLY per application, if on at the same time please preference with numbers)

Robotics and Coding STEM (Years 5-8) Tuesday 3pm – 5pm		Engineering and Technology (Years 5-8) Wednesday 3pm – 5pm		Experimenting with STEM (Years 5-8) Thursday 3pm – 5pm	
Taiko (Years 5-8) Tuesday 3pm – 5pm		Drama (Years 5-10) Wednesday 3pm – 5pm		Forensic Science STEM (Years 5-8) Thursday 3pm – 5pm	
Art and Design (Years 5-8) Tuesday 3pm – 5pm		Dance (Years 5-8) Dance (Years 9-11) Wednesday 3pm – 5pm		Media and Communications (Years 7-11) Thursday 3pm – 5pm	
		Computer Science STEM (Years 5-8) Wednesday 3pm – 5pm		Extension Mathematics (Years 5-10) Thursday 3pm – 5pm	
		Music Performance (Years 7-11) Wednesday 3pm – 5pm			

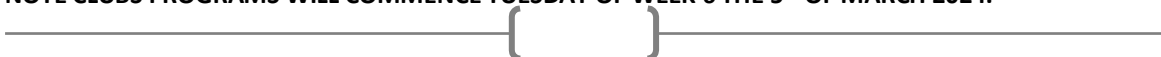
Please outline why you wish to be involved in a short statement below to support your application:

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____

Please return this note to Plumpton High Schools Front Office or your Schools Front Office by Wednesday Week 4 the 21st of February 2024.

PLEASE NOTE CLUBS PROGRAMS WILL COMMENCE TUESDAY OF WEEK 6 THE 5th OF MARCH 2024.





**PLUMPTON EDUCATION COMMUNITY
GIFTED AND TALENTED PROGRAMS 2024
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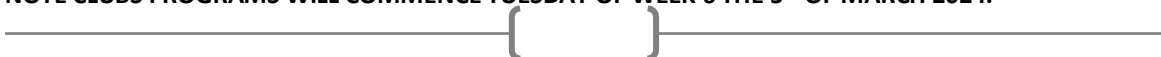
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