



eSmart
Schools

*This is a brief summary of
the presentation at the
Glen Iris Primary School
Parents Association Annual
General Meeting.*

STEM, STEAM, CODING, DIGI TECH

WHAT'S HAPPENING AT GIPS?



Robyn Floyd 2016

THE VICTORIAN CURRICULUM F-10.

Learning Areas

- The Arts
 - Dance
 - Drama
 - Media Arts
 - Music
 - Visual Arts
- **English**
- **Humanities**
 - Civics and Citizenship
 - Economics and Business
 - Geography
 - History
- **Languages**
- **Health and Physical Education**
- **Mathematics**
- **Science**
- Technologies
 - Design and Technologies
 - Digital Technologies

Capabilities

- Critical and creative thinking
- Intercultural
- Ethical
- Personal and social

In 2017 all schools in Victoria will deliver the Victorian Curriculum. As I have been working with the VCAA and over the past 18 months years staff at GIPS have been discussing the changes to AUSVELS and implications for teaching and learning. There are some changes including the development of Scope and Sequence charts for every learning area and ICT ...is now Technologies.

For more info

<http://victoriantcurriculum.vcaa.vic.edu.au>

ICT capabilities:

- being able to use ICTs effectively and know which ICTs to select for specific tasks.
- involves learning about safe use and practice.



TECHNOLOGIES

capabilities:

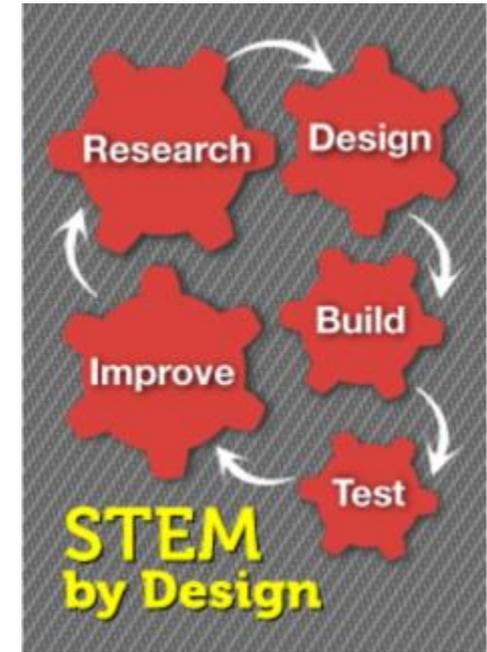
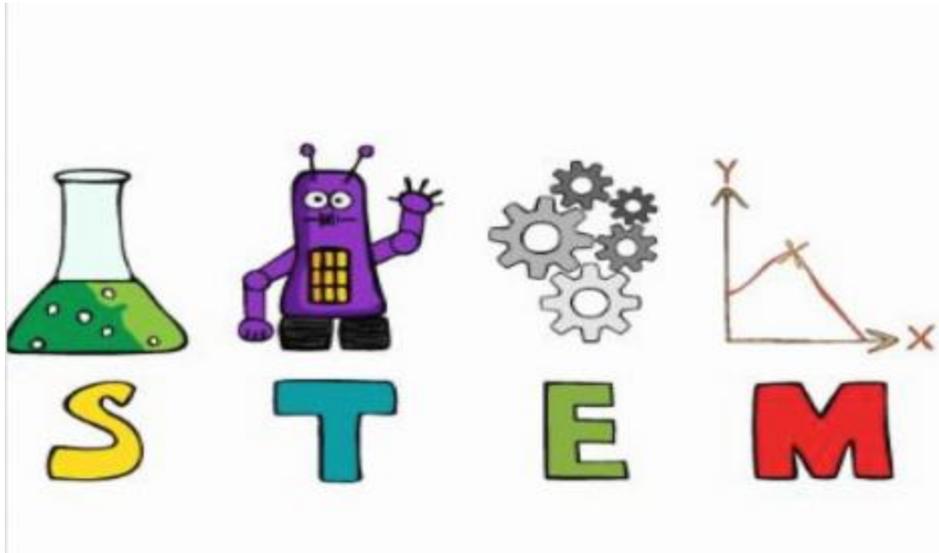
- understanding how ICTs actually work,
- learning a literacy in coding which underpins being able to create technology and learning about digital systems
- emphasises a way of thinking that is important to creating solutions

DIGI TECH

- **Cybersafety** – *We have eSMART accreditation – a 3 year process with ongoing auditing*
- **Edmodo** – *Year 5 & 6s practice safe chat in an enclosed and monitored environment*
- **Digital Licences** - *like the Grade 4 pen licence but this licence gives you access to GIPS technology and how to use it safely*
- **A classroom ‘Twitterboard’** – *an example of ‘unplugged’ or offline practice. Students write ‘tweets’ on paper and pin them on a noticeboard. They learn what is acceptable and what is not. A classroom noticeboard is a safe way to practice.*



STEM OR STEAM?



STEM Education:

- is a curriculum that is driven by problem-solving, discovery, exploratory learning
- requires students to actively engage a situation in order to find its solution

At GIPS STEM is part of the year level Inquiry Units which integrate a number of discipline areas.

10 Reasons to Teach Coding

By Brian Aspinall @mrspinall

5 Coding is inclusive

& builds self-confidence.



6 Coding supports many

principles of mathematics.



4 Coding is a place for students

to take risks & fail safely.



7 Coding teaches problem-solving



and critical/analytical thinking skills.

8 Coding is a new type

of literacy and will be a large part of future jobs.



9 Coding develops

teamwork & collaborative skills.



10 Coding can help humanity.



3 Coding teaches story-

telling with games and animations.



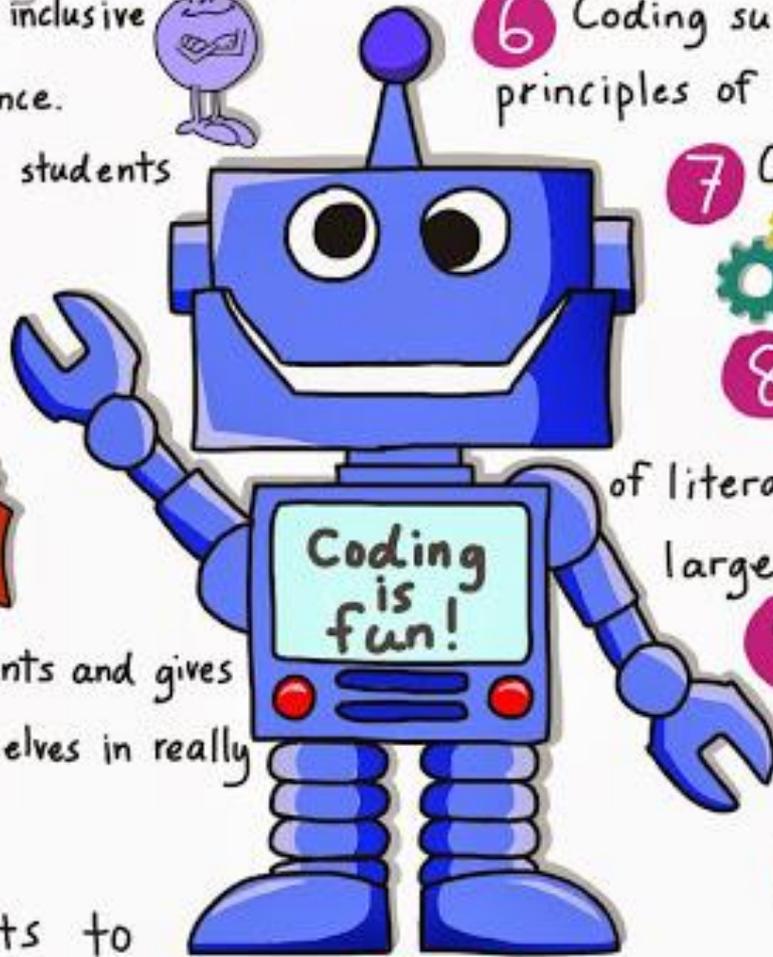
2 Coding empowers students and gives

them tools to express themselves in really cool ways.



1 Coding allows students to

create content, not just consume it.



BONUS:

Coding gives you SUPERPOWERS!



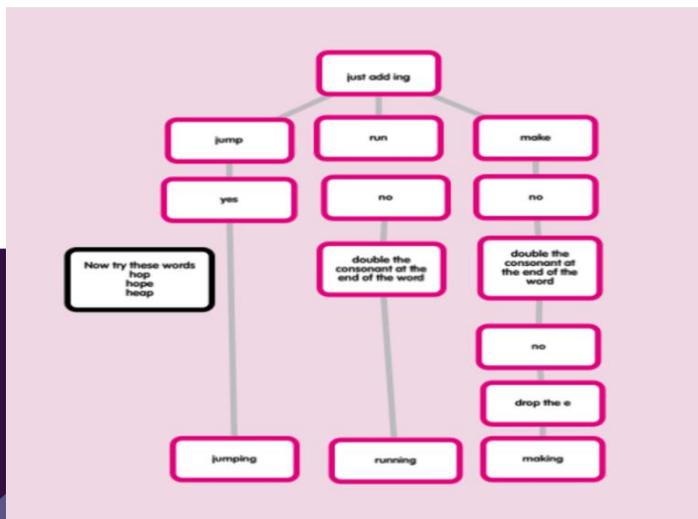
@sylvia duckworth

CODING: PLUGGED & UNPLUGGED

https://www.youtube.com/watch?v=hrnhiKAQ1_k&feature=youtu.be

Code is the 21st century literacy and the need for people to speak the ABC of Programming is imminent. Our world is increasingly run by software and we need more diversity in the people who are building it.

More importantly, writing software is about expression, creativity - and practical application. Our kids should learn to bend, join, break and combine code in a way it wasn't designed to. Just as they would with crayons and paper or wood and tools. We believe there's plenty to learn in programming logic and culture before showing children a single screen.



We looked at an example of unplugged activities that teach the processes needed to code.

Course 1

Try now

[Get Help](#)

Start with Course 1 for early readers. Students will create computer programs that will help them learn to collaborate with others, develop problem-solving skills, and persist through difficult tasks. By the end of this course, students create their very own custom game or story that they can share. Recommended for grades K-1.



Stage 1: Happy Maps

Unplugged Activity

1

Stage 2: Move it, Move it

Unplugged Activity

1

Stage 3: Jigsaw: Learn to drag and drop

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Stage 4: Maze: Sequence

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In 2008 when I came to GIPS as AP (Curriculum) we had 100 Desktops (1:4) and 1 Data projector.

In 2016 we have iPads 1:3 Preps & 1s, Laptops 1:5 (Prep-2s), Laptops 1:5 (3 & 4) iPads 1:4 (3 & 4) iPads 1:1 Years 5 & 6 sets of 10 x iPads in French, Art, Performing Arts and PE, microphones, tripods , six robots, IWBS in all rooms, Apple TVS in all rooms, Large TV screens (Art/LAB), Data projector and screen (PA)

WHAT NEXT for GIPS?

- Focus on STEM, coding, creative thinking and problem-solving
- ICT Student Action Leadership Team continues to lead the way for students (You can't comment as this safe site is closed but you can explore)
- <https://kidblog.org/class/gips2016ictsalt/posts>
- A planned Digital Junction/Hub in the old Lab area



This is only a brief summary of the presentation. Keep your eyes peeled for further Education Sub-Committee parent evenings in 2017. In previous years we have presented on ASD, Advice of Apps, cybersafety, storytelling, strategies to support anxiety in children (24th Nov 2016)

ARE YOU A PARENT WHO CODES?

WE HAVE CLASSROOM HELPERS FOR ALL SORTS OF PROGRAMS.
ARE YOU INTERESTED IN SUPPORTING OUT CODING PROGRAM IN 2017?
IF SO RING ROBYN 98853624 OR POP IN FOR A CHAT.