TEACHING AND ASSESSING THE GENERAL CAPABILITIES IN A SECONDARY SCHOOL CONTEXT

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Eltham High School has made a commitment to the teaching, learning, and assessment of 21st century skills throughout the curriculum.

**THE RATIONALE**

Development of Interdisciplinary Inquiry Subjects Across the Curriculum

- Year 7 - Integrated Studies
- Year 9 - Cornerstone Subjects
- Year 10 - Extended Investigation Elective
- VCE - Extended Investigation

This is realised through both embedded and explicit instructional practice centred on 21st century skills.

**THE VISION**

Our vision is to develop creative students who are active seekers, users, and creators of their own knowledge, who have a strong sense of responsibility toward society and the environment, and who act with integrity.

Development of Teaching and Learning Program Focusing on Higher Order Thinking, Collaborative, and Problem Solving
Teaching for the 21st century requires assessment for the 21st century.

Evidence from teachers suggests significant shifts in student capabilities and skills when explicitly taught.

The ability to teach and assess capabilities and embed these within the curriculum has been a work in progress for a decade at EHS.

The intention has been to provide data that is useful at a system, school, teaching, and student level.
All students are immersed in a capability rich teaching and learning space.

Across the following 5 years students are engaged regularly with further opportunities through both interdisciplinary subjects and immersion programs.
Eltham High School Case Study

THE CAPABILITIES AT WORK
THE INQUIRY MODEL

ENGAGING

PURPOSE

- To understand what students already know, think and can do.
- To provide students with opportunities to engage with the topic.
- To help plan future learning and differentiation.

THIS MIGHT LOOK LIKE

- Artwork or gallery walks.
- Watching thought-provoking clips.
- Mind mapping.
- Completing reflection tools.
- Brainstorming.
- Generating KWL charts.
- Excursions/incursions.
- Guest speakers.
- Image analysis.

BUILDING KEY KNOWLEDGE

PURPOSE

- To continue building students’ curiosity and knowledge.
- To establish meaning and significance.
- To develop students’ understanding of essential concepts, skills, and knowledge.

THIS MIGHT LOOK LIKE

- Direct instruction of core content/skills.
- Note taking.
- Short research tasks.
- Guest speakers.
- Excursions/incursions.
- Jigsaw activities.
- Think, pair, share.
- Experiments.
- Image analysis.

MAKING CONNECTIONS

PURPOSE

- To synthesise/revise new learning.
- To connect new learning to existing knowledge, upcoming tasks, significance of the topic.
- To encourage students to begin applying and transferring knowledge.
- To identify areas of interest/questions to pursue.
- To challenge existing beliefs, ideas, values.

THIS MIGHT LOOK LIKE

- Introducing and unpacking assessment/criteria.
- Creating collages.
- Critical thinking activities regarding information for example:
  - pro/con tables
  - fishbone
  - solution trees
  - argument analysis
  - thinking hats analysis
- Using graphic organisers to sort and categorise information for example:
  - Cornell notes
  - KWL charts
  - Text-Think-Connect
  - Reading Connections
  - Summary Organiser
- Graphing information and perspectives.
- Study groups.

RESEARCHING

PURPOSE

- To develop research skills.
- To make sense of information.
- To document development of ideas.
- To reflect on how knowledge and skill have expanded.

THIS MIGHT LOOK LIKE

- Defining the question/topic/issue/problem at a smaller scale.
- Note taking and researching from:
  - books
  - internet
  - interviews
  - visual source analysis
  - original data collection (surveys, focus groups)
- Reflecting on validity and reliability of information.
- Individual or group project work.
- Creating annotated bibliographies and research logs.
- Understanding relevance of information.

RESPONDING

PURPOSE

- To assist students to make conclusions and propose solutions.
- To assess and demonstrate students’ progress towards learning goals.
- To encourage reflection.
- To support students to consider the impact of audience and relevant presentation modes.
- To support students to present and justify a case/position.

THIS MIGHT LOOK LIKE

- Essays.
- Debates.
- Games.
- Concept maps.
- Posters.
- Digital presentations.
- Videos/advertisements/radio segments.
- Models/dioramas.
- Oral presentations.
- Drama/music performances.
- Artworks.
- Exhibitions.
- Research reports.
# THE CAPABILITIES IN ACTION

<table>
<thead>
<tr>
<th>Prior Knowledge</th>
<th>Emerging</th>
<th>Consolidating</th>
<th>Established</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGAGING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With support students begin to engage with the inquiry area and can identify what they already understand about a topic and their personal interest.</td>
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<td>With support students begin to engage with the inquiry area and can identify what they already understand about a topic and their personal interest. They begin to consider other perspectives.</td>
<td>As students engage with the inquiry area they can independently identify what they already understand about a topic and their personal interest. They consider a range of different perspectives and how this compares to their own.</td>
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<tr>
<td><strong>BUILDING KNOWLEDGE</strong></td>
<td></td>
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<tr>
<td>Students are scaffolded to take notes and document their learning within structured templates/worksheets.</td>
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<td>Students are scaffolded to take notes and document their learning in the most appropriate format.</td>
<td>Students can independently take notes and organise their ideas.</td>
</tr>
<tr>
<td><strong>MAKING CONNECTIONS</strong></td>
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<tr>
<td>Students can use a range of structured graphic organisers to make links between key ideas and their own understanding.</td>
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<td>Students begin to select relevant graphic organisers and ways of representing information to make links between key ideas and their own understanding.</td>
<td>Students independently engage in making links between ideas and their own understanding. They identify links between a wider range of material and are supported to establish connections.</td>
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</tbody>
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## THE CAPABILITIES AT WORK

### Active Listening

<table>
<thead>
<tr>
<th>Looks like</th>
<th>Sounds like</th>
<th>Feels like</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>One idea shared at a time</td>
<td>You are being heard</td>
</tr>
<tr>
<td>One person speaking at a time</td>
<td>Talking back and forth</td>
<td>An interesting discussion</td>
</tr>
<tr>
<td>Looking at the speaker</td>
<td>Questions being asked</td>
<td>Safe space for challenging one another’s ideas</td>
</tr>
<tr>
<td>Eye contact</td>
<td>People discussing what is right or wrong</td>
<td>Proud</td>
</tr>
<tr>
<td>Nodding</td>
<td>People building off of one another’s ideas</td>
<td>Feels awake</td>
</tr>
<tr>
<td>Straight backs, shoulders back</td>
<td>“Uh huh”</td>
<td></td>
</tr>
<tr>
<td>Hands on desk</td>
<td>“Yes, I understand”</td>
<td></td>
</tr>
<tr>
<td>Bottom glued to chair</td>
<td>“Can you explain that in another way?”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>“Can you repeat what you just said?”</td>
<td></td>
</tr>
</tbody>
</table>

[http://www.visiblethinkingpz.org/VisibleThinkingInAction/01a_VTinAction.html](http://www.visiblethinkingpz.org/VisibleThinkingInAction/01a_VTinAction.html)

[http://www.pz.harvard.edu/thinking-routines](http://www.pz.harvard.edu/thinking-routines)
### Pros
- Less class distractions
- More face-to-face interaction
- Less cyber-bullying
- Less worries about your online ‘image’
- You might go outside and play a sport
- Might decrease amount of smashed phones or electronics if you have a ‘bad phone’ kit

### Cons
- You can’t easily check compassion between classes
- With phones out, more chance of them being stolen or lost
- Can’t gain contact with parents/guardians if there is an emergency
Hi Mrs. Hughes,
I was wondering if it would be too late to request a "vegan" dietary requirement for the City Experience camp? I’m doing a project for integrated studies that requires me to do something sustainable, and I’m going vegan as part of it. I completely understand that you have your hands full at the moment, so if it is too late, it’s all right.
Looking forward to the trip,
Tom W, Group 1A,
IF someone had their phone taken away then they might be against the idea and then they will be mad and will not get the most out of school but IF they are left to realize for themselves that phones are distracting then they will put their phones away themselves without a teacher telling them to.

This will give them a better mindset and this is what I love about all high school because only you know how you learn best meaning that you can only learn IF you are in the right mindset which you get from responsibility.
Students can reflect on their 21st century skills problem in order to understand the way they think and work.

The school is highly regarded for its interdisciplinary focus and provides professional development for schools regarding the implementation of this approach.

The initiative has provided a means of establishing the value of 21st century teaching for key stakeholders - teachers and parents.

Teachers can assess and reflect on their approach to 21st century skills and design more effective learning sequences based on student needs.

Students can reflect on their 21st century skills problem in order to understand the way they think and work.
Some students develop collaboration and problem solving naturally whilst others need explicit teaching.

Strong collaborators are not necessarily strong problem solvers, and vice versa.

Our students have a solid grounding in these skills during primary school but need continued exposure to tasks that support their development in secondary school.

Traditional assessment does not necessarily work with new forms of teaching and learning.

How can we better design our traditional subject areas to effectively embed these skills?

How can teaching programs be designed to develop both skills equally?

How might our students compare to those without the same 21st century skills emphasis or interdisciplinary inquiry programs?

How might we further expand our initiative to cater for a wider range of skills including ICT skills and critical thinking?

Traditional assessment does not necessarily work with new forms of teaching and learning.