The Learning Power Approach

Teaching Students to Teach Themselves

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- Thinking on your feet
- Learning agility
- Floundering intelligently

- Cambridge
- Google
- Pearson
- PWC
- Ernst and Young
- ……

The world is changing…

21st century habits of mind

- Learning agility
- Critical consumption
- Control of attention
- Curiosity
- Dedication
- Imagination
- Collaboration
- Craftsmanship

- Which of these would you want for your children or grandchildren?
- What are you doing to cultivate them?

Learning habits matter

- "Achievement tests predict only a small fraction of the variance in later-life success."
- "They do not adequately capture such qualities as perseverance, self-control, attentiveness, resilience to adversity, openness to experience, empathy and tolerance of diverse opinions."
- "Learning habits have strong effects on educational attainment…but have additional effects on important life outcomes beyond their effects on schooling."
- "These habits can be enhanced, and there are proven and effective ways to do so."
  - James Heckman et al, *Improving Non-Cognitive Skills to Promote Life Success*, OECD 2013

- Grades get you through gateways
- Qualities of mind determine whether you flourish on the other side

The aim of the LPA is to

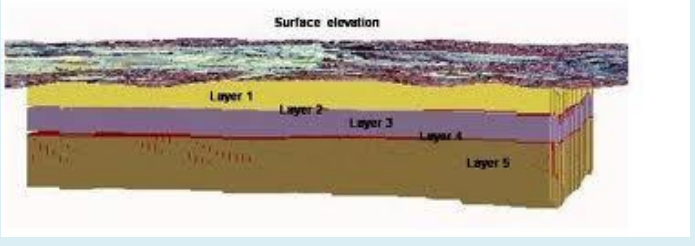
- Develop all students as
- Confident and independent learners
- Ready, willing and able to
- Choose, design, research, pursue, trouble-shoot and evaluate learning for themselves
- Alone and with others
- In school and beyond
- Through all aspects of school life, especially normal lessons
- Systematically, progressively and demonstrably

WHY?

- Because we won't always be there
- Because university demands learning power
- Because employment is changing
- Because life is tricky
- Because The Melbourne Declaration says we will
  - "All young Australians should develop their ***capacity to learn*** and play an ***active role in their own learning***"
- Because results go up when we do.

The multi-layered classroom

- **Knowledge** (information, concepts, ideas, theories…)
- **Literacies and expertise** (linguistic, mathematical, digital)
- **Learning habits** (attitudes, inclinations, beliefs)



You can't not be coaching attitudes and habits

- History PLUS credulity
- History PLUS criticality

- Fractions PLUS experimentation
- Fractions PLUS fear of mistakes

- Magnets PLUS curiosity
- Magnets PLUS passivity

- Reading PLUS pleasure
- Reading PLUS drudgery

How to teach maths

Our teacher

1. **gives us problems that require us to think for an extended time perseverance**
2. **gives us problems that can be solved in several different ways agility**
3. **asks us to decide on our own procedures for solving complex problems independence**
4. **presents problems that have no immediately obvious method for finding the answer resourcefulness**
5. **presents problems that require us to apply what we have learned in new contexts transference**

- **“Cognitive activation is significantly related to high maths achievement, and greater interest/engagement, across all pupils”**
- **AND**
- **“Pupils with low and medium socioeconomic status (SES) profit most from having high levels of cognitive activation in their maths lessons”**
- **YET**
- **“Lower-achieving pupils report undertaking such activities less often”**
- **BECAUSE**
- **“their teachers may not believe lower ability pupils are able to cope with the cognitive demand”**

Anser Charter School, Boise ID

“Through our innovative approach to education Anser challenges students to meet rigorous *academic* and *character* standards and to *provide service* to others. Students learn to *take responsibility* for achieving their *personal best*. They participate in *learning expeditions* – purposeful, extensive studies of a single topic. Harnessing the power of *adventure* and *discovery*, expeditions lead students to become more motivated in their academic work while *developing perseverance* and *self-discipline*.”

Elements of a maths workshop

- Designing **the grapple problem: just beyond their grasp**
- Grappling **– solo exploration of strategies and possibilities**
  - Teacher nudging and probing
- Discussion **– sharing strategies, problems and insights**
  - Ss refer to the 'anchor chart' to guide discussion
  - Teacher circulates noting student thinking
- Focus **– short input**
  - Unpacking the target learning
  - Discussing more or less efficient strategies
- Application **– exploring and appraising multiple strategies**
  - Teacher supports less confident student
  - Takes notes on individual learning
- Synthesis **– reflection on**
  - What has been learned
  - How they were learning
  - The lesson design
  - What's next?

Discuss…

- What did you like about that format?
- How closely does your teaching resemble it?
- Are your students ready to grapple and talk in that way?
- If not, what would you have to start doing next week, so that in 3 months' time they can handle it?
- What barriers might there be to general uptake of this style in your school?

WELCOME TO THE Y10 SPEED-DATING CLASS…

The speed-dating protocol

- **Practising evaluation**
  - Using good and bad models
  - Understanding rubric/criteria
  - Fine-tuning expectations of quality
  - Separating aspects of critique
    - Content and development
    - Facts and statistics
    - Grabbing attention
- **Speed-dating rounds 5/5/3 – fast and focused**
  - Editor's Feedback Form + copy of rubric
  - Link to real-world writing activity
  - Training ability to
    - Give feedback accurately, precisely, respectfully, clearly
    - Accept feedback graciously and non-defensively
    - Appreciating a range of perspectives
    - Internalise the editor function / building self-evaluation

Reflective writing – myself as a learner…

- Today's lesson was to be honest quite tough. It ***taught me to ask a lot more questions*** that I usually wouldn't even think about. I don't think I showed much sign of ***persevering*** though… Today I wasn't a strong contributor to my group…but I thought one of my ***strengths was being able to listen***…I don't think I asked the right ***questions to intensify my learning***. If I was able to ***question myself or others*** more, I think I would have gained a much better understanding of the topic… What ***I need to improve*** on for the next lesson is ***talking about roles and responsibilities in the group…and persevere through tough times***.
  - Debbie, Year 9, Bankstown Girls' School, Sydney

Learning to self-correct in maths

MY WORK PROGRESS IN MATHEMATICS			
WHERE I LOST MARKS			
1. I did not answer all the questions			
2. Some of my answers were wrong			
3. I did not show working out where I should have			
4. I left out some important things, e.g. (+, -, x, /)			
5. I did not copy out numbers correctly			
6. My work was messy and untidy. umbers were not clearly written. Work was not well organised.			
7. My addition, subtraction, muliplication or division was poorly done. Write in which one(s)			
8. I did not read the questions carefully			
9. I did not understand the work and did not see the teacher for help			
10. I rushed through my work			
11. It was not my best work. I could have done better. How?			

The learning power curriculum

We are getting better at…

• **asking questions**	• **Curious**
• **helping ourselves when we are stuck**	• **Resourceful**
• **being bold and trying new things**	• **Adventurous**
• **working well in different groups**	• **Collaborative**
• **concentrating despite distractions**	• **Focused**
• designing our own learning	• Self-instructing
• using our imaginations	• Creative
• researching independently	• Investigative
• checking what we are told	• Sceptical
• improving our own work	• Craftsmanlike
• seeking and valuing feedback	• Open
• looking more carefully	• Attentive
• adopting different perspectives	• Empathic
• planning and anticipating	• Methodical

Design Principles for a LP Classroom

- **Exemplary** – you too are a learner, about subject and about teaching
- **Progressive** – Focus on improvement not achievement
- **Independent** – SOLE activities, well-designed projects, less telling
- **Split-screen** – activities to stretch specific learning habits
- **Explicit** – teacher name-checking and valuing the learning habits
- **Immersive** – décor, layout and resources
- **Self-improving** – peer reflection and critique; drafts and revisions
- **Generous** - everyone helps each other
- **Self-directed** – Ss *designing* and co-creating learning activities
- **Adaptable** – Ss *choosing* level of challenge; recognising the sweet spot
- **Collaborative** – lots of talk and speculation
- **Challenging** – 'grapple time'; 'tricky'; just beyond easy
- **Safe to learn** – no risk of being dissed; meticulous policing
- **Compelling** – intriguing, valuable/pointed, connected
- **Orderly** – routines, clear standards, high expectations

A Whole-School Ethos

- An example of a school that is trying to foreground the development of confident, articulate learners
- Notice
  - Language
  - Activities
  - Responsibilities

Do I like it? Do we do it?

- 'Developing the habits of effective learning'
- The 'student voice team'
- 'We look forward to getting you stuck'
- 2 hour lessons / 'no set breaks'
- Term-long cross-curricular projects
- Students running staff development sessions
- Visual displays of learning processes
- 'We've been part of the development of a coaching culture' (peer mentoring)
- Students plan parental consultations
- 'Learning sessions, not lessons', 'extension, not homework'

The Learning Power Approach
Is it for me?

- LPA is for schools genuinely committed to building learning confidence and capability in the face of complexity, uncertainty, adversity, and difference, as well as raising standards.
  - i.e a lack of fear, rigidity, defensiveness or scorn.
- For all students, regardless of their background or their path in life.
- Where teachers and leaders are willing to change their habits.
- NOT FOR EVERYONE!

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