



Disciplinary Reading
Tuesday 11th May
3.30pm-4.00pm

Fran Haynes



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ASPIRATION | EXCELLENCE | TRANSFORMATION

Outline of Today's Session



1. What is disciplinary literacy?
2. A closer look at disciplinary reading.
3. Misconceptions
4. Practical ideas.












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<p>1</p> <p>Prioritise 'disciplinary literacy' across the curriculum</p>  <ul style="list-style-type: none"> • Literacy is an important skill across all subjects in secondary school and a strong predictor of outcomes in later life. • Disciplinary literacy is an approach to improving literacy across the curriculum that emphasises the importance of subject specific support. • All teachers should be supported to understand how to teach students to read, write and communicate effectively in their subjects. • School leaders can help teachers by ensuring training related to literacy prioritises subject specificity over general approaches. <p style="text-align: center; font-size: small;">Page 8</p>	<p>2</p> <p>Provide targeted vocabulary instruction in every subject</p>  <ul style="list-style-type: none"> • Teachers in every subject should provide explicit vocabulary instruction to help students access and use academic language. • Effective approaches, including those related to etymology and morphology, will help students remember new words and make connections between words. • Teachers should prioritise teaching Tier 2 and 3 vocabulary, which students are unlikely to encounter in everyday speech. • Teachers and subject leaders should consider which words and phrases to teach as part of curriculum planning. <p style="text-align: center; font-size: small;">Page 10</p>	<p>3</p> <p>Develop students' ability to read complex academic texts</p>  <ul style="list-style-type: none"> • Training focused on teaching reading is likely to help secondary school teachers teach their subject more effectively. • To comprehend complex texts, students need to actively engage with what they are reading and use their existing subject knowledge. • Reading strategies, such as activating prior knowledge, prediction and questioning, can improve students' comprehension. • Strategies can be introduced through modelling and group work, before support is gradually reduced to promote independence. <p style="text-align: center; font-size: small;">Page 14</p>	<p>4</p> <p>Break down complex writing tasks</p>  <ul style="list-style-type: none"> • Writing is challenging and students in every subject will benefit from explicit instruction in how to improve. • Teachers can break writing down into planning, monitoring and evaluation, and support students by modelling each step. • Targeted support should be provided to students who struggle to write fluently, as this may affect writing quality. • Teachers can use a variety of approaches, including collaborative and guided writing, to motivate students to write. <p style="text-align: center; font-size: small;">Page 18</p>	<p>5</p> <p>Combine writing instruction with reading in every subject</p>  <ul style="list-style-type: none"> • Combining reading activities and writing instruction is likely to improve students' skills in both, compared to a less balanced approach. • Reading helps students gain knowledge which leads to better writing, whilst writing can deepen students' understanding of texts. • Students should be taught to recognise features, aims and conventions of good writing within each subject. • Teaching spelling, grammar and punctuation explicitly can improve students' writing, particularly when focused on meaning. <p style="text-align: center; font-size: small;">Page 22</p>	<p>6</p> <p>Provide opportunities for structured talk</p>  <ul style="list-style-type: none"> • Talk matters both in its own right and because of its impact on other aspects of learning. • High quality talk is typically well-structured and guided by teachers. • Accountable talk is a useful framework to ensure talk is high quality, and emphasises how talk can be subject specific. • Teachers can support students by modelling high quality talk, for example including key vocabulary and metacognitive reflection. <p style="text-align: center; font-size: small;">Page 26</p>	<p>7</p> <p>Provide high quality literacy interventions for struggling students</p>  <ul style="list-style-type: none"> • Schools should assess and proactively plan to support students with the weakest levels of literacy, particularly in Year 7. • Developing a model of tiered support, which increases in intensity in the left hand column, is a promising approach. • Assessment should be used to match students to appropriate types of intervention, and to monitor the impact of interventions. • Creating a co-ordinated system of support is a significant challenge requiring both specialist input and whole school leadership. <p style="text-align: center; font-size: small;">Page 30</p>
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What is 'disciplinary literacy'?



1. Prioritise 'disciplinary literacy' across the curriculum

“Disciplinary literacy is an approach to improving literacy across the curriculum. It recognises that literacy skills are both general and subject specific, emphasising the value of supporting teachers of every subject to teach students how to read, write, and communicate effectively.”

‘Improving Literacy in Secondary Schools Guidance Report’

Disciplinary Literacy



It is the belief that reading and writing are integral to disciplinary practices and that disciplines differ not only in content but also in the ways this content is produced, communicated, and critiqued.

From this perspective, literacy is no longer just a set of strategies or tools to be imported into the disciplines to improve reading and writing of texts across content areas; it is an essential part of disciplinary enculturation and socialisation.

*Language Correlates of
Disciplinary Literacy*
Zhihui Fang

Disciplinary literacy takes a turn away from isolated content area strategies and clarifies what teachers can do to help their students learn in a more effective way. It respects the varied ways that students read, reason, write, think, speak, and, most important, *participate* in specific content areas [...] disciplinary learning doesn't just build knowledge but actually produces and constructs it.



ReLeah Lent 2017



Knowledge of content

+

**knowledge of how to think about
and communicate that content**

=

subject knowledge

Disciplinary Literacy is Crucial in Every Subject

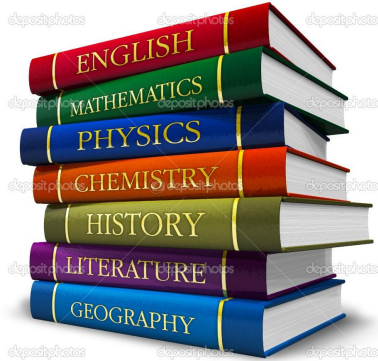


- **Cultural entitlement:** *'...it is an essential part of disciplinary enculturation and socialisation.'*
- **Assessment outcomes**
 - Reading and writing are linked: Improving reading skills will improve writing skills and vice versa.
 - All subjects require a significant degree of reading or writing, or both

Primary



Secondary



Rich people
Poor people

Proletariat
Bourgeoisie

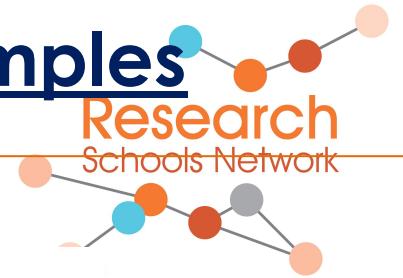


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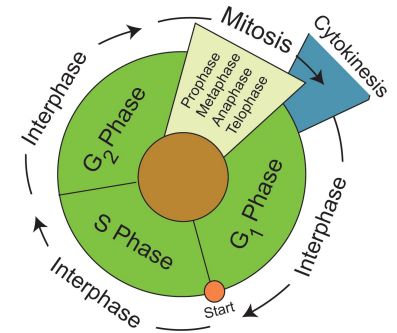
Disciplinary Literacy: Subject Examples



Disciplinary Literacy: Examples from Different Subjects - Science

The cell cycle is controlled by proteins called cyclins and a set of enzymes that attach to the cyclin and become activated. The interaction of these molecules, based on conditions both in the cell's environment and inside the cell, controls the cell cycle.

- **Tier 3 vocabulary - very specific**
- **Embedded clauses**
- **Subject first**
- **Noun phrases (to avoid several sentences)**
- **Alongside graphics**
- **Author awareness when deciding to read but not important thereafter.**



Disciplinary Literacy: Examples from Different Subjects - History

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The protests and condemnations from civil rights leaders and Northerners poked an already raw nerve in the South. The white leaders in Southern states like Mississippi that enforced Jim Crow laws, regulations that segregated Blacks from whites, were still stinging from the 1954 Supreme Court decision *Brown v. Board of Education of Topeka*, which declared that racially segregated schools were unconstitutional.

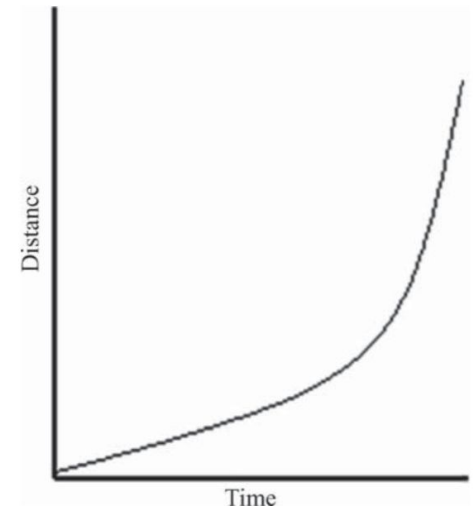
- **Tier 2 and 3 vocabulary**
- **Nominalisation (used to create abstract ideas that can be infused with perspectives)**
- **Author awareness throughout reading**
- **Read for bias**
- **Compare sources**



Disciplinary Literacy: Examples from Different Subjects - Maths

The equation $d = (at^2)/2$ is used to calculate the distance that an object travels in time t at acceleration rate a .

- Tier 2 and 3 vocabulary
- Tier 2 words often have a different meaning in maths (polysemy)
- Prose and graphics are equally important when reading (usually presented in linear way)
- Mathematical symbols, such as $f(x)$, π , η , $=$, and β , are used to represent concepts
- No author awareness when reading but looking for errors.



	Read	Write	Think
Science	<p><i>When scientists read, they</i></p> <ul style="list-style-type: none"> • Ask "Why?" more than "What?" • Interpret data, charts, illustrations • Seek to understand concepts and words • Determine validity of sources and quality of evidence • Pay attention to details 	<p><i>When scientists write, they</i></p> <ul style="list-style-type: none"> • Use precise vocabulary • Compose in phrases, bullets, graphs, or sketches • Use passive voice • Favor exactness over craft or elaboration • Communicate in a systematic form 	<p><i>When scientists think, they</i></p> <ul style="list-style-type: none"> • Tap into curiosity to create questions • Rely on prior knowledge or research • Consider new hypotheses or evidence • Propose explanations • Create solutions
History	<p><i>When historians read, they</i></p> <ul style="list-style-type: none"> • Interpret primary and secondary sources • Identify bias • Think sequentially • Compare and contrast events, accounts, documents and visuals • Determine meaning of words within context 	<p><i>When historians write, they</i></p> <ul style="list-style-type: none"> • Create timelines with accompanying narratives • Synthesize info/evidence from multiple sources • Emphasize coherent organization of ideas • Grapple with multiple ideas and large quantities of information • Create essays based on argumentative principles 	<p><i>When historians think, they</i></p> <ul style="list-style-type: none"> • Create narratives • Rely on valid primary and secondary sources to guide their thinking • Compare and contrast or ponder causes and effects • Consider big ideas or inquiries across long periods of time • Recognize bias
Math	<p><i>When mathematicians read, they</i></p> <ul style="list-style-type: none"> • Use information to piece together a solution • Look for patterns and relationships • Decipher symbols and abstract ideas • Ask questions • Apply mathematical reasoning 	<p><i>When Mathematicians write, they</i></p> <ul style="list-style-type: none"> • Explain, justify, describe, estimate or analyze • Favor calculations over words • Use precise vocabulary • Include reasons and examples • Utilize real-word situations 	<p><i>When Mathematicians think, they</i></p> <ul style="list-style-type: none"> • Consider patterns • Utilize previous understandings • Find connections • Estimate, generalize, and find exceptions • Employ mathematical principles
English Language Arts	<p><i>When students of English read, they</i></p> <ul style="list-style-type: none"> • Understand how figurative language works • Find underlying messages that evolve as theme • Assume a skeptical stance • Pay attention to new vocabulary or words used in new ways • Summarize and synthesize 	<p><i>When students of English write, they</i></p> <ul style="list-style-type: none"> • Engage in a process that includes drafting, revising, and editing • Use mentor texts to aid their writing craft • Pay attention to organization, details, elaboration and voice • Rely on the feedback of others • Avoid formulaic writing 	<p><i>When students of English think, they</i></p> <ul style="list-style-type: none"> • Reflect on multiple texts • Ask questions of the author • Consider research or others ideas • Discuss ideas and themes • Argue both sides of a point

Disciplinary Literacy: A Shift That Makes Sense

ReLeah Lent



Institute for
Effective Education
 Empowering educators with evidence

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It needs to be a KS2, KS3, GCSE text

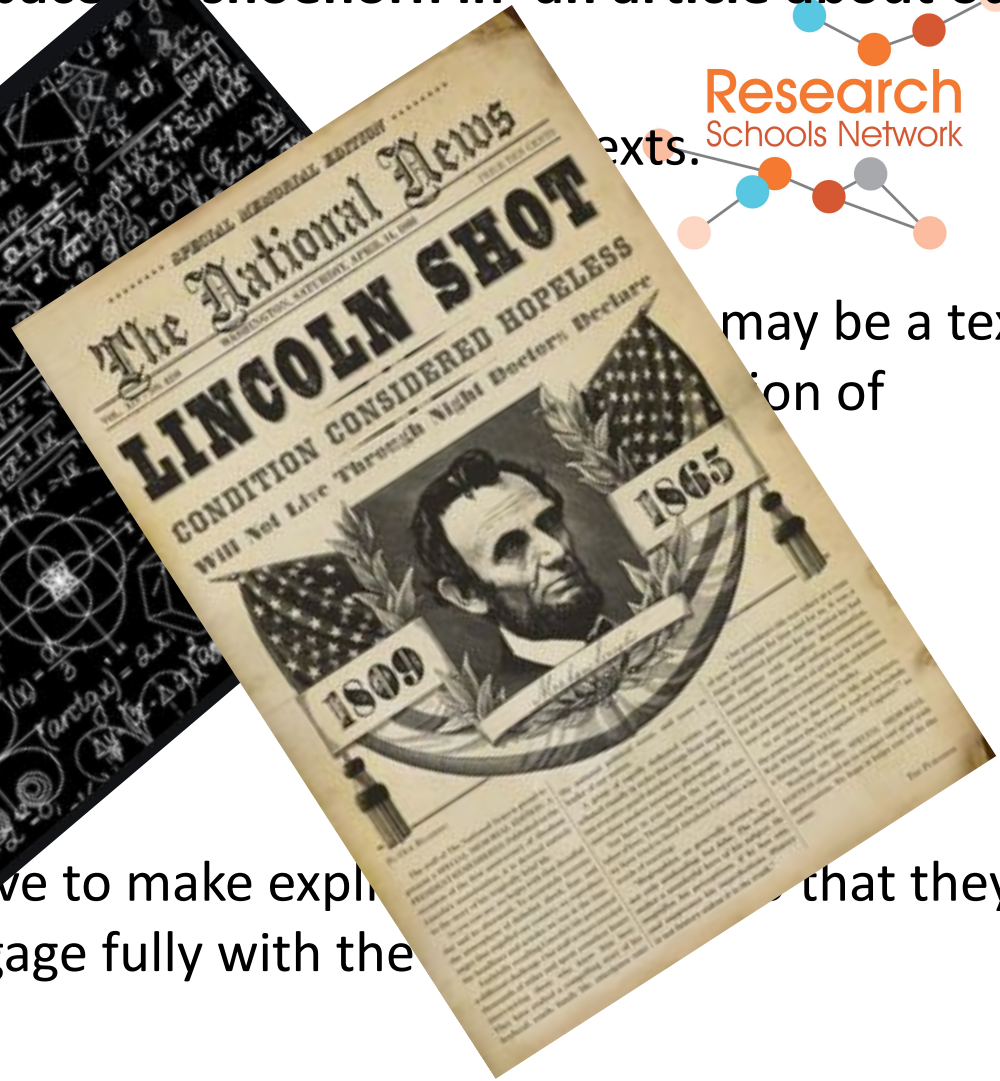
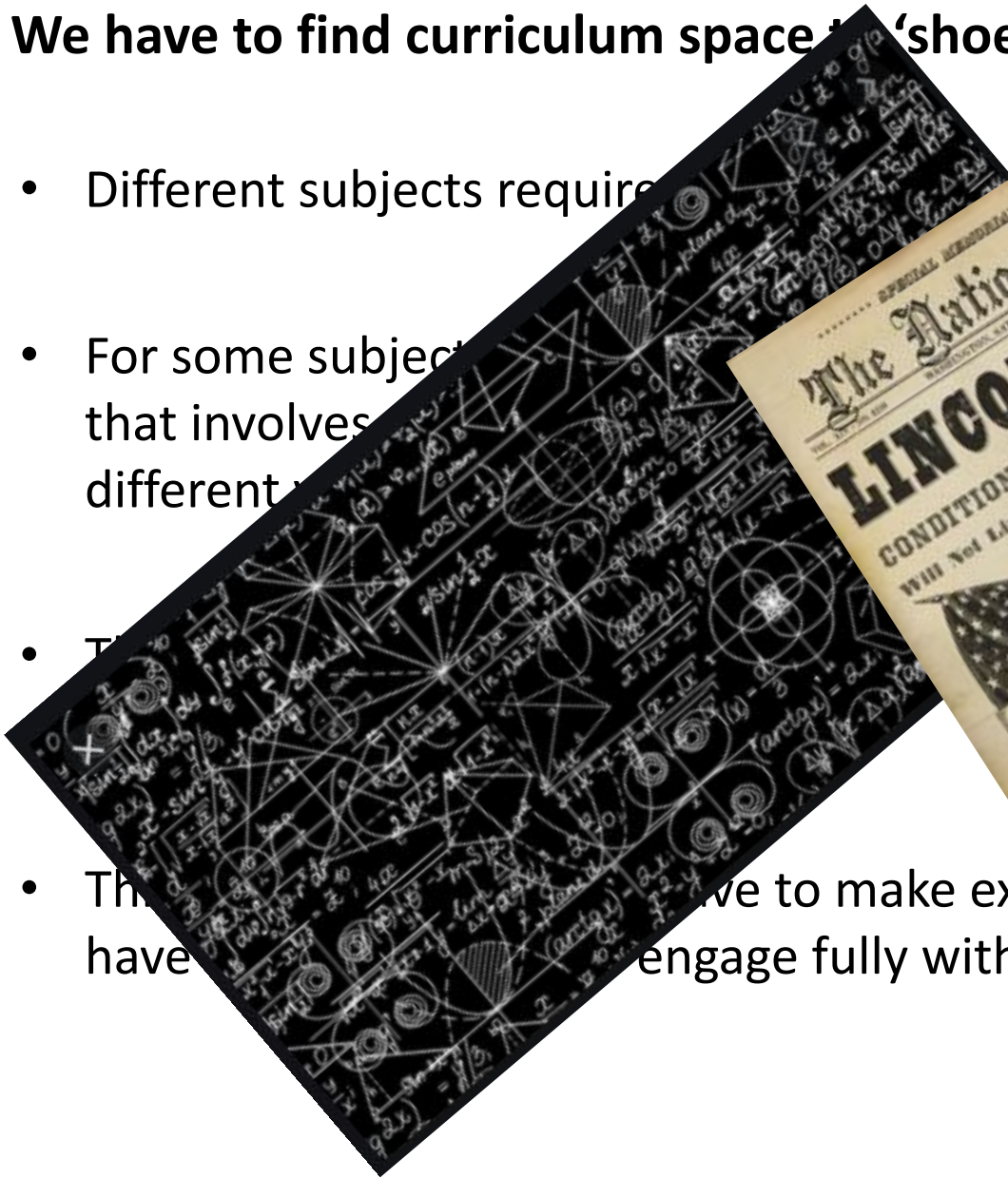


- It's crucial that the texts are 'authentic' and make genuine use of the subject's unique literacy practices.
- This does not mean that the texts have to be extremely challenging or academic, and you can use extracts.
- You will need to plan how to support students with their reading...



We have to find curriculum space to 'shoehorn in' an article about our

- Different subjects require different texts.
- For some subjects, a text may be a text that involves a different type of text.
- Texts may be a text that involves a different type of text.
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It's not reading **about** your subject...

it's reading **in** your subject.

We haven't got time in our curriculum to add in extra reading



- Subject knowledge = knowledge of content + knowledge of how to communicate that content.
- Students have an entitlement to be inducted into the different subjects - education should take students beyond their own subjective experience. This is especially important for disadvantaged students.
- Reading will help students to increase their knowledge and this will lead to better understanding of the core content.

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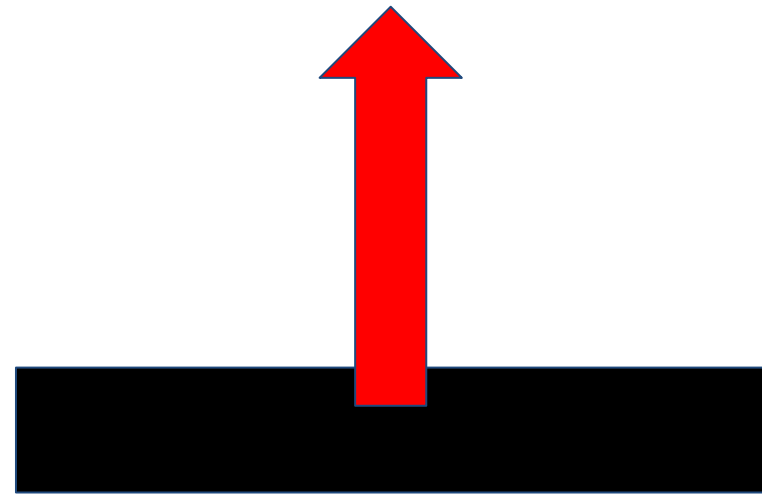


Micro rules



1. The universal article: *The polar bear has thick, white fur.*
2. Synonyms: *Our cousins across the pond.*
3. Optional parenthesis: *Trout, any of several prized game and food fishes of the family Salmonidae (order Salmoniformes) that are usually restricted to freshwater.*
4. Throwaway references: *Young drivers are at a greater risk of being injured or killed on our roads than any other demographic (VicRoads 2014).*
5. Generic numbers: *Study Figure 2, a map showing how global surface temperatures might change by 2070'.*





Curriculum Team 'Read Alouds'



Explicitly Model Reading



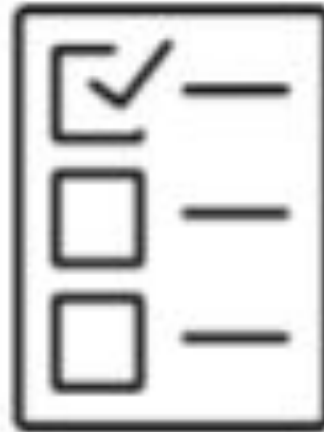
5

Combine writing instruction with reading in every subject



- **Combining reading activities and writing** instruction is likely to improve students' skills in both, compared to a less balanced approach.
- Reading helps students **gain knowledge that leads to better writing**, whilst writing can **deepen students' understanding of ideas**.
- Students should be taught to **recognise features, aims and conventions of good writing within each subject**.





Creating checklists



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