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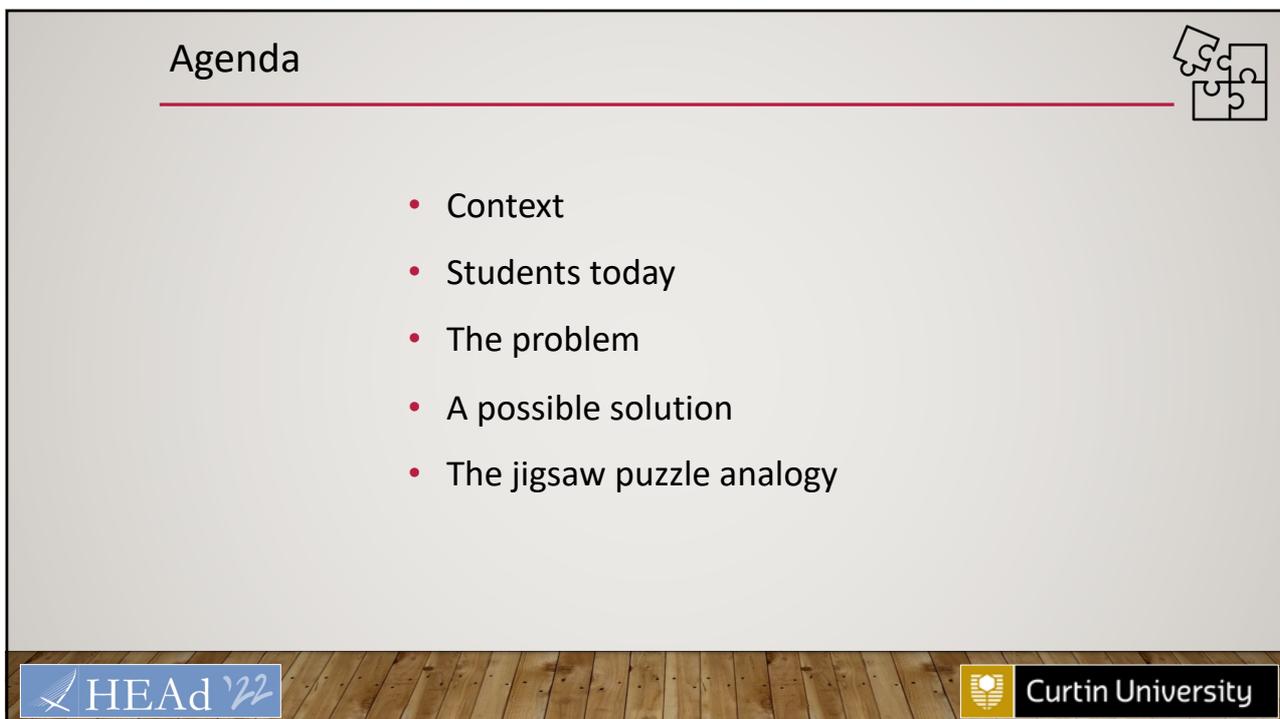
**Student Learning: Putting the Pieces Together**  
A/Prof Cesar Ortega-Sanchez  
Curtin University

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**Agenda**

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- Context
- Students today
- The problem
- A possible solution
- The jigsaw puzzle analogy



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## Context

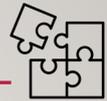


Landscape in higher education has changed, dramatically, in the last 20 years.



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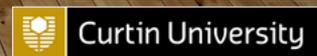
## Context



Higher education for all



<https://peregrineglobal.com/wp-content/uploads/diversity-and-inclusion-training-1024x576.jpeg>



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## Context



In 2020 Covid hit us hard!



https://championline.co.uk/app/uploads/blog\_post/11/online-learning-vs-face-to-face-learning.png




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## Students Today



Journal of the European Institute for Multidisciplinary Studies on Human Rights & Sciences  
Volume 2, Issue 1, Month 2020 | #RethinkProcess  
ORIGINAL SOURCE ON:  
<https://knowmadinstitut.org/2020/08/generational-gap-in-learning>

Volume 2, Issue 1, Month 2020 | SDGs: 4, 5, 10

### Generational Gap in Learning

Federico Alegria\* NEW RESEARCH

### Perceived impact of contextual determinants on depression, anxiety and stress: a survey with university students

Nasih Othman, Farah Ahmad ✉, Christo El Morr ✉ & Paul Ritvo

*International Journal of Mental Health Systems* 13, Article number: 17 (2019) | C

Journal of Affective Disorders  
Volume 274, 1 September 2020, Pages 305-314

### Depression, anxiety and stress in different subgroups of first-year university students from 4-year cohort data

### Impact of COVID-19 Pandemic on College Student Mental Health and Wellness

William E. Copeland, PhD, Ellen McGinnis, PhD, Yang Bai, PhD, Zoe Adams, BS, Hilary Nardone, BS, Vinay Devadanam, BA, Jeffrey Rettew, PhD, Jim J. Hudziak, MD

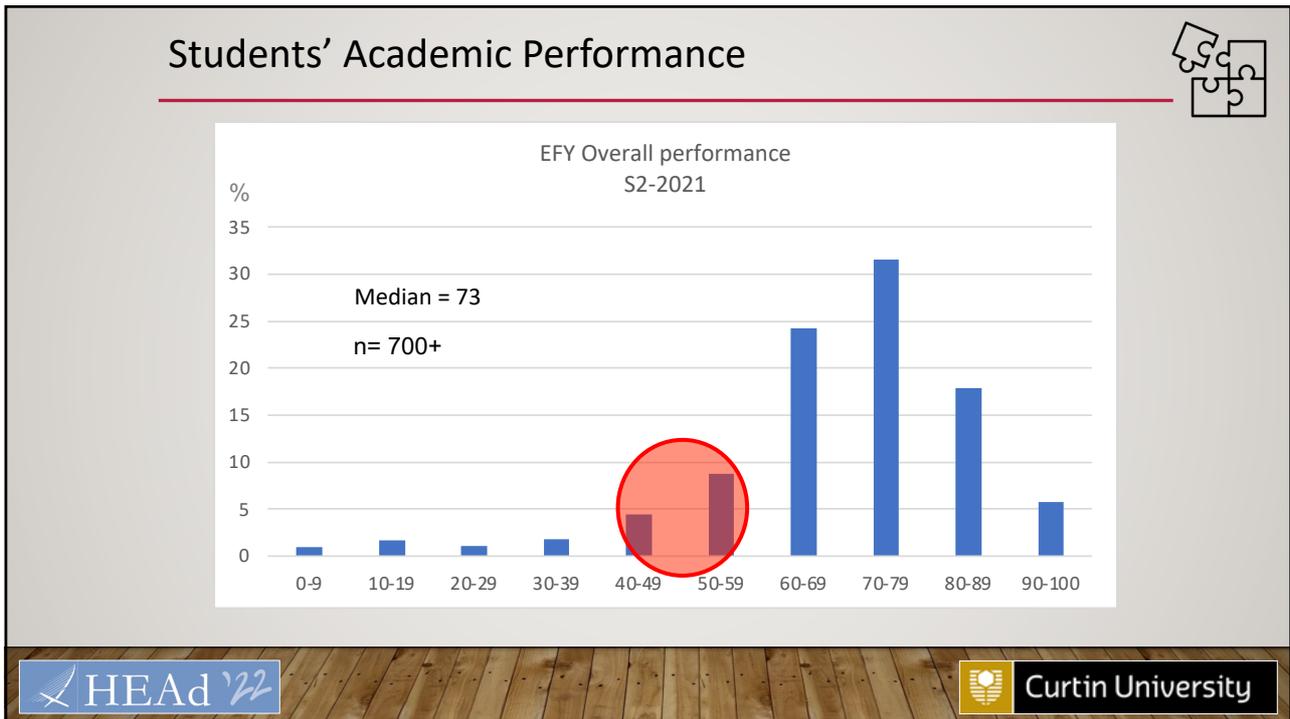
International Journal of Child, Youth and Family Studies (2018) 9(2): 125-150  
DOI: 10.18357/ijcyfs92201818216

### FACING THE GENERATION CHASM: THE PARENTING AND TEACHING OF GENERATIONS Y AND Z

Rika Swanzen




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### Complete the phrase

I wish my students...

- ...attended lectures
- ...

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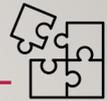
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## Some sweeping facts about our students



- Most university students were born in 2000 or later.
- The internet and mobile devices have been with them most of their life.
- They have been bombarded with information all their life.
- Nobody taught them how to manage the tsunami of information.
- They grew in an over-protective environment.
- The school system rewards effort, not performance.
- Some schools are more interested in their ranking than in educating people.
- ...

## The Problem



The things we wish about are just symptoms of a much bigger problem.

### What have they learned?

- Distrust information.
- All knowledge is relative. A point of view.
- Social networks taught them they are always wrong.

### The results:

- They trust no one. Not even themselves.
- They are incapable of seeing the big picture.
- They know, deep down, they don't need to learn.

“Why bother? I can Google it when I need it.”



## What do we do?



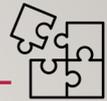
- They trust no one. Not even themselves. ➤ Gain their trust. Boost their confidence.
- They are incapable of seeing the big picture. ➤ Show it to them. Explain it.
- They believe, deep down, they don't need to learn. ➤ Prove them wrong.

Yes but, how?



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## What the theory says



- Learning is the acquisition of information. (**Cognitive psychology**)
- Students demonstrate learning by adopting behaviours. (**Behaviourism**)
- Students build knowledge by connecting new information with existing information. (**Constructivism**)
- People learn within a social context. (**Social learning**)
- Knowledge is situated and is a product of the activity, context and culture in which it is formed and utilized. (**Socio-constructivism**)
- Learning is about meaningful experiences that lead to a change in an individual's knowledge and behaviours. (**Experiential learning**)
- Every person's level of intelligence actually consists of many distinct "intelligences". (**Multiple intelligences**)
- Information must be provided in progressive levels of complexity. (**Scaffolding**)



<http://www.ibe.unesco.org/en/geaaf/annexes/technical-notes/most-influential-theories-learning>



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## The Jigsaw Puzzle Analogy



Learning is like putting a jigsaw puzzle together:

- It takes time. You can't rush it.
- The same experience is perceived differently by different people.
- Requires discipline and motivation.
- Requires patience and resilience (handle frustration).
- It is very satisfactory when pieces connect.
- Skills are transferable.

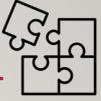
## The jigsaw puzzle analogy



Know the big picture



## The jigsaw puzzle analogy

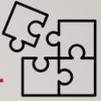


- Get organised before starting.
- Have a plan.



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## The jigsaw puzzle analogy



- Start with the easy ones



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## The jigsaw puzzle analogy

- Separate the edges
- Get to know the pieces
- Discover "tricks"



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## The jigsaw puzzle analogy

- Complete the edge first



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## The jigsaw puzzle analogy



- Classify the pieces



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## The jigsaw puzzle analogy



- Focus on one feature at a time
- Identify and connect pieces that go together



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## The jigsaw puzzle analogy



- Gaps in the puzzle can guide your search



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## The jigsaw puzzle analogy



- Step back and check your progress



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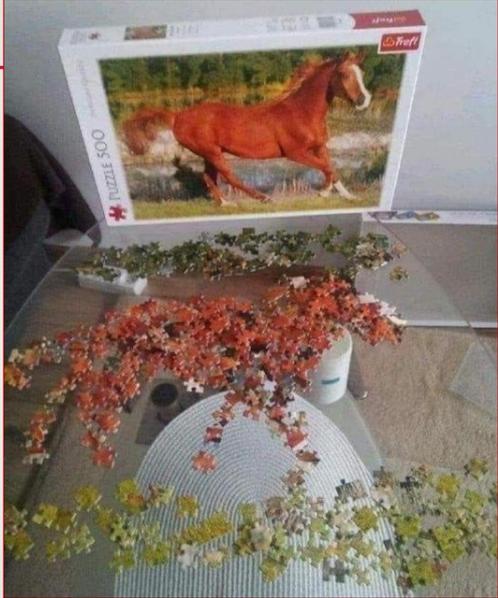
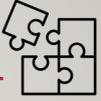
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## The jigsaw puzzle analogy

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- Bad learning



Courtesy of Amanda Sullivan



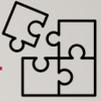
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## In summary

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We can use the jigsaw puzzle analogy:

<u>In learning</u>	<u>In teaching</u>
<ul style="list-style-type: none"> <li>• Learn to recognise and classify the information.</li> <li>• Don't just collect facts. Connect them.</li> <li>• Approach learning with a purpose.</li> <li>• Don't lose sight of the big picture.</li> <li>• Know that perseverance leads to success.</li> <li>• There are many ways to achieve goals.</li> <li>• ...</li> </ul>	<ul style="list-style-type: none"> <li>• Tell them about the analogy. And keep reminding them about it.</li> <li>• Tell them about the big picture.</li> <li>• Show them how to identify and classify information.</li> <li>• Make links between information explicit.</li> <li>• Encourage them to persevere.</li> <li>• Give them time to reflect.</li> <li>• ...</li> </ul>






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## Other uses of the analogy



- Learning activities as pieces of a big puzzle (the course).
- Units as pieces of a bigger puzzle (the program).
- University as a piece in an even bigger puzzle (life).
- Assessment becomes a demonstration of how well can they see the big picture and how well they can apply what they see to solve problems.
- ...



VS



## Some references

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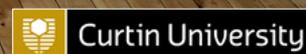
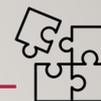


- Suanzen R. (2018), "Facing the Generation Chasm: The parenting and teaching of generations Y and Z", International Journal of Child, Youth and Family Studies. Vol. 9 No. 2. DOI: <https://doi.org/10.18357/ijcyfs92201818216>
- Copeland W. et al. (2021), "Impact of COVID-19 Pandemic on College Student Mental Health and Wellness", Journal of the American Academy of Child & Adolescent Psychiatry. Vol 60-1.
- Alegría F. (2020), "Generational Gap in Learning", Journal of the European Institut for Multidisciplinary Studies on Human Rights & Sciences. Vol 2-1. <https://knowmadinstitut.org/2020/08/generational-gap-in-learning>



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## Thank you for your attention



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