

So what do I do in my lessons next week?

Neurocuriosity 2016

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Learnus™

**UNDERSTANDING
LEARNING: engaging brains
and building networks**

A Learnus pamphlet

June 2014

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SO WHAT DO I DO IN MY LESSONS NEXT WEEK?

What would you say to teachers about curiosity?

- ?
- ?
- ?

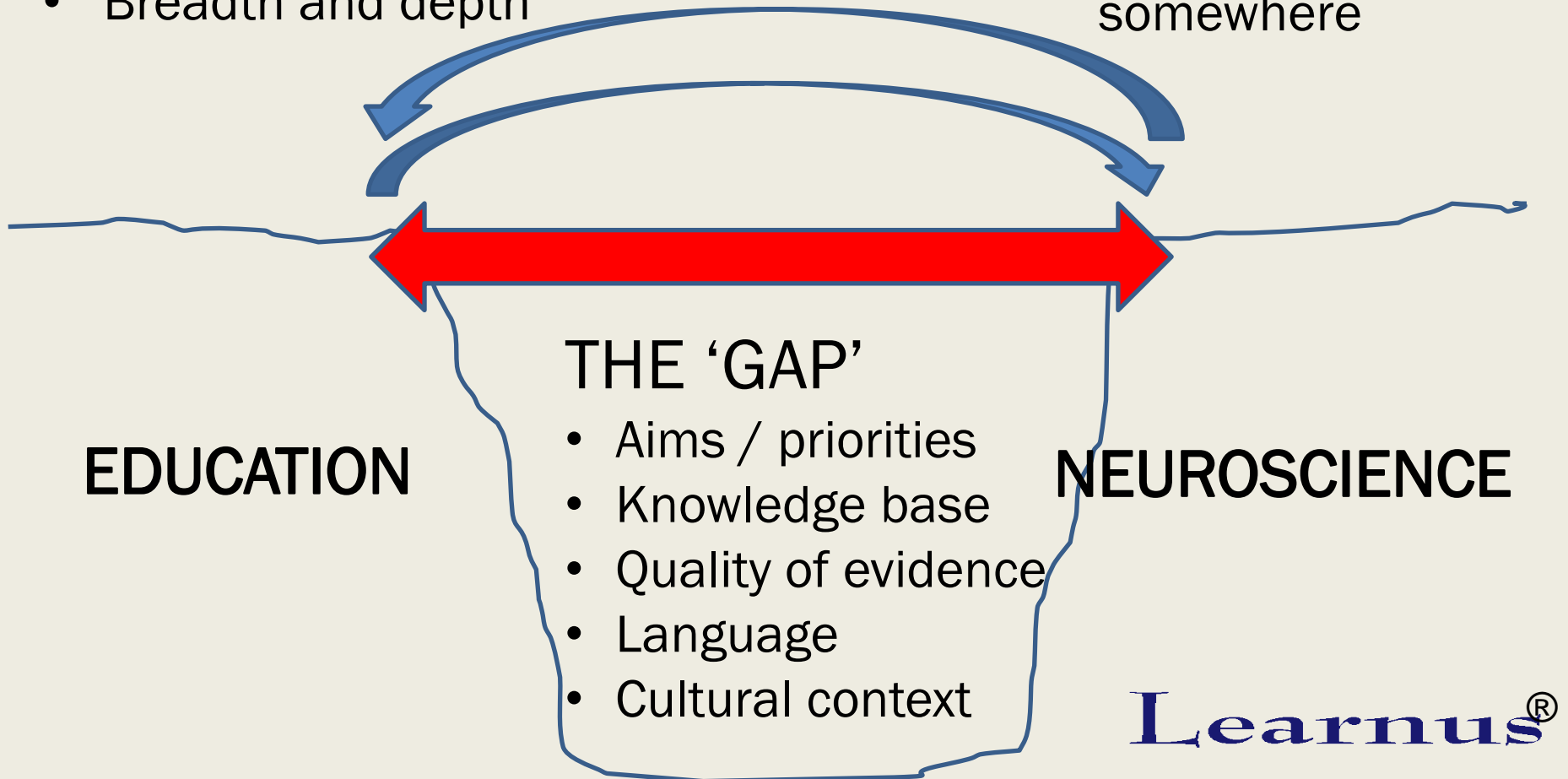
Use strategies to stimulate curiosity and generate interest:

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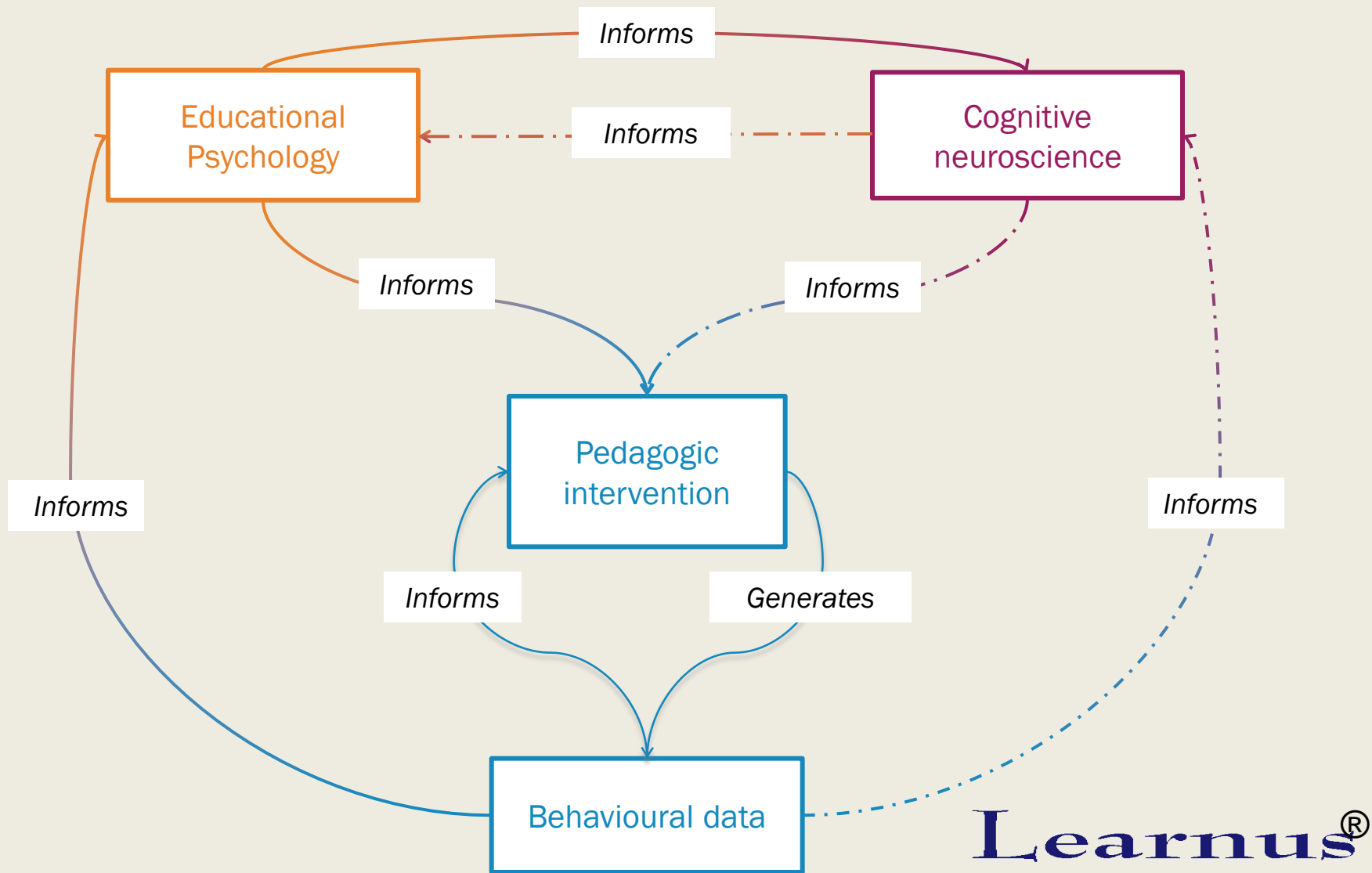
Bridging the gap:

- Complex
- Breadth and depth

- Not without risk
- Need to start somewhere



SOME COMPONENTS OF EDUCATIONAL NEUROSCIENCE



Does the evidence indicate that there needs to be major changes in teachers' practice?

- Not at present – risk too high
- Evidence not robust enough

Are there more subtle adjustments that could be made?

- Probably yes in some areas

LEARNING COUNTER-INTUITIVE CONCEPTS:

- The influence of existing knowledge
- The need for time to think and reflect
- Guidance in transfer of reasoning processes

Use strategies to encourage thinking:

- “Wait time” / “Think time” for questions
- “Pair-share” activities
- “Stop-think”
- Explicitly relate to existing ideas
- Consider alternative ideas / explanations?

WORKING MEMORY:

- Students find it difficult to hold a series of instructions in their head
- Learning less productive if WM is overloaded

Use strategies to reduce loading:

- Provide fewer instructions
- Work in groups
- Develop WM over time
- Use complementary 'input' sources

What needs to happen in schools in order to take advantage of improvements in our understanding of learning?

- Focus on learning (not simply recall of information to pass tests)
- Identify examples of effective practice and examine why they work
- Don't throw the baby out with the bath-water.

What channels are there available in order to introduce changes in classroom practice?

- Teacher education (pre-service and continuing professional development)

How can teachers work more effectively with researchers in the cognitive sciences to address the issues?

- Engage in dialogue
- Involvement in research projects
- Raise issues for research; be explicit and specific about what you want to know

SO WHAT DO I DO IN MY LESSONS NEXT WEEK?

- Curiosity consolidates learning
- Curiosity may act as a positive feedback mechanism
- Curiosity, surprise, rewards and memory are not independent.

Use strategies to stimulate curiosity and generate interest:

- Surprise items and events
- Rewards
- Questions
- Encourage exploration of phenomena and ideas

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