Students as Learners

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Intended Learning Outcomes

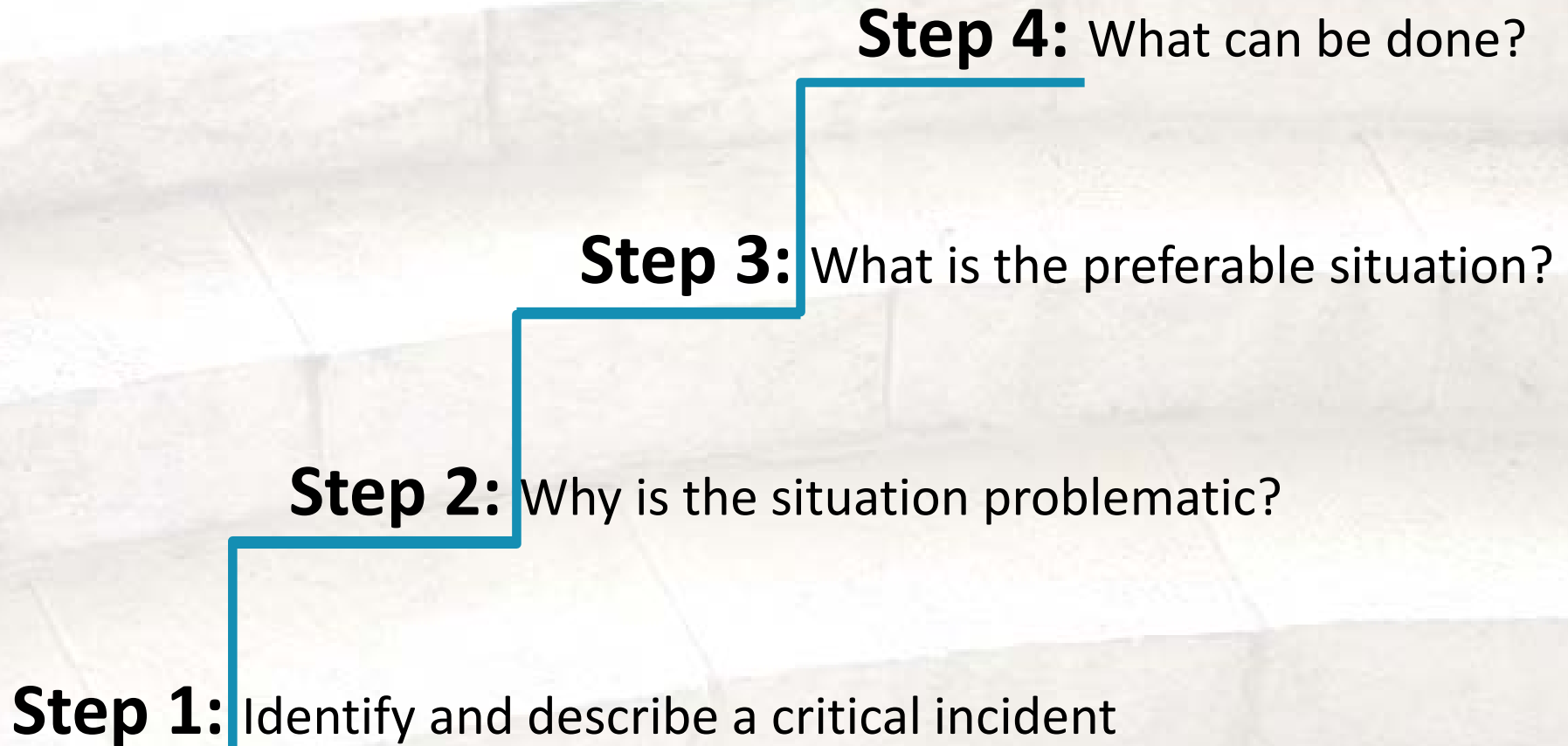During this session you will have opportunities to:

Review critical incidents from your teaching experiences

Analyse critical incidents regarding teacher and student biases, expectations and beliefs about teaching and learning

Consider their significance for your teaching and for student learning

Decide how to address and accommodate these biases, expectations and beliefs

The four steps approach

Step 4: What can be done?

Step 3: What is the preferable situation?

Step 2: Why is the situation problematic?

Step 1: Identify and describe a critical incident

The four steps approach

See Handout

Step 4: **What can be done?**

What do I know about students as learners that might be relevant to this situation? What could I change? What could the students be encouraged to change? How will I pre-empt a similar situation?

Step 3: **What is the preferable situation?**

Before the session, did I have a vision of my teaching and the students' engagement and learning? On reflection was it a realistic vision?
What is my perception now of a preferable situation?
How could I know the students' perceptions of a preferable situation?

Step 2: **Why is the situation problematic?**

Why did I identify this as a situation as a critical incident?
What is problematic about it for the teacher and the students?
How might different students perceive the situation?

Step 1: **Identify and describe a critical incident**

Describing the situation helps remind us of factors which may not have been apparent at the time; it can also help us identify different perceptions of the situation.

Step 1 - Identify and Describe

In pairs or threes

You each have 5 minutes to briefly describe your Critical Incident to your peers
Address these three questions:

1. **What happened?**

2. **How did the student or students react?**

3. **How did you react?**

   Step 1: *Describing the situation helps remind us of factors which may not have been apparent at the time; it can also help us identify different perceptions of the situation.*

Step 2 -Why is the situation problematic?

In pairs or threes

Each explain why the situation is problematic for you and the students

Step 2: *Why did I identify this situation as a critical incident?*

What is problematic about it for the teacher and the students?

How might different students perceive the situation?

Step 3 - What is the preferable situation?

In pairs or threes

Discuss preferable situations for the teacher and students.

Depending on what is seen as the preferable outcome, there may be a variety of preferable situations

Step 3: *Before the session, did I have a vision of my teaching and the students' engagement and learning? On reflection was it a realistic vision?*

What is my perception now of a preferable teaching and learning situation?

How could I know the students' perceptions of a preferable situation?

What do we know about students and learning?

Step 2 - Why is the situation problematic?

➢ Students don't contribute to knowledge sharing and they don't practise their presentation skills because they won't do presentations in class.

➢ Students are not improving their work because they don't listen to teacher feedback.

Step 2:*Why did I identify this situation as a critical incident?*

What is problematic about it for the teacher and the students?

How might different students perceive the situation?

'legitimate peripheral participants' Lave and Wenger, 1991

Community of Practice

Moving towards full participation

Self Efficacy and Mastery, Bandura, 1977

I believe I can do something

Mastery

Self-efficacy

I try again

Mindset Theory, Dweck, 2006

Growth Mindset –

I believe in effort

- Try harder – better learning

- Learn from risk taking

- Learn from feedback on my efforts

- Positive self concept - open to new learning

Fixed Mindset –

I believe in **ability**

- I can either do it or not do it

- Avoid risk taking - may get it wrong which means I am not clever enough

- Feedback on my ability makes me avoid risk

- Insecure or negative self concept which limits my openness to new learning

Youtube Dweck, 2006

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Students as Self Regulated Learners

Zimmerman, 1990

Self-regulation has three dimensions:

Metacognition
Motivation
Behaviour

'Students commit to a full-time effort and continuously develop their ability to be independent and take responsibility for their own academic development. They are proactive, exploring and ready to learn.'

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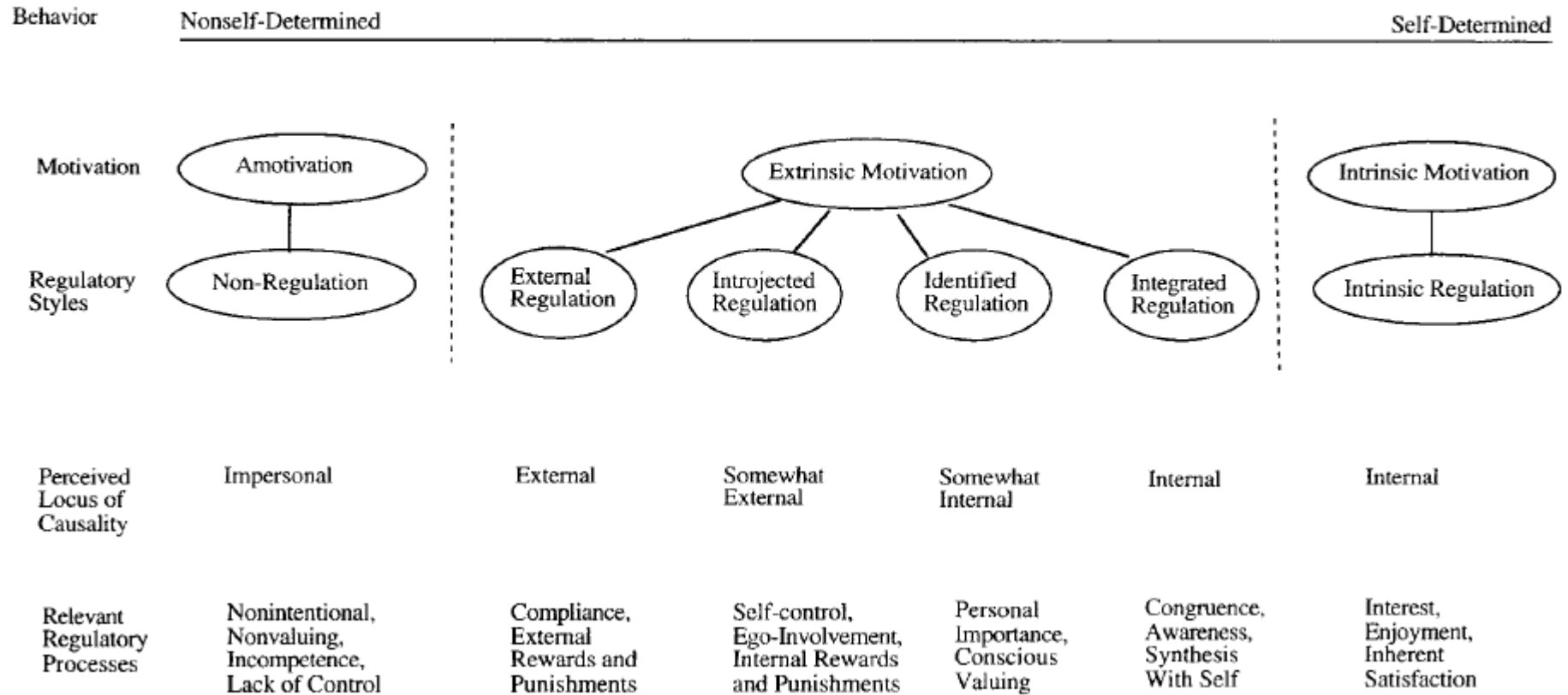# Factors Contributing to Motivation

Relatedness

Autonomy

Competence

Intrinsic & internally regulated motivation
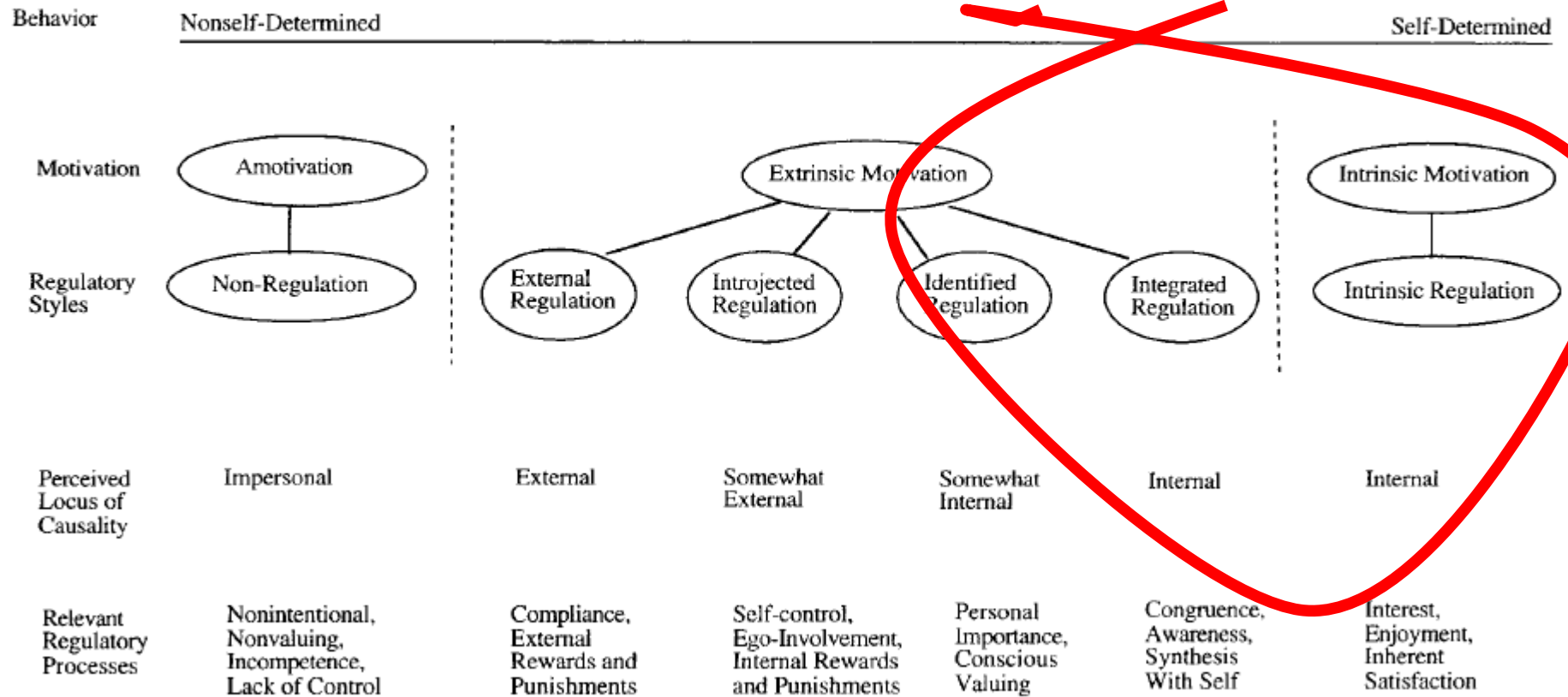
Ryan and Deci, 2000

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Figure 1
The Self-Determination Continuum Showing Types of Motivation With Their Regulatory Styles, Loci of Causality, and Corresponding Processes

Ryan and Deci, 2000

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Figure 1
The Self-Determination Continuum Showing Types of Motivation With Their Regulatory Styles, Loci of Causality, and Corresponding Processes
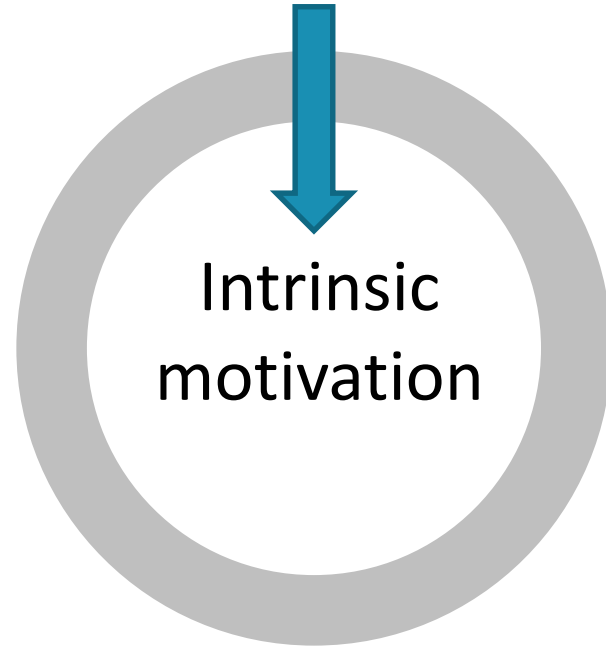
Ryan and Deci, 2000

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Relatedness

Autonomy

Competence

Extrinsic motivation

Intrinsic motivation

Step 4 Action – Encourage Self Efficacy and Growth Mindset

- ✓ **Provide manageable learning challenges**

- ✓ **Give learners responsibility for their learning**

- ✓ **Give feedback on how they are learning**

- ✓ **Give feed-forward on how to develop their learning skills**

- ✓ **Focus on 'not yet'**

What do we know about students and learning?

Step 2 - Why is the situation problematic?

Students see me, the teacher, as the only expert in the class therefore they are reluctant to participate in collaborative learning activities like creating Wikis and peer learning.

Step 2:*Why did I identify this situation as a critical incident?*

What is problematic about it for the teacher and the students?

How might different students perceive the situation?

Student Beliefs about Knowledge, Teaching and Learning

Students who believe in the **certainty** of knowledge and the **expertise** of the teacher tend to have **traditional conceptions of teaching and learning**.
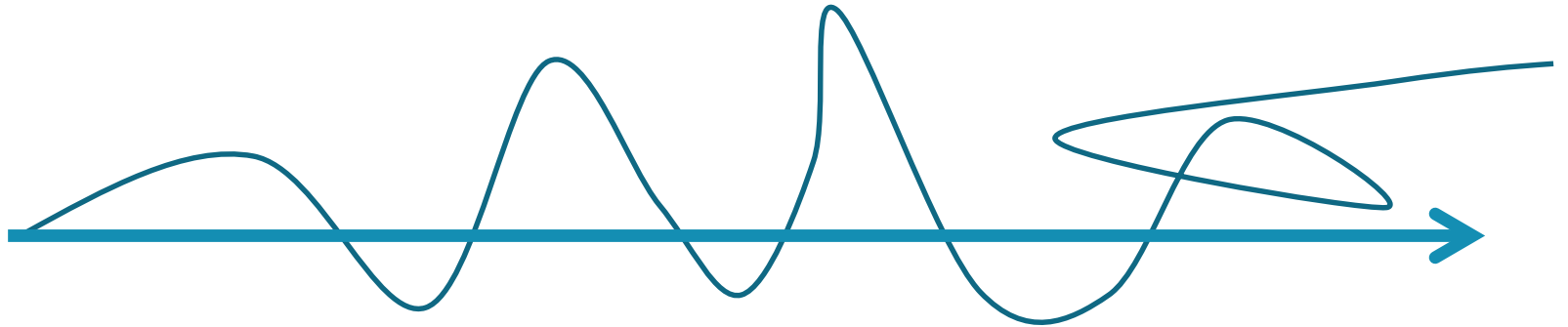
Otting et al. 2010, 752

Developmental Knowledge and Values

Bachelor Male Students

Perry, 1970

Dualism   Relativism   Commitment

Reassuring – Bachelors students tend to develop more sophisticated conceptions of knowledge

Step 2 - Why is the situation problematic?

Students are unwilling to participate in learning activities therefore they are not fully engaging with the learning process and I waste my time planning these activities.

Step 2: *Why did I identify this situation as a critical incident?*

What is problematic about it for the teacher and the students?

How might different students perceive the situation?

Results suggest that students who value their own **learning efforts** positively, and who are less dependent on the expertise of the teacher, have **constructivist conceptions of teaching and learning.**

Otting et al. 2010, 752

Not all students know what they believe about knowledge or how their beliefs influence their perceptions of how they are being taught

What are our beliefs about knowledge?

Yes   **Yes but**

Consider this statement:

Listening to an expert is the best way to learn

And think of a teaching and learning context from a course you teach or have taught

Now decide where you stand, in which corner?
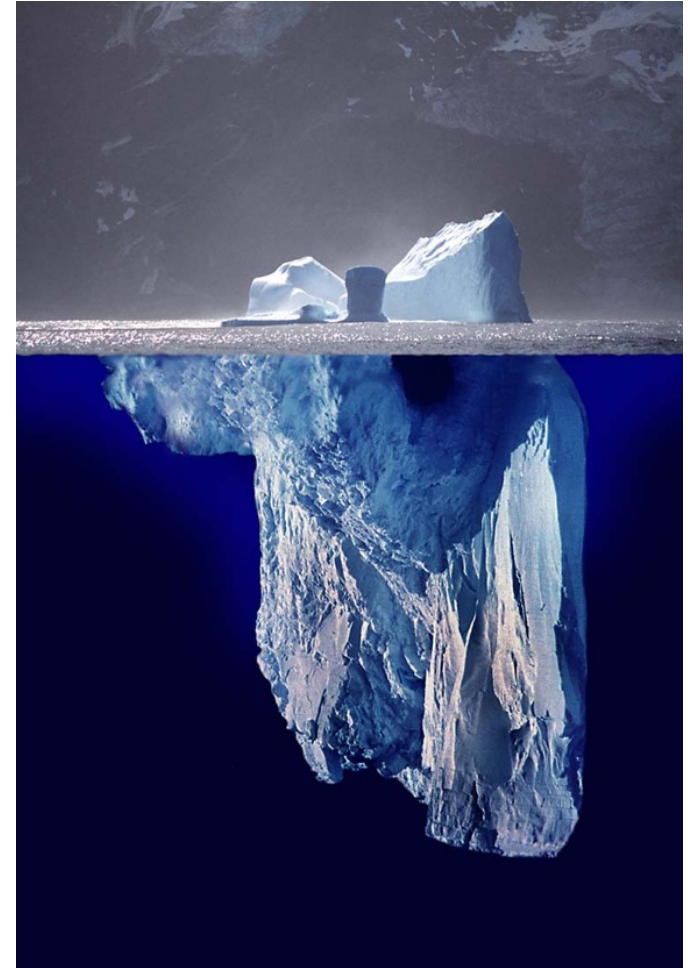
Explain your position to a colleague

No   **No but**

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Deep and Surface Learning
Marton & Säljö, Biggs, Prosser & Trigwell…

We adopt different **learning approaches** dependent upon our **motivation, our beliefs** and our **perceptions** of the task

Step 4 Action – Changing Beliefs about knowledge, teaching and learning

- ✓ Find out students' conceptions of knowledge at the start of the course – through discussion, a mind mapping or concept mapping activity, Yes But No But or a continuum activity, **see examples in BB folder>Students as Learners and on** VIB

- ✓ Include discussion about knowledge and how we learn in the sessions

- ✓ Provide examples of how knowledge in the subject area has evolved and continues to be challenged and critiqued

- ✓ Plan learning activities which require pair work or group work and share reasons for doing this

- ✓ Design assessments which can be addressed in alternative ways

What do we know about students and learning?

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Step 2 - Why is the situation problematic?

Students don't prepare for class which means they either don't understand what I'm talking about or I waste time reviewing what they should have already read.

Step 2: *Why did I identify this situation as a critical incident?*

What is problematic about it for the teacher and the students?

How might different students perceive the situation?

Students' Perceptions of Workload

If students perceive a work-load to be heavy, they are likely to adopt a surface level approach to learning

Entwistle and Ramsden, 1983; Kember & Leung, 1998; Lizzio et al., 2002

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Over to you – put yourself in a student's shoes

1. Share the student workload, including preparation and assessments, for a course you teach with a colleague in your group

2. Record your colleague's perceptions on the scale below

1 very low	2 low	3 okay	4 high	5 very high

3. Swap over, repeat stages 1 & 2 and compare

4. What did you find? What suggestions do you have for reducing or adapting current workloads?

Find out students' perceptions of workload and work together to address the situation

How? Meet with student focus groups, send participants questions before meeting and discuss questions listed on 'A Protocol to Investigate Students' Perceptions of Subject Workload' (available on Bb)

Aim for a shared understanding of assessment requirements and standards

How? Dialogue, peer review and self assessment informed by exemplars and rubrics, (Course - Helping Students Understand Assessment)

The strongest predictors of students using a deep approach to studying are **their perceptions of the quality of the teaching** and the appropriateness of the assessment.

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How stereotypes and expectations – within us and students – influence learning

Oops…

Oops…

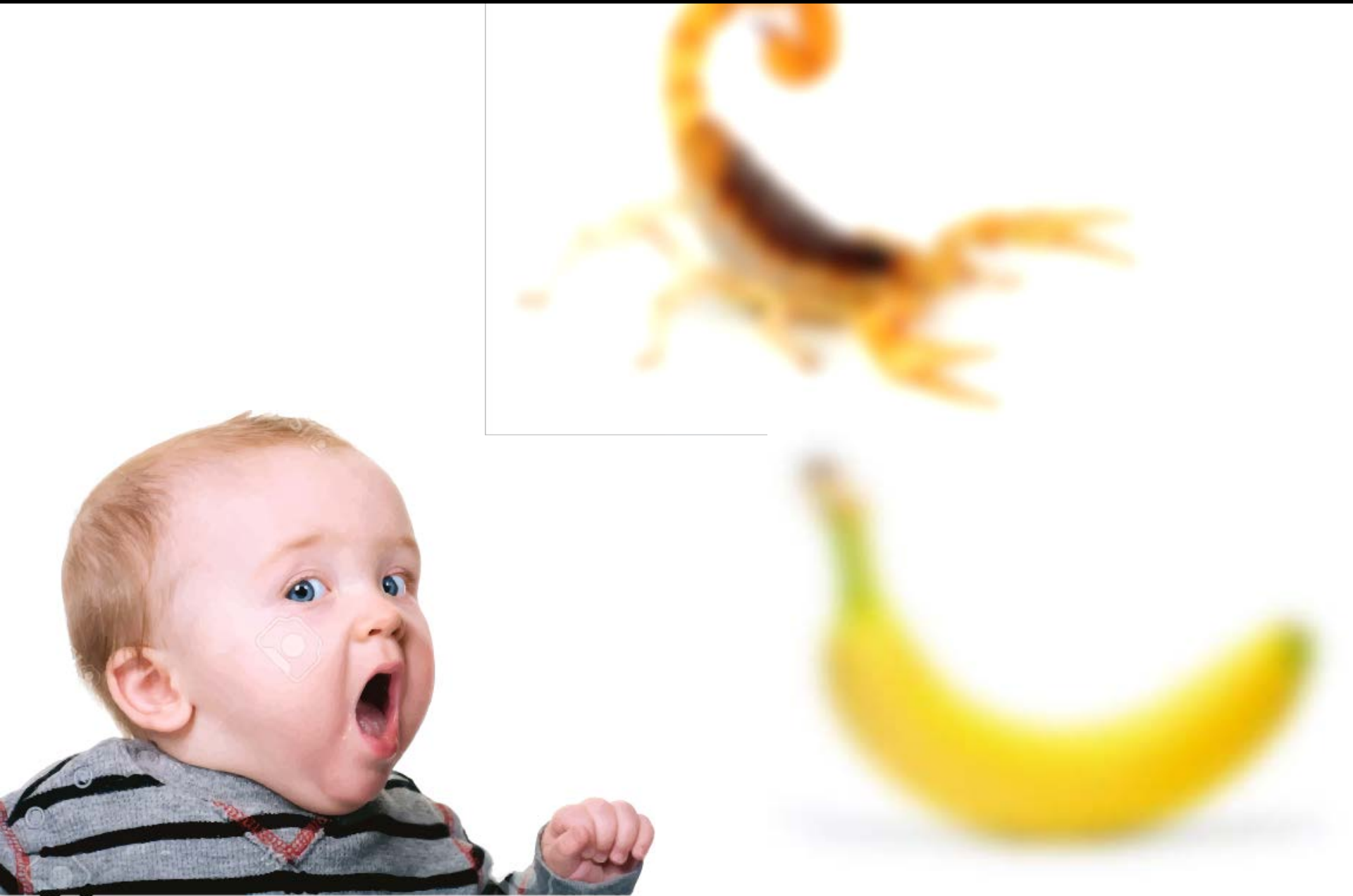# A test of implicit bias…

https://implicit.harvard.edu/implicit/

…and I scored the highest

Implicit bias as a teacher?

- LTP…
- Eileen Trauth (Penn State)
- ERC
- Anne-Francoise Gilbert (Freiburg Uni)

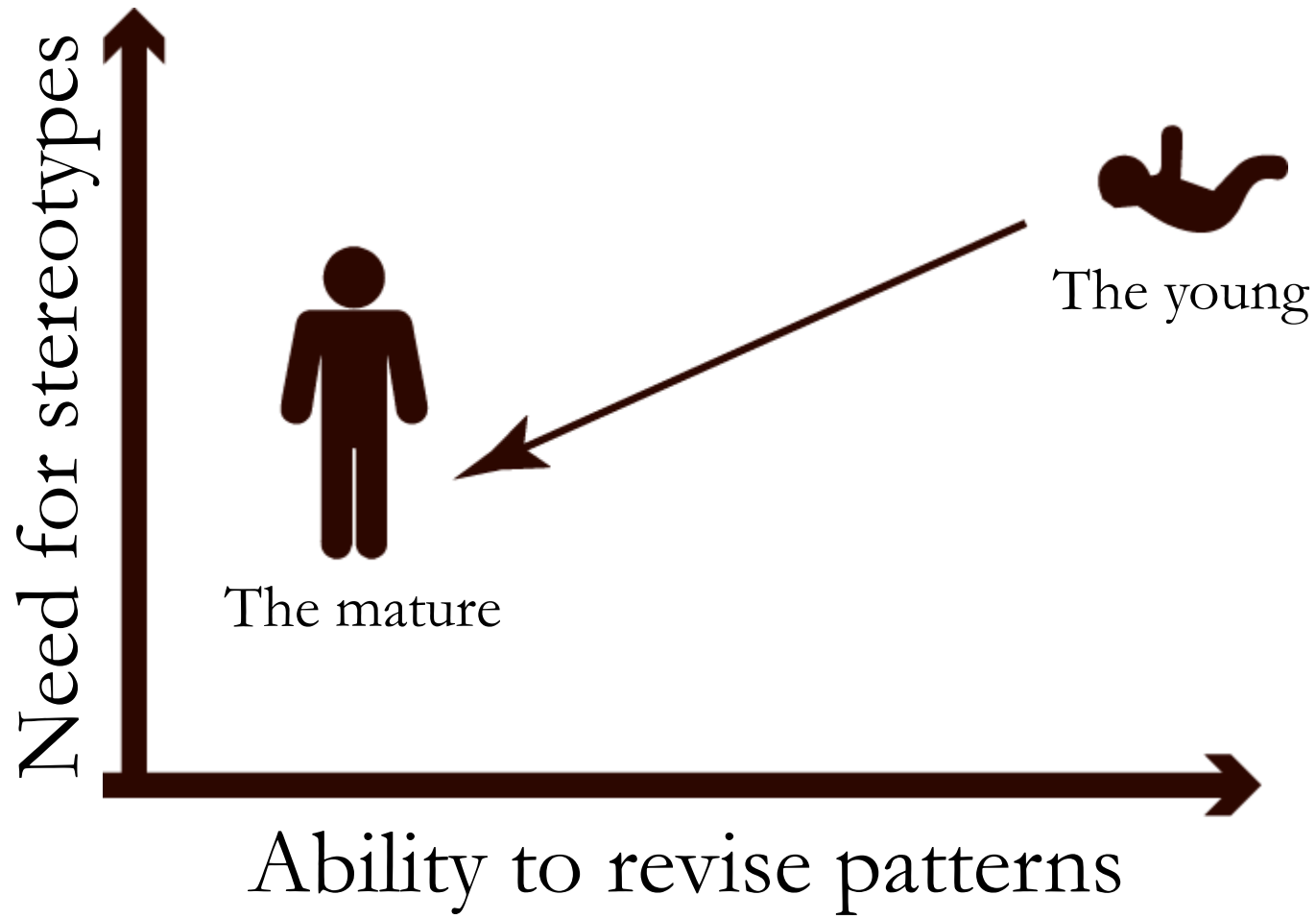# Biases are 'good'

The young

Need for stereotypes

Ability to revise patterns

But when the need wanes…

Need for stereotypes

Ability to revise patterns

The young

The mature

…the implicit bias remains

The athlete

The politician

…the implicit bias remains

The athlete

The politician

The categorization has two effects:

The athlete

The politician

We affect others

The athlete

The politician

We miss out on novelty

The athlete   The politician

We affect others

University **teaching & grading** is influenced by gender and race.

Fleming ND, Brown S, & Glasner A (1999) Biases in marking students' written work: quality. Assessment matters in higher education: choosing and using diverse approaches 83:92.

Breda T & Ly ST (2014) Professors in core science fields are biased in favor of women: evidence from France.

We affect others

University **students grade** their online teacher higher if they think it is a man.

MacNell, Driscoll, & Hunt, 2014. What's in a name: exposing gender bias in student ratings of teaching. Innovative Higher Education.
Lavy 2004. Performance pay and teachers' effort, productivity and grading ethics. (National Bureau of Economic Research).
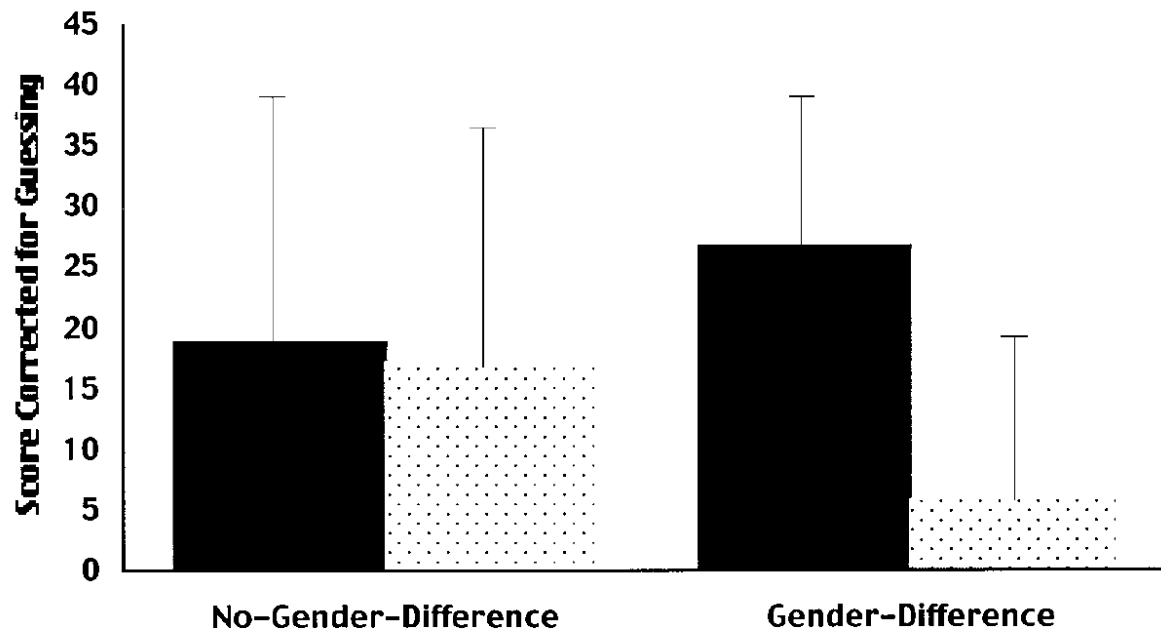
We miss out on novelty

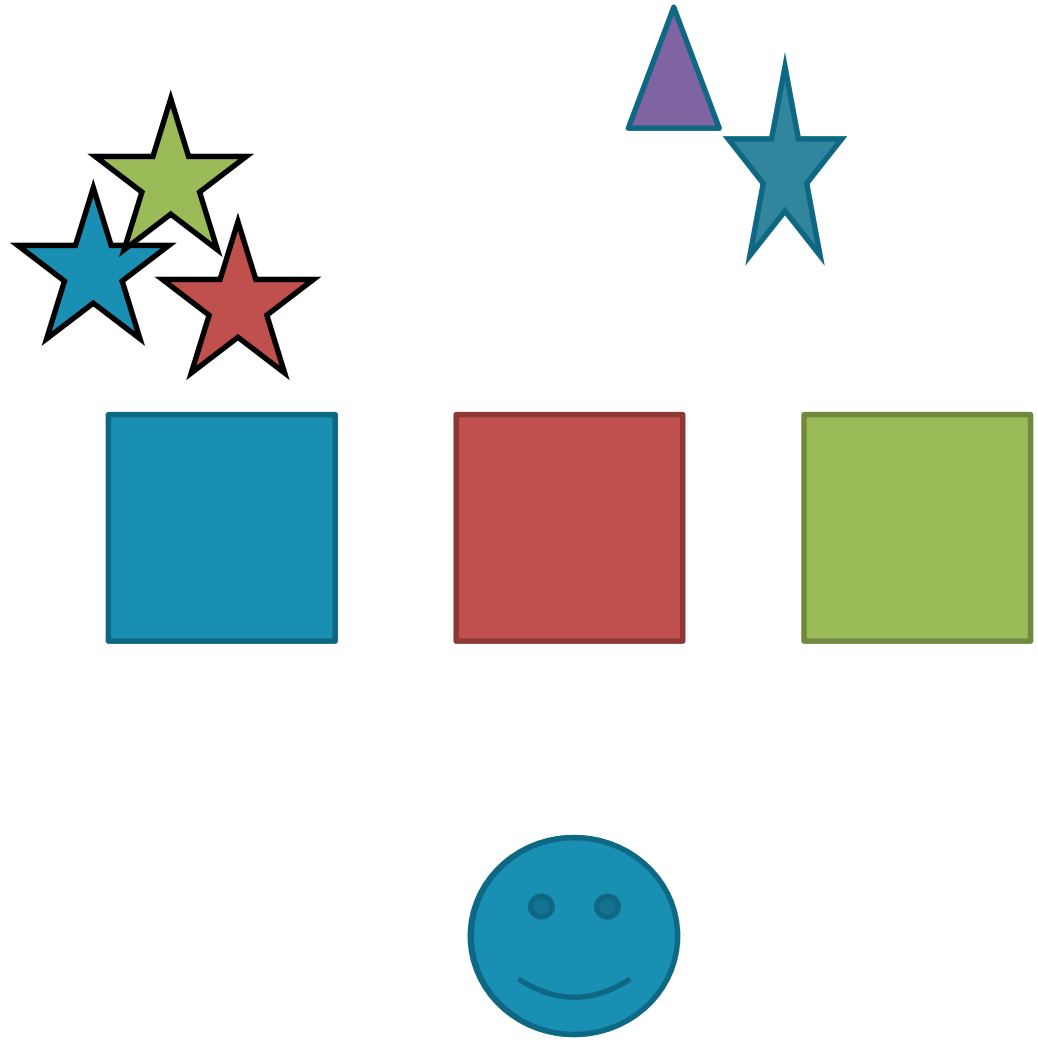School kids perform better on math when allowed to sign tests with a boy's name.

Ambady N, Shih M, Kim A, & Pittinsky TL (2001) Stereotype Susceptibility in Children: Effects of Identity Activation on Quantitative Performance. Psychological Science 12(5):385-390.

Nullified   (Implicit)   Explicit

If the teachers says females usually under-perform – female students will under-perform.

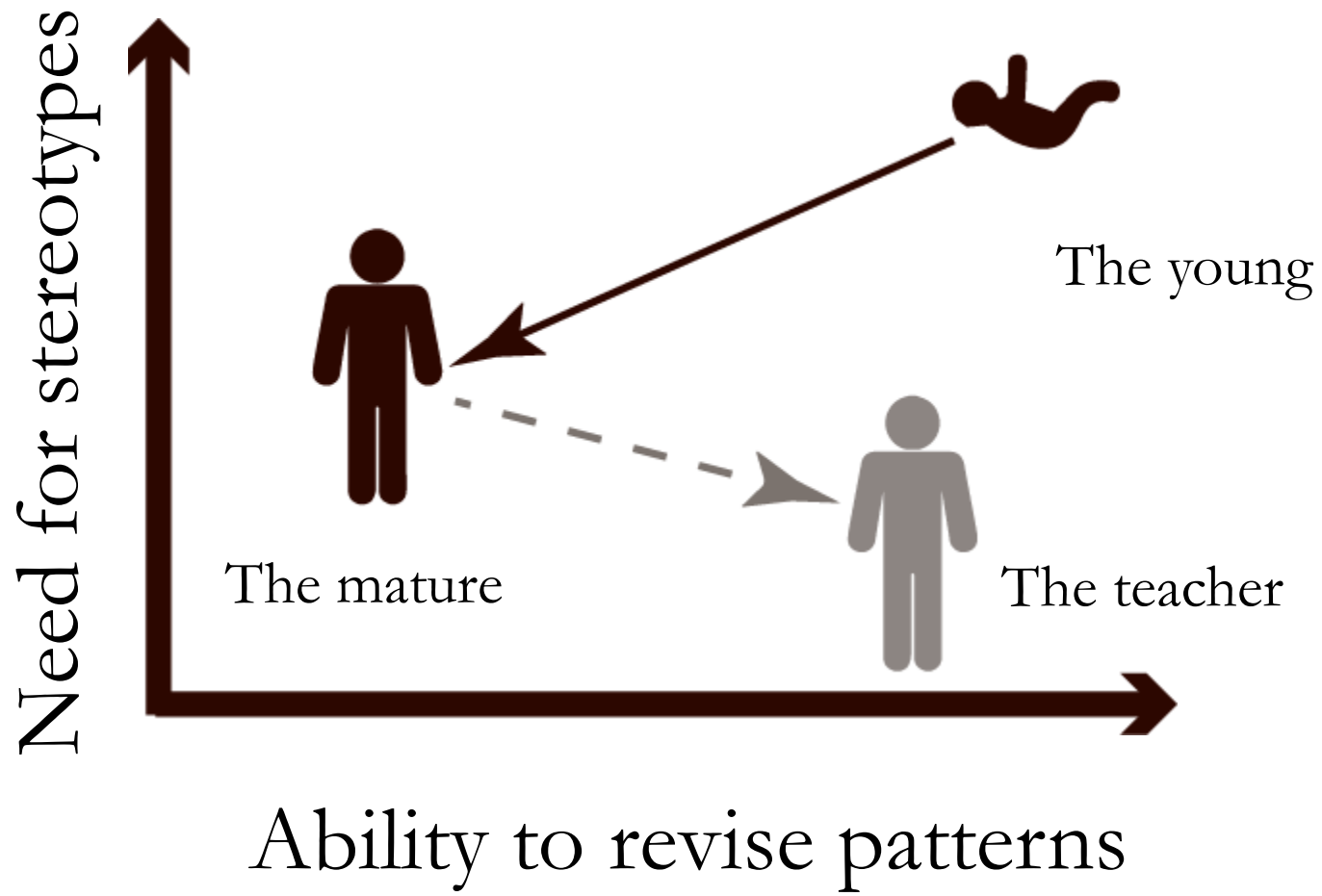Spencer SJ, Steele CM, & Quinn DM (1999) Stereotype threat and women's math performance. J. of exp. Soc. Ps. 35(1):4-28.

Benefits and dangers of categories

Danmarks
Grundforskningsfond
Danish National
Research Foundation

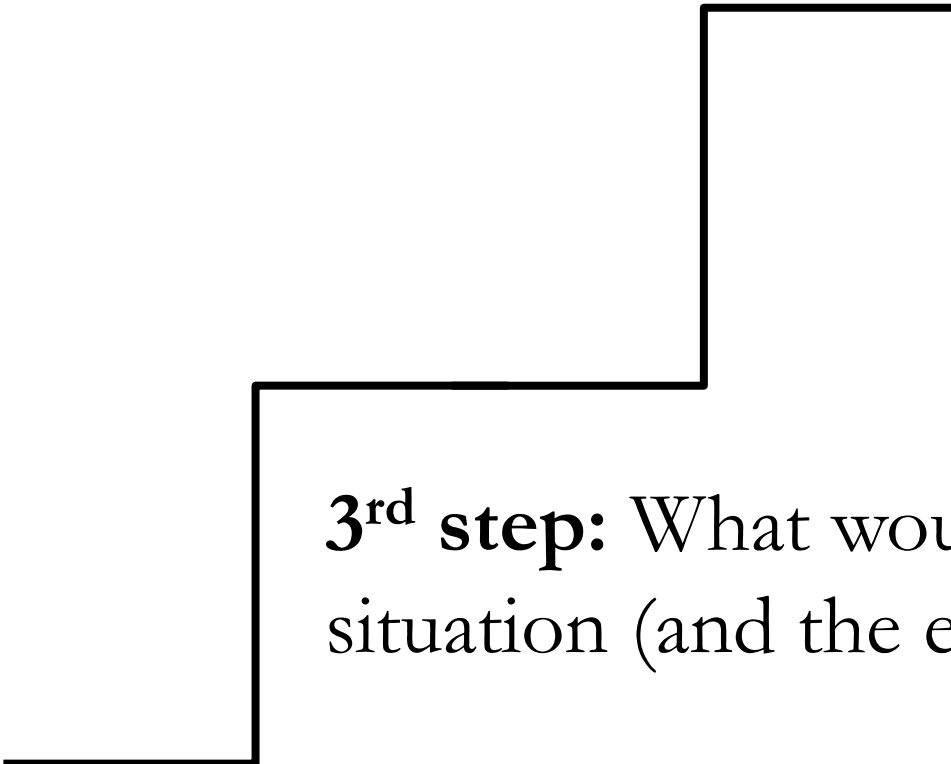# What can be done?

What can be done?

- LTP…
- Eileen Trauth (Penn State)
- ERC
- **<u>Anne-Francoise Gilbert (Freiburg Uni)</u>**

What can be done?

1. Classroom Dynamics

The class includes a 50/50 mix of female and male students. During group presentations, the female students regularly take on management roles in their group.
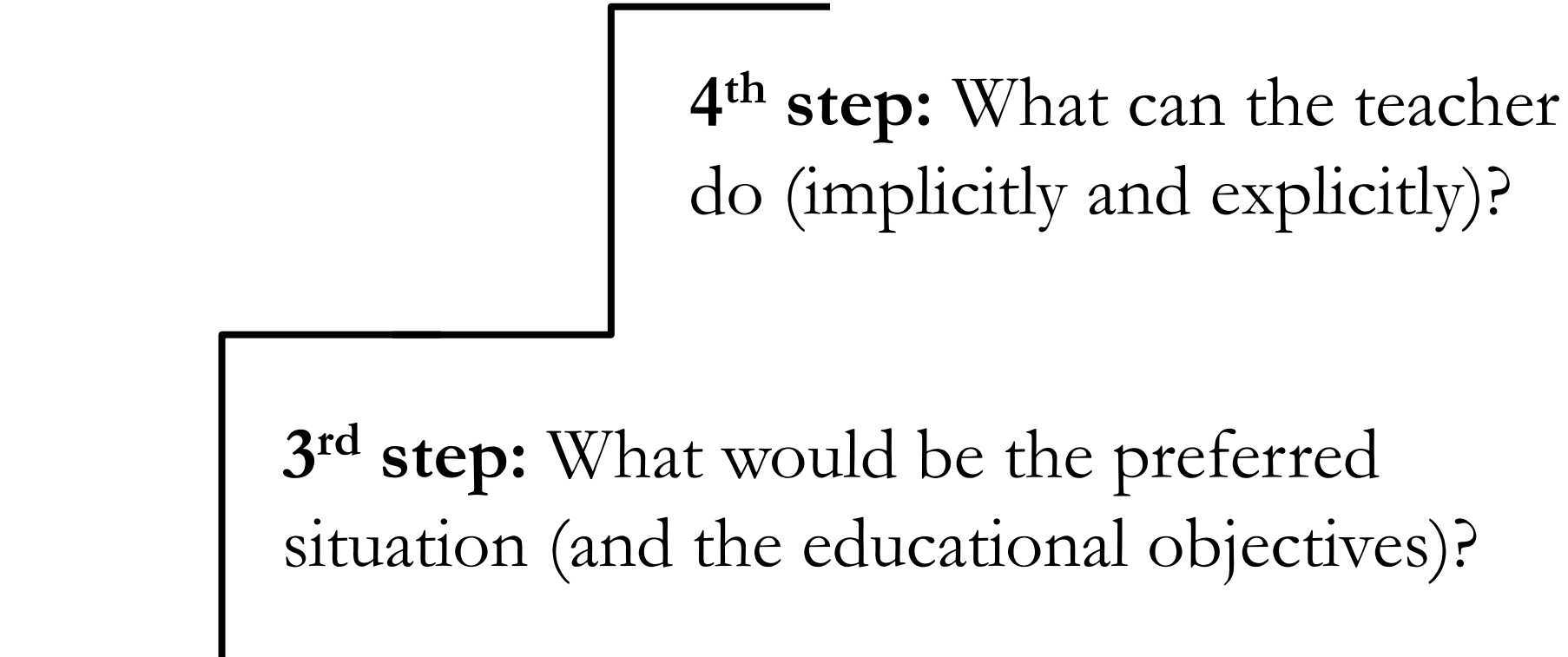
The four step approach

3ʳᵈ step: What would be the preferred situation (and the educational objectives)?

2ⁿᵈ step: Why is the situation problematic?

1ˢᵗ step: Identify the situation

The four step approach

4th step: What can the teacher do (implicitly and explicitly)?

3rd step: What would be the preferred situation (and the educational objectives)?

2nd step: Why is the situation problematic?

1st step: Identify the situation

What can be done?

1. Classroom Dynamics

The class includes a 50/50 mix of female and male students. During group presentations, the female students regularly take on management roles in their group.

What can be done?

Implicit approach – same opportunity

Keep assessing dynamics in the class room
Identify roles, rotates roles, clarify requirements
Group work: jigsaw, think-pair-share etc
Establish rules

What can be done?

Implicit approach – same opportunity

Keep assessing dynamics in the class room
Identify roles, rotates roles, clarify requirements
Group work: jigsaw, think-pair-share etc
Establish rules

Explicit approach – raise awareness

Explain the problem
Define inclusive skills are a learning outcome etc

What can be done – in general

Implicit
- Manage groupwork (e.g. rotation)
- Anonymous exams
- Define and discuss evaluation criteria before hand
- Consider the language and visuals
- Involve the families (American Geosciences Inst.)
- Create the respectful arena (Hare 2009)

Explicit
- Exploit the biases to raise awareness

Hare W (2009) Socratic open-mindedness. Paideusis 18(1):5-16.

Exposing the bias

Avg errors: 12
(n=20)

Research highlight of week 29

by Jennifer Sugden

Fortune favor the bold, or so it would seem from the article named Bold Moves by Peter Fiske who chief executive of PAX Water Technologies in California. The article was published in the journal Na tells the amazing story off a chimpanzee that used a bold move to gain a higher rank in his family. W did was to scare the other chimpanzees by making a lot of noise so that he could get to the food th sharing first. This also raised him up in the social ranks in the family. It has not been observed befor the impressive observation is an advancement ethological sciences. A bold move can also be of use humans, especially young graduates, who only have expertise, but no experience. In the academic y is not common to use bold moves, but rather hard work to rise up in the ranks. Blood, sweat and te of. It can be seen as offending to do something bold when you are just a graduate or if you do not high status. But to be noticed in your job or make your job application stand out, doing something l might actually be your biggest advantage, IF it works.

Avg errors: 6
(n=20)

Research highlight of week 30

by John Baines

Fortune favor the bold, or so it would seem from the article named Bold Moves by Peter Fiske who is the chief executive of PAX Water Technologies in California. The article was published in the journal Nature and tells the amazing story off a chimpanzee that used a bold move to gain a higher rank in his family. What he did was to scare the other chimpanzees by making a lot of noise so that he could get to the food they were sharing first. This also raised him up in the social ranks in the family. It has not been observed before and the impressive observation is an advancement ethological sciences. A bold move can also be of use to humans, especially young graduates, who only have expertise, but no experience. In the academic world it is not common to use bold moves, but rather hard work to rise up in the ranks. Blood, sweat and tears, sort of. It can be seen as offending to do

My damage control

My damage control

Your stereotypes, and damage control?

Why bother?

We need talent in the right place

Step 4- What can be done?

In pairs or threes

Drawing on your reflections and the session's input on bias, expectations, perceptions and beliefs…

Discuss and identify what can be done regarding your critical incidents to enable student engagement and learning.

Step 4: *What do I know about students as learners that might be relevant to this situation?*

What could I change? What could the students be encouraged to change?

How will I pre-empt a similar situation?

To Conclude

Relevant Courses on Students as Learners

The multilingual and multicultural classroom: Challenges and opportunities Register by 25.08.16. Half day, 0.25 ECTS

Teaching to celebrate diversity: An introduction to students as learners one day, 0.5 ECTS or one and a half days, 1 ECTS. Available on request by 5 or more colleagues.

Discover your own teaching biases and ways to address them Register by 25.08.16. Half day, 0.25 ECTS

Link to all courses on teaching, learning and assessment

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Prosser, M., Trigwell, K., Hazel, E. & Gallagher, P. (1994) 'Students' experiences of teaching and learning at the topic level.' *Research and Development in Higher Education* 16, 305-10.

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6. Breda T & Ly ST (2014) Professors in core science fields are biased in favor of women: evidence from France.
7. Kaatz A, Gutierrez B, & Carnes M (2014) Threats to objectivity in peer review: the case of gender. Trends Pharmacol. Sci. 35(8):371-373.
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