Of Horses and Water: Building engagement in the classroom

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Famous couples through history

Coding challenges
(with our combined cultural awareness training)

NZ   n=1;

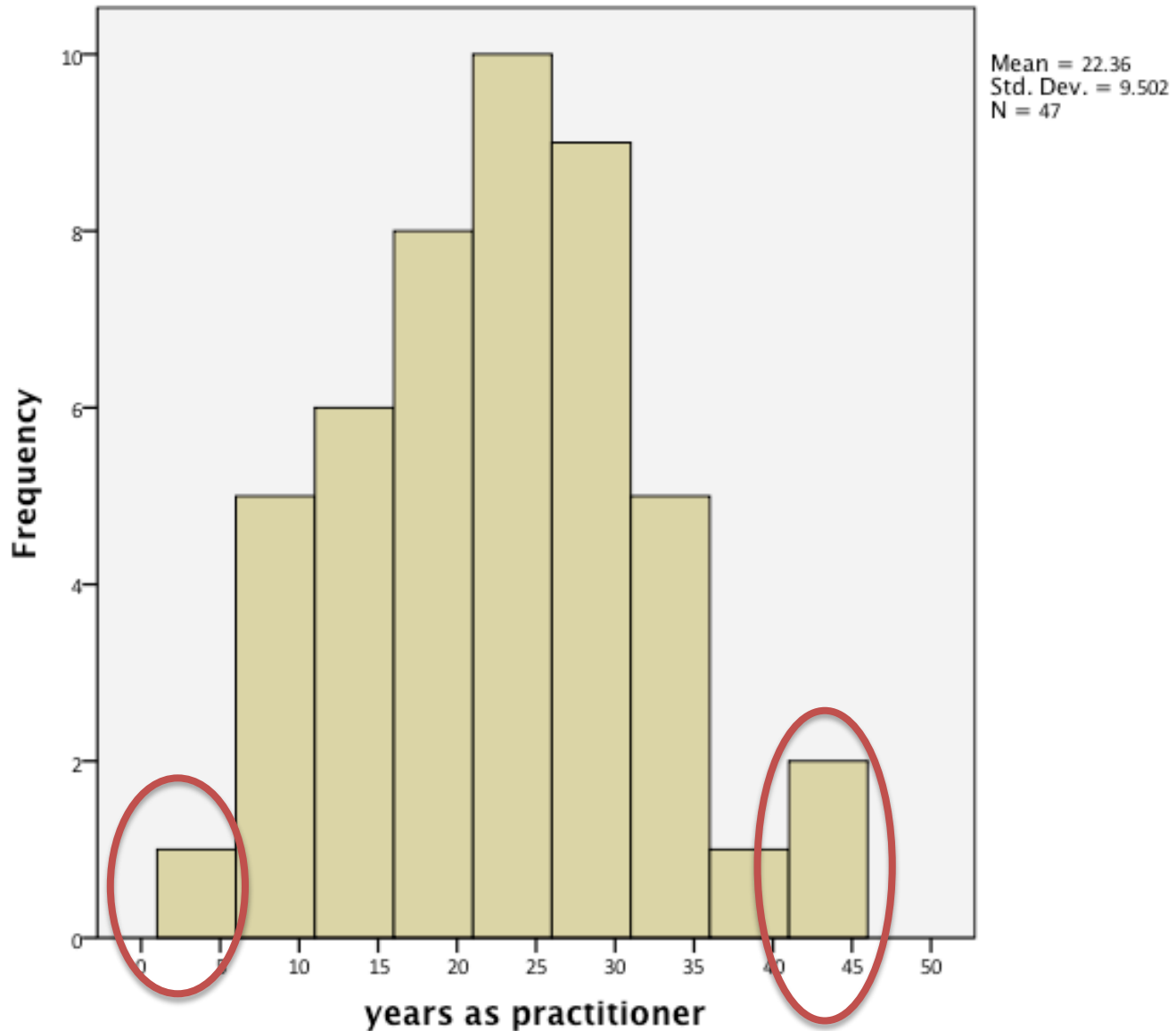decided to code as "Near enough Australian"

The nation of Canadia   n= 2;

decided to code as "not quite USA, but close"
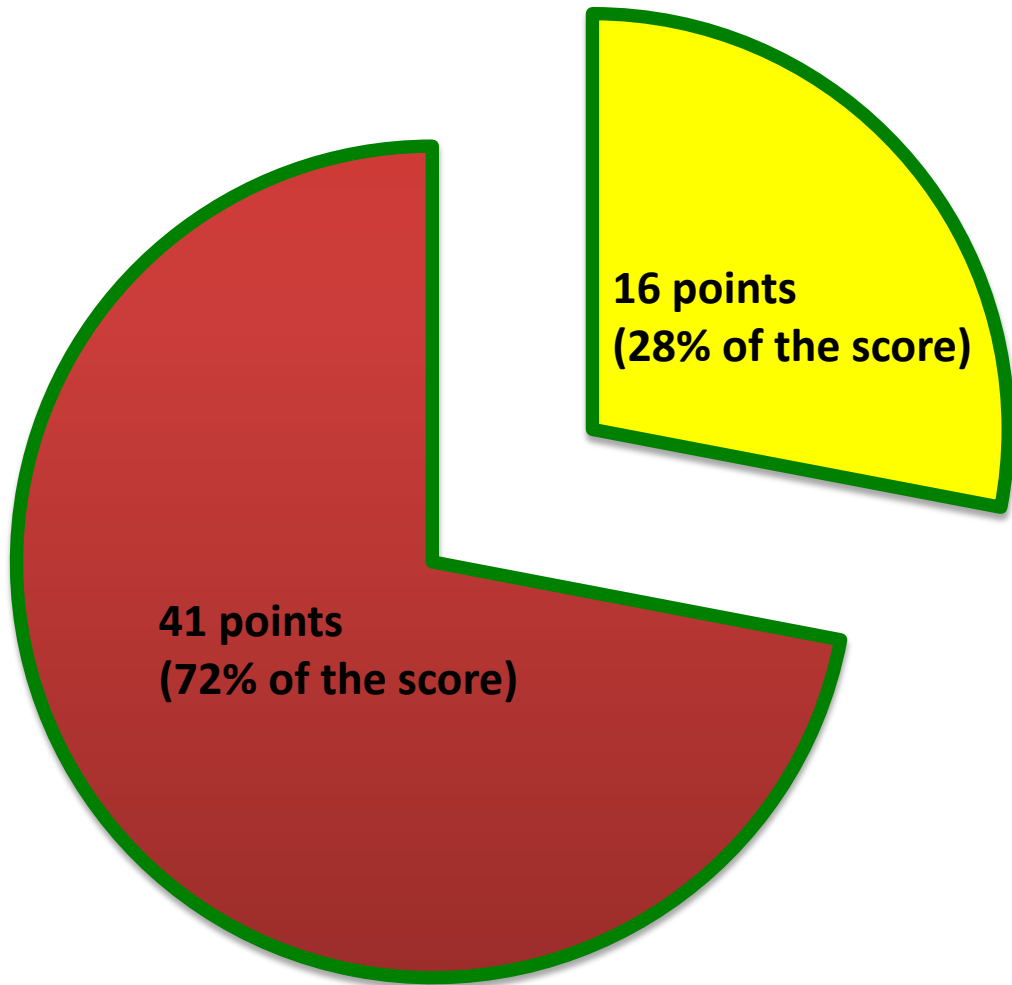

Welsh   n=2

Coded as "Others/strange people"

Irish   n=1   (dropped because invalid)

Demographics
years in "practice"

An example:

for total points scored, such as 57, this could be factored as 16 for one team and 41 for another

16 points (28% of the score)

41 points (72% of the score)

This sort of high level analysis could be applied to, say, sporting challenges between nations

Low variance items N=54

Students behave as "consumers" of education   Agree 90.7% (49)

We spend too much time in the curriculum   Disagree 92.3% (48)
concentrating on "soft skills" and insufficient
time on the scientific base

Students don't know enough facts these days   Disagree 90.7% (49)

Lots of variance in what you think – why?

	Disagree	Agree
Assessment drives learning; we should assess students more often.	57 %	43 %
Students often choose Pharmacy because they can't get into medicine or dentistry.	47 %	53 %
Students are not interested in content, only in getting a job at the end.	70 %	30 %
Knowing what I know now, I would reconsider my career choice.	84 %	16 %
Students behave as "consumers" *vs.* Pharmacy is second choice for many	$r_s = 0.3$	$p = 0.04$

Workshop 1
time = 5mins

- Look at results slide

    Discuss: Are you surprised?

- What do you think are the implications for your classrooms?

- Feedback to all

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The actual classroom experience?

A Vision of Students Today:

http://www.youtube.com/watch?v=dGCJ46vyR9o

Workshopping 2

- Generate a list of "difficult topics" – and why they are seen as "difficult"

(discuss, record and report back)

- Why do you think these "difficult topics" are, in fact, "difficult" ?

Characteristics of the Millennial Learner

1. Strong need for *relationships* with teachers: learning enhanced through personal rapport with instructors
2. *Informality:* a more casual, interactive, less rigid learning environment
3. *Skeptical*: less likely to simply "accept" truth from a credentialed expert and more likely to believe in multiple simultaneous truths being possible
4. *Relevance:* need a reason to learn beyond simply being told to do so
5. Active *engagement* or connection with material
6. Truncated attention span
7. Multiple priorities focused on *self-development*: formal education is only a small component of this

Competency?

- Evolving definitions have created misunderstanding and confusion
- Competency as a psychometric property?
- Competency as a personality trait/characteristic?
- Competency as an unquestioned "good"?
- Competency as capability?

The Psychology of Engagement

Flow: "the mental state of operation in which a person performing an activity is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity" (Csikszentmihalyi)

- Focus on motivation, harnessing of emotions in the service of learning and performing

- Opposite of ennui or anxiety

- "in the moment", "present", "in the zone"

Mechanisms of flow

- Capacity of human cognition ~126 bit/s
- Typical 1-to-1 conversation is ~40 bit/s
- Typical "daydreaming" is ~40 – 80 bit/s
- ….simple daily tasks consume a great deal of cognitive space. As a result individuals must make conscious choices as to what to focus attention upon
- "Cognitive Load Theory"

Conditions for "Flow"

- Wholeheartedly performing a task or activity for intrinsic rather than extrinsic purposes

Flow theory postulates three conditions:

- Active involvement in an activity with a clear set of goals and progress

- Clear and temporal mechanism for feedback to allow individual to negotiate changing demands

- Balance between perceived challenges of a task and one's perceived skills, to provide confidence in possibility of success
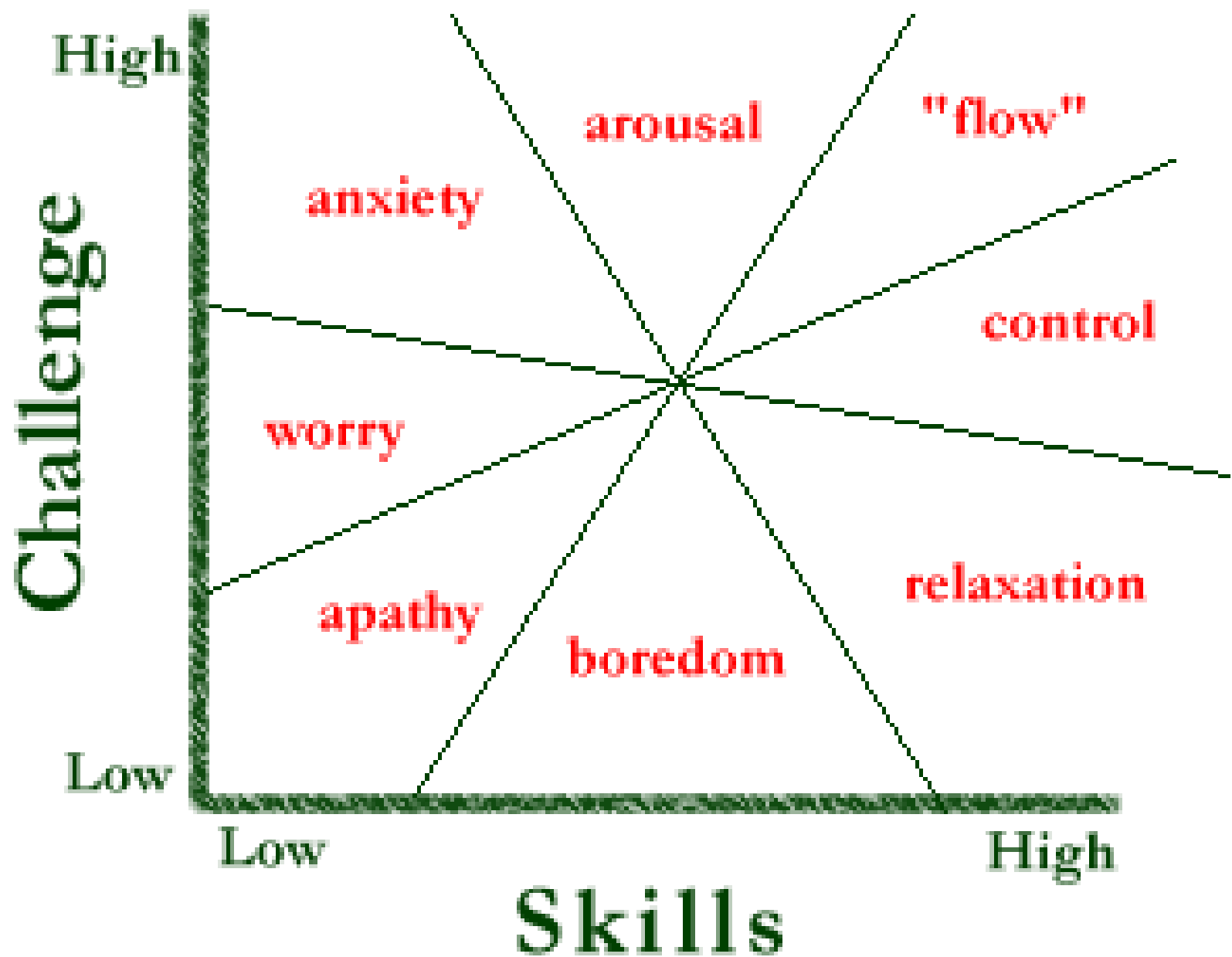
What does this mean for us?

- Meaning of *"information"* is changing: plagiarism is not morally wrong, but simply repurposing of freely available content

- Meaning of *"expert"* is changing: respect is not conferred due to degrees, status, or title but because of situational and utilitarian expertise

- Meaning of *"learning"* is changing: no longer about objective truths but about multiple competing realities

What does this mean for us?

- *Relationships* produce the motivation that drives the learning

- Threats to relationships (e.g. negative grades, feedback, etc) impact negatively on learning and are NOT seen as constructive

- "Facts change, but the need for relationships stays the same…"

What does this mean for us?

- Superficial divergent learning valued over deep focused learning in an effort to make connections between different realms
- Social skills highly valued for occupational and life success
- Raised as children to manage multiple choices so resist being told one right way to do things
- Are discriminating consumers who lead complex lives and expect value

Enough about them…what about us?

To create "engaged" classroom environments…

…we need "engaged" faculty

BUT…

What's it like being a faculty member today?

Workshopping 3
What should we be doing?

You are a member of your faculty's Teaching Improvement Committee and have been asked to work with a medicinal chemistry instructor who receives poor student feedback.

He claims students don't find the material relevant or interesting so there's little he can do about this, and he'd just as soon be focused on his research anyway – so what's all the fuss about?

Summary/conclusions

Principal take homes:

1. Faculty/staff development (critical).

2. Evolution in classroom power dynamics: as expertise becomes less valuable, conversation becomes more important.

3. This needs to be deliberately linked with educational missions.

Our advice ?

Just connect