

SCHOOL OF EDUCATION

EDPS302 – Creating Positive Learning Environments

Models of behaviour management

Solution Focused Intervention
&
Engaging students with technology

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EDPP302 – Risk and behaviour management

SCHOOL OF EDUCATION

Solution Focused Intervention
(continued)

- Rationale
- Assumptions
- Skills

Rationale



Issues for behaviour modification

- Assumes motivation
- Creates negative reinforcement as offset to punishment
- Reliance on detached consequence
- Reinforcement is predictable not scheduled
- Values form the basis of approach





Assumptions behind the approach

- Small changes can have significant effects
- People get stuck in their problems
- Exceptions exist when the problem is not happening
- People have the strengths to solve their problems



Assumptions behind the approach

- Change is inevitable and ever-present
- Find out what stops a solution from occurring and notice when the problem is not there
- The person is not the problem, the problem is the problem
- If it works, don't fix it. If it does not work, do something different.

Skills/techniques

solution Focused intervention **Summary**

A solution focus

- is about what stops or restrains other things from happening or change from occurring
- notices what has been different or the exception rather than the focussing on patterns of problem behaviour
- looks for small changes that can snowball into larger ones
- searches for leverage in the strengths shown by students

solution Focused intervention **Approaches**

1. Exception questions
2. Coping questions
3. Scaling questions
4. Miracle question
5. Externalisation

My best friend is passing around you?

from <http://quantumkoan.com/uk/writings/papers/?p=Brief%20Therapy.pdf>

Rewriting the narrative
- changing dominant stories



Reframe Renaming or redefining an existing behaviour into alternative, more positive terms.

Accentuate/Highlight Finding exceptions and differences then reinforcing these patterns by highlighting and drawing attention to them.

Challenge Confronting the alternatives between the old and new narratives, addressing the problem as an externalised identity.

Exaggerate An extension of accentuation but a more playful consideration of the extremes likely as the stories evolve - the miracle question and possibility.

solution FOCUSED intervention **I - ACE**

very
Skills for dealing with difficult people

ignore This must be done quietly - the person baiting must not know you are ignoring them - it can be tricky because it may feel you are doing nothing but you are - it is NOT pretending to ignore, the baiter must think that you really didn't hear them at all.

agree This is relatively simple to use, but must be done sincerely and not sarcastically or dismissively. It stops them dead in the tracks. "You came last in maths again ha,ha,ha." "Yeh, you're right... I've never been any good at maths."

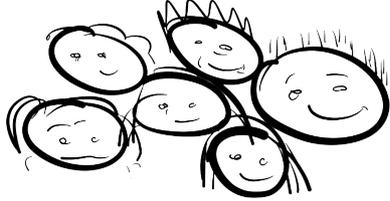
confuse Give them a sincere answer to a question they didn't ask - then move off immediately - or change the topic - profoundly but politely misunderstand them eg. "What are you doing here making the place look ugly?" Reply: "Oh, about 3 o'clock, I think I heard."

exaggerate This is similar to agree but takes it further - again it must not be insulting but takes the insult to a ridiculous length - "Your mother is a whore!" Reply: "Oh, you saw her ad in the paper, too?"

From Brief Therapy Institute of Sydney

Engaging students with technology

- ✓ Background of digital technology
- ✓ Effectiveness of technology
- ✓ How does it work?
- ✓ Examples



7 years before the first commercial mobile phone

16 years before the world wide web was freely available



Looking back to 1978?



Teaching in 1978?

Overview . . .

A digital dimension is not an answer to the challenge of engaging unmotivated learners.

However, digital tools used strategically and with skill can provide an effective alternative for disengaged students to access learning.

Key words:

Narrative | Flow | Design



In 1900, Robert Eugene Otto was born in Key West, Florida in the USA. Gene, as he came to be called, was the youngest of the family's three boys.

The Ottos were a well to do family. But unfortunately money did not make them kind. By many accounts they were often cruel to their servants. One of the servants who was very badly treated was a young girl. Apparently, she knew a few things about voodoo. To get even she made a special doll for young Gene. Some say that she sewed a curse in it.



Gene gave the doll his own first name, Robert and took it everywhere with him. Robert was about 90 centimetres tall and made of straw. Reportedly, the doll had been made to look just like the boy. It even wore clothes like Gene's.





What is technology?

Technology is anything that was invented after you were born."
Alan Kay

Technology is everything that doesn't work yet."
Danny Hillis

From Prensky, M. (2001) *Digital Game-Based Learning*. McGraw-Hill, NY



Technology problems ...



... disruptive technologies
from the past

Disruptive technologies from the past



Gutenberg printing press (1448)

Feared and resented by those whose influence depended on a means of communication they could easily understand and control.

By mixing that fear with popular superstition, people were encouraged to resent the technology and its results as heretical or even diabolical.

Disruptive technologies from the past



The telephone

An article in the New Times from 1876 stated that "the telephone, by bringing music and ministers into every home, will empty the concert halls and the churches"

Disruptive technologies from the past



Kodak camera (1888)

Kodak cameras were originally banned from the Washington Monument.

The 'Hartford Courant' sounded the alarm as well, declaring that "the sedate citizen can't indulge in any hilariousness without the risk of being caught in the act and having his photograph passed around among his Sunday School children."

**Disruptive technologies
from the past**



The ballpoint pen

From *Federal Teachers*, 1950: "Ballpoint pens will be the ruin of education in our country. Students use these devices and then throw them away. The American values of thrift and frugality are being discarded. Businesses and banks will never allow such expensive luxuries."

**Disruptive technologies
from the present**

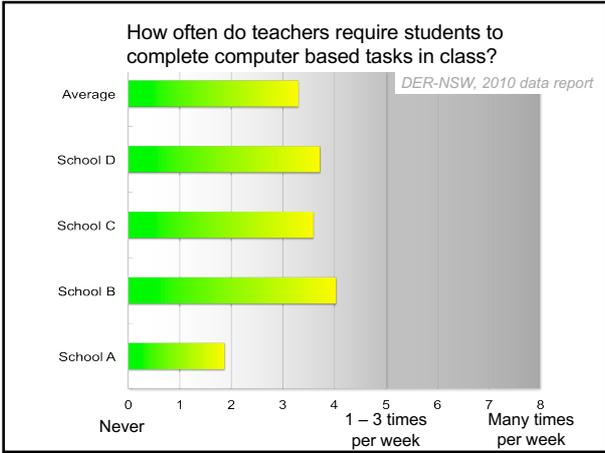


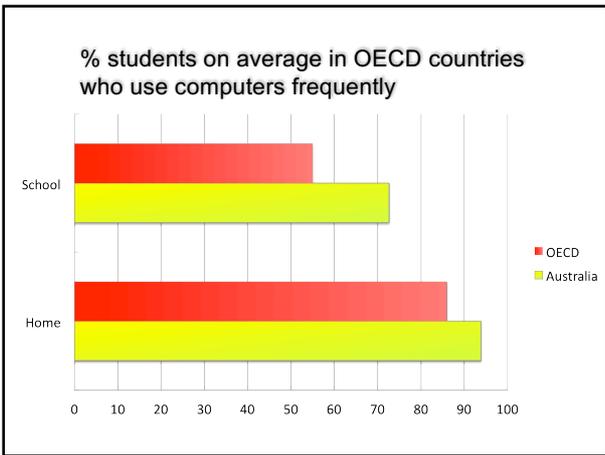
the tablet computer

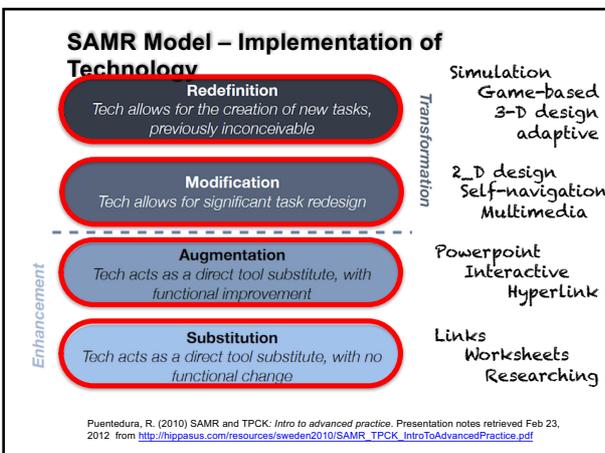
What some teachers say

- "Kids just want to play games all the time."
- "They will forget how to write and spell."
- "Computers just end up broken or stolen."
- "We need to spend more time on the basics."
- "We haven't got enough time in the day for something extra."

. . . the response from teachers today











Liam 

Age:	Year 8
Reading:	Year 3
Maths:	Year 4/5
Last known workplace:	Year 4
Interests:	motorbikes graffiti

making change

Who is this person on the \$10 note? (click on the note)

Work out how much change you would get from \$10 if you bought the following things

Q.8

A CD on sale for \$9.00

A \$1.00 C \$19.00
B \$2.00 D \$0.10

Lessons from Liam

- He worked quickly through each example.
- He did not stop when the red cross appeared.
- When incorrect he immediately checked and re-did his answer.
- When finished he went back to do it again and again.

Number correct the first time: 7 / 70 %
Rating: 5 stars
Support: Almost 100 percent

Liam repeated the exercise 3 times before being satisfied with his score.

So what is going on ?

How is the technology engaging this student ?



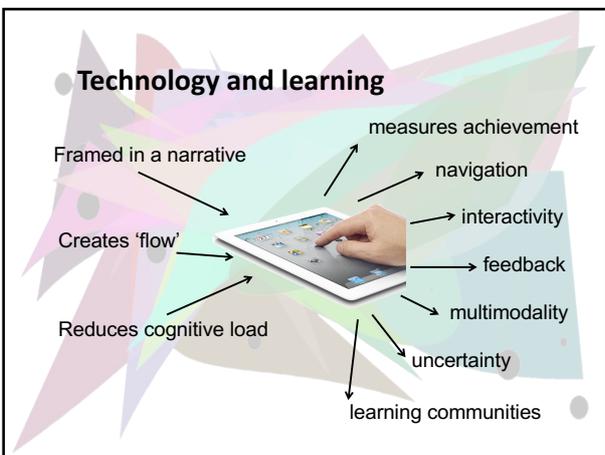


Research on technology and learning

Areas of improvement

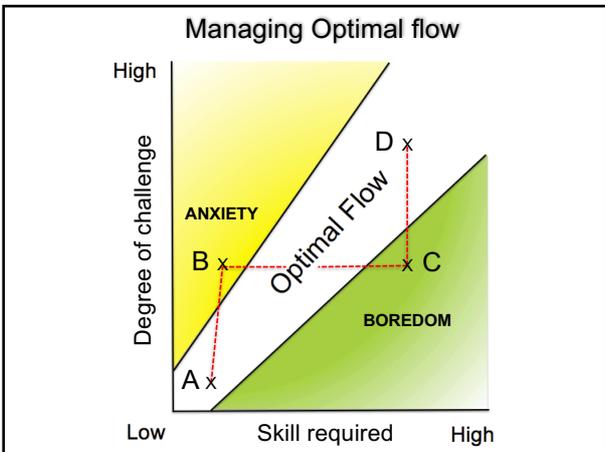
- learning outcomes
- motivation
- participation
- accessibility
- personalisation
- integration

Carnoy, Daley & Loop, 1986;
Taylor *et al.*, 2007;
Char...
Passey *et al.*, 2004 ;
Under...
U.S. ...
Somekh *et al.*, 2007a;
Underwood, 2009;
Hollingsworth *et al.*, 2008;
Kulik, 2003;
Kiboss, 2000.

















Tacit/informal/social learning . . .

- scaffolding
- zone of proximal development (ZPD)
- teacher is actively responding to students
- student is a co-participant in this interaction
- learning environment is dynamic



tacit knowledge . . . comes from a first person act of doing and thinking within a content area or discipline. It is about problem solving and learning situated within relevant, authentic experiences

. . . . is exemplified by apprenticeships

. . . . emerges from within narratives & integrated curriculum

social interaction . . . is about sharing and discussing varying perspectives

. . . generates learning collectives or communities that respond to changing dynamics in the learning environment

. . . less structured or 'messy' learning

informal learning . . . students tinker and explore in a self directed and more relaxed environment

. . . learners themselves organise a structure to make sense of their experiences

Adapted from Hung, D., Lee, S. S., & Lim, K. Y. T. (2012). Authenticity in learning for the twenty first century: Bridging the formal and the informal. Educational Technology Research & Development, 60(6), 1072-1094.



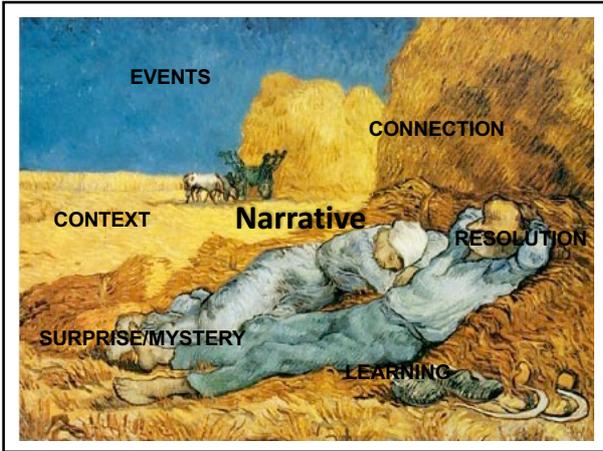
What is narrative ?

Narrative

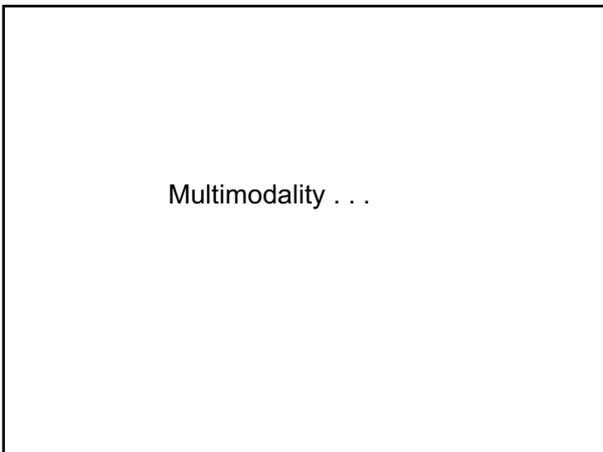
Narrative, a form of discourse which tells a story, is derived from the Latin gnarare, meaning 'to know.'

Indeed, narratives are an old tradition built upon a human need to "make meaning and to forge connections between seeming disparate bits of knowledge and experience" in human culture (Blyer & Perkins, 1999, p. 245)

from Steven Nathanson (2006). *Harnessing the Power of Story*. Reading Horizons, 47(1), 1-26









Distinction Between Modes and Modalities
Moreno & Mayer (2007)

Multimodality

Feature	Description	Examples
Mode	Code used to represent information	Verbal (e.g., printed words, spoken words) and Non-verbal (e.g., illustrations, photos, video, and animation)
Modalities	Sense receptors used to receive information	Auditory (i.e., through the ears) Visual (i.e., through the eyes)



Multimodality

Modalities
Sense receptors used to receive information

- Reduces cognitive load
... the demands of memory on any one sense
- Responds to learning preferences
... providing processing options for students
- Stimulates flow
... facilitates motivation and challenge



Multimodality

- Learning is improved when related pictures are presented at the same time as text based information (Dual coding effect).
- Learning is further enhanced when information is presented through the visual and auditory modalities simultaneously (Modality effect).

Source: <http://psychometrics-blog.rightpeople.com.au/2012/multimedia-learning-online/>



Multimodality

Modality effect

- There are separate processing systems for visual and auditory information, both of which are limited in capacity.
- Presenting information in both modalities allows for the combined resources of both systems to process information, using more cognitive resources, reducing cognitive load and increasing knowledge acquisition.



Multimodality

- Effective learning environments are those that combine verbal and non-verbal representations of the knowledge using mixed-modality presentations.
- The presentation of verbal and non-verbal materials in the visual modality alone is more likely to overload students' cognitive capacity during learning as compared to the presentation of verbal materials in the auditory modality and non-verbal materials in the visual modality.

Moreno, R & Mayer, R. (2007) Interactive multimodal learning environments. Educational Psychology Review 19, 309-326



Multimodality

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Moreno, R & Mayer, R. (2007) Interactive multimodal learning environments. Educational Psychology Review 19, 309-326

Multimodality

Photosynthesis

Plants use the light energy from the sun (solar energy) and convert it into chemical energy that is stored as sugar (glucose) in the plant.

Excess glucose is stored as starch in the leaves, roots, stems and seeds of the plant.

Plants can do this because of leaf structures called chloroplasts that contain a special substance called chlorophyll.

WATER + LIGHT = CHEMICAL ENERGY

1. Chloroplasts trap light energy

2. Water enters leaf

3. Carbon dioxide enters leaf through stomata

4. Sugar leaves leaf

CHEMICAL ENERGY + CARBON DIOXIDE = SUGAR

Multimodality

Photosynthesis

Light Energy

Carbon dioxide

Water

Oxygen

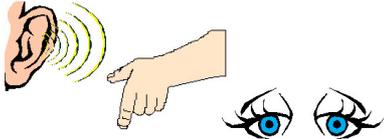
Multimodality

Photosynthesis



Multimodality

Combining visual, tactile and verbal modes of instruction increases the brain's ability to process information. By combining modes of instruction, the burden is reduced on working memory.



... and a true pedagogy



Focus on design of learning activities

Concentrate effort on making the design work rather than the student

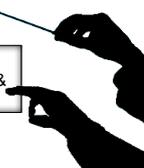
Teacher is a participant in the activity of learning

Non-direct intervention approach
– a fundamental shift in pedagogy

Provide secondary stimulus – adding interest and depth through links/dramatisation/diversion

Social/tacit learning through conversation & discussion

Strike a balance between challenge & skills



Strategic learning design – activities and resources

4 design tools

Hype HTML-5 editor for webpage and interactive objects compatible with tablet devices

edmodo Learning Management Systems

Add text, graphics, movies and more to create interactive iBooks

MATHEMATICS Interactive, engaging NSW DEC maths program with feedback, self-help & full progress reporting



Settings

Campbelltown Suspension Centre

Level 9 Maths

Level 9 Maths

Level 10 Maths

Live Mathematics

Activities

eBooks

Interactives

Videos

Problem Solving

More

My Progress

15/101

2/101

3/101

32/101

How do my medals work?

My Points

6853

389

weekly

19/19

next award

My Awards

Goals and feedback

Support, options & additional activities

NA - Number

NA - Algebra

NA - Linear and Nonlinear Relations

MG - Measurement

MG - Geometric Reasoning

MG - Pythagoras and Trigonometry

SP - Statistics

SP - Probability

Are You Ready?

Index Notation

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Exponents

Negative Indices

Scientific Notation

Direct Variation

Indirect Variation

Wages and Salaries

references - technology

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