



Motivating Learning

A TEAN Event

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Aims



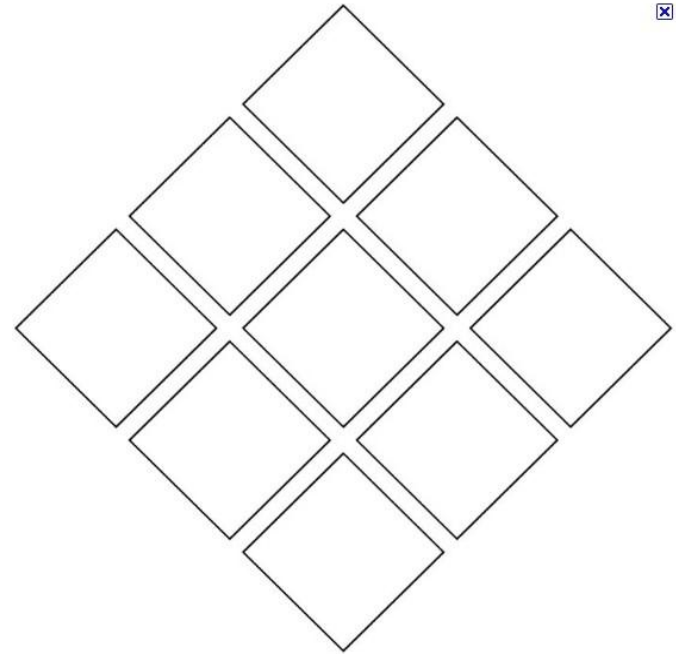
- To introduce a research-led theory of motivation and to invite you, through reflection and discussion, to connect this to your own practice as a teacher-educator
- To provide and explore a few tools for promoting intrinsic learning motivation
- To create a space for autonomous (but not necessarily independent) action-planning

Chloe – A composite case study

Chloe is a bright, chatty and popular girl, who consistently underachieves in the classroom.

Work is done with minimal effort, and in a rush. Only very occasionally do you see glimpses of her true potential – when she's genuinely interested in the topic. There are no significant external factors that you're aware of. Public exams are looming. There's a mountain of material to cover. So do you:

- With a partner, rank your choices in order, using a 'diamond 9':
- Compare your responses with those of another partnership. Justify your responses, but feel free to change your mind if you're convinced by counter-arguments



1. Look for ways of giving her some choices/flexibilities in getting the learning done?
2. Have a private chat with her, trying to establish the relevance of the curriculum to her own plans/ambitions?
3. Empathise with her? You can see that this work is crushingly boring and that exams are a necessary evil!
4. Modify your teaching in the hope of 'clicking' with her?
5. Do nowt – it's up to her to engage when she's ready?
6. Occasionally (and fairly randomly) reward her efforts with small tangibles - certificates, stationery, Maltesers, etc?
7. Use praise consistently, making it clear to her that if she has a go, however briefly, then she'll be affirmed?
8. Create a formal reward schedule, so she can eventually accumulate enough tokens to translate into a big pay-off?
9. Reassure her that she has the ability – she could be achieving highly if only she could be a*sed?



"Between stimulus and response there is a space. In that space lies our freedom and power to choose our response. In those choices lies our growth and our happiness."

(Stephen Covey, 2004)

Reminder: 4 Myths

(Carol Dweck: Self Theories)

- **Students with high ability are more likely to love learning**
- **Success in school makes children love learning**
- **Praise, especially intelligence-praise, leads to a love of learning**
- **Confidence in one's intelligence is the key to a love of learning**

| Mindset: | Fixed | Growth |
|-----------------|---|--|
| Your belief: | Intelligence is a fixed trait | Intelligence is cultivated through learning |
| Your priority: | Look smart, not thick | Become smarter, through learning |
| You feel smart: | Achieving easy, low effort successes and outperforming others | Engaging fully with new tasks, exerting effort, stretching and applying skills |
| You avoid: | Effort, difficulty, setbacks, higher-performing peers | Easy, previously mastered tasks |



What do we mean by 'motivation'?

- **Intrinsic** (autonomous): doing something for the thing itself – a focus on *process*
- **Extrinsic** (controlled): doing something for what it'll bring as a reward – praise, prizes, performance grades, etc. – a focus on *product*



Three massively researched conclusions:

1. Autonomously-motivated students thrive in educational settings
2. Students benefit when teachers support their autonomy – and so do their teachers
3. These benefits appear in both the educational and developmental domains

Educational benefits of autonomous motivation (Reeve):

- Higher academic achievement
- Higher perceived competence
- Higher self-worth
- Preference for/pleasure from optimal challenge
- Stronger perceptions of control
- Greater creativity
- Higher rates of retention



Basic Psychological Needs

(Deci & Ryan)

“There are necessary conditions for the growth and well-being of people’s personalities and cognitive structures. The healthy human psyche strives for these nutriments and gravitates toward situations that provide them.”



Self-Determination Theory

(Edward Deci & Richard Ryan,
University of Rochester)

Basic Psychological Needs:

- Autonomy
- Competence
- Relatedness



AUTONOMY

“Being the perceived origin or source of one’s own behaviour”

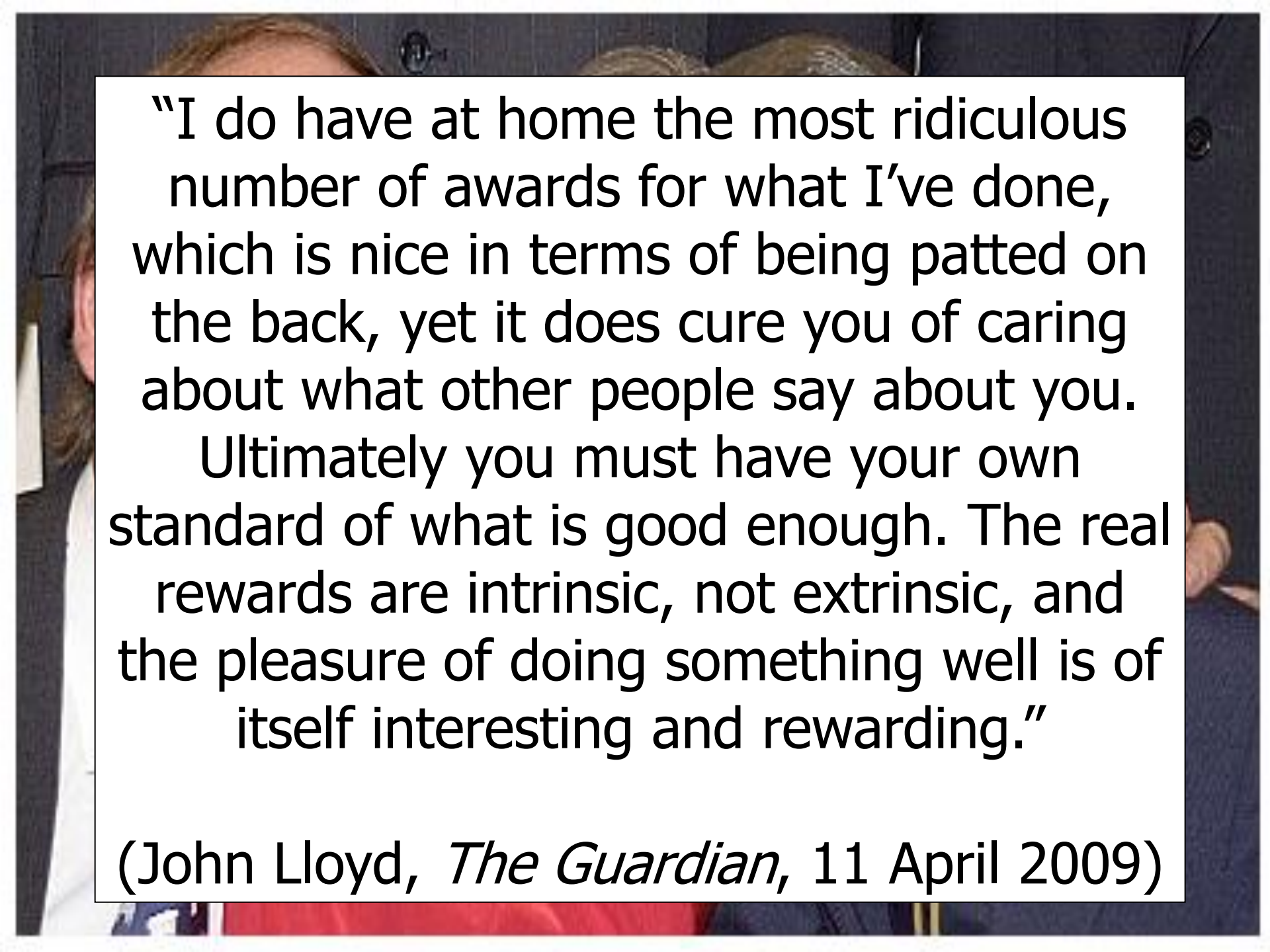
Even the great synthesisers don't agree:

- "There is increasing evidence for the dilution effect of praise on learning" (*Hattie, 2012*)
- "... it appears obvious [from the research] that abstract rewards – particularly praise – when given for accomplishing specific performance goals, can be a powerful motivator for students" (*Marzano, 2001*)
- "Verbal praise is an extrinsic motivator that positively alters attitude and behaviour" (*Cameron & Pierce, 1994*)



“If a person is engaged in some activity for reasons of intrinsic motivation and if he begins to receive the external reward, money, for performing the activity, the degree to which he is intrinsically motivated to perform the activity decreases”

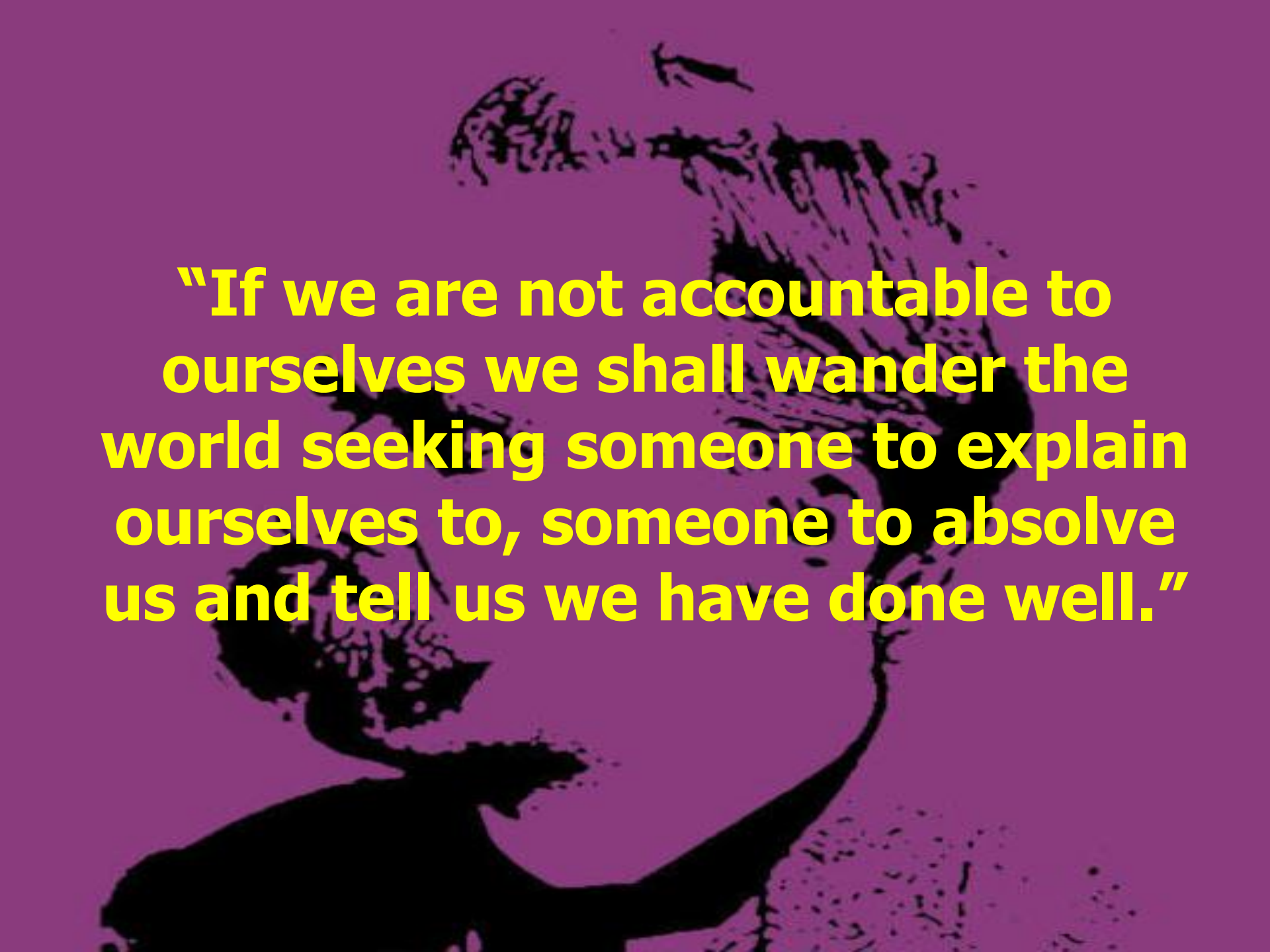
(Edward Deci, 1971)



“I do have at home the most ridiculous number of awards for what I’ve done, which is nice in terms of being patted on the back, yet it does cure you of caring about what other people say about you.

Ultimately you must have your own standard of what is good enough. The real rewards are intrinsic, not extrinsic, and the pleasure of doing something well is of itself interesting and rewarding.”

(John Lloyd, *The Guardian*, 11 April 2009)



“If we are not accountable to ourselves we shall wander the world seeking someone to explain ourselves to, someone to absolve us and tell us we have done well.”



More nuance needed! (1)

- Praise has a negative effect on intrinsic motivation as measured by free-time activity ($d = -0.4$), but a mild positive effect on IM as measured by students' attitudes towards the activity ($d = 0.14$), and an effect of $d = 0.34$ on students' abilities to perform the 'rewarded' activity (*Marzano*)
- Praise (and other rewards) given for accomplishing easy tasks can undermine achievement and *lower* students' perceptions of their ability (*Morine-Dershimer*)



More nuance needed! (2)

- Reward is most effective when it is contingent on attaining some specified standard (*Wiersma; Cameron & Pierce; $d = 0.38$*) .
Classroom implication: Don't offer Maltesers simply for doing an activity; make any reward contingent on successful achievement of specific performance goals



More nuance needed! (3)

- Abstract symbolic recognition is more effective than tangible rewards. Verbal rewards can produce effect sizes of >0.4 . Studies producing the most negative outcomes for rewards tend to use tangible rewards like money and sweets. **Classroom implication: abstract awards (e.g. praise), given for attaining specific goals, can be positive motivators.**





The 4 Ts of Autonomy:

- 1. Task** (is there a degree of open-endedness about the task?)
- 2. Time** (are there flexibilities over deadlines?)
- 3. Technique** (does the task offer alternative routes to completion?)
- 4. Team** (do pupils have a say in choosing their collaborators?)

Autonomy idea



SATS

(Student & Teacher Seminars)



SATS rules

- At the start of a term, both student and teacher list their top three learning goals
- Towards the end of term, each writes his/her own report, identifying 3 successes, and 3 failures en route to achieving these goals (and reasons for both)
- Share reports with each other

Autonomy idea



Do what Google does:
Have a FedEx Day! (delivery
by tomorrow morning)



FedEx Day rules

- Pupils generate a problem to solve or a project to tackle
- Support them in choosing/acquiring appropriate resources
- Let them go!
- Presentations the following morning – encourage a variety of presentational formats (of their choosing)



The \$1 million
question:

How do we get them
to do the dirty work?

When it just ain't interesting enough ...

- Provide a big-picture rationale that links the task to the child's well-being
- Work on an interpersonal relationship that emphasises choice and flexibility rather than control and pressure
- Acknowledge and accept the negative feelings that some tasks might elicit

So why are we sometimes controlling?

- Greater familiarity with behaviour modification principles than autonomy-generating principles
- We aren't that good at recognising when pupils are/aren't interested
- We're the focus of controlling, pressuring conditions ourselves



'Able, brilliant and skilled professionals do not thrive in an environment where much of their energies are absorbed by the need to comply with a raft of detailed requirements.'

House of Lords, 2009, *The cumulative impact of statutory instruments on schools: report*,
p.15

Why are we sometimes controlling (2)?

- When pupils are disengaged, we resort to increasing control strategies
- We still believe that the greater the incentive, the greater the motivation
- We underestimate pupils' capacity to motivate themselves
- We can see motivation as a fixed trait

Why are we sometimes controlling (3)?

- Both parents and pupils rate controlling teachers as more competent than autonomy-supportive teachers
- We believe that researchers just don't get it: "*You* try it! Autonomy in my class is a recipe for chaos/giving in/getting nothing done"
- "'Elf & Safety'"

“The most striking thing about some undergraduates is their dependence, their lack of initiative and their reluctance to think for themselves. This is reflected in their often-shocking inability to engage in intellectual conversation and to organise their thoughts in writing. I believe this dependency to be a consequence of two things. First, the reluctance of many parents to give their children the freedom to find things out for themselves as they are growing up. Second, the national curriculum prescribing exactly what is to be learnt and, in so doing, often eliminating the discovery process from learning. If there is any discovery, it is so sanitised by health and safety that any pedagogical effect is lost.”

(Prof Tim Birkhead, TES, 6 Feb 09)

From homework to homelearning – a self-determination route:

- Recall the most recent piece of homework you've set your/a class.
- Describe it in detail to a partner: what exactly did it involve? What was the timescale? Was it challenging? If so, did they have the resources to succeed at it? If they've completed it, what were their reactions to it?
- How could you have (even) better supported their needs for autonomy, competence and relatedness?



Homelearning

– a 3-point checklist:

1. Does this task offer the pupils any **autonomy** over how and when to do it?
2. Does this task feed their growing sense of **competence**? Will it engage and challenge them appropriately? Does it call on HOTS or MOTS?
3. Does it involve any sense of **social connectedness**? Peers? Family? You?



LogoVisual Thinking

A Guide to Making Sense

Anthony Blake
John Varney



Logo-Visual Thinking

<http://www.logovisual.com/>

FOCUS (a guiding Q or stimulus)

GATHER (ideas from memory, association, imagination or prompts)

ORGANISE (sorting into groups, clusters or themes)

UNDERSTAND (making meaning – seeing the ideas as a unity)

APPLY (work towards a product for their meaning-making)

- **Focus:** How do I motivate my students?
- **Gather** (NB individually!) as many responses as possible, from as many contexts as possible – one per post-it/magnote
- **Organise** (collaboratively) the collective responses into thematic clusters
- **Understand** your groupings by creating a short unifying 'title' for each cluster
- **Apply** and disseminate: reveal your cluster titles to the other groups
- **Extension:** rank your cluster titles by short-term vs long-term efficacy



“Pupils whose teachers use a thinking skills approach can receive an intellectual boost equal on average to more than half a year’s extra schooling.”

(Effect size: 0.62)

<http://eppi.ioe.ac.uk>





TASC

Let's Talk

P4C/CoE

CASE

Mysteries

CAME

Mindmaps/
Radiant Thinking

Other?

LVT

6 Thinking Hats

Dilemma
Based Learning

Characteristics of Thinking Skills:

Clear purpose – the purpose of tasks is made explicit to students in terms of significance, relevance and potential meaning

Articulation – students talk about their work and are encouraged to describe and articulate their thinking

Mediation – the teacher intervenes to discuss, stimulate and crystallise learning that is taking place, and involve students in this through modelling and collaborative work

Connecting Learning – the teacher and the students make connections within the tasks, between tasks and with their wider experience

Evaluation – students evaluate their own performance in terms of participation with an activity and approaches to learning

Metacognition – thinking about thinking; understanding the process of learning.



Self-Determination Activity: a super FedEx 30 minutes

- Think of a problem to solve or a project to tackle
- Frame it thus: "How do I/we ...?"
- Decide who you'd like to tackle it with
- Choose your tools/weapons: words, posters, dance, drama?
- Present your findings

“I like mastery goals, and I like performance goals, but which is better?”

| | Mastery | Performance |
|--|---------|-------------|
| Find classes interesting | x | |
| Persist in the face of difficulties | x | |
| Value cooperativeness | x | |
| Seek help when confused | x | |
| Self-regulate effectively | x | |
| Use deep learning strategies (elaboration, connection) | x | |
| Manage tough decisions | x | |
| Experience positive emotion | x | |
| See the point of a task | x | |
| Lead to academic achievement | x | x |

Performance goals – OK and Not OK:

- Performance-approach goals:
striving to outperform others or
appear talented
- Performance-avoidance goals:
striving to avoid doing worse than
others or to appear less talented

“The findings for performance-avoidance goals have been almost uniformly negative” (Hulleman, 2010):

- High anxiety
- Poor study habits
- Help-avoidance
- Self-sabotaging
- Low interest
- Low achievement



References & recommended reading

- Colvin, G. (2009); Talent is Overrated – What *really* separates world-class performers from everybody else
- Coyle, D. (2010); The Talent Code – Greatness isn't born, it's grown
- Deci, E. & Ryan, R. (eds.) (2002); Handbook of Self-Determination Research
- Ericsson, K.A. (ed.) (2009); Development of Professional Expertise – Toward measurement of expert performance and design of optimal learning environments
- Hattie, J. (2009); Visible Learning – A synthesis of over 800 meta-analyses relating to achievement
- Horowitz, F., Subotnik, R. & Matthews, D. (eds.) (2009); The Development of Giftedness & Talent Across the Lifespan



References & recommended reading

- Kohn, A. (1993); Punished by Rewards – The trouble with gold stars, incentive plans, As, praise and other bribes
- Pink, D. (2009); Drive – The surprising truth about what motivates us
- Schulz, K. (2010); Being Wrong – Adventures in the margin of error
- Shenk, D. (2010); The Genius in All of Us – Why everything you've been told about genetics, talent and intelligence is wrong
- Senko, C., Hulleman, C. & Harackiewicz, J. (2011); Achievement Goal Theory at the Crossroads: Old controversies, current challenges and new directions
- Syed, M. (2010); Bounce – How champions are made