Ensuring good returns on investment when deploying new technologies

Notes to accompany a presentation by Mark Baker of Education Vision Consultancy Ltd

at BETT 2013

Education Vision Consultancy

Ensuring good returns on investment when deploying new technologies

This presentation begins with two hypotheses. Firstly that too many school ICT projects fail to deliver sufficient impact. They may yield benefit, but less than could be expected. In other cases no benefit will be gained and in some extreme cases the project may have a negative impact on educational outcomes. The second hypothesis is that whilst there are many environments where people have to work under pressure, schools nevertheless fact particular challenges when trying to encourage professional development and change.

The presentation suggests a technology procurement process and explores how the different stages impact on making successful changes in the classroom.
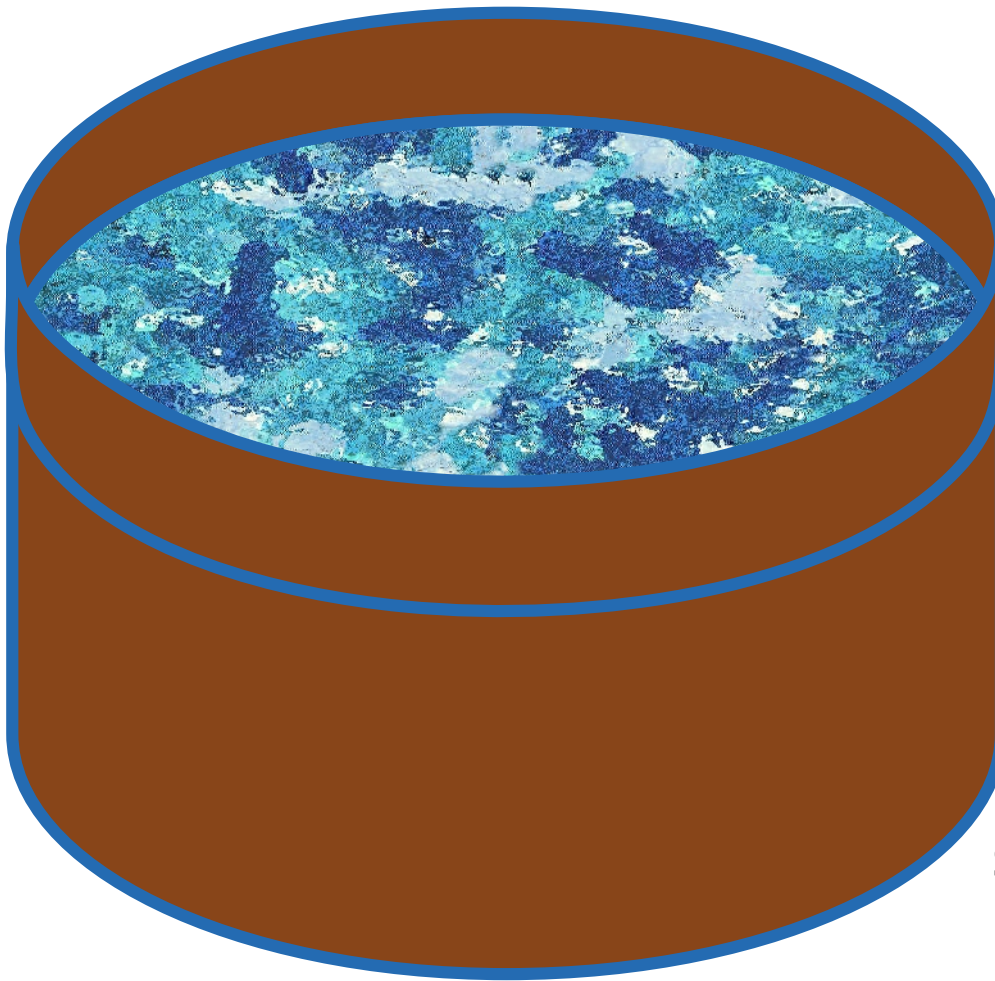
The process can be described by the mnemonic VOSPIR - vision, desired outcomes, success criteria, procure, implement, review.

CPD and support is often a crucial component of success. Needs will change over time, but can include initial functional training, support for initial use and consolidation of skills, professional reflection, leading on to extension of skills and professional practice and finally embedding as a part of "business as usual".

In conclusion, leading and managing ICT projects successfully is summarised in these four bullet points:

- Vision

- Desired outcomes/success criteria

- Effective CPD

- Active management for outcomes

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Baker's two pots conjecture

Management capacity

Staff energy and enthusiasm

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National priorities

Local priorities

Vision for education

ICT vision

ICT strategy

"Best practice"

ICT delivery

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Start here

Education vision

ICT vision

Desired outcomes

Technology to buy?

Success criteria

Procure

Implement

Review
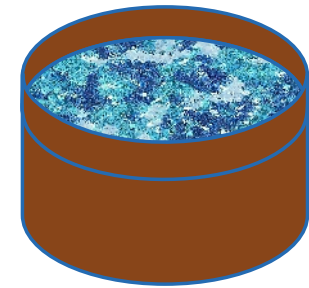
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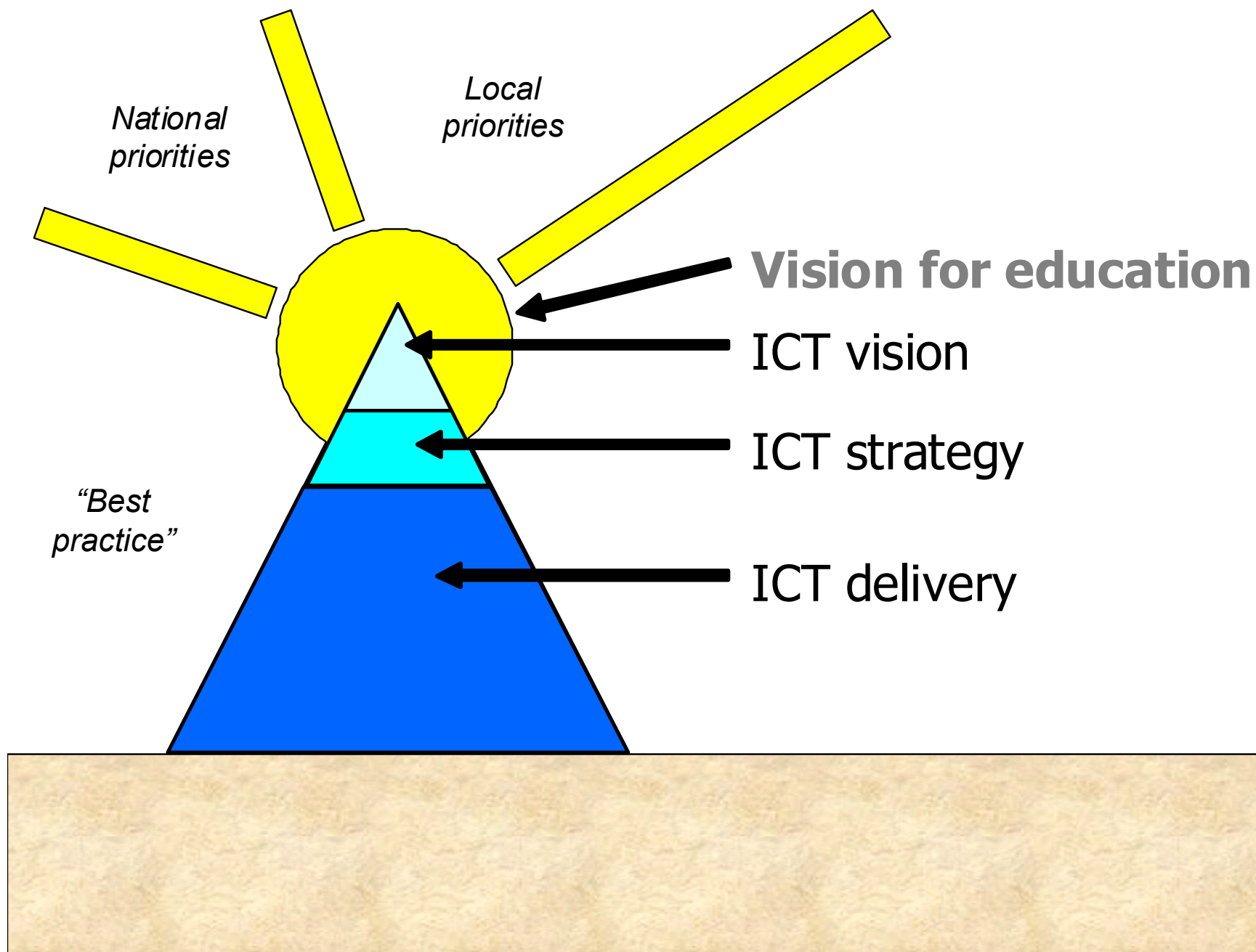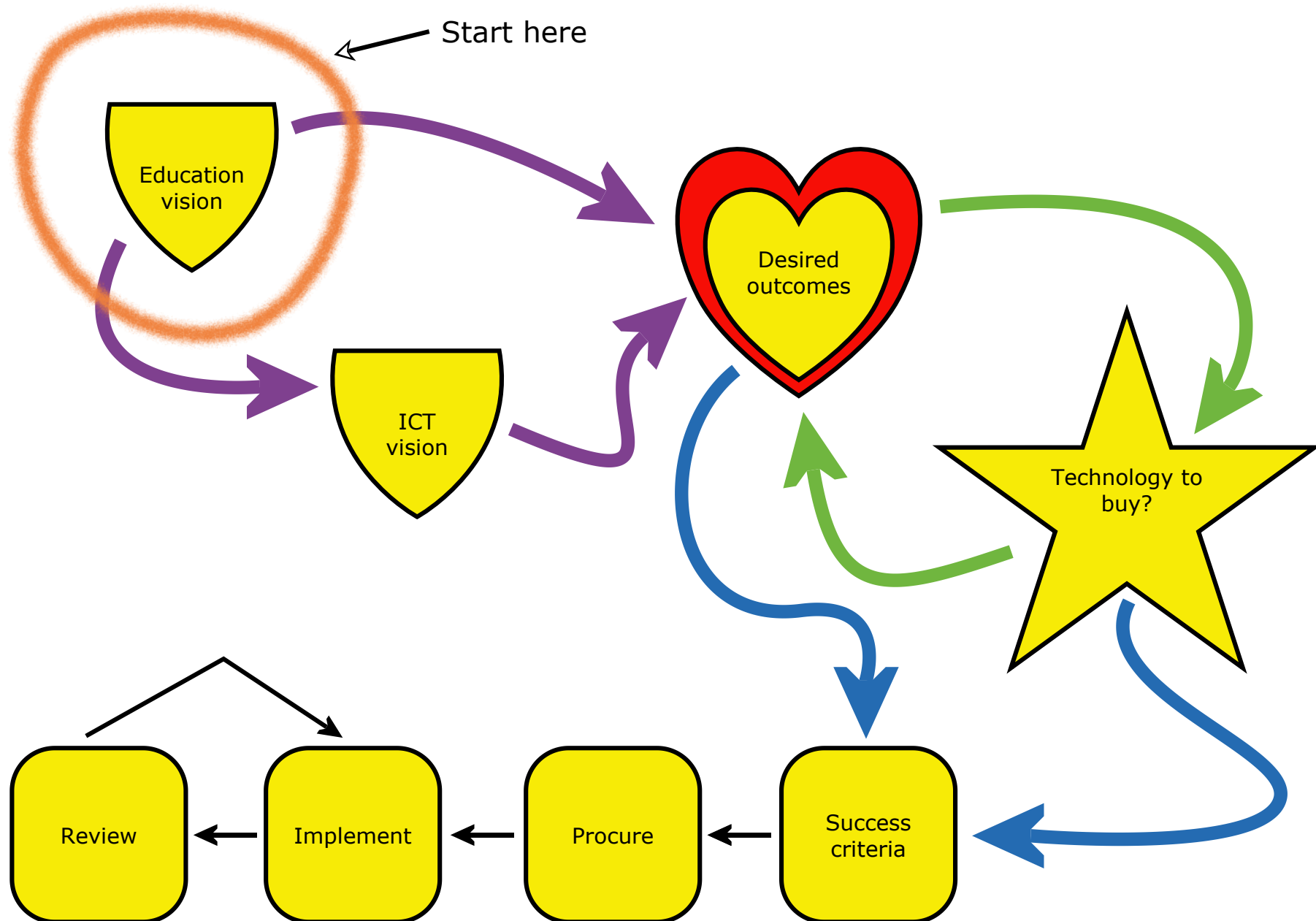
Mnemonic

V	O	S	P	I	R
V	O	S	P	Imp	view
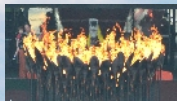
Everett Rogers adoption of innovation model

2.5% Innovators — Early Adopters 13.5% — Early Majority 34% — Late Majority 34% — Laggards 16%

Technology buyers

Implement – lead for success

- Inspire/sell the benefits or the idea
- Communication/expectations
- Lead by example

Sponsor

Champion / Driver

Leader Leader Leader Leader Leader

Everyone else

Implement – management

- Manage the risks
- Manage the benefits
- Manage the support
- Manage change
- Maintain momentum
- Manage project changes
- Structure (people)
- Control resources

Manage = Monitor + Assess + Act

Kotter's 8 step model (1995)

- Establish a sense of urgency
- Form a powerful guiding coalition
- Create a vision
- Communicate the vision
- Empower others to act on the vision
- Plan for and create short-term wins
- Consolidate improvements and produce still more change
- Institutionalise new approaches

In conclusion

Management for success
- Vision
- Desired outcomes/success criteria (project focus)
- Effective CPD
- Active management for outcomes

Little hurdles, big impact

Manage risks AND benefits

What about CPD and support?

If it's worth doing, it's worth doing properly

What is a project's time horizon?

Dimensions of change

Vision	Skills	Incentives	Resources	Action Plans	Success
	Skills	Incentives	Resources	Action Plans	Confusion
Vision		Incentives	Resources	Action Plans	Anxiety
Vision	Skills		Resources	Action Plans	Slow Change
Vision	Skills	Incentives		Action Plans	Frustration
Vision	Skills	Incentives	Resources		False Starts

Jacqueline S. Thousand & Richard A. Villa
Managing Complex Change; 2001

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A Personal Vision for ICT © Mark Baker 2011
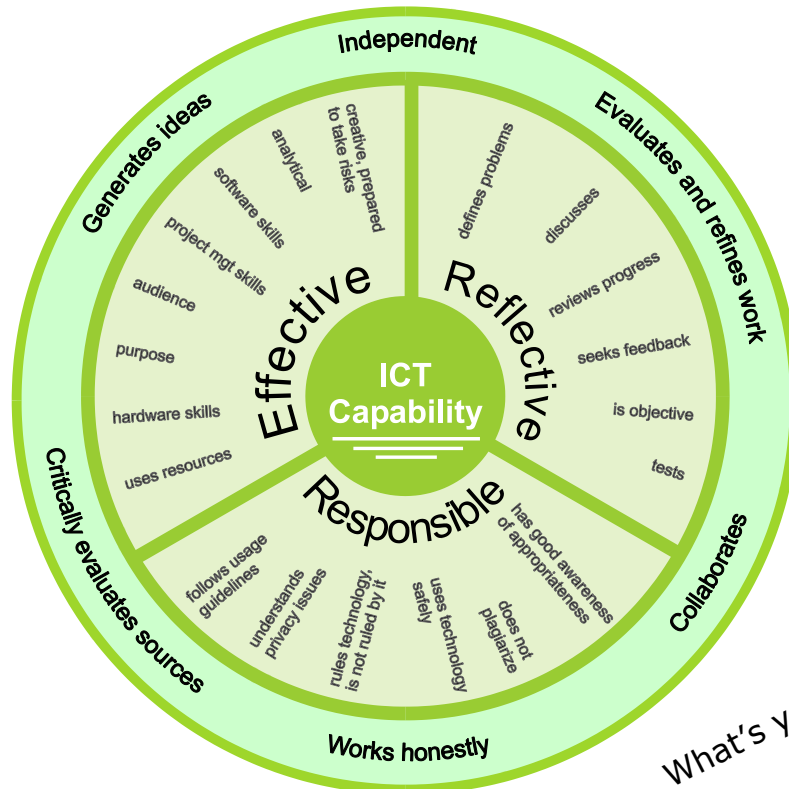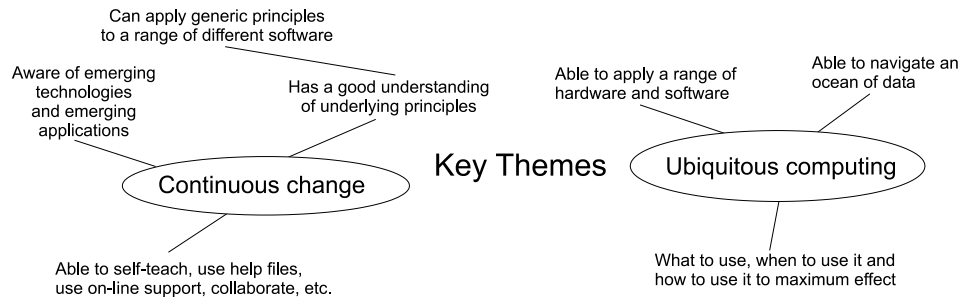
Technology can enhance learning or detract from it - it all depends on how well it is used.

Key Themes

Continuous change
- Can apply generic principles to a range of different software
- Aware of emerging technologies and emerging applications
- Has a good understanding of underlying principles
- Able to self-teach, use help files, use on-line support, collaborate, etc.

Ubiquitous computing
- Able to apply a range of hardware and software
- Able to navigate an ocean of data
- What to use, when to use it and how to use it to maximum effect

ICT Capability

Independent

Generates ideas
- creative, prepared to take risks
- analytical
- software skills
- project mgt skills
- audience
- purpose
- hardware skills
- uses resources

Effective

Reflective
- defines problems
- discusses
- reviews progress
- seeks feedback
- is objective
- tests

Evaluates and refines work

Responsible
- follows usage guidelines
- understands privacy issues
- rules technology, is not ruled by it
- uses technology safely
- does not plagiarize
- has good awareness of appropriateness

Critically evaluates sources

Collaborates

Works honestly

What's your vision for ICT?

Data projectors – Enhance/detract

Pace
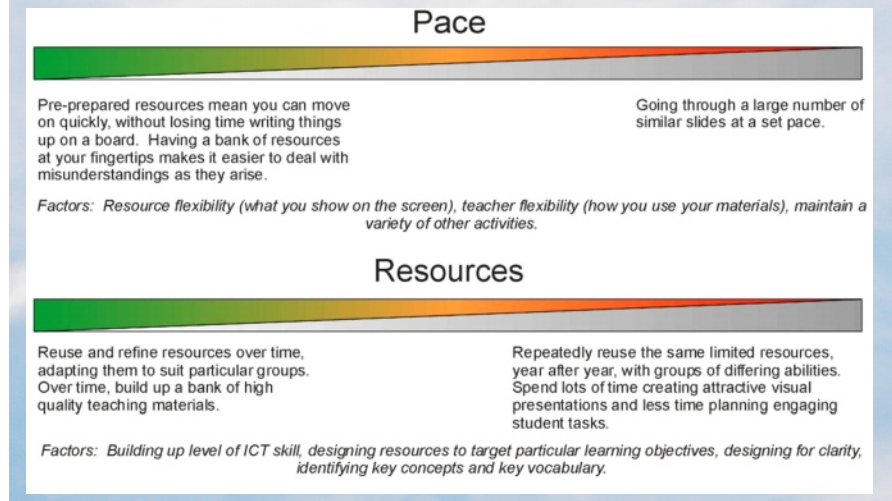
Pre-prepared resources mean you can move on quickly, without losing time writing things up on a board. Having a bank of resources at your fingertips makes it easier to deal with misunderstandings as they arise.

Factors: Resource flexibility (what you show on the screen), teacher flexibility (how you use your materials), maintain a variety of other activities.

Going through a large number of similar slides at a set pace.

Resources

Reuse and refine resources over time, adapting them to suit particular groups. Over time, build up a bank of high quality teaching materials.

Repeatedly reuse the same limited resources, year after year, with groups of differing abilities. Spend lots of time creating attractive visual presentations and less time planning engaging student tasks.

Factors: Building up level of ICT skill, designing resources to target particular learning objectives, designing for clarity, identifying key concepts and key vocabulary.