

Termly Conference of Tobago Principals Feature Address -

Reshaping Teaching and Learning through ICTs

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Purpose of Presentation

- To highlight some of the trends/best practices in teaching and learning with Information and Communication Technologies (ICT).
- ICT covers all technologies used for the handling and communication of information and their use, specifically in education. For example Internet, tablet PCs, e-readers, laptops etc. (MOE, ICT Draft Policy, 2005).

Minimally Invasive Education (MIE)

- 300 children observed for 9 months without teacher
- Knowledge construction, social exchange thru curiosity
- Learning independent of children's demographics
- Improvements include:
 - † Attendance & exams
 - † English, concentration
 - † Problem-solving, team work, and Self-regulation



“Hole in the Wall Project, India” (Mitra, 2004)

New Literacies



Vacca & Vacca (2008)

Use Questions

Locate Information

**Evaluate
Information;**

**Synthesize
Information**

**Communicate
Information**

Mobile and Game-Based Learning



Kallo, V & Mohan, P, 2011

World Peace Game

Develops collaboration and higher order thinking skills as students have fun in determining how to disengage countries under the threat of war.

Mobile Math Innovation

- Lessons
- Examples
- Tutorials
- Quizzes
- Games

Flipped Classroom

- Coursework is done at home
- Home-work is done in the classroom
- More in-class time to focus on problem-solving skills



Immersive Learning



(Center for Digital Education, 2012)

- Learning thru motion
- Video games with video motion (Kinect or Xbox 360)
- More engaging using all senses
- Technology interfaces easily with white boards, multimedia projectors, and televisions

Learning Theories for Digital Age

- **Connectivism**: Learning is experienced externally by forming connections to sources of information
- **Constructivism**: constructing new knowledge thru self-directed learning building on prior experiences
- **Engagement theory**: engaging in learning activities thru interaction with peers and meaningful tasks.

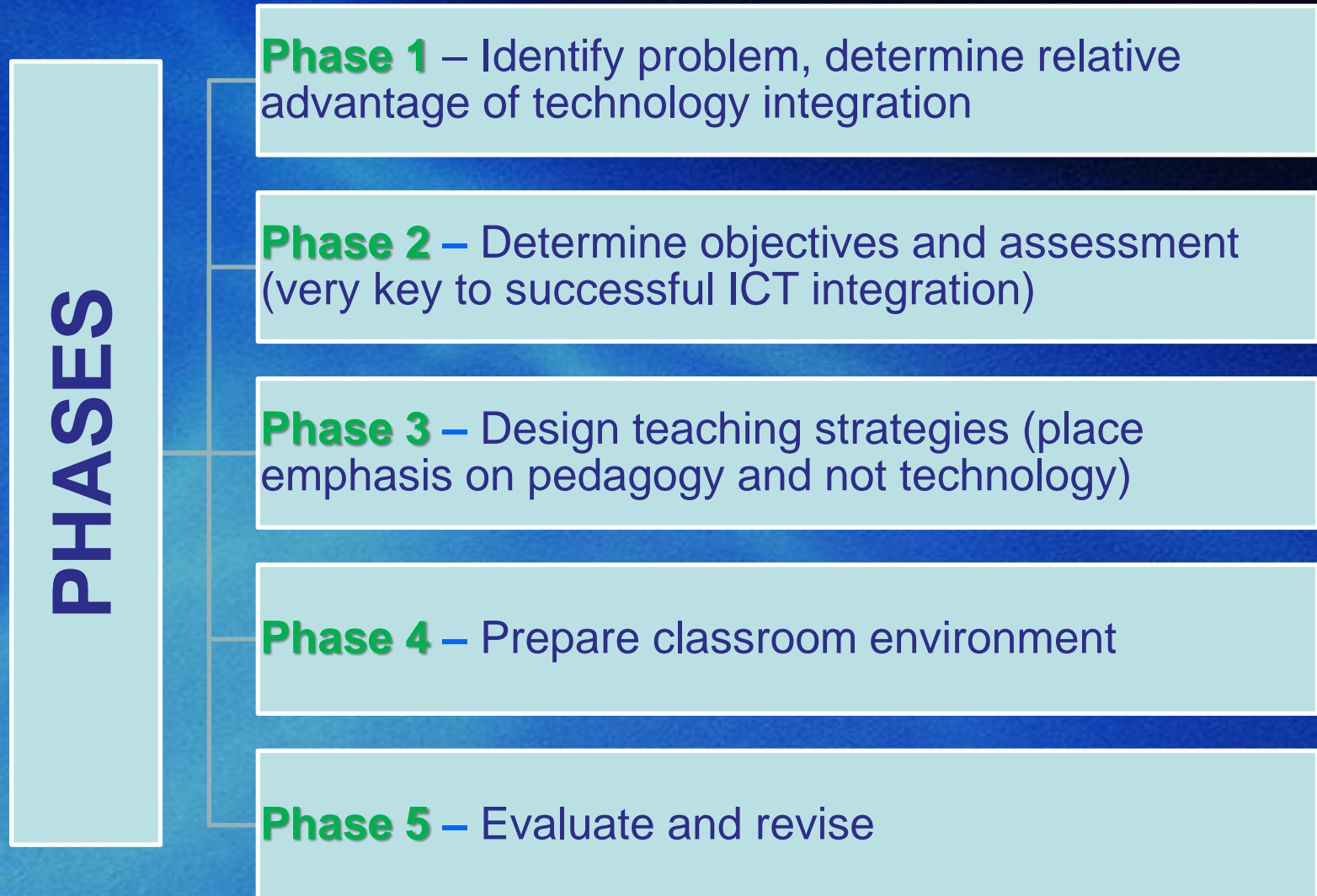
(see references at the end)

Bloom's Digital Taxonomy

Existing & Digital verbs



Technology Integration Planning Model



(Roblyer, 2010)

Barriers to ICT Integration



(Mahadeo, 2011, p. 50)

Open Educational Resources (OER's)

- Commonwealth of Learning (COL) defines OER's as the following:

"materials offered freely and openly to use and adapt for teaching, learning, development and research."

• Operates under a Creative Commons license: *allows the materials to be copied, adapted, and used ... Provided the finished product is shared in a similar way with others*

(COL, 2009).



References

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<http://media.convergemag.com/documents/CDE12+BRIEF+Microsoft+Kinect+v.pdf>
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Thank You!

