Harnessing tools for classroom assessment

Greg Hughes
Apple Education Trainer

greg@deferrers.com
@deepexperience1

Distinguished Educator

Physics Teacher

Vice Principal: Learning Technologies & Curriculum

Apple RTC Manager

ADE Advisory Board

Apple Education Trainer

…never had an ICT lesson…!

“*The electric light did not come from the continuous improvement of candles*”

Oren Harari

Assessment & Workflow

Showbie

iTunes U

Padlet

Explain Everything

Google Classroom

Nearpod

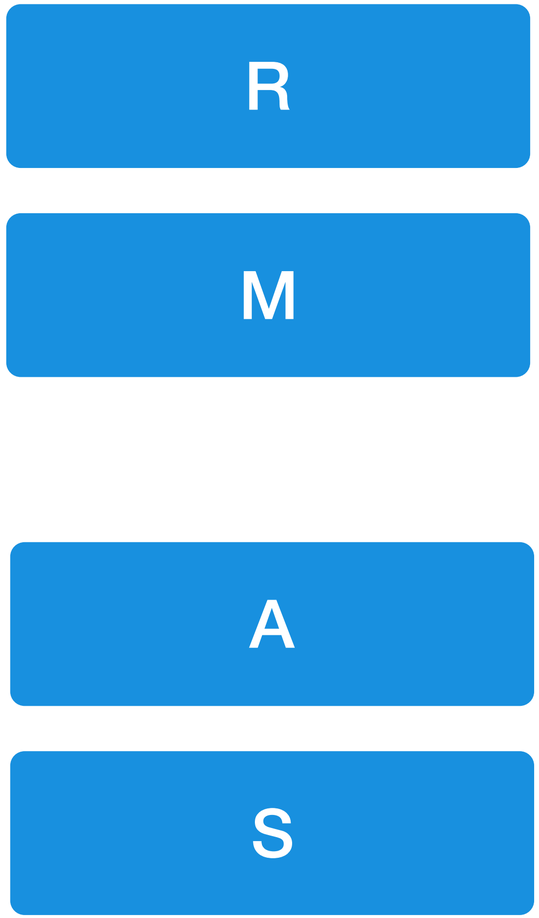
Socrative

Kahoot!

Plickers

Quizlet & Quizlet Live

SAMR Model



SAMR Model

Transformation

Redefinition

Technology allows for the creation of new, previously inconceivable tasks

Modification

Technology allows for significant task redesign

Enhancement

Augmentation

Technology acts as direct tool substitute, with functional improvement

Substitution

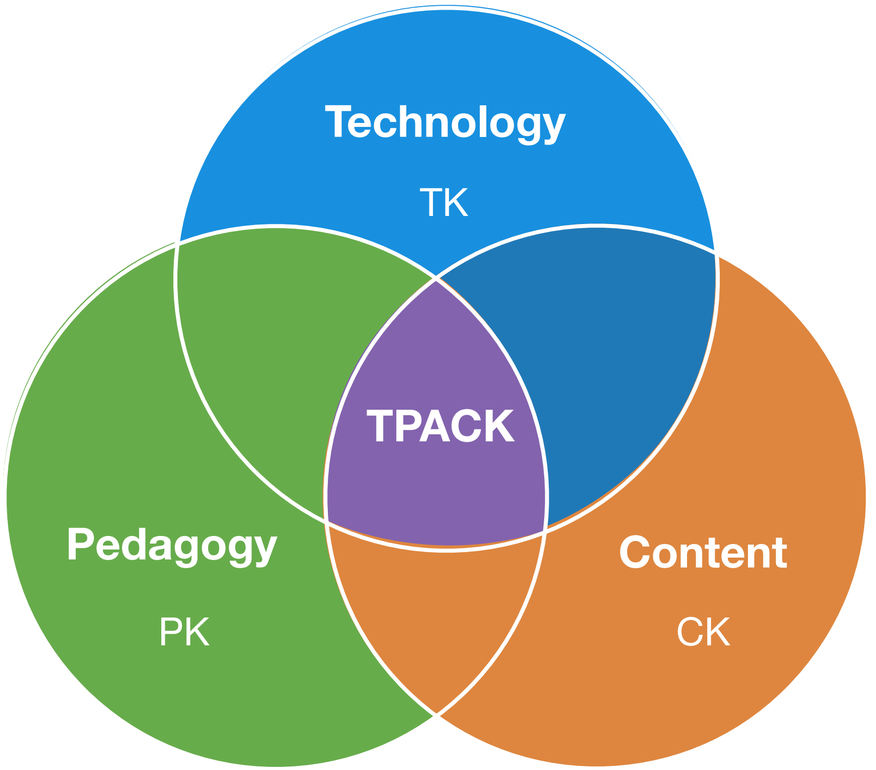
Technology acts as direct tool substitute, with no functional change

Study	SAMR Level	Description	Effect Size
Ligas (2002)	**S**	CAI system used to support direct instruction approach for at-risk students.	**0.029**
Xin & Reith (2001)	**A**	Multimedia resources provided to contextualize learning of word meanings and concepts.	**0.264**
Higgins & Raskind (2005)	**M**	Software/hardware used for text-to-speech, definitions, pronunciation guide for children with reading disabilities.	**0.600**
Salomon, Globerson & Guterman (1989)	**R**	Software presents students with reading principles and metacognitive questions as part of the reading process.	**1.563**

Pearson, P.D., Ferdig, R.E., Blomeyer Jr, R.L., & Moran, J. "The Effects of Technology on Reading Performance in the Middle-School Grades: A Meta-Analysis With Recommendations for Policy." *Learning Point Associates/North Central Regional Educational Laboratory (NCREL)* (2005).

TPACK Model

Koehler and Mishra



Source: http://www.tpack.org

5 best practices

Shared Leadership

Individual Leadership

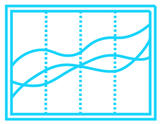
Community Engagement

Student Learning

Instructional Practices

Curriculum Design

Relevant and Timely



Quantitative

Qualitative

Design and Facilities

Information Technology

Underpinning Pedagogy

Collaboration

Involving all students in staff & peer discussions to support learning, via sharing best practice, feedback and peer mentoring

Resources

Providing all teaching staff and students with engaging and relevant resources that are consistently good quality.

Assessment for learning

Integrating apps through workflow systems to collate data, assess student understanding and support differentiation

Modelling

Using various apps, web tools and display technologies to share work and model student ideas and skills in real-time.

Teachers

Collaboration

Verso

Twitter

FaceTime

Resources

Explain Everything

Google Drive

iBooks

iTunes U

Assessment for learning

Socrative

Showbie

Edmodo

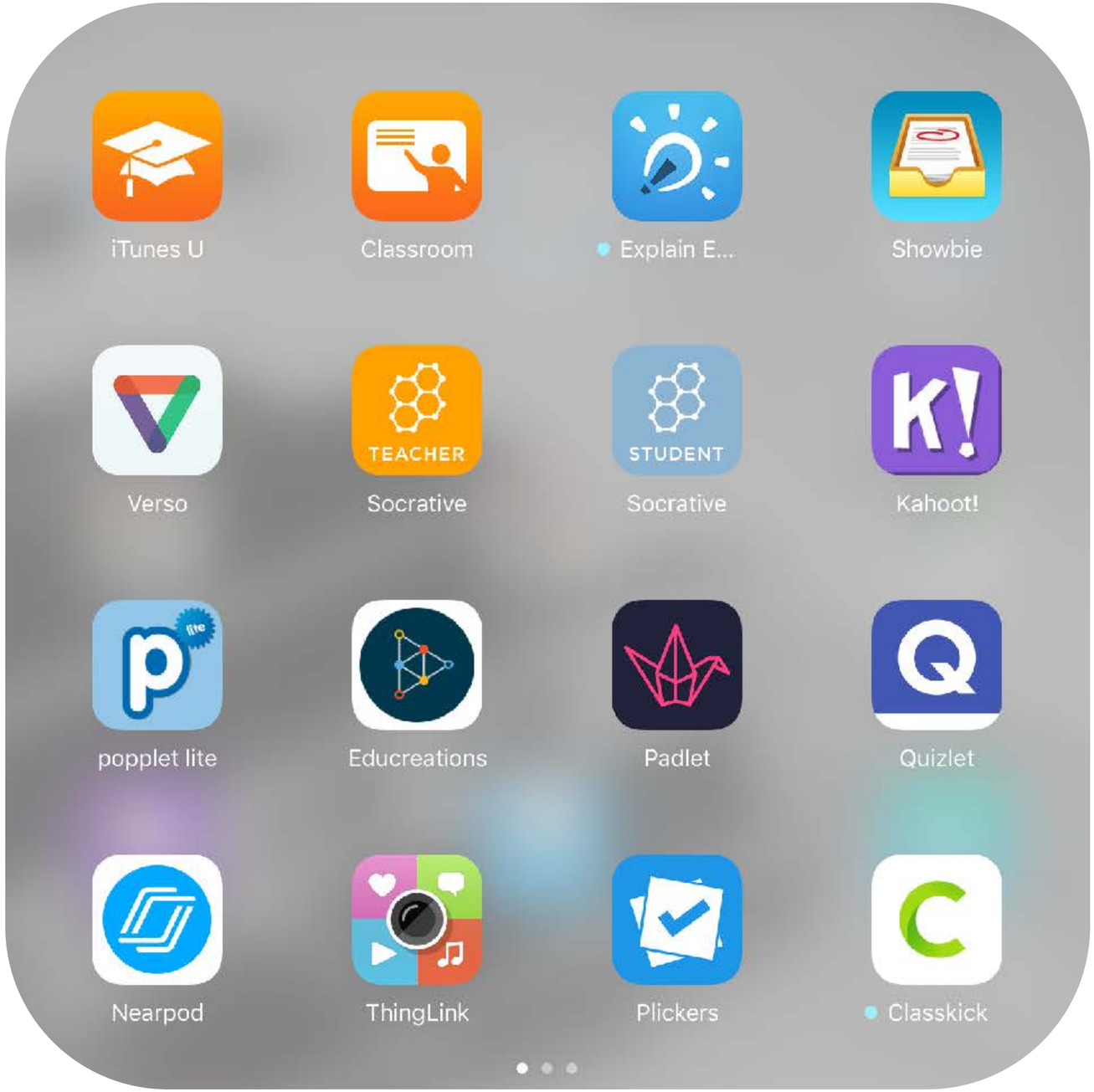
Modelling

AirPlay

iMovie

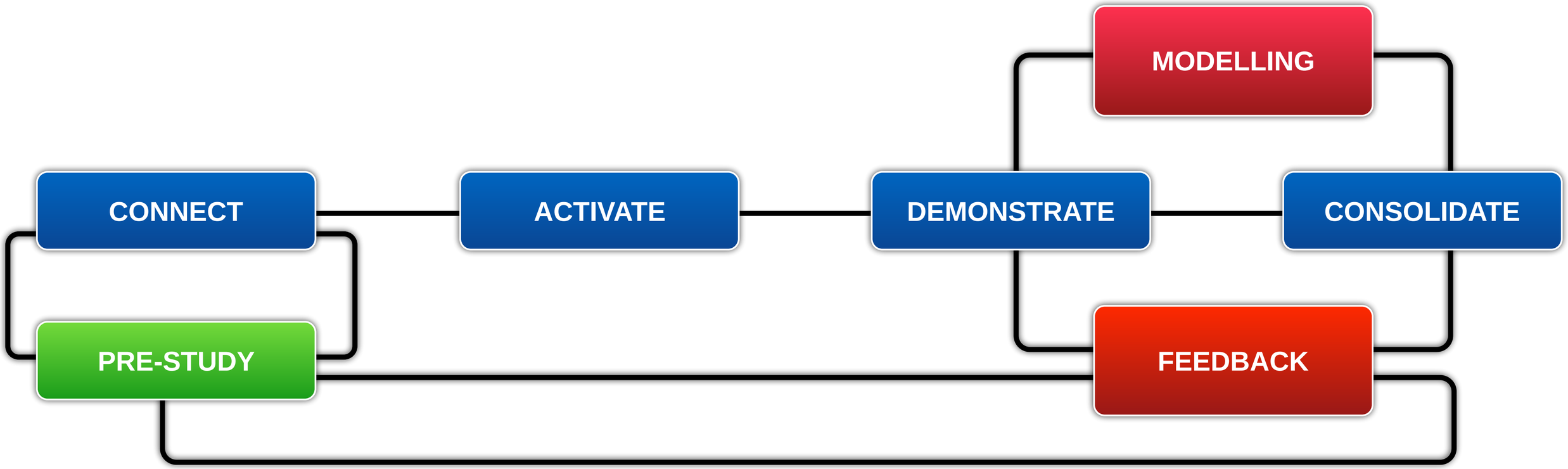
Keynote

Students



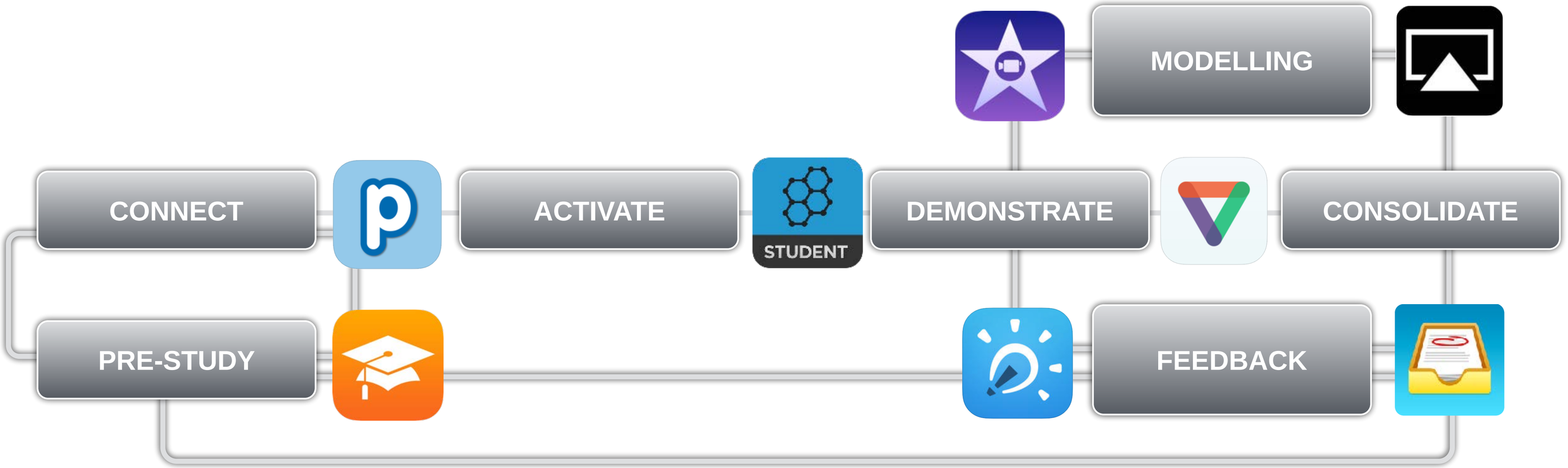
My Education apps

Accelerated Learning Cycle



Source: Accelerated Learning in the Classroom, Alistair Smith, 1996

Accelerated Learning Cycle



Source: Accelerated Learning in the Classroom, Alistair Smith, 1996

Demo

Assessment for Learning tools

Assessment & Workflow

Showbie

iTunes U

Padlet

Explain Everything

Google Classroom

Nearpod

Socrative

Kahoot!

Plickers

Quizlet & Quizlet Live

Audio/Video

Diagnostic

Differentiation

Challenging

Engaging

Timely

Mastery

ASSESSMENT

Save time

Formative

Simple

Relevant

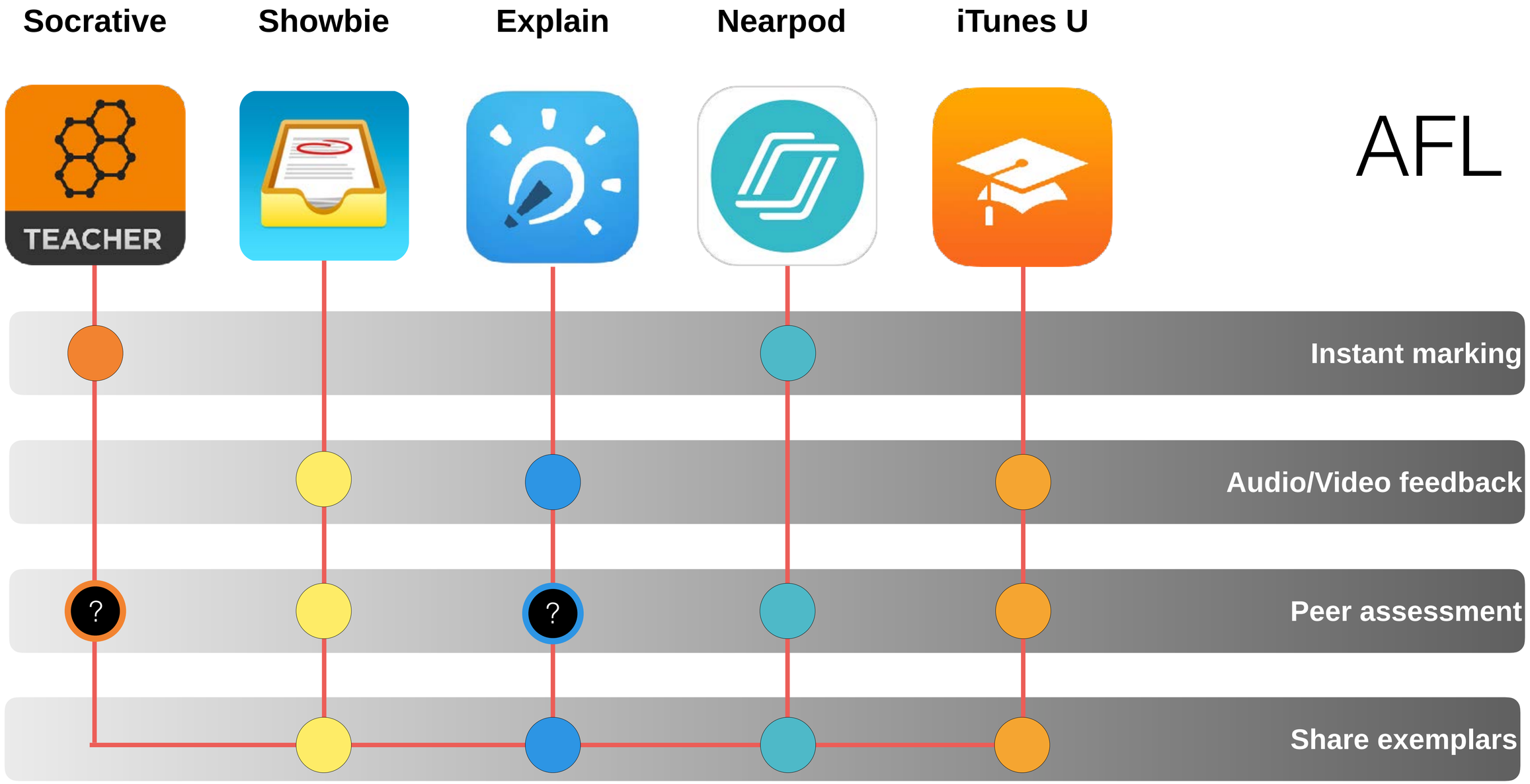
Intervention

Self/Peer

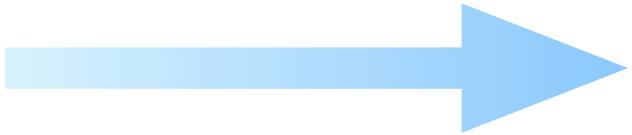
Feedback

Modelling

Summative


Socrative
Showbie
Explain
Nearpod
iTunes U
TEACHER
AFL
Instant marking
Audio/Video feedback
Peer assessment
Share exemplars
?
?

Assessment



	TEACHER led (Questioning) >>>> STUDENT led (Creative)			
	Quizzes & self-assessment	**Student Journals & Portfolios**	**Creating student content**	**Storytelling & Explaining ideas**
COMPLEXITY	Socrative	Padlet	Popplet	Adobe Spark
	Kahoots!	See-Saw	Book Creator	Strip Designer
	Quizlet	Pages	DoInk	Verso
	NearPod	Showbie	Thinglink	Paper (Sketchnotes)
	Google Classroom	iTunes U	Keynote (animation) & iMovie (video)	Explain Everything

Digital assessment

Free tools, save money

Faster, more regular feedback

Use of video/audio to enhance/transform feedback

Automatic tracking & date stamping

Share exemplars & best practice, improved questionning

Better support for peer assessment & metacognition

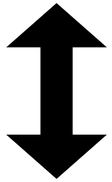
IMPACT

Measuring impact of learning

- Retention
- Literacy & Numeracy
- Accuracy & Progress
- Attitudes
- Engagement

- Exam Results
- Cost savings
- Time savings
- Attendance
- Behaviour

Issues:



- Qualitative VS Quantitative
- Effect Size & Sustainability
- Reliability & Reproducibility

Thank you

Greg Hughes

greg@deferrers.com

@deepexperience1