Theme 5: Application of Digital Learning Tools
Digital Tools in the classroom

Webinar 3

24th January 2023

14.00 to 18.00

Jane English & Jane Doughty

Webinar 3: Learning Outcomes

- To gain knowledge and learning from development of digital literacy in Wales

- To gain knowledge of how digital tools can enhance learning

- To learn of examples being used in the classroom

- To share examples of digital tools you have seen being used in the classroom
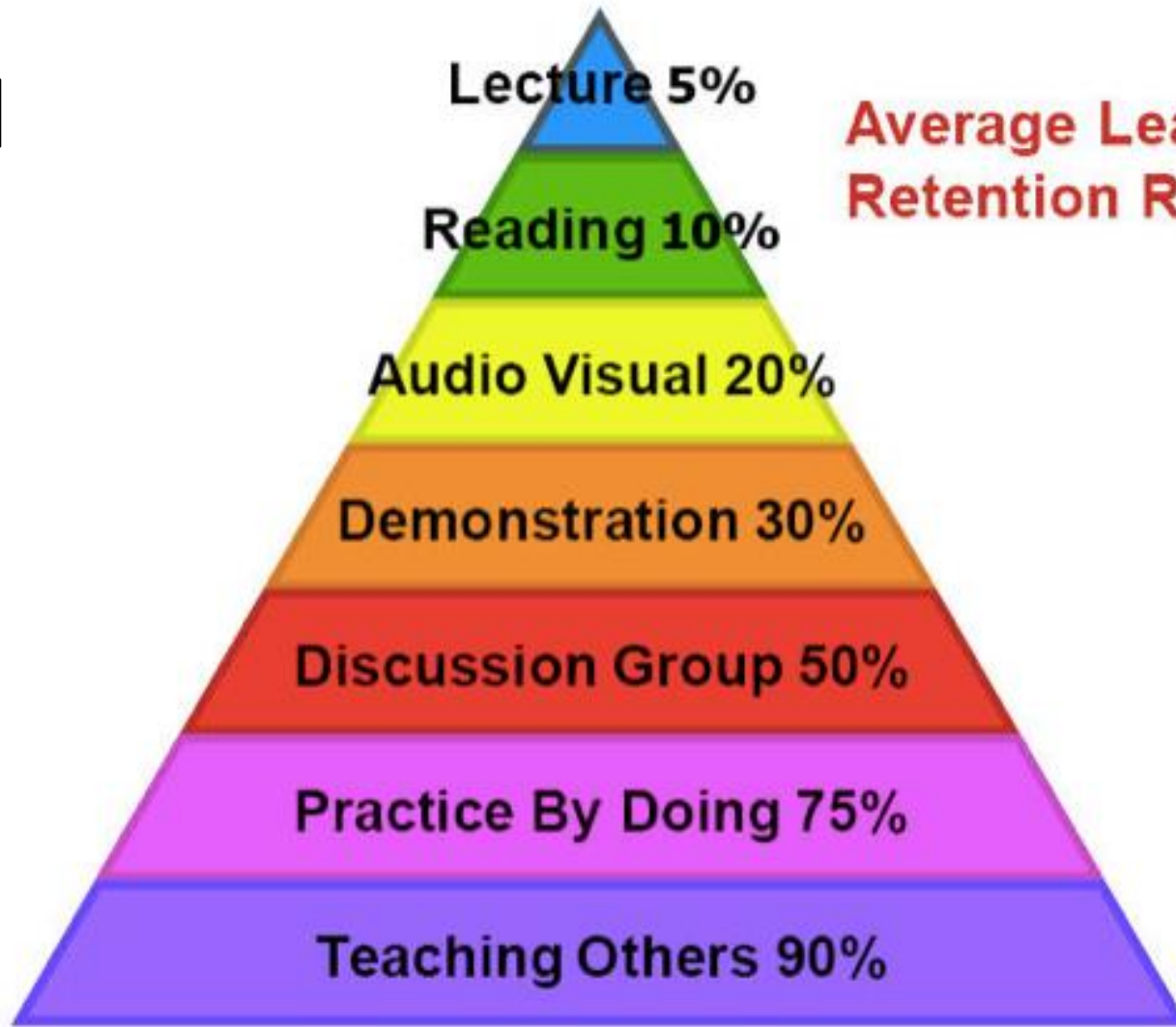
Welcome to Kevin Palmer

Dr. Kevin Palmer

Deputy Director Pedagogy, Leadership and Professional Learning Division

WALES

Questions and comments

If you have any questions or comments Dr. Palmer would be happy to

hear from you

Learning Pyramid

Lecture 5%
Reading 10%
Audio Visual 20%
Demonstration 30%
Discussion Group 50%
Practice By Doing 75%
Teaching Others 90%

Average Learning Retention Rates

Source: National Training Laboratories, Bethel, Maine

Factors when using Digital Tools

Cost

Ease of use for both teachers and students

Do they enhance learning?

Time Effective

Safe

Equity

Breakout Discussion

We asked you to come to this session with an example of a digital tool being used in a classroom.

In your groups please share the example you have seen of a digital tool being used in the classroom?

How did it enhance the learning of students?

How were students given feedback?

Greater use of online platforms

Google Meet

Zoom

Teams

Parents' evenings

Students who are unwell

Staff collaboration & networking

Professional development

Engaging with technology in the classroom

Education systems need to help young people to understand and benefit from their engagement with digital technology and digital cultures.

Fostering digital literacy in the classroom provides one way in which to make subject learning relevant to a society in which growing technology use is changing the way that both adults and children represent and communicate information and meaning and participate in cultural life.

www.futurelab.org.uk
Digital literacy across the curriculum

Google classroom

6 Reasons to use Google Classroom

https://youtu.be/xm5bREwcvPo

3mins 48sec

Microsoft Tools

OneNote

Get organised with OneNote Class Notebook, featuring personal workspaces, a content library, and a space that encourages students to collaborate.

LEARN MORE ABOUT ONENOTE >

Digital storytelling with Sway

You and your students can create high-quality, interactive digital stories in minutes using your images, text, videos, and other media.

LEARN MORE ABOUT SWAY >

Microsoft Tools

Power BI

With a live dashboard featuring critical student data, you can monitor progress, create interactive reports, and access data on the go.

LEARN MORE ABOUT POWER BI >

Excel

Track student progress, updates, and key milestones in this simple, familiar format.

LEARN MORE ABOUT EXCEL >

Azure

Track and analyse student progress with the safety and simplicity of Microsoft Azure cloud-based services.

LEARN MORE ABOUT AZURE >

Microsoft tools

Windows 11

Improve instruction and assessment with the built-in accessibility and power of Windows, including Office 365 with Word, Excel, PowerPoint, OneNote, and Teams.

LEARN MORE ABOUT WINDOWS ›

Teams

Manage your class workflow and engage the voice of every student with Microsoft Teams.

LEARN MORE ABOUT TEAMS ›

Digital Tools for Inclusion

Digital Inclusion – How the design and use of digital technologies can promote educational equality

Microsoft Learning Tools

The primary feature of Learning Tools is the Immersive Reader, which was developed based on literacy science, to improve reading comprehension.

Digital Tools -Exclusion

Cost of hardware

Cost of software

Internet connectivity

Parental support

Discussion Breakout Digital Inclusion

What advice would you give to a school which has a large number of students from low income families to ensure the use of digital tools in the school does not lead to those students being disadvantaged ?

Break

A break of 30 minutes

Digital Literacy & Reform Competencies

The next session is looking at how digital tools can both enhance the learning taking place within the subject and develop competencies.

Creativity

Collaboration

Communication

Critical Thinking

Creativity in the Classroom

- applying elements of creativity to subject knowledge.

- can be done in all subjects across the school curriculum

- combine resources such as pens, paper, art materials and digital technologies

- knowledge of a subject in order to create an output.

- think imaginatively and critically and use and develop their creative abilities to re-contextualise knowledge

Creativity in the Classroom

- use visual images, audio and text to represent meaning

- Digital technologies present many more opportunities be creative in the classroom.

- abundance of freely available software online that can support the creation of different sorts of outputs in the classroom

- most do not require a high level of functional skill of either the teacher or of the learner.

Using Creativity - animation In science

Doink   www.doink.com

Learning about enzyme theory

Difficulties visualizing lock and key theory

Teacher asked others using Twitter

Advised to use Doink

Students created animations

Stored on website, teacher could access and give feedback

Creativity

Among other things using digital technologies can facilitate the creation of:

— online content on social networking sites

— music and song

— audio-visual presentations

— interactive maps

— graphs

— models

— learning diaries

Creativity

– pictures or illustrations
– websites
– films
– animations
– podcasts
– photos/photo montages
– blogs
– wikis
–

Creativity Tools

Creating comics

www.comicbrush.com

animoto.com

Editing film

www.microsoft.com/windowsxp/using/

moviemaker/default.mspx

www.apple.com/ilife/imovie

Web Based Tools

- Editing Audio

audacity.sourceforge.net

www.jamstudio.com

- Publishing podcasts and videos

www.radiowaves.co.uk

- Making games

www.fyrebug.com/2009/09/12/yogo

Practising Collaboration

Google docs

drop.io

Tools like drop.io provide a shared space
for students in a class or group where they
can upload documents, notes, links and can
comment on each other's work in real time.

wallwisher.com

Wallwisher allows the creation of a virtual notice
board where students can post their thoughts on
a particular subject

Collaboration- Tips for supporting collaboration in the classroom:

1. Optimum group size is three or four students, maximum six.

2. Discuss group skills and ask students tothink about what successful collaboration looks like.

3. Consider rearranging the teaching space to acilitate group working.

4. Encourage students to create 'group rules' in order to set expectations of one another within the group.

Collaboration- Tips for supporting collaboration in the classroom:

5. Ask students to define a role for each group member and support them to produce a group plan of how they intend to complete the given task.

6. Have regular mini-plenaries in which you support group reflection and progress by suggesting a number of points to consider.

7. Encourage a mutually supportive learning environment in which students discuss ideas and help others in their group.

Practising Collaboration – students aged 11 years

Why are volcanoes dangerous?

- Task of explaining to others why volcanoes are dangerous.
- The students worked in groups to choose an audience and find information.
- Find a persuasive argument, select an appropriate format to present their argument
- Created blogs or filmed models of erupting volcanoes, online quizzes or PowerPoint presentations.
- Students supported to think about what they needed to do in order to work well together and to evaluate how they had used particular technologies

Communication

1. Encourage students to distinguish between effective and non - effective communication and to discuss what constitutes effective communication

2. Adequate time to plan any form of communication and regular review

3. Students are aware of their audience and the needs of that audience

4. Try to create a real audience for students to present to.

5. Be sure they get feedback on presentation.

Tips for Students , not the usual PowerPoint

- Avoid using a large body of text on a slide

- Always repurpose information and put it into your own words; don't just copy and paste.

- PowerPoint should be used to support your presentation

- Don't read from slides but use them to show supporting information.

- Don't use too many slides.

- Carefully consider the images you include and the meanings they infer

- Think carefully about colour schemes – some colours can help to make information stand out

Tips for Students

Rivers- when we are looking at rivers we should first of all classify them by length. We then move on to identifying where it starts and where it finishes. Clearly an important aspect of any river is the level of pollution. We need to check how this is measured so we can compare rivers. A further area to be looked at is what work takes place on the river. Is there a big fishing industry, are there loading and unloading quays

Rivers
1. Length
2. Source
3. End
4. Cleanliness
5. Industry

4

Tips for Students

Slide 1
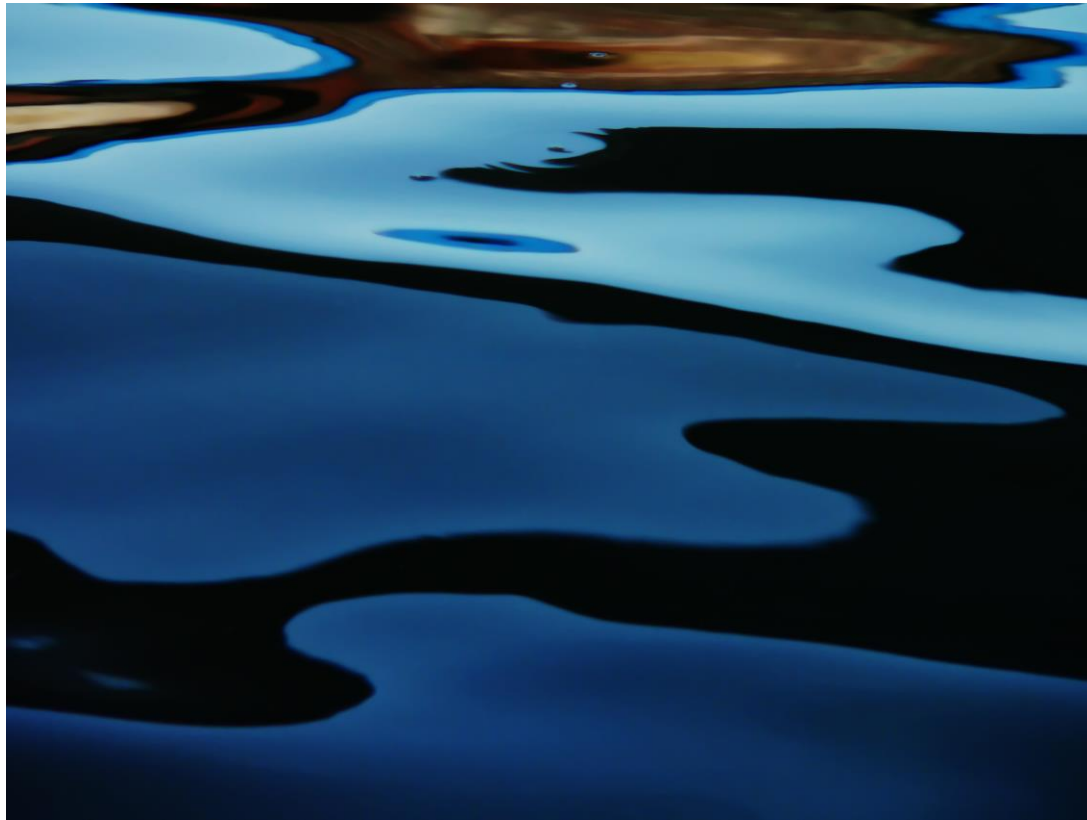
Slide 2

Rivers
1. Length
2. Source
3. End
4. Cleanliness
5. Industry

4

Example of Communication Science- students aged 16

Why is DNA the molecule of life?

Create a presentation for other students

To be put on the learning platform

Purpose to increase students' subject knowledge

Improve communication skills

Select appropriate digital tool, from video, PowerPoint, podcast

Peer evaluation

"We're only putting the important stuff into the video, so we've got to learn it more so we know what to put in." Year 11 student

The useful websites

https://www.allaboutexplorers.com/teachers/

Teaching tool for teachers educating students about research

https://www.jamendo.com/start

Copyright free music for students creating presentations

Blogging

www.blogger.com

- Students write a short post on what they have learned about a specific topic
- Group work, students record experiences of working together

Critical thinking and digital literacy

Critical thinking and digital literacy

A digitally literate student is not just passively receiving information or meaning but also contributing to it, analysing it and shaping it.

Students need to engage in critical thought n order successfully develop other elements of digital literacy such as creating outputs and choosing which tools and format to use

Digital Literacy across the curriculum (FutureLabs)

Breakout session

How might you incorporate digital tools to enhance learning in the following two lessons?

1. Students aged 15, looking a sea pollution and its impact on swimmers and those who enjoy the seaside

2. Students aged 11, are asked to to look at healthy lifestyles, in particular looking at healthy eating and regular exercise.

Critical Thinking Tips

- Encourage students to ask questions, to seek elaboration, to rationalise ideas and to judge accuracy, value and authenticity of information they find.

- Model the process by engaging in self analytical, reflective teaching practices.

- Ask students to consider the positive and the negative aspects of an idea or a particular technology.

- When students encounter or make a claim, encourage them to consider what the starting assumptions for that claim may have been, what evidence supports that claim and what implications result from that claim.

Ability to find and select information

Representation: how websites claim to tell the truth, establish credibility and the veracity, credibility and bias of their content.

Language: the user-friendliness and interactivity of a website and how the graphic design and visual images have afforded those.

Production: how web articles are actually authored and who uses the web (corporate, political parties, individuals etc) in order to persuade and influence, the role of advertising and other commercial influences.

Ability to find and select information

Language: the user-friendliness and interactivity of a website and how the graphic design and visual images have afforded those.

Audience: who the website is aimed at, targeted advertising, user interactivity and how websites are used by commercial companies to gather data about individuals.

 Think critically about issues of representation, language, production and audience.

A Digital Prospectus- Cross Curricular activity

Students aged 9-11 years

Digital format and made available as a DVD

Cross-curricular, collaborative piece of work

Children working to draw on their own experiences and opinions of their school to create short film clips.

Each group of five or six children of mixed ability and age, were made responsible for the content of a certain section of the prospectus

Digital Literacy at whole school level

- a shared, coherent and broad understanding of digital literacy across the school

- strong senior management support and a culture where staff feel that they can safely experiment with their teaching practices

- an emphasis on ongoing reflection, planning and reviewing

- a commitment to ICT resources as well as to making the best use of freely available web based tools

- the possibility of having some degree of flexibility around planning the time and location of lessons

Digital Tools to support the administration work of School Leaders and Teachers

Class Dojo

A communication app used to share reports between teachers and parents.

Flipboard

Connect the community to your school by creating newsletters with Flipboard. You can share and collect articles by creating digital magazines to share with parents and the school community.

Permission Clicks

Have you or your teachers ever sent forms or permission slips home with students? Have you ever had every one of those forms returned and signed?

Digital Tools to support the administration work of School Leaders and Teachers

Remind(opens in new tab) is an app/website that sends reminders for appointments, meetings, events, or any updates leaders set up.

Remember The Milk(opens in new tab) is a free cloud-based tool that lets leaders quickly document thoughts and organize it all for review later

Evernote(opens in new tab) is a free cloud-based digital notebook that allows leaders to document notes and even have collaborative notes.

Grammarly(opens in new tab) is a digital writing tool that can be used for newsletter emails and all communications.

Trello(opens in new tab) is a virtual whiteboard on which leaders can create post-it-style notes and customize each depending on their project requirements. Leaders can have multiple boards for different projects

Teachers supporting Teachers

The Microsoft Partners in Learning Network is a global community of teachers that features discussions about the use of digital technologies.

Wallwisher page on which teachers invited to post virtual sticky notes about Web tools for teachers.

Twitter has an active, global community of teachers who regularly share their experiences of using digital technology in the classroom.

Thank you

Thank you for all your contributions today – we look forward to seeing you at webinar 4

27th January 2023

14.00 to 18.00