

Inclusive e-Assessment

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The JISC TechDis Service

- JISC TechDis is an Advisory Service funded by JISC (same as the RSCs).
- We are co-located with the Higher Education Academy in York, but we cover HE, FE (inc. ACL etc) and specialist (disability) colleges across the UK
- Our remit is neither focused mainly around assistive technology or around disability but around good practice in using technology:
 - to deliver more inclusive teaching and learning
 - to deliver more accessible services (library, support etc)
 - to create a more inclusive experience for disabled staff



Working at all levels

- JISC TechDis act as advisors, key influencers of policy for all the UK Funding Bodies.
- We work with institutional managers to shape policy affecting accessibility and inclusion across an institution.
- We work with course leaders and teams to ensure that learning, teaching and assessment are designed with accessibility in mind.
- We work with practitioners to ensure that delivery of learning, resources, support etc. are as accessible as possible



Simulations: not the real thing, but they give some idea of what it's like

- www.techdis.ac.uk/simdis
- www.webaim.org/simulations/...
 - [...screenreader.php](#)
 - [...lowvision.php](#)
 - [...cognitive.php](#)



Creating Accessible Content



Instructions are key

- It doesn't matter how great your content is if the instructions aren't perfectly clear and unambiguous to **every user**.
- Consider this actual real world example:
 - Students reads "If you can't answer some of the questions, leave them and come back to them later."
 - Student walks out of test half way through.
 - Student comes back half an hour later and is puzzled to find they aren't allowed back to complete their test.



Font face and size

- Is this readable?
- Is this readable?
- *Is this readable?*
- **Is this readable?**
- *Is this readable?*
- Is this readable?
- **Is this readable?**



Language: An Example

- What is the name of the process of protecting, preserving and managing natural resources?
 - a) agriculture
 - b) forestry
 - c) conversation
 - d) conservation



Clarity Example 1: Who were the original six members of the EEC?

- A. Belgium, The Federal Republic Of Germany, France, Italy, Luxembourg, The Netherlands
- B. Italy, Denmark, The Netherlands, Belgium, The Federal Republic Of Germany, France
- C. France, Italy, Luxembourg, The Netherlands, Denmark, The Federal Republic Of Germany
- D. United Kingdom, Spain, Belgium, France, The Federal Republic Of Germany, Italy



Clarity Example 2: Who were the original six members of the EEC?

- France
- Italy
- Spain
- Denmark
- Luxembourg
- United Kingdom
- Netherlands
- Belgium
- The Federal Republic Of Germany

NB Not strictly equivalent – but simply to illustrate what **may** be a more straightforward question for all



Navigation

Animals 1 - a crossword for learners of English - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address <http://www.englishlearner.com/tests/animals1.html> Go

Google Search Web Search Site PageRank Page Info Up Highlight

*Write your answers in the correct boxes.
You can move between the boxes using the mouse or the TAB key.*

Across

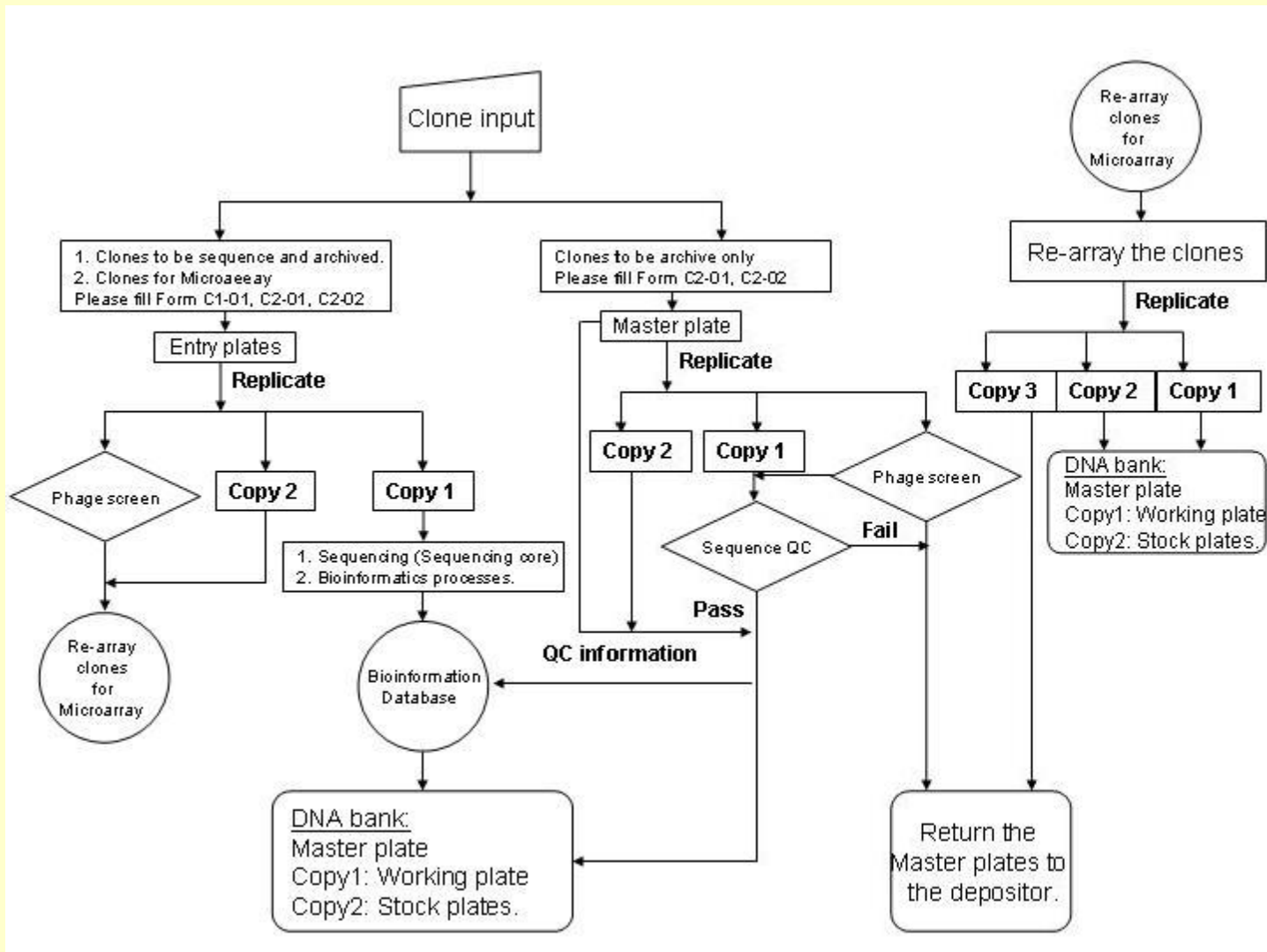
- 5. big, green, dangerous animal, lives in water
- 7. a bird that hunts at night
- 9. flies to hunt at night, a lot of people are very afraid of it
- 11. lives in Africa, has a very long neck
- 13. little, grey animal, eats insects and has spikes all over its body

Down

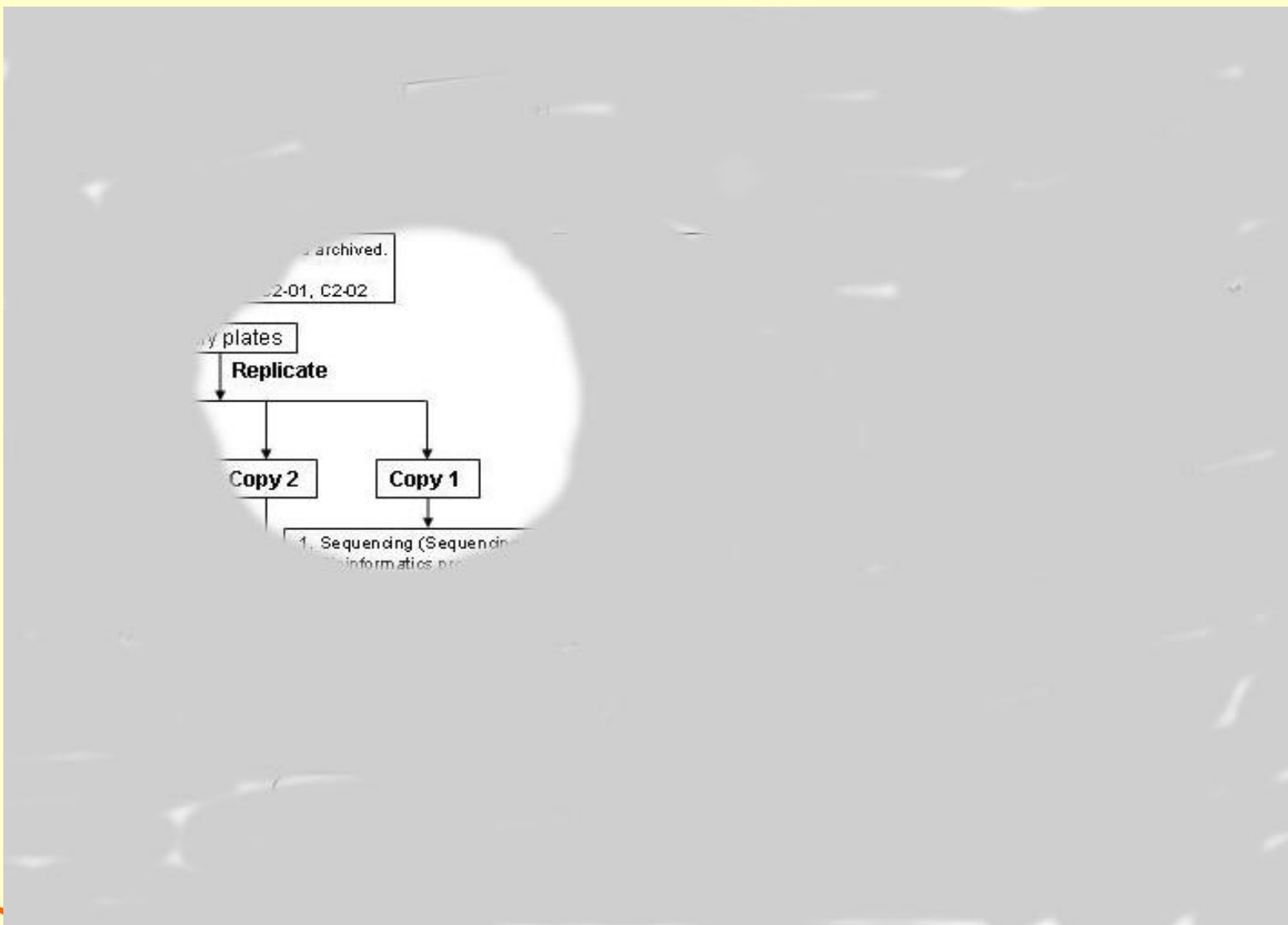
- 1. it's called man's best friend
- 2. red, lives in forests; thought to be cunning
- 3. the king of animals
- 4. looks like a horse, but has stripes
- 5. gives us milk
- 6. a bird that eats other animals
- 8. the biggest animal in the world
- 9. collects honey



Images 1: Perfect vision?



Images 2: Tunnel vision



Pixelation

- The image below is a section from which million-selling album cover from 2004 ?



Colour

- Which of the following words highlighted in red is 'cordeiro' in Portuguese??
- “Mary had a little lamb, You’ve heard this tale before, But did you know she passed her plate, And had a little more?”
- And what if you’re red/green colourblind or have no colour vision at all:
- “Mary had a little lamb, You’ve heard this tale before, But did you know she passed her plate, And had a little more?”



Dexterity

- You have one finger or you are using a head wand to input your keyboard responses:
- To see how much time is remaining in this test press Alt+T
- To see the instructions for completing the test press Alt+I
- Problem?



Tabbing Order

- Move To Previous Question
- Question 6
- Move To Next Question
- What is the capital of Norway?
- A
- B
- C
- D
- Oslo
- Stockholm
- Copenhagen
- Bergen
- Check Box
- Check Box
- Check Box
- Check Box
- Click Here For Help Area



Links

- If you could pull out links into a separate alphabetical list for quick reference, and the link was the underlined part of the following, which would help you get back to the question you left unanswered?
- Click here for Question List
- Click here for Question List
- Click here for Question List
- Click here for List of Questions



Tables 1

- The table in this example is written horizontally. What is the mean score of the students aged over 25?
- Screen reader would read “Student Ash Bill Charlie Deeta Ellie Age 32 21 19 28 47 Score 81% 44% 75% 65% 62%”

Student	Ash	Bill	Charlie	Deeta	Ellie
Age	32	21	19	28	47
Score	81%	44%	75%	65%	62%



Tables 2

- The table in this example is written vertically. What is the mean score of the students aged over 25?
- Screen reader would read “Student Age Score Ash 32 81% Bill 21 44% Charlie 19 75% Deeta 28 65% Ellie 47 62%”

Student	Age	Score
Ash	32	81%
Bill	21	44%
Charlie	19	75%
Deeta	28	65%
Ellie	47	62%



What's It Worth?



Roehampton University HEAT Project

- ***What's it worth? Developing equivalent assessment opportunities for students with disabilities, through the use of digital video and audio recordings***
- Project determined guidelines for determining equivalence of up to 40 assessment types
- Project report at <http://bit.ly/1yYQGj>
- HEAT scheme reports at www.techdis.ac.uk/getheatscheme



Creating Engaging Assessments



Using What you Have

- Everyday software such as Microsoft® Word can be used to create interactive resources.
 - Bacteria Cell Structure
- See the Accessibility Essentials series for more information about how to do this.
 - www.techdis.ac.uk/accessibilityessentials



Audacity

- Simple sound editing software
- Good introductory tutorial at www.techdis.ac.uk/getfreesoftware under 'Reading Tools'
- Can add introductory music and other effects simply
- Could be used to easily create audio versions of documentation



Camstudio (with subtitles via MovieMaker)

- Choose images to be used.
- Open Camstudio, define 'recordable' area, move cursor, add commentary.
- Save avi file.
- Open file in Windows MovieMaker
- Add subtitles.
- Et voila!
- 'Get started' clip at www.techdis.ac.uk/getfreesoftware under 'Visualisation Tools'
- Similar tools also available online
 - www.screentoaster.com



Xerte

- Free learning object creator that produces accessible learning objects.
- Online version at www.techdisplayxerte.info
- Example learning objects:
 - http://xerte.techdis.palepurple.co.uk/play_6
 - <http://www.nottingham.ac.uk/~cczjrt/menuDemo/>



JISC TechDis Resources

- e-Assessment Staff Pack
 - www.techdis.ac.uk/staffpacks
- e-Assessment Advice and Guidance
 - www.techdis.ac.uk/geteassessment
- HEAT Scheme
 - www.techdis.ac.uk/getheatscheme



JISC TechDis Resources

- Xerte
 - www.techdis.ac.uk/getxerte
- Free and Open Source Software list
 - www.techdis.ac.uk/getfreesoftware
- Teaching Inclusively Using Technology (including a module on assessment)
 - www.techdis.ac.uk/getteachinginclusively



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