eAssessment Tools at UWS

Bill Steele

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Assessment

- **Assessment lies at the heart of the learning experience: how learners are assessed shapes their understanding of the curriculum and determines their ability to progress. At the same time, assessment and feedback form a significant part of practitioners' workloads and, with increased numbers, reduced budgets and higher learner expectations, continue to be a matter of concern for many institutions.**
- **Effective assessment and feedback can be defined as practice that equips learners to study and perform to their best advantage in the complex disciplinary fields of their choice, and to progress with confidence and skill as lifelong learners, without adding to the assessment burden on academic staff.**

[From JISC, Effective Assessment in a Digital Age]

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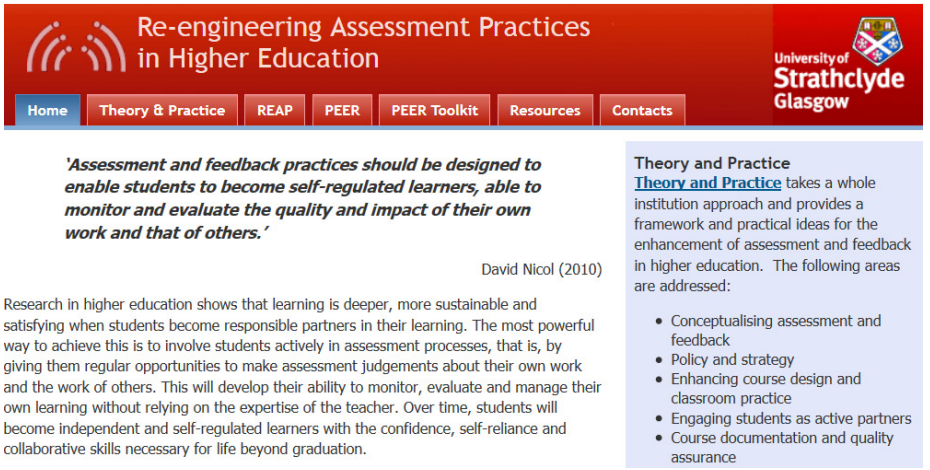
REAP



- The Re-Engineering Assessment Practices (REAP) principles of good assessment and feedback, developed as a result of the REAP project funded by the Scottish Funding Council during 2005–2007, provide a framework for discussing how assessment and feedback can have a beneficial impact on learning.

[From JISC,Effective Assessment in a Digital Age]

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Principles

Assessment tasks should (engage)

1. Capture sufficient study time and effort in and out of class
2. Distribute students' effort evenly across topics and weeks
3. Engage students in deep not just shallow learning activity
4. Communicate clear and high expectations to students

Good feedback practice should(empower)

1. Clarify what good performance is (goals, criteria, standards)
2. Facilitate the development of reflection and self-assessment in learning
3. Deliver high quality feedback to students: that enables them to self-correct
4. Encourage dialogue around learning (peer and tutor-student)
5. Encourage positive motivational beliefs and self-esteem
6. Provide opportunities to act on feedback
7. Provide information that teachers can use to help shape their teaching

From Gibbs and Simpson (2004) and Nicol and Macfarlane-Dick (2006)

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Peer and self Review

- it is now recognised that learning programmes that provide opportunities for learners to acquire skills of self-monitoring and self-regulation (for example by assessing their own work against defined criteria) prompt deeper and more effective learning

[From JISC,Effective Assessment in a Digital Age]

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Student View

- the National Student Survey has reported consistently lower levels of satisfaction with assessment and feedback than with other aspects of the higher education experience.
- *'We would like to see all universities and colleges implement a systematic policy to enhance traditional teaching methods with new technologies [and] leverage technology to provide innovative methods of assessment and feedback.'* National Student Forum Annual Report 2009

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E-Assessment adoption

- 2009 JISC Review of Advanced e-Assessment Techniques (RAeAT) indicates that, despite potential benefits, adoption in higher education of the more complex opportunities made possible by technology is variable. Without departmental champions to support implementation, take-up of the more challenging aspects of e-assessment, especially in the context of summative assessment, has been slow.

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Technology in Assessment

- Technology, if used appropriately, can add value to any of the activities associated with assessment: from establishing a culture of good practice to the processes involved in submission, marking and return of assessed assignments; from the delivery of assessment to the generation of feedback by practitioners or peers.

[From JISC,Effective Assessment in a Digital Age]

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E-Assessment Benefits

- Enhances student learning
- reduces the workload of administrators and practitioners
- online assessments can be accessed at a greater range of locations than is possible with paper examinations
- enables learners to measure their understanding at times of their own choosing
- immediate expert feedback delivered online in response to answers selected by learners can rapidly correct misconceptions
- the time saved in marking can be used in more productive ways, for example in supporting learners experiencing difficulties
- outcomes of assessments can be more easily collated and evaluated for quality assurance and curriculum review processes
- management of peer and self review
- space saving for storage of papers
- reduced travel by externals and academic staff

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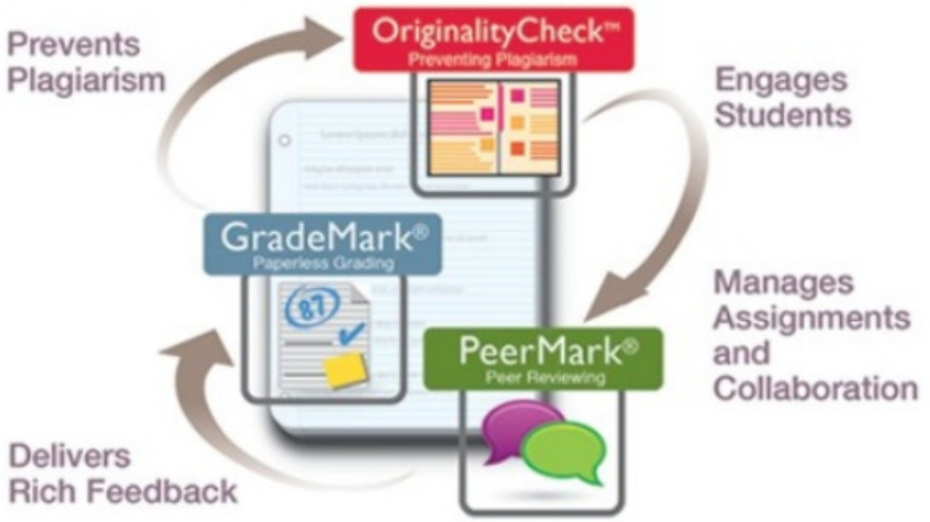
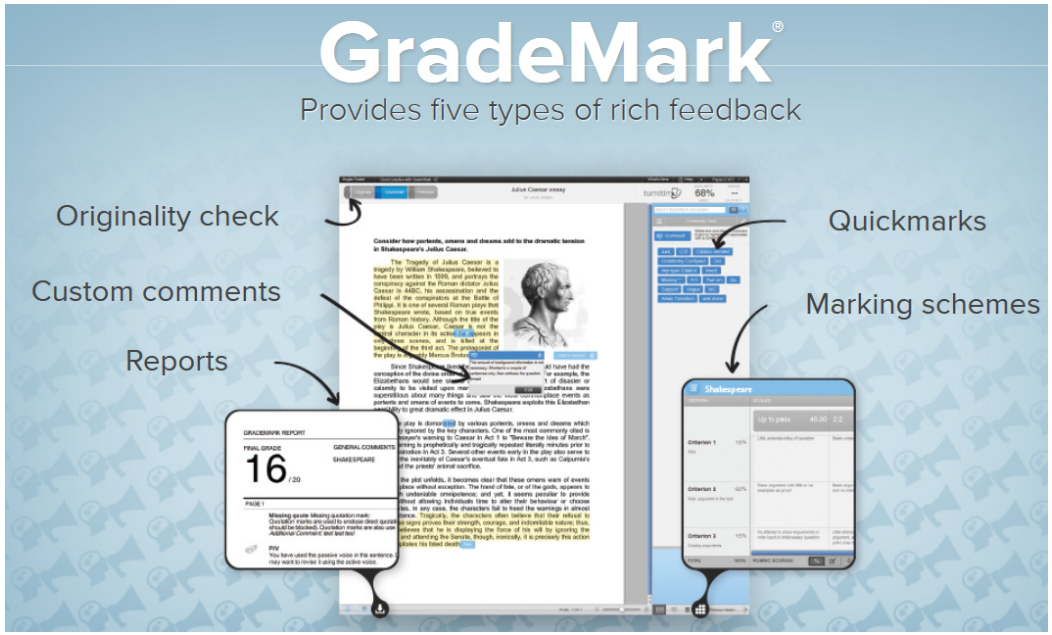
Turnitin

- Peermark – allow student to peer review and embed assessment criteria – self assess
- Paper submission – Grademark - Rubric – general feedback audio





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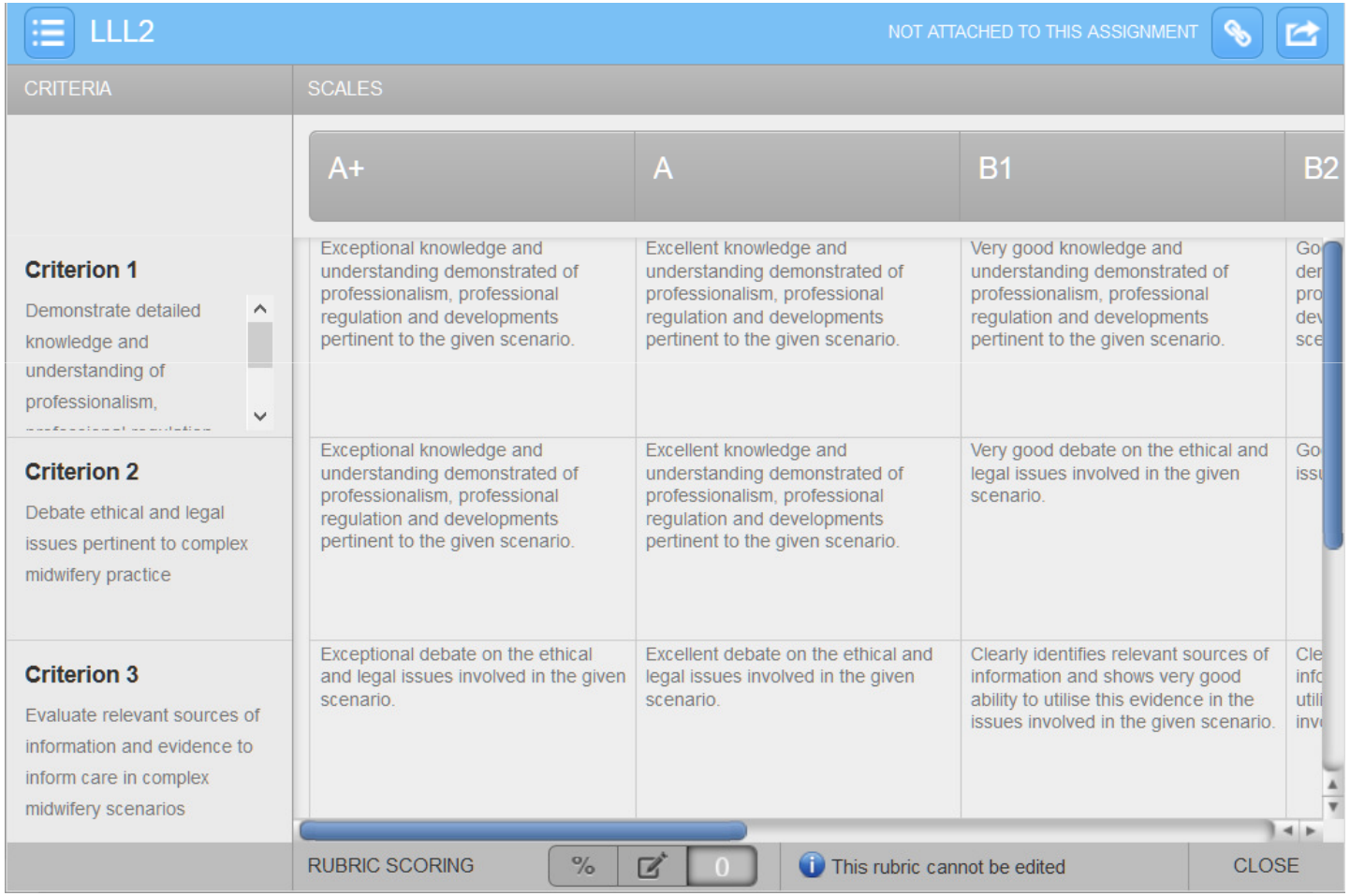
Rubric



LLL2

NOT ATTACHED TO THIS ASSIGNMENT

CRITERIA	SCALES			
	A+	A	B1	B2
Criterion 1 Demonstrate detailed knowledge and understanding of professionalism,	Exceptional knowledge and understanding demonstrated of professionalism, professional regulation and developments pertinent to the given scenario.	Excellent knowledge and understanding demonstrated of professionalism, professional regulation and developments pertinent to the given scenario.	Very good knowledge and understanding demonstrated of professionalism, professional regulation and developments pertinent to the given scenario.	Go der pro dev sce
Criterion 2 Debate ethical and legal issues pertinent to complex midwifery practice	Exceptional knowledge and understanding demonstrated of professionalism, professional regulation and developments pertinent to the given scenario.	Excellent knowledge and understanding demonstrated of professionalism, professional regulation and developments pertinent to the given scenario.	Very good debate on the ethical and legal issues involved in the given scenario.	Go iss
Criterion 3 Evaluate relevant sources of information and evidence to inform care in complex midwifery scenarios	Exceptional debate on the ethical and legal issues involved in the given scenario.	Excellent debate on the ethical and legal issues involved in the given scenario.	Clearly identifies relevant sources of information and shows very good ability to utilise this evidence in the issues involved in the given scenario.	Cle info utili inv

RUBRIC SCORING % 0 This rubric cannot be edited CLOSE

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Peer Review

"Students don't just learn from instructors they also learn from one another. PeerMark facilitates peer review so that students can evaluate each other's work and learn from their classmates."

iParadigms

"..if we want students to develop critical thinking, judgement and autonomy in assignment production they should be provided with high-level evaluative experiences similar to those of experts. Peer review, students evaluating and commenting on each other's work, is one way to achieve this"

PEER

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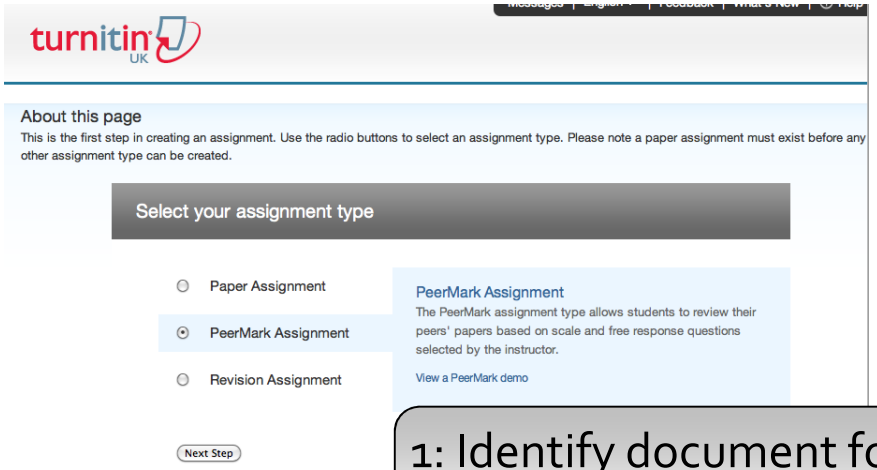
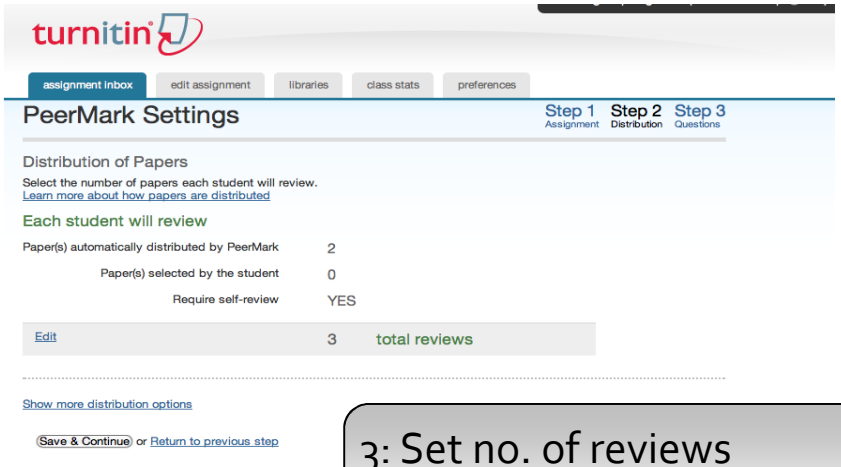
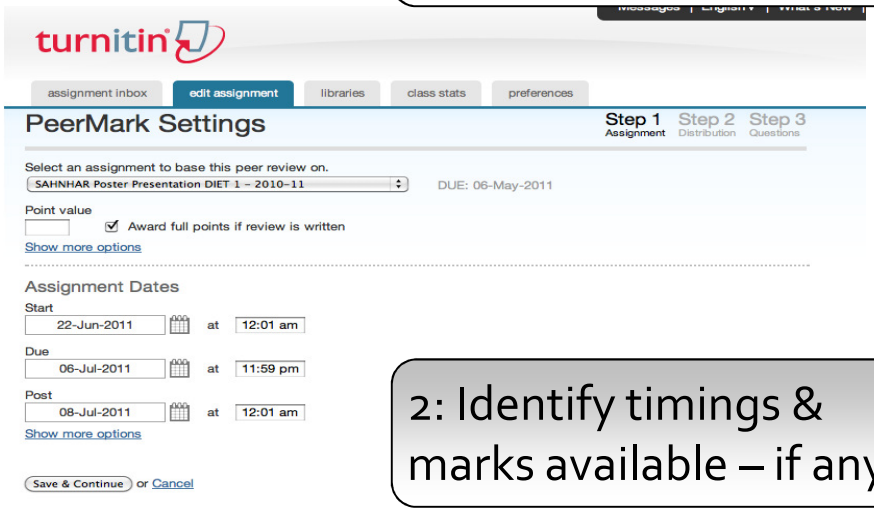
Setting up PeerMark?



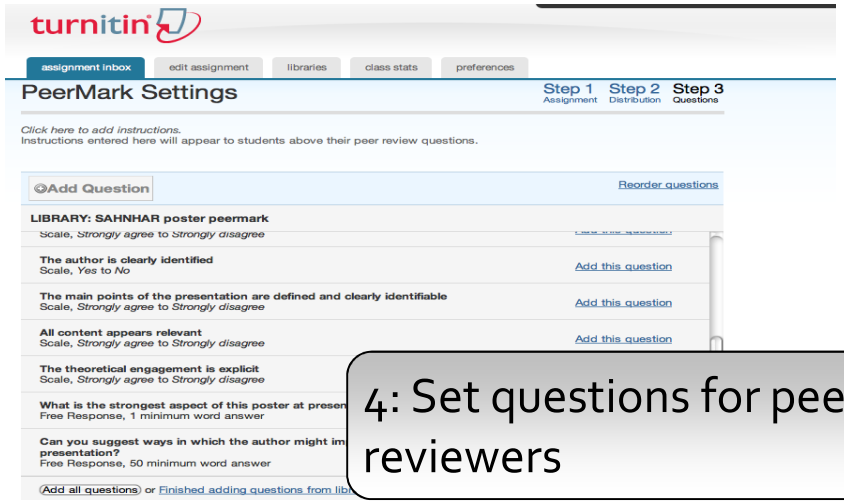
1: Identify document for peer-review



3: Set no. of reviews (self & instructor reviews)



2: Identify timings & marks available – if any



4: Set questions for peer reviewers

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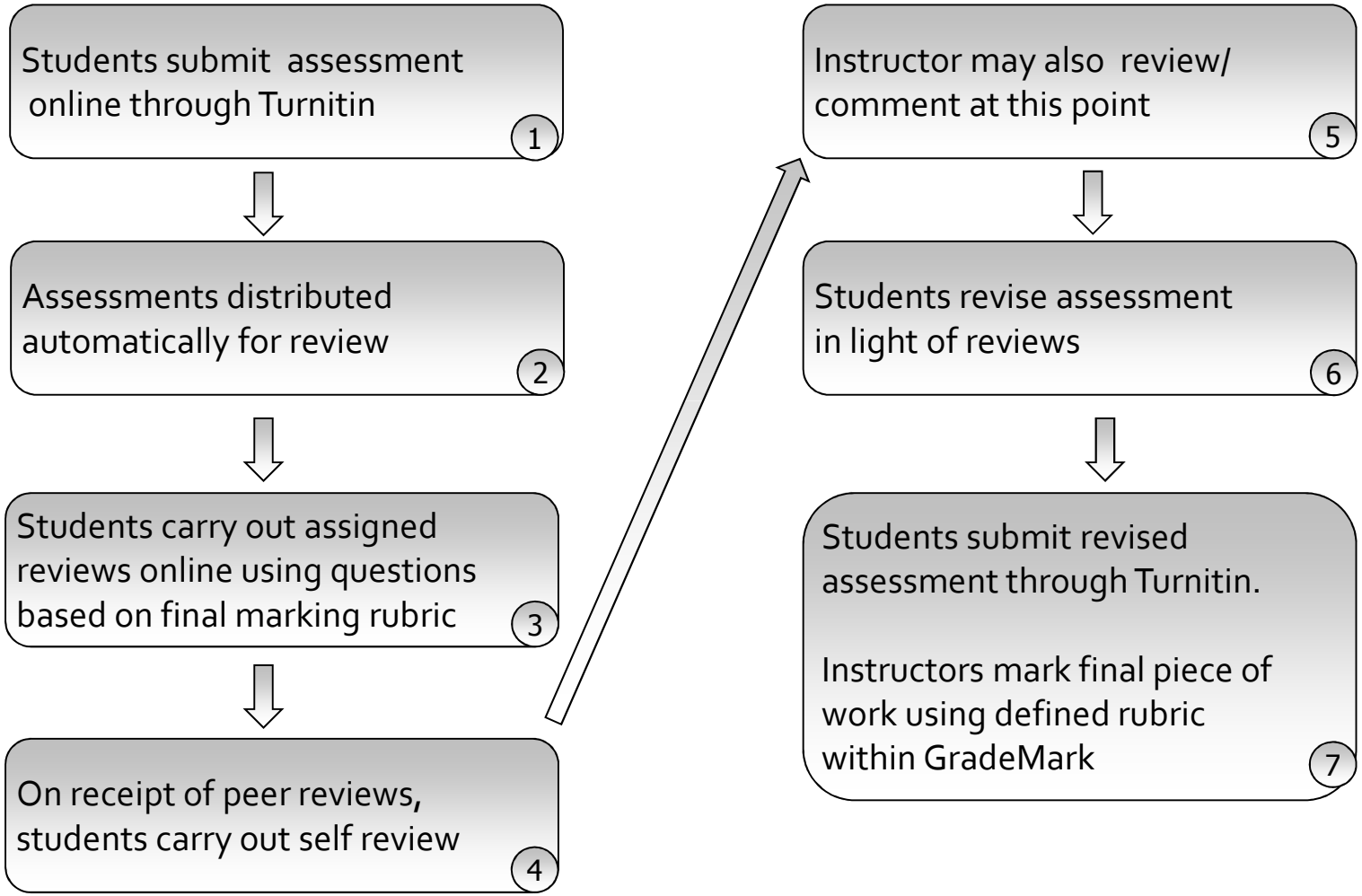
The PeerMark workflow



Peerwise

- PeerWise is an online repository of multiple-choice questions that are created, answered, rated and discussed by students.

- Students create multiple choice questions
- Provide feedback to fellow students
- Create a bank of questions for further use
- Engage in the assessment process
- Improve exam results
- http://peerwise.cs.auckland.ac.nz/docs/instructors/
- http://youtu.be/j1tN006KEWo

50secs

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Clickers

Why should institutional management be interested?

- EVS can be applied in almost all disciplines
- EVS applies to lectures (central to low cost mass teaching) and introduces interactivity.
- Introducing EVS is low risk: student attitude measures have been markedly positive in almost all cases both from the start and after years of use
- EVS is used to implement "Interactive Engagement" (Hake), and a specific variety of this "Peer instruction" (Mazur), which is **almost the only application of technology that has been demonstrated to raise exam results consistently by a substantial amount**
- EVS contributes significantly to both individual learning and community building in a class
- A wide variety of types of pedagogic application may be (and have been) implemented with the same equipment

- Instant feedback
- Anonymity encourages engagement
- Maintains attention throughout class
- Improves memory retention – Curve of Forgetfulness
- Integrates a game approach
- Provides a skeleton revision prompt
- http://www.turningtechnologies.co.uk/

http://www.reap.ac.uk/reap/index.html
http://www.reap.ac.uk/reap/public/Guides/BP5_InteractiveLecturesEVS.pdf

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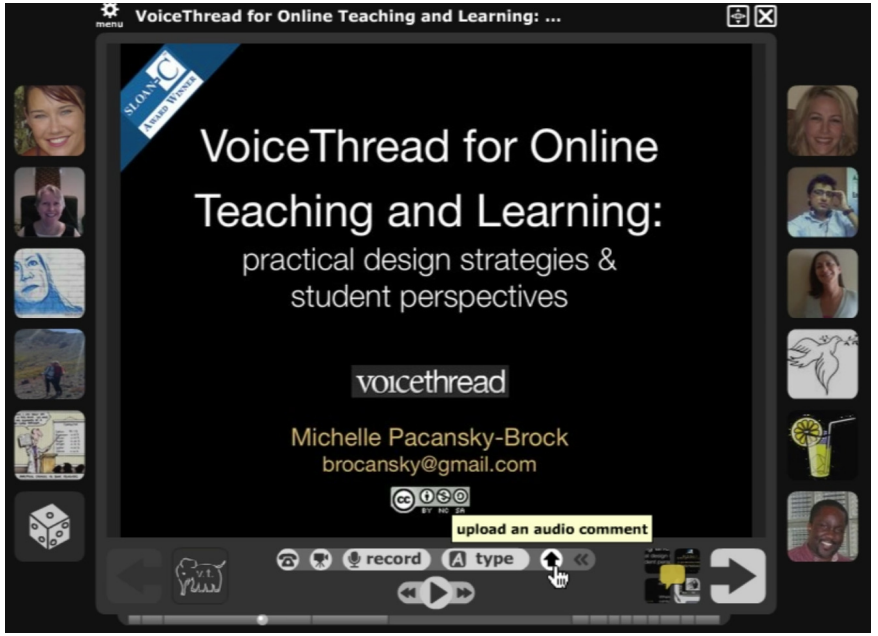
Voicethread

- Educators at over 500 of the world's leading Higher-Ed institutions have made VoiceThread a part of their 21st-Century learning platform, offering students in online courses, hybrid courses, and site-based courses the opportunity to collaborate and interact with instructional materials.



- Media is placed on Voicethread and participants include their comments as text, audio, video, phonecall
- The media could be a site plan, project outline, simulation, customer presentation etc
- How to use for assessment????

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MyFeedback

- Combined aspects of clickers, voicethread and Peerwise. All on a mobile platform.
- Mobile Web 2.0 System for assessment and feedback
- engage students in discussions that are on-topic and engaging with peers and tutors
- access formative assessment material (quizzes) on the go
- read feedback before viewing their marks/grades
- rate their peers' presentations
- create quizzes for their peers from their mobile phones.

Tutors able to:

- anonymously comment (formative)
- mark /grade and comment (summative) on the quiz creation activity
- poll/survey students

http://146.191.60.16:8080/77770316/myFB_page/try-it-out.html

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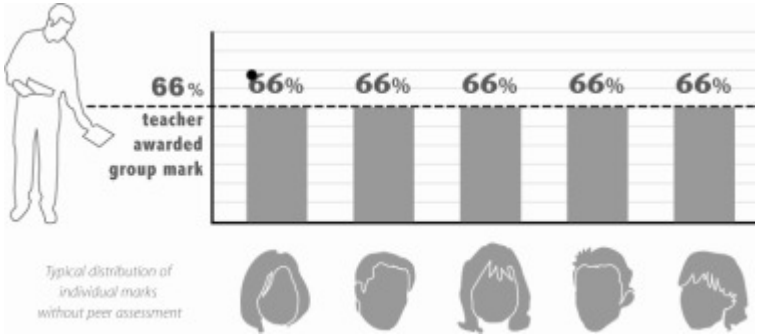
WebPA

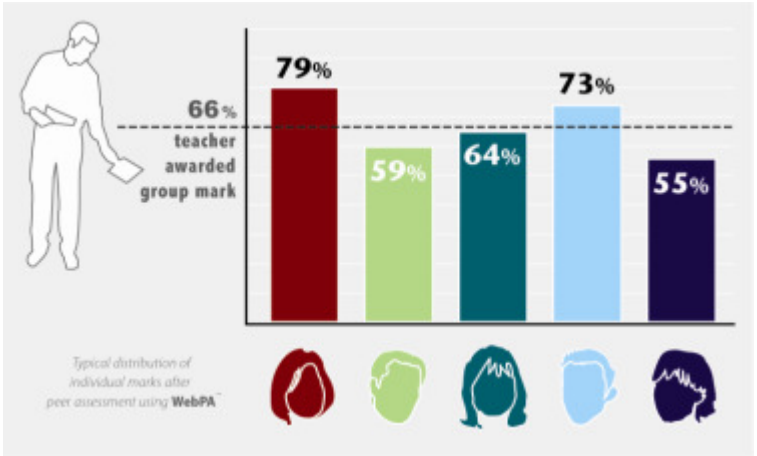
WebPA is an open source online peer assessment tool that enables every team member to recognise individual contributions to group work.

A well known criticism of assessed group work is that each student receives the same team mark, regardless of individual performance.

By using WebPA to peer assess group work, each student received an adjusted mark.

Marked by students, the people that know!





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Assess By Computer

- supporting long and constructed answers that include diagrams and mathematical formulae
- supports common multiple choice question
- tools for the setting, administration and most importantly marking of virtually any type of formative or summative assessment
- the machine does the time-consuming routine tasks while the human assessor makes the all important value judgments

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Embedding eAssessment in Module Delivery: As Easy as ABC

A Case Study in the Use of Assessment21's Assess by Computer (ABC)

Dr Neil McPherson & Mr Alan Simpson

What is Assess by Computer (ABC)?

ABC is an electronic technology that "offers a set of easy to use yet sophisticated tools that handle the whole assessment process from exam and question setting to student feedback and results analysis."

– Assessment21

Aims

To harness potential of ABC to enhance and enrich student experience of teaching & assessment through:

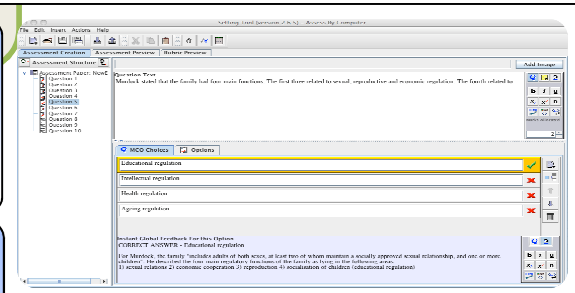
- Location of student at centre of learning experience
- Increased potential for formative self assessment & evaluation
- Development of utility and efficiency in the delivery and marking of assessment

Putting ABC to work

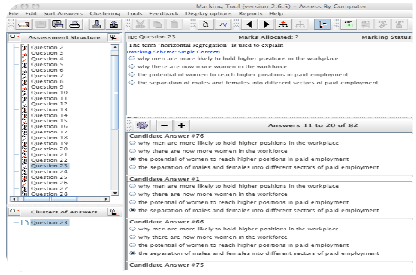
Used as a just-in-time formative teaching tool in seminar setting – assessment used to gauge student understanding at start allowing focus to be placed on areas of uncertainty

Made available online so that students could engage with formative outside seminar contact time. This allowed students to evaluate their knowledge & understanding

Used to deliver and electronically mark end of trimester high-stakes exam



Question and feedback setting tool



Marking tool

Outcome – high-stakes summative exam

Harness synergies internal to ABC's integrated assessm
system byusing in formative and summative assessmer
Multi-site delivery – includes powerful online invigilatio
Accuracy and efficiency of marking – MCQs to extende
Qs

"the machine does the time-consuming routine tasks v
human assessor makes the all important value judgme

– Assessment21

Outcome – on-going formative assessment

Production of an enhanced and enriched feedback matrix through student use in seminar setting and outside of institution – feedback capabilities mappable across the principles of good feedback produced by Nicol & McFarlane-Dick (2006)

- Clarifies good performance through cycle of learning, assessment and re-assessment
- Facilitates self-assessment and self-evaluation producing reflection
- Encourages students to self-correct any confusion, misconception or misunderstanding
- Synchronous feedback delivery in seminar encourages dialogue with tutor and peers
- Fulfils motivational role through the mapping of progression within a safe environment
- Empowers students to continually extend knowledge and understanding of module content but also of the assessment feedback process → stimulates metacognition
- Produces rich feedback for educators – encourages reflective practice in lecturers and tutors

Student feedback

'I liked how the ABC system gave me feedback when using practi
questions during seminar classes.'

'Sitting at a computer to carry out an exam did not feel quit

'It had a very "easy-to-use" interface which allowed for everyone
computer literate or not, to complete the exam easily and efficiently.

References

Assessment21. 'E-Assessment for the 21st Century'. Website. Available at: assessment21.com

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Nicol, D.J. & D. MacFarlane-Dick. 'Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedt
Higher Education. 2006; 31: 199-218.

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Mahara

- ePortfolio system
- Provides full use of multimedia
- Potential for peer review
- Can be exported to Turnitin
  - http://mahara.solent.ac.uk/view/view.php?id=487&showmore=1
  - http://eport.education.illinois.edu/view/view.php?id=192
  - http://wbl-online.org.uk/view/view.php?id=263
- Social networking tool with private public and control groups

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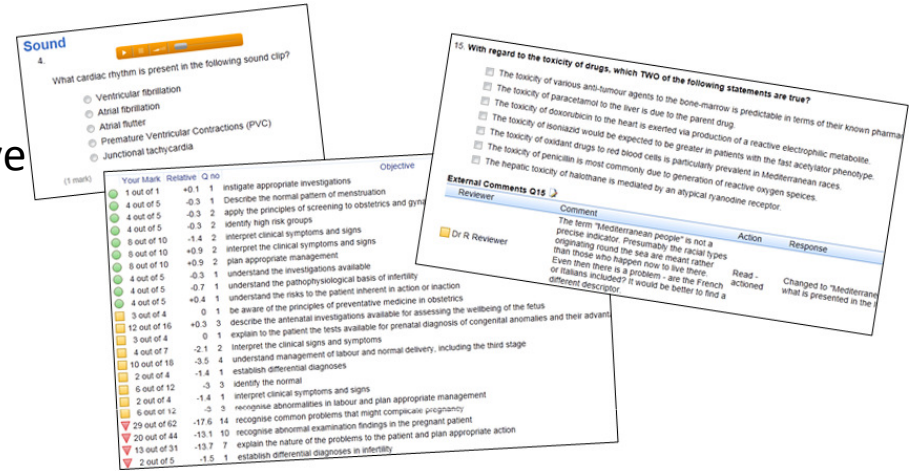
Rogo

Rogō
eAssessment - Open Source Project

Rogō is an enterprise-level e-assessment system:

- support for formative quizzes, summative exams, surveys and several other paper types
- authentic assessments can be created using any combination of 15 question types together with graphics, audio files and video.
- http://www.nottingham.ac.uk/rogo/questions/new-index.aspx



Script Concordance Test (SCT)	Multiple Choice (MCQ)
Ambiguous scenario and vague data	Well defined scenario and accurate data.
More than one acceptable answer	Only one correct answer
Assesses reasoning	Assesses knowledge

Clinical Vignette

Background information for a clinical situation with a description of the patient and symptoms

Hypothesis	New Information
Details of the initial hypothesis	New Information following review of test results

Then this hypothesis becomes:

- ruled out or almost ruled out
- less probable
- neither less or more probable
- more probable
- certain or almost certain

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Wikis

- Wikis provide a forum where you and your students can establish collaborative dynamics. Unlike on most blogs and discussion boards, students can interact and edit their posts and contributions within a single working document. As an assessment tool, wikis provide a space for collaboration and group work.
- Students can work in small groups to research a specific topic, to prepare literature reviews and to discuss and prepare oral presentations as a group. In a wiki, this is easier than in a discussion board, where the multiple threads of posts and comments can become confusing. Students can edit and insert work into each other's contributions, and learn from and with each other. You can track students' unique contributions and assess them individually.

http://teaching.unsw.edu.au/assessing-wikis


7 things you should Zoom In out…
Wikis

Scenario

Sarah and her team have been working on their term project since the second week of class. To make things go more smoothly, Sarah introduced her teammates to the concept of a wiki.[1] She used a wiki last semester and appreciated the way you can share and collaborate on documents without special software or training. She also liked the fact that the wikis are Web pages, making links to references very handy.

The team members have done most of their work using a wiki and conference calls. They really like the fact that anyone on the team can browse and modify the wiki with nothing more specialized than a Web browser. For conference calls, one person posts a rough document or an agenda online; the others correct and contribute to it in real time.

Sarah and her team are impressed with how easy it is to add, modify, or delete material from the wiki. There is no HTML to learn or any programming interface to master. You simply click on the wiki page's "Edit" button to begin to change the page's content. A click of the "Save" button posts the changes back to the Web site and updates the wiki, making the assembly of content for the wiki easy and straightforward—everyone on the team can read (and react to) information being generated and add their modifications or corrections. And, since their wiki lives on the Web, the team can work on the assignment at any time, from any location offering an Internet connection. Sarah did caution her team to be mindful of deleting information from the wiki; she had once inadvertently wiped out someone else's contribution without realizing what had happened.

Out of curiosity (and to get more reaction to their project), Sarah solicited input on her team's work by publishing the URL for the team's wiki. In essence, she put their work-in-progress up for scrutiny by experts in the field. The feedback has been positive so far, with some constructive suggestions about rewording and new content to consider. As a result, she is now sure they have completed a thorough investigation and feels that the team may have something to contribute to the field beyond just a class project.

[1] The word "wiki" is not an acronym but rather (according to Ward Cunningham, currently of Microsoft Corporation, who coined the term) "a [Hawaiian word] used as an alliterative substitute for quick, to avoid naming this [software] quick Web." The name has now entered the Internet lexicon, along with other Web-based terms such as blogs and podcasts.

What is it?

A wiki is a Web page that can be viewed and modified by anybody with a Web browser and access to the Internet. This means that any visitor to the wiki can change its content if they desire. While the potential for mischief exists, wikis can be surprisingly robust, open-ended, collaborative group sites.

Wikis permit asynchronous communication and group collaboration across the Internet. Variously described as a composition system, a discussion medium, a repository, a mail system, and a tool for collaboration, wikis provide users with both author and editor privileges; the overall organization of contributions can be edited as well as the content itself. Wikis are able to incorporate sounds, movies, and pictures; they may prove to be a simple tool to create multimedia presentations and simple digital stories.

According to *The Wiki Way*, "'[O]pen editing' has some profound and subtle effects on the wiki's usage. Allowing everyday users to create and edit any page in a Web site...encourages democratic use of the Web and promotes content composition by nontechnical users."[2] Because the user interface is familiar—a Web page on a personal computer—barriers to modifying wiki pages are minimal. Plus, the results of the users' actions on the content of the site are instantly visible to other users.

Who's doing it?

The first wikis appeared in the mid-1990s. Scientists and engineers used them to create dynamic knowledge bases. Wiki content—contributed "on the fly" by subject-matter specialists—could be immediately (and widely) viewed and commented on. Adopted as an instructional technology in the past few years, wikis are being used for a wide variety of collaborative activities. In addition to compiling information, faculty and staff in higher education use wikis as repositories for meeting notes. Agenda items are contributed prior to a meeting; notes added during the meeting are saved in a public archive. The ability to export notes to Microsoft Word makes reporting easy and adds versatility to the meeting wiki. Some institutions are experimenting with wikis as e-portfolios. Artifacts within a wiki folio are easily shared when the wiki is used as a presentation tool.

[2] B. Leuf and W. Cunningham, *The Wiki Way: Quick Collaboration on the Web*, Addison-Wesley: Boston, 2001, p. 15.

more

EDUCAUSE Learning Initiative
advancing learning through IT innovation
Formerly NLII www.educause.edu/eli

7 things - https://net.educause.edu/ir/library/pdf/ELI7004.pdf

Commoncraft - http://www.youtube.com/watch?v=-dnL00TdmLY

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Blogs

- You can use blogs in a course to facilitate students' formative learning towards key assessable learning outcomes, including academic literacy (Dysthe, 2001) and digital literacy skills. Generally you do this by requiring students to write and publish regular posts, and by giving feedback, and/or encouraging the students' peers to give feedback, in the comments section of the posts.

http://teaching.unsw.edu.au/assessing-blogs

7 things - https://net.educause.edu/ir/library/pdf/ELI7006.pdf

Commoncraft - http://www.youtube.com/watch?v=NN2I1pWXjXI

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Blog Use

- Placement record
- Lab report
- Course notes
- Course reading summary
- A digital diary for a group task such as a group project or an oral presentation can increase a student's perceived accountability in a group task and in turn improve the quality of their work.

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Resources

- 7 Things you should know about learning technology topics http://www.educause.edu//research-and-publications/7-things-you-should-know-about/7-things-you-should-know-about-learning-technology-topics?keys=assessment&filters=
- Assessment Futures - http://www.assessmentfutures.com
- Assessment Standards Knowledge exchange (ASKe) - http://www.brookes.ac.uk/aske/
- Centre for the study of higher education - http://www.cshe.unimelb.edu.au/assessinglearning/index.html
- Commoncraft - http://www.commoncraft.com/
- Effective Assessment in a Digital Age - www.jisc.ac.uk/digiassess
- HEA Assessment Centre - http://www.heacademy.ac.uk/assessment

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OpenMark

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