Imperial College London

University of Glasgow

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Digital literacy in a MOOC setting

Cancer in the 21st Century – The Genomic Revolution

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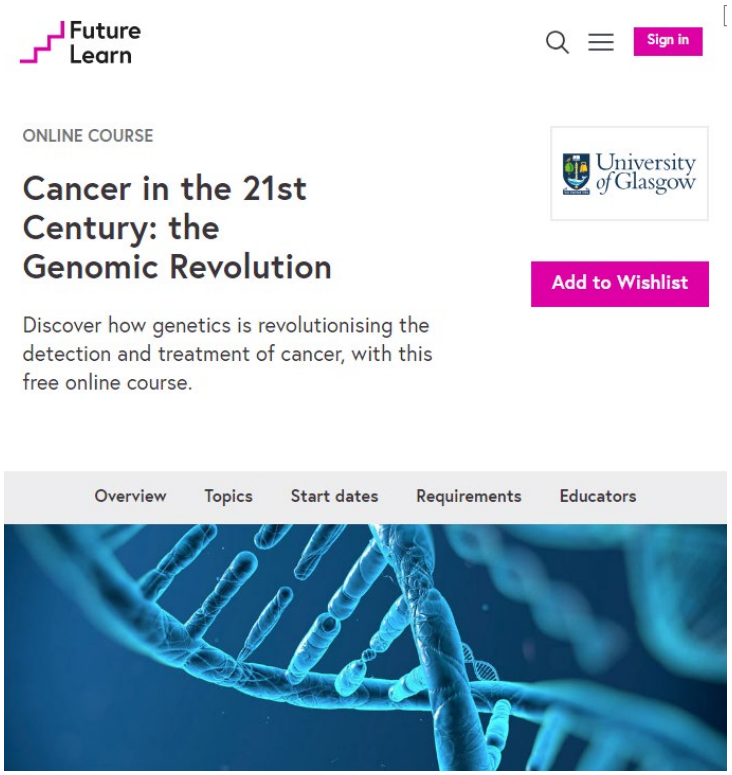
Presentation Overview

- An introduction to the MOOC
- Assessment within the MOOC
- Previous research
- Initial findings on plagiarism
- Additional guidance on plagiarism
- Re-framing of guidance to support conversations around digital literacy



Introduction to the Written Assessment

Here is the question:

What do we know about how epigenetic regulation goes wrong in cancer and what types of targeted treatment could arise from our knowledge of epigenetic de-regulation in cancer?

Peer Review Process

Guidelines

1. What did you like about the author's work?
2. Had they carried out research using reliable resources and had good use been made of these? Did they cite the sources?
3. How might the author improve the communication of their key ideas?

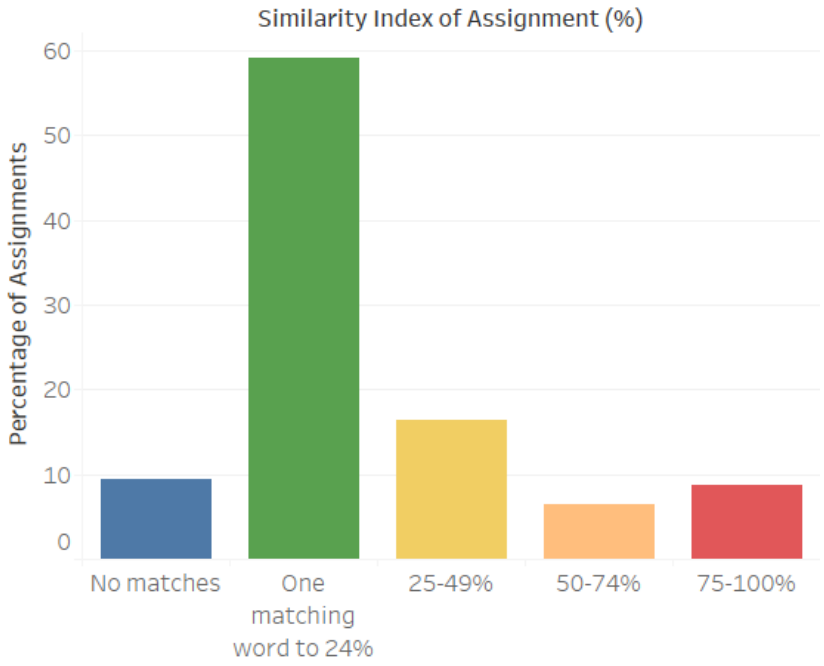
Findings from analysis of written assignments and peer review

- Generally positive, students enjoyed receiving feedback from others and appreciated different viewpoints on their work
- The ‘scaffolding’ provided seemed to be sufficient

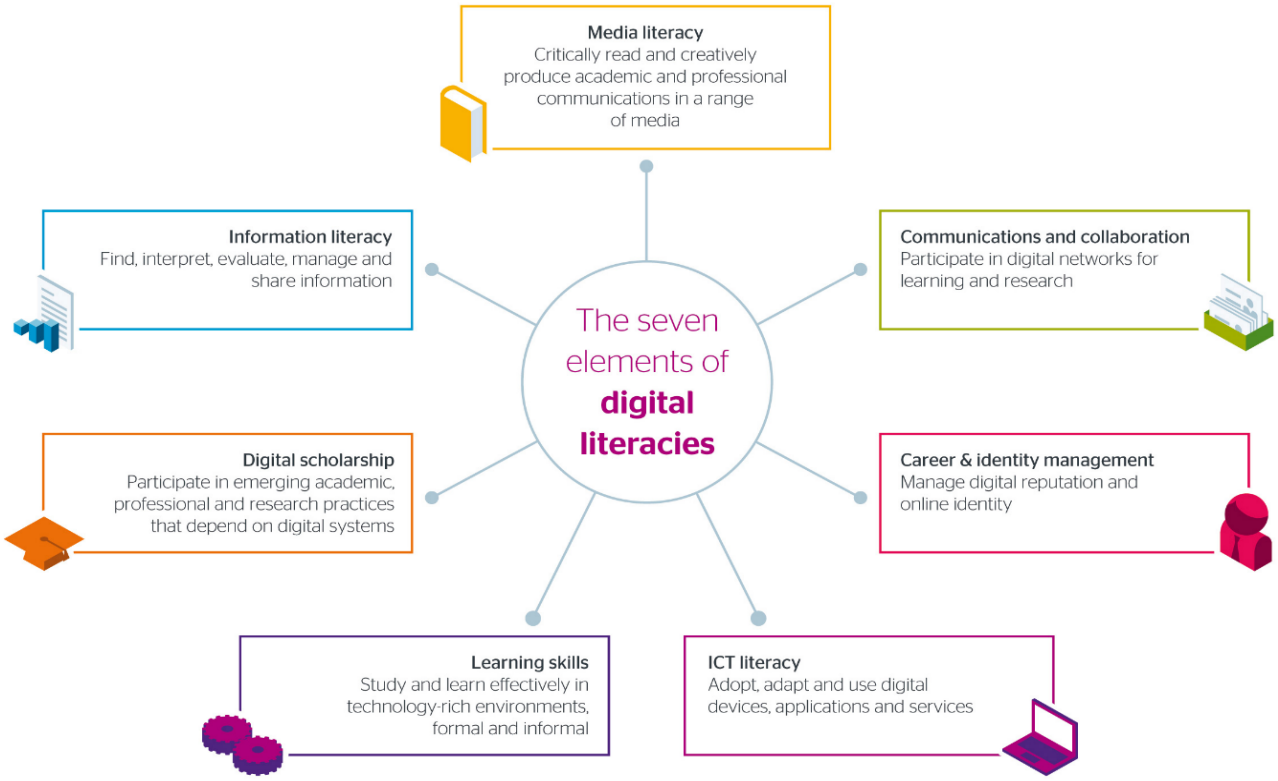
- Challenges included a relatively high proportion of assignments that were not a genuine attempt at peer review
- As these summaries were then allocated to other students, this may have unnecessarily contributed to a negative peer review experience

Plagiarism in written summary assignments

- Distribution of the written summary assignments in relation to their similarity index (Turnitin)
- Total of 171 written assignments in first ‘run’
- 32 written assignments excluded (summary non-submissions)



Jisc's Seven Elements of Digital Literacies



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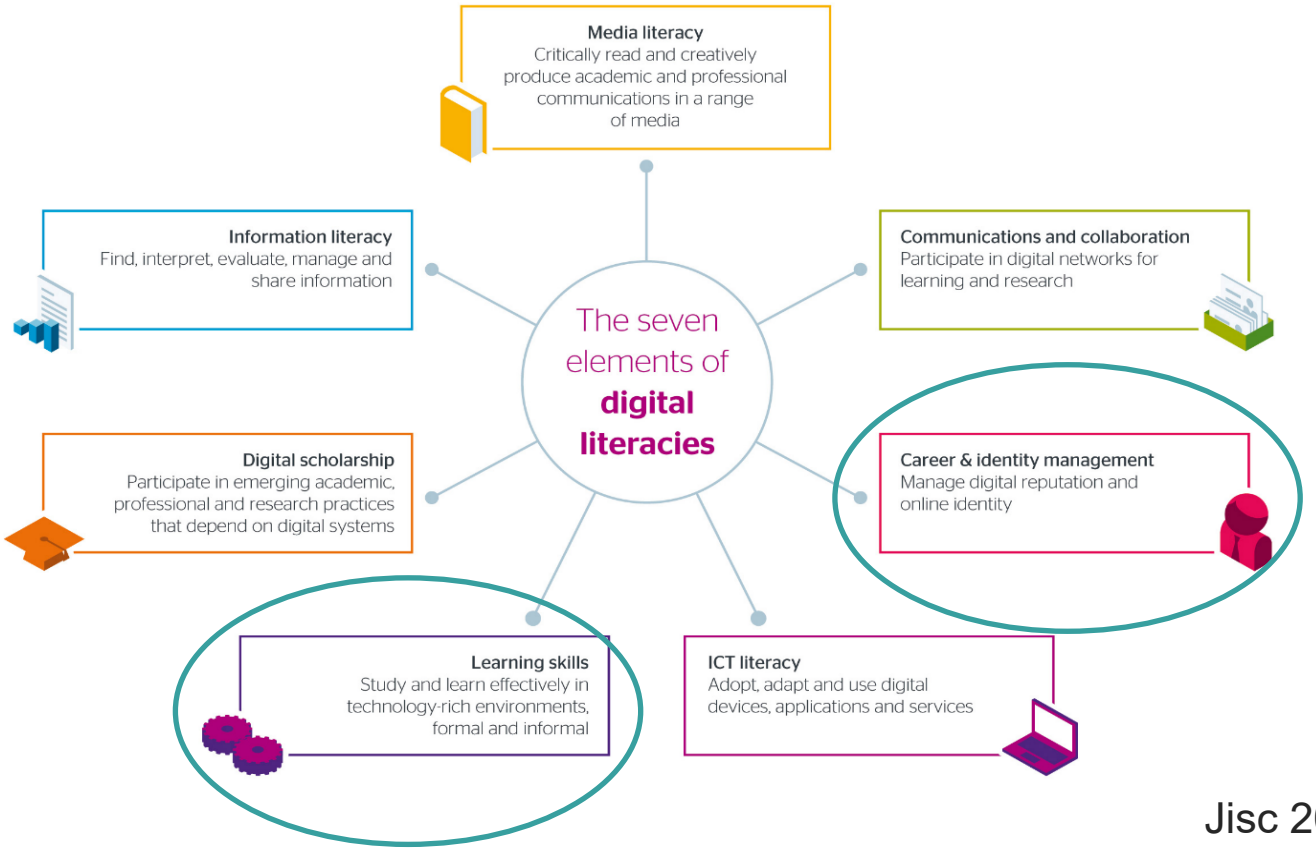
First Iteration of Pre-Assessment Guidance



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Pre-Assessment Guidance and Changes Pt 1

- Additional guidance on plagiarism and appropriate citation
- Links to external webpages
- Enable students to ‘opt out’ of written assessment and peer review tasks

Focus of our concerns

- Ensuring that our ‘learners’ were aware of the implications of plagiarism in an academic setting
- Certificates of Completion/Participation
- Instructional design – many students mentioned they were ‘forced’ to complete the written assessment task (could not opt out)

Subsequent analysis of summaries

- Range of summaries submitted
- A sub-set with a full reference list, and/or clear in-text citations
- A sub-set that lack any resource list
- A sub-set that appear to be fully plagiarized
- This lead us to re-consider how to approach the assessment guidance, and pre-assessment tasks…

Considering our learners – healthcare students and professionals

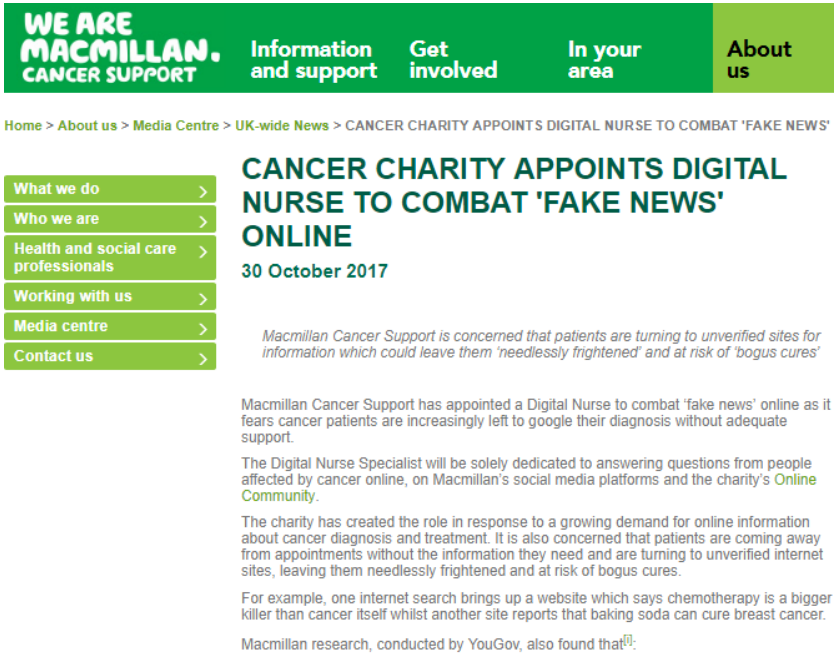
- Recent studies suggest that patients are increasingly reliant on healthcare professionals to guide them through the maze of information they find online
- While ‘Dr Google’ is the first port of call for healthcare information, patients’ trust in healthcare professionals is increasing (Hesse et al 2010)
- Training healthcare professionals in information and digital literacy skills can help them to support their patients (Mcmullan 2006)

Considering our learners – patients and public

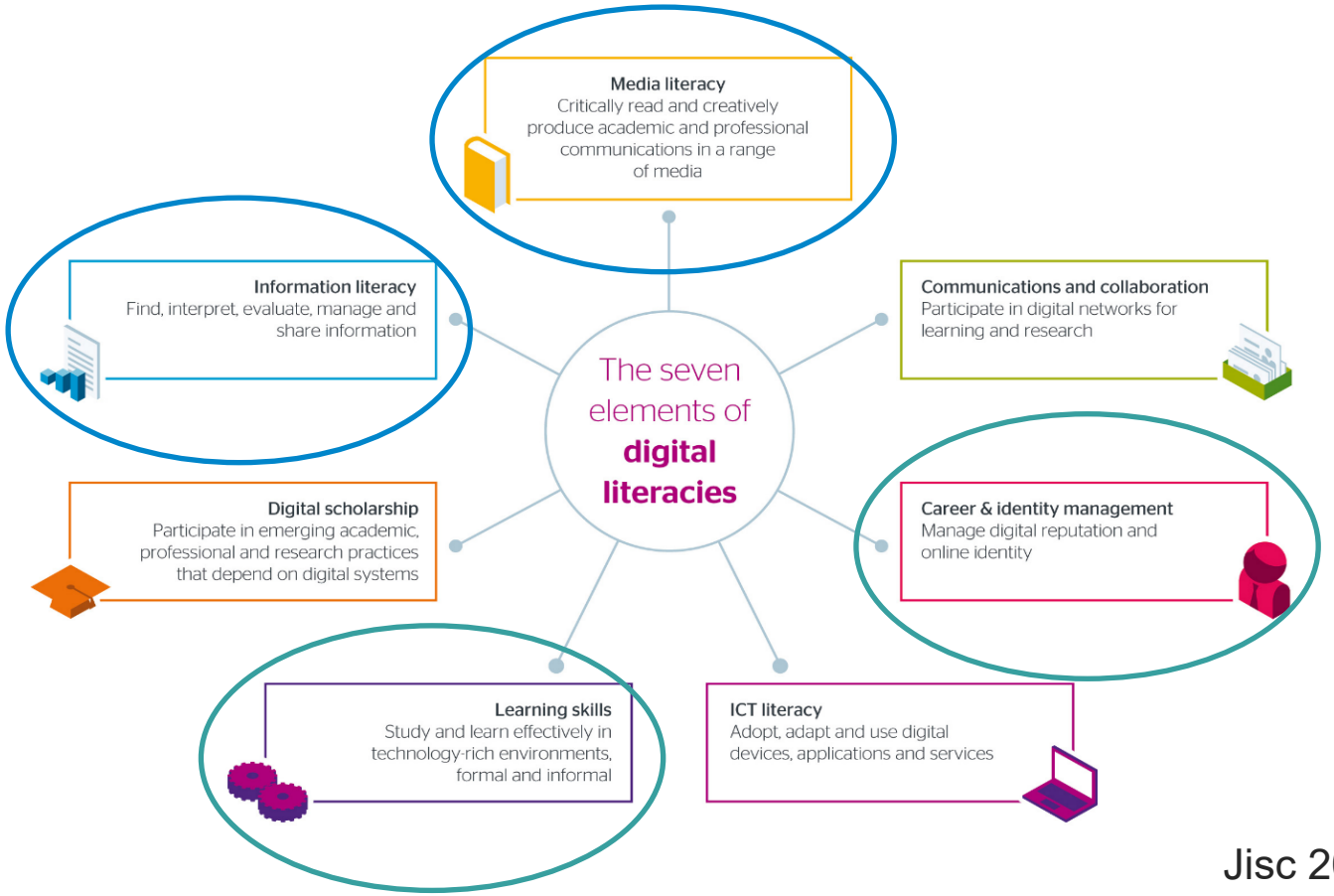
- Patients are increasingly seeking healthcare information in an online setting
- Another MOOC on the FutureLearn platform, ‘Social Media for Healthcare’ found that most students could easily find healthcare information online (Attique et al 2016)
- However, over 50% of students stated they were then unsure how to evaluate whether this information could be used for making healthcare decisions

A personal story of cancer

- Within the course there are a series of videos from a cancer patient perspective
- Macmillan Cancer Support research (conducted by YouGov in 2017) found that over 40% of patients searched for information on their diagnosis online
- To support patients, both Macmillan Cancer Support and Cancer Research UK have recently created Digital Nurses to support patients in understanding the information they find online



Second Iteration of Guidance and Tasks



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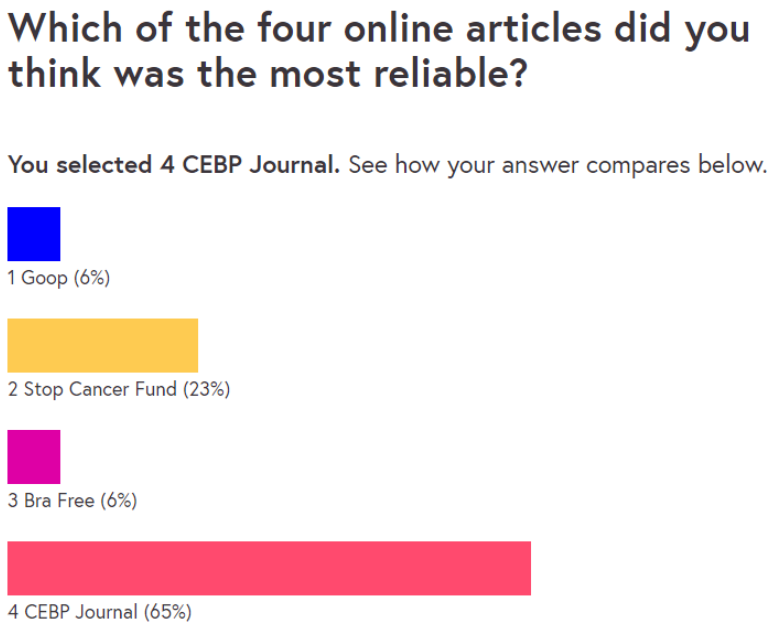
Evaluating a range of online resources

- In Week 3, in the context of the links between environmental factors and the development of cancer we posed a question to students
- They were provided links to four different online sources and asked to select which they found the most reliable using a poll
- There was also a discussion surrounding the rationale for choosing a particular resource



Preliminary findings

- It appears that the most recent guidance and pre-assessment activities(in addition to the previous guidance) may have resulted in a modest improvement in appropriate citation, and a reduction in plagiarism
- We are planning several additional pre-assessment tasks for the next run of the course in January 2019 including a video on how to evaluate information found online

Challenges in evaluation

Run	Number of Active Learners	Number of Summary Assignments Submitted	Number of Peer Reviews Written
1	789	171	318
2	676	100	139
3	1,811	102	137
4	1,606	48	69
5	2,329	76	145
6	2,564	15	22
7	2,153	14	19

We would welcome any suggestions on how to boost engagement with the written task

- Planning to promote run of the course more widely
- Posters
- Add enrolment link to newsletters
- Twitter
- Facebook

- Any additional suggestions?

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