

Asynchronous Learning in a Virtual Environment: Part 1



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Content



- ▶ What is asynchronous learning?
- ▶ Essentials for the development of asynchronous learning
- ▶ Asynchronous case based learning
 - ▶ Acceleration of its use in the context of the pandemic
 - ▶ Interface and content
 - ▶ Ways of encouraging interaction
 - ▶ Sourcing of material

What is asynchronous learning?

- ▶ Refers to forms of learning that do not require students and tutors to be online simultaneously
- ▶ Includes a range of teaching and learning tools ranging from 'electronic notes' and 'lecture capture' to highly interactive, multimedia platforms
- ▶ Advantages
 - ▶ Self-paced and flexible
 - ▶ No requirement for teaching space
 - ▶ Comes in a variety of forms –allows for different modes of learning
 - ▶ Allows the student time for deeper reflection
- ▶ Disadvantages
 - ▶ Requires self-discipline
 - ▶ No immediate feedback
 - ▶ Loss of a sense of connection
 - ▶ More difficult for the teacher and the student to monitor progress.



Listen to Podcasts



Explore Teacher-curated Resources



Research + Explore



Reflect + Document Learning



Read + Take Notes



Watch Video-based Instruction



Engage in Online Discussions

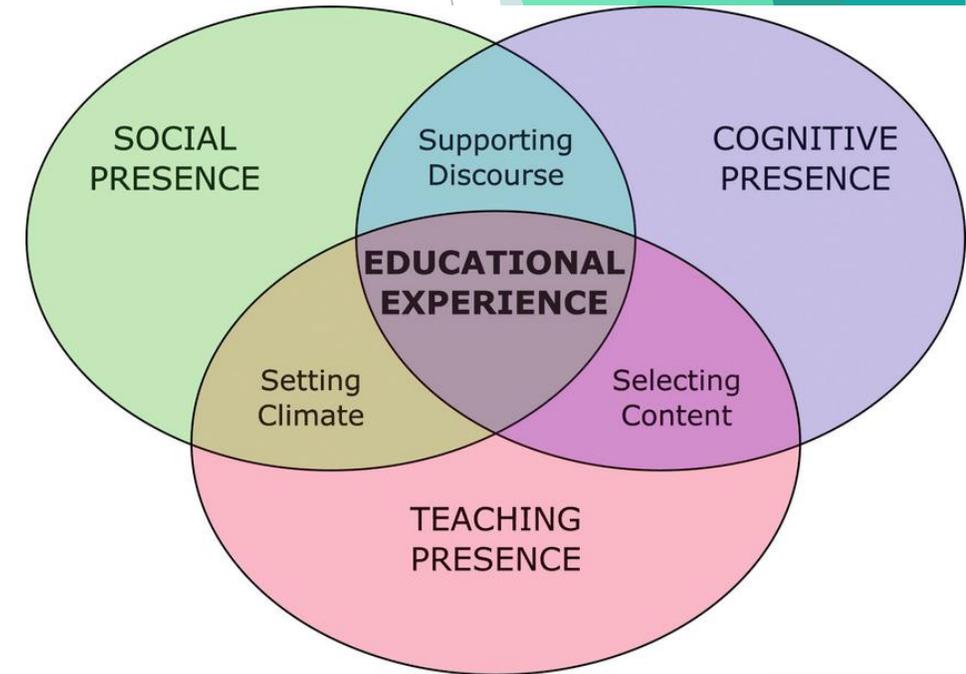


Practice + Review

Essentials for the Development of Asynchronous Learning



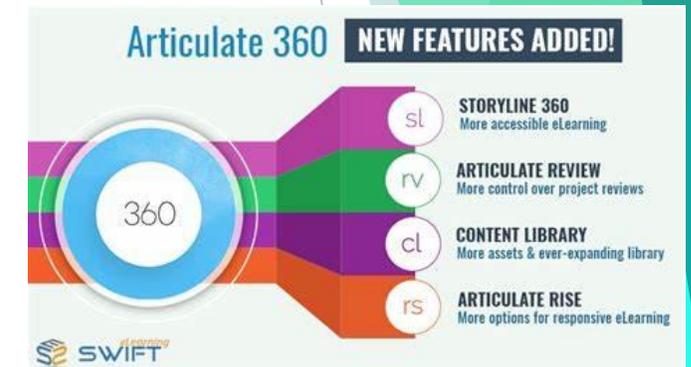
- ▶ Central repository of information eg Moodle, Blackboard
 - ▶ Includes all relevant course content, materials and the tools/resources.
 - ▶ Should be flexible and accessible for students and teachers (laptop, mobile)
 - ▶ Clearly defines self-paced versus those linked to live (synchronous) activities.
 - ▶ Content should be curated regularly to avoid 'clutter' and confusion.
- ▶ Coherent narrative to guide students and foster a 'spirit of enquiry'
 - ▶ State the intended learning objectives- they are a roadmap for students
 - ▶ Identify multimedia material relevant to the objective
 - ▶ Allow sufficient time within the curriculum
 - ▶ Encourage interaction eg knowledge checks, online quizzes, reflection
 - ▶ Establish effective communication between the teacher(s) and students



Asynchronous Case Based Learning

March 23rd 2020:

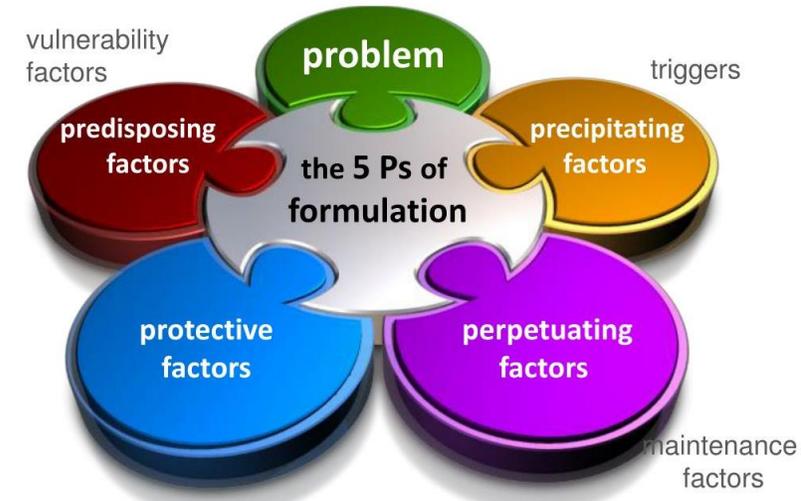
- ▶ Year 5 Psychiatry placements at UCL were cancelled and the team were asked to create a virtual placement from a standing start.
 - ▶ Brief tutorial given on how to embed case scenarios into an interactive multimedia platform, Rise 360.
 - ▶ Individual lessons created on a range of topics
Psychosis, affective disorders, anxiety, OCD, suicide awareness, dementia, CAMHS.
 - ▶ Each session included a written or recorded narrative
 - ▶ Learning outcomes – linked to curriculum map
 - ▶ Related resources – lectures, podcasts
 - ▶ Video material embedded
 - ▶ Students asked to watch and take notes as they would be asked a series of questions on key aspects of the history, key symptoms, diagnosis, risk assessment



Asynchronous Case Based Learning

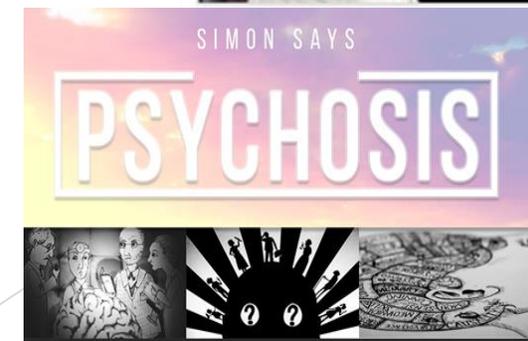
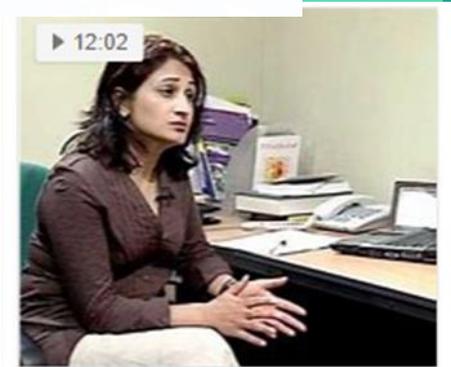


- ▶ Interaction encouraged in several ways
 - ▶ Mental State Examination Checklist - student completes and submits on line before seeing a model answer
 - ▶ 3 x 4 table to facilitate reflection on the predisposing, precipitating, perpetuating and preventative factors - biopsychosociocultural perspective.
 - ▶ Flip cards to encourage the student to consider the answer first
 - ▶ Multiple choice and free text answer questions- used to test knowledge throughout.
 - ▶ Interactive panels with links to videos, podcasts, NICE guidance, Stepped Care principles.
 - ▶ Live Q&A timetabled within a week - students posted questions ahead of time



Sourcing relevant material

- ▶ Video material - sourced from you tube
- ▶ Included material developed by Universities, supplemented by free on-line resources developed by mental health charities, independent bloggers, Animated Minds
- ▶ Material chosen to ensure that learning objectives were met, including stigma, diversity and equality, multidisciplinary team working, and least restrictive care:
 - ▶ ‘Psychiatric Interviews for Teaching: Anxiety’ University of Nottingham.
 - ▶ ‘General Adult Psychiatry History Panic Disorder. Oxford University
 - ▶ ‘OCD patient interview’- Keystone Clinical Studios
 - ▶ ‘Simon says: Psychosis!’ -Sussex Partnerships NHS Trust
- ▶ Other material eg Geeky Medics, Podcast medics, NICE guidance



Let's look more closely at the scope of multimedia and digital learning



Asynchronous Learning in a Virtual Environment: Part 2



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Content

- ▶ Multimedia in virtual learning
- ▶ Digital learning
- ▶ Films, music and media
- ▶ Gaming
- ▶ Artificial Intelligence



Using multimedia

- ▶ Choice of learning management systems
- ▶ Creating multimedia content
- ▶ Alignment and integration of multimedia content
- ▶ Evoking curiosity
- ▶ Adding levels of curiosity and complexity



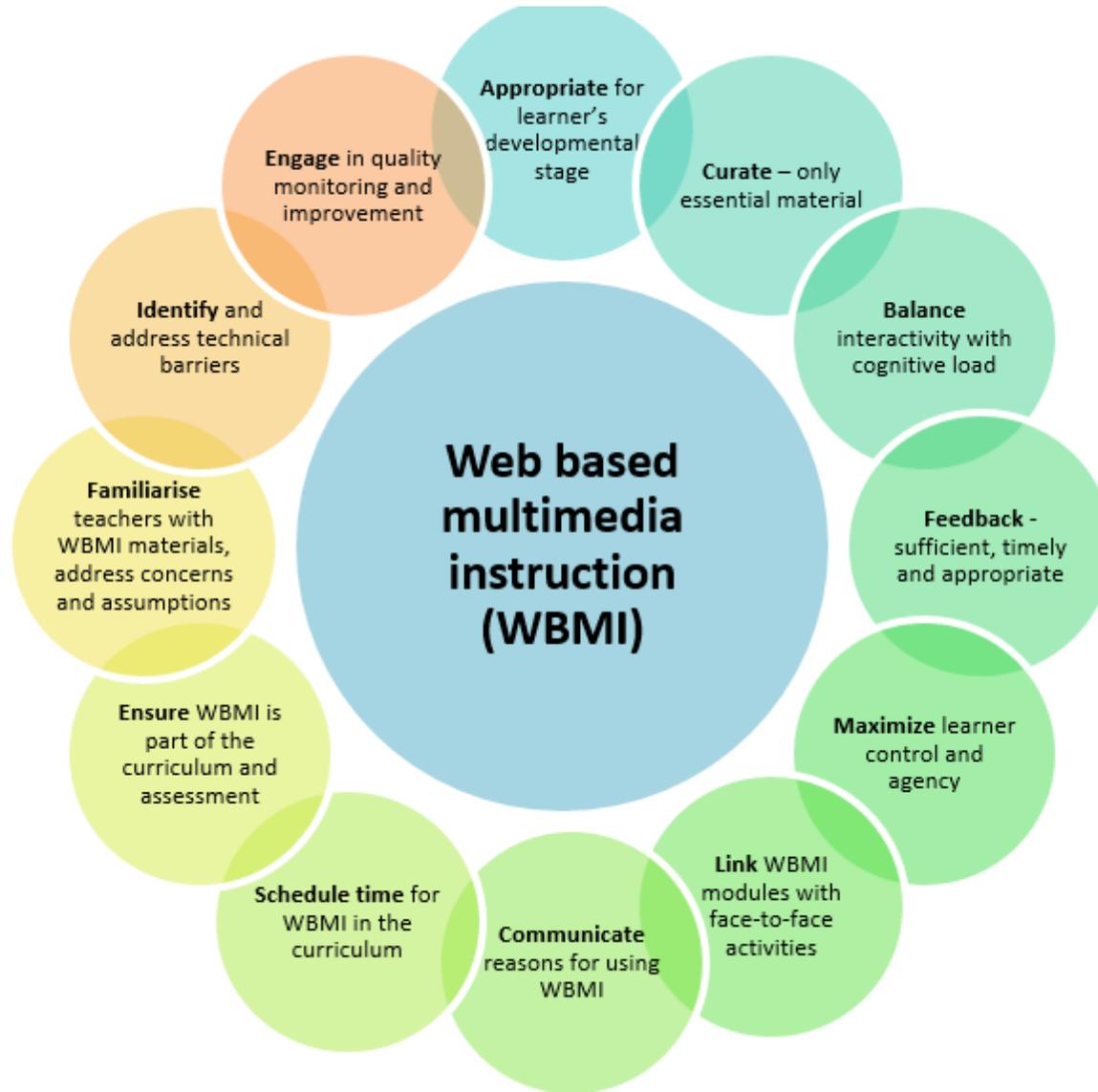
Using multimedia



- ▶ Audio recording
- ▶ Video recording
- ▶ Producing video clips
- ▶ Adding captions
- ▶ Editing, storing and transferring multimedia content
- ▶ Reusing multimedia content



Effective implementation of virtual multimedia teaching



Role of films and media

- ▶ Useful for teaching psychopathology, differential diagnosis, different perspectives, stigma and transcultural themes
- ▶ Practical considerations
- ▶ Teaching format
- ▶ Virtual film clubs

- ▶ Music
- ▶ Books
- ▶ Arts



Gaming

- ▶ Underused medium of learning
- ▶ Unique symbolic, sensory and emotional value
- ▶ Serious gaming and gamification
- ▶ Fun element
- ▶ Advantages/disadvantages
- ▶ Practical considerations for educators and developers



Artificial Intelligence

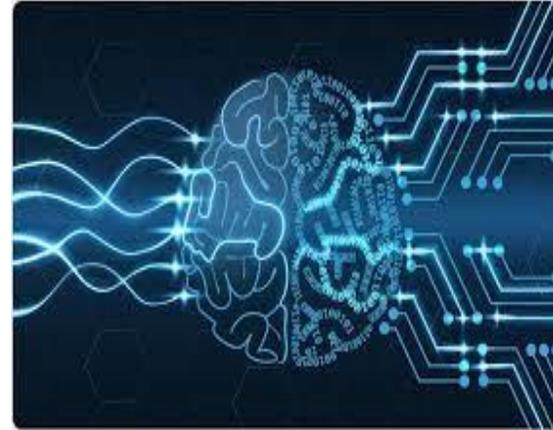


Role of AI

- ▶ Helps system to adapt to learners in a dynamic manner
- ▶ Improves quality of learning
- ▶ Reduce time taken to learn

Role in psychiatry

- ▶ Natural language processing
- ▶ Integration of natural biomarkers



Big data and algorithms

Acknowledgements



- ▶ Introduction to asynchronous learning - Prof. Suzanne Reeves and Dr. Seri Abraham
- ▶ The role of multimedia in asynchronous learning - Dr. Seri Abraham and Prof. Suzanne Reeves
- ▶ How Films and Media Can Be Used to Teach Psychiatry Virtually - Claire Fischer and Ratnu Vaidya
- ▶ How do medical students learn digitally? - Ratnu Vaidya and Deepika Sharma
- ▶ Virtual Case based learning - Vikram Hackett, Toozy Nanda, Adeola Akinola and Seri Abraham
- ▶ Virtual Reflective Learning - Toozy Nanda, Vikram Hackett, Adeola Akinola and Seri Abraham
- ▶ Gaming and psychiatric education - Chun Chiang Sin Fai Lam and Stephen Kaar
- ▶ Artificial Intelligence in Psychiatric Education - Prof. Benedict du Boulay

Key references



- ▶ Dave S, Tandon K (2011) Cinemeducation in psychiatry. *Advances in psychiatric treatment* 17: 301-8.
- ▶ O'Doherty, D., Dromey, M., Loughed, J., Hannigan, A., Last, J., & McGrath, D. (2018). Barriers and solutions to online learning in medical education - an integrative review. *BMC Medical Education*, 18, 1-11. doi: 10.1186/s12909-018-1240-0
- ▶ Brunn, M., et al., *The Future is Knocking: How Artificial Intelligence Will Fundamentally Change Psychiatry*. Academic Psychiatry, 2020. 44: p. 461-466
- ▶ Gentry S et al. Serious Gaming and Gamification Education in Health Professions: Systematic Review. *J Med Internet Res* 2019;21(3):e1299

Thank you!

The background features abstract, overlapping geometric shapes in various shades of teal and green. The shapes are primarily triangles and polygons, some of which are semi-transparent, creating a layered effect. The colors range from light, pale greens to deep, dark teals. The overall composition is modern and clean, with the text 'Thank you!' centered in a simple, sans-serif font.