# Exeter Education Incubator Café



# Session 1

Monday 26th June, 2023.

The Digital Maker Space, Streatham Campus.

EduExe Festival Event, 2023.

**Table 1: Learning Clinical Pharmacology and Medicines Prescribing with a Card Game.**

Mark Carew, PhD, SFHEA.

Lecturer in Biomedical Science

I invented a card game to help medical students learn clinical pharmacology (a difficult subject that is necessary to master for the safe and effective use of medicines).  The game encourages students to discuss how medicines work in patients and to learn from one another.

## Outcomes:

- Created and play-tested two physical decks of cards covering different drugs and conditions.
- Card game adopted as part of WRAP sessions in the year 2 BMBS curriculum.

## Next Steps:

- Act on feedback from students and design new decks of cards to cover the most often prescribed drugs.
- Evaluate impact of card game on learning clinical pharmacology with regards to the year 5 Prescribing Safety Assessment.

**Contact**: m.a.carew@exeter.ac.uk

**Table 2: Senior People Professional Apprenticeship Virtual Environment: trialling the use of the metaverse**

Dr Lisa Grover

The purpose of the research is to gain insight into whether the Senior People Professional virtual environment is appealing and easy to use. We are interested to know whether sessions delivered through a virtual environment differed from sessions via MS Teams, focusing on fatigue and enjoyment. We also want to develop insight into whether the virtual environment creates more opportunities for peer-to-peer dialogue and interaction.



**Outcomes:**

- increased student-to-student communication.
- a virtual environment that students think is appealing and easy to use.
- deliver virtual sessions that are more engaging than via video-conferencing software and that are less fatiguing.

**Next Steps:**
- deliver sessions in the virtual environment on 29th June and 6th July
- survey to all students after the sessions
- interview volunteer students after the sessions

**Contact:** l.grover@exeter.ac.uk

## Table 3: Delivering complex Simulated Exercises to Large Student Groups

Dr Martin Robson, Senior Lecturer in Strategic Studies.

Simulated exercises are a proven pedagogical tool to provide students with a 'sandpit' to test concepts and theories in a simulated real-world context for the purpose of pedagogical progression, personal training and the reinforcement of skills and behaviours. Simulations involve participants to collaborate in teams, deploying a set of skills and behaviours to manage multiple concurrent time sensitive tasks. This project explored methods for delivering effective simulations to large cohorts of up to 100 students.

### Outcomes:
Two workshops were held:

**Empathy Mapping Exercise** – Students produced an Empathy Map from their experience of participating in a Simulation using *Aftershock: A Humanitarian Crisis Boardgame*. Key benefits of a simulation:

- Behaviours: teamworking, achieving targets within the simulation
- Skills: multitasking, developing leadership skills, develop thinking 'outside of the box'
- Employability: experience valuable for assessment centres

**Systems Mapping Exercise** – two small groups produced Systems Maps to identify the critical benefits of the simulation to be retained in upscaling it from a small group of students (10-20) to larger groups (e.g. 100). Critical common themes / risks identified were:

- Generating an immersive environment: this was identified as the critical element
- Active participation
- Participant motivation / managing participant expectations
- A Sandbox to test ideas

### Next Steps:
Run a large group simulation for up to 100 students to implement the critical themes identified.

**Contact**: m.robson@exeter.ac.uk

**Table 4: Understanding student anxiety about perceptions that others cheat in (online) assessments**

Dr Alison Hill, Dr Nic Harmer and Steve Porter.

We introduced unique data sets into our online assessments in 2020/21 for a second year Biochemistry module and since 2021/22 both second year Biochemistry modules are assessed using this methodology. We now have three cohorts of students who have sat these personalised exams and we surveyed them and ran focus groups (using empathy and systems maps) to understand what it is like to take online (personalised) exams and if they are concerned about others cheating.

Our students told us:

1. They want online exams and feel under less pressure in this environment.
2. 68% of students believe there is more cheating in an online exam.
3. 80% of students think individualised assessments prevents or discourages collusion/cheating in online assessments.
4. Students do not fully understand what constitutes unethical behaviour in online assessments.

### Next Steps:

1. Full analysis of data and writing a paper.
2. Dissemination: *Internal* EduExe, Incubator blog, Biosciences; *External*, Microbiology Society Conference, Birmingham April 2023, Horizons in STEM UK, Swansea June 2023, ViCEPHEC, Durham August 2023.

**Contact**: a.m.hill@exeter.ac.uk

## Table 5: Role Models & Growth Mindsets: Inspiring students' engagement in challenging STEM learning environments

Dr Luke McGuire (Psychology) and Dr Houry Melkonian (Mathematics)

Research shows that female students are most likely to form negative beliefs about their abilities in studying and performing mathematics and engineering compared to male students, and as a result are numerically underrepresented in those fields. This project aims to address this issue by (a) introducing counter-stereotypical role models in the field of study and (b) testing a novel growth mindset intervention (i.e., the belief that intelligence is malleable) in STEM classes where persistence is key for success.

### Outcomes:
- In our classroom study, we found that growth mindset was related to stereotyping. However, there was no change in mindset or stereotyping as a result of our intervention.
- Participants' expectancies to succeed in their subject did change over time, but only when they identified highly with the person delivering the intervention
- In a second online experimental study, we found that the growth mindset intervention was related to lower stereotyping amongst male participants compared to female

### Next Steps:
- Carry out qualitative focus groups to further probe why persistence and mindsets may or may not be relevant to STEM students at the university

**Contact**: l.mcguire@exeter.ac.uk & h.melkonian@exeter.ac.uk

## Table 6: Making Accessibility Guidance Accessible

Gurbangozel Charyyeva, Ellie Cook, Becky Ellis, Rachel Griffiths, Jodie Hall, Dr Caitlin Kight, Sean Porter, James Stewart, Dr George Tarling.

The aim of this project is to understand and improve staff experience of the current socio-digital ecosystem of accessibility support – thereby improving the help offered to students.

Methods: We have used surveys, focus groups, and a resource mapping exercise to explore the existing socio-digital ecosystem.

Outcomes:
Preliminary results indicate:
- Staff feel they need better access to information on a wide range of accessibility needs
- Educators find it difficult to locate the information they want
- Written guidance (including checklists) is desirable, but, overwhelmingly, staff want to discuss these issues with a colleague – and it is often colleagues who provide the final answer to accessibility questions
- Overall, staff feel frustrated by existing guidance, describing it as 'hidden' and 'inadequate' – which leaves them feeling 'unsupported'

Next Steps:
Once data collection is finished, we will design and beta-test an accessibility portal that responds to the feedback provided by study participants.

Contact: c.r.kight@exeter.ac.uk & g.tarling3@exeter.ac.uk

## Guidance for Attendees

1. Find the table of the project you're interested in.
2. When the bell rings, move to the next table of the project that you would like to listen to.
3. Build connections! Share email addresses, Twitter handles and comments at the tables you visit.
4. Join the conversation on Twitter @UoEEduInc.

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