TECHNOLOGY ENHANCED LEARNING ENVIRONMENTS (UG)
PORTFOLIO

GENERAL INFORMATION

Submission: Check Canvas for details

Due: Check Sussex Direct for details

NB: There will be a project poster & demo session in Week 11 of term.

Assignment weighting: 100% of overall module marks

PORTFOLIO DESCRIPTION

The assignment for TELE consists of an individual portfolio submission. The assignment is worth 100% of your marks for the module. There are four elements to the portfolio, shown below, with the relative percentages for each:

Element	Percentage
Journal: What makes learning meaningful?	15
Learning environment prototype	25
Project poster & demo	10
Project report	50

JOURNAL: WHAT MAKES LEARNING MEANINGFUL? (1250 WORDS)

For this part of the portfolio, you will be documenting one positive learning experience from your past. You will be asked to consider this experience in terms of its theoretical underpinnings, and underlying assumptions about how people learn and what motivates them. You will then reflect on whether, and how, the elements of your positive learning experience can be implemented in a technology enhanced learning environment, with reference to your own learning environment prototype. Specific instructions are provided for each of the five entries, which you can find in the Assessment section of Canvas. Please work on each entry when the relevant topic is introduced during the term. Although the journal is only due at the end of the module, along with the rest of the portfolio elements, writing entries over the course of the term means that 1) you will actually be able to use these personal reflections to inform the design of your learning environment prototype, 2) you will have finished this element of the portfolio well before the final deadline and 3) we can give you feedback on your entries before you submit them if you would like.

LEARNING ENVIRONMENT PROTOTYPE

This component of the portfolio involves the design of a technology-enhanced learning environment prototype (in the broadest sense: this could be a desktop or smartphone app, gesture-based tool, a tangible device, augmented reality application, an embodied interaction tool, etc.). You are, however, not required to develop a VR, AR, haptic, or similar tool. Your prototype could be as simple as an interactive storyboard built using Adobe XD (a mock-up of the actual product that you are proposing).

You should start by deciding on a learning focussed issue of your choice. Then, using theories of learning, motivation, and relevant research, you will develop a technology-enhanced learning environment, which addresses the issue. Your solution should make appropriate use of relevant technologies and consider the needs of the learner, as well as the learning context.

Your solution will be developed iteratively over the course of the module. Many of the practical sessions will focus on a specific task related to the design process. You will be given worksheets to guide you through these tasks. You should download the relevant one for the week from Canvas and complete as much as possible before the session. You should then bring the sheet to the practical session to get feedback. These completed worksheets will be included in your project report as appendices (see below).

In designing your learning environment, you should focus on "innovative interactions", i.e. ways of approaching a topic which go beyond standard methods of teaching. This may involve the use of novel technologies (e.g. augmented reality, virtual reality, gesture-based interactions, etc.), but you can equally design a desktop/tablet/mobile learning environment, provided you can clearly show how the interactions afforded by your environment are novel and/or innovative in a way that could benefit learning. Your learning environment also needs to embody your chosen theories of learning and motivation in a clear and rigorous manner. You should be aiming for a mid-fidelity prototype, which is explained clearly in the project report. This prototype should be included as part of your portfolio.

PROJECT DEMO & POSTER SESSION (INTERACTIVE LIVE SESSION)

In Week 11, you will have an opportunity to receive feedback from a wider range of sources.

The poster should be included as part of your portfolio.

PROJECT REPORT (2500 WORDS)

This document should include the following sections:

1. **Intro** – what is your project topic? Why did you feel it was an issue that needed to be addressed in a new way?
2. **Design/development/implementation process** – describe your design process from start to finish (referencing relevant practical worksheets as appropriate, included as appendices). Discuss the initial idea, how it developed over time, and how it changed in response to feedback received. Finish by describing the final prototype (using illustrations where appropriate).
3. **From theory to design** – which theories of learning and motivation influenced the design of your learning environment? How were they embodied in the design (provide specific examples)? Assume that the reader has a general familiarity with the main theories, so only provide a brief overview of those relevant to your project (but any theories mentioned should be appropriately referenced). Why did you choose the theories that you did? Do you feel the approach was successful, or would you do things differently?
4. **Innovative interactions** – in what ways does your prototype afford "innovative interactions"? Is the technology (e.g. hardware) innovative? Is it a particular form of interaction that is different? Does it offer a novel way of learning about a specific subject? Do you think it improves on existing/traditional techniques? If so, how? And why?
5. **Appendices (excluded from the word limit)** – include your completed practical worksheets here.

Approximate mark allocation for the report

Note that the following percentages are not hard and fast rules, but should give you an idea of the relative importance and scope of each section:

Intro (10%)
Design/development/implementation process (35%)
From theory to design (25%)
Innovative interactions (20%)
References and appendix (10%)

POINTS TO NOTE

1. The portfolio is an individual project, however, during the practical sessions you will be working in groups to discuss and evaluate each other's ideas. Note that there will be no peer *marking*: the aim is simply to get feedback from others.

2. The mark allocation (p. 1) could suggest that most of the work will be put into the project report. In truth, designing the learning environment and the accompanying poster and demo is likely to be more time-consuming than any other component. However, it was decided to allocate marks in this way in order to put more weight on your learning process, rather than on your prototype: one term is really not enough time to develop a fully functional learning environment prototype, therefore, we will be looking for evidence of what you have learnt through the design process, and how your views on learning have developed over time (as evidenced by the project report and journal).