University of the West of England
BRISTOL

UNIVERSITY OF THE WEST OF ENGLAND
CORPORATE AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Section 1: Basic Data		
Awarding Institution	University of the West of England, Bristol	
Teaching Institution	As above	
Delivery Location	Delivered from UWE Frenchay (online)	
Faculty responsible for programme	Arts, Creative Industries and Education	
Department responsible for programme	Education Innovation Centre	
Modular Scheme Title	The University Modular Framework	
Professional Statutory or Regulatory Body Links ***Name of PSRB*** ***Type of approval*** **Dates**	N/A	
Highest Award Title	MA Education in Virtual Worlds	
Default Award Title	N/A	
Interim Award Titles	Postgraduate Diploma Education in Virtual Worlds Postgraduate Certificate Education in Virtual Worlds	
UWE Progression Route	N/A	
Mode of Delivery	Online (Distance)	
Codes	**UCAS:**	**JACS:**
	ISIS2: X19C62	**HESA:**
Relevant QAA Subject Benchmark Statements	N/A	
CAP Approval Date	Curriculum Innovation Competition approval 1st March 2011, Special CAP date 29 March 2012	
Valid until Date		
Version	1.1	

This programme requires no variation from UWE's Academic Regulations and Procedures 2011/2012.

Section 2: Educational Aims of the Programme

The overall aims of the programme are to provide an opportunity for students to:

- explore a new and innovative learning environment,
- investigate the applicability of extant learning and teaching models to those activities in virtual worlds, and
- explore the potential development of new pedagogies in virtual worlds.

Students will, therefore, both develop their synthesis skills in current educational environments, and prepare themselves for future knowledge synthesis/creation. They will also have the opportunity to increase their skill levels in technology enhanced learning, and thereby improve their future employment prospects.

Specifically, the programme aims to enable students to:

- Develop their critical appreciation and understanding of virtual worlds
- Design curricula that are appropriate to learning in virtual worlds
- Develop their scripting, building and virtual world environment design skills
- Develop their critical understanding of simulation and role play as learning techniques in virtual worlds
- Develop their critical understanding of the sociological aspects of virtual worlds as they impact upon education
- Critically appraise the philosophy of education in virtual worlds
- Develop their critical understanding of the role and operation of artificial intelligence and non-player characters in educational activities, and
- Develop their critical understanding of researching education in virtual worlds, and demonstrate that understanding through the medium of a dissertation or extended piece of learning environment design

Section 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and Understanding	
A Knowledge and understanding of: • The operation and structures of virtual worlds • The educational potential of virtual worlds • Sociological and philosophical issues relating to virtual worlds • Artificial intelligence as it applies to education in virtual worlds	**Teaching/learning methods and strategies:** The learning and teaching strategy is based upon a guided exploration model, where students are introduced to a range of theories, practices and philosophies and then are guided through an active exploration of their application to educational environments in virtual worlds. Tutorials and workshops will take place in virtual worlds where students can experience their operation and explore the educational potential for themselves. Students will also explore alternative communities and environments and synthesize narratives of the real and virtual. They will have the opportunity to both meet and create non-player characters based upon artificial intelligence engines. **Assessment:** Through experiential narrative, travel blogs, reflective portfolios and design and creation projects.

B Intellectual Skills

B Intellectual Skills:

- Synthesis
- Critical evaluation
- Virtual world research
- Increasing self-knowledge

Teaching/learning methods and strategies:
The synthesis necessary for understanding education in a new environment like virtual worlds is itself a complex issue and students will be required to draw on and synthesize a wide range of data and evidence. By its nature, much of that evidence is incomplete, patchy and subject to bias, as it relates to personal experiences of learners in VWs. Students will be required to identify problems and pertinent questions, as well as propose methods to advance possible solutions, as forms of assessment in 4 of the 8 modules. Also, whilst we recognize that research is not necessarily about problem-solving, dissertation students will be encouraged to choose practical educational issues to investigate, as well as more theoretical models.

Assessment:
Through research project proposal, dissertation, reflective commentary, taking part in self-diagnostic opportunities, literature searching and analysis and production of a virtual world conference paper.

C Subject, Professional and Practical Skills

C Subject, Professional and Practical Skills:

- Curriculum design
- Learning environment design
- Creation of virtual world learning environments
- Developing simulations and role play exercises in virtual worlds

Teaching/learning methods and strategies:
Teaching and learning strategies are predicated upon a situated learning model, where the learning takes place in the context to which it refers. Through a “learning by doing” approach, students will have the opportunity to actually design and create learning experiences in their own subject field, and to try them out on members of their cohort or other volunteers in virtual worlds.

Assessment:
Through design and creation projects, reflective logs, prototyping and testing.

D Transferable Skills and other attributes	
D Transferable Skills and other attributes: • Computing skills • Virtual world navigation and communication skills • Working in virtual groups • Experience of being a distant student • Initiative • Decision-making • Independent learning abilities	**Teaching/learning methods and strategies:** As the course is studied entirely online, students will be developing their computing skills on a day to day basis, as well as through specific tutorials on software packages such as Opal (VW creation tool). They will be part of a virtual cohort for the duration of their studies, and as virtual worlds are populated spaces, students will be given the opportunity to hold open seminars and workshops to practice their communication skills with a potentially international audience. Initiative, decision-making and independent learning abilities will all be developed through exploration and investigation of VW applications to education. **Assessment:** Through travel blogs, reflective logs, design and creation projects. The experience of being a distant student is not assessed as such, but will impact upon the assessments undertaken throughout the course.

Section 4: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a **part time student** as this is the only mode available at present. All modules are at level M (7) and 12 credit modules are studied in parallel each semester. UWE credit rating is shown in brackets after the module title.

ENTRY

	Compulsory Modules	Optional Modules	Interim Awards
Year 1	<u>Semester 1</u> Orientation in virtual worlds - UTVGSD-15-M Designing curricula in Virtual Worlds- UTVGSE-15-M <u>Semester 2</u> Simulations and role play - UTVGSF-15-M Scripting and building learning environments - UTVGSG-15-M	N/A	PG Cert can be awarded for successful completion of all 4 modules (60 credits).
Year 2	<u>Semester 1</u> Philosophy of education in virtual worlds - UTVGSH-15-M Sociology of the metaverse - UTVGSJ-15-M <u>Semester 2</u> AI, bots and non-player characters - UTVGSK-15-M Research methods in virtual worlds - UTVGSL-15-M	Dissertation - UTVGSM-60-M Extended Project - UTVGSN-60-M N.B. Students can opt for either module. Both are begun towards the end of semester 2 and can be submitted in October of that year or May of the following year.	PG Cert can be awarded for successful completion of any 4 modules from this year or previous year (60 credits). PG Dip can be awarded for successful completion of modules totaling 120 credits.

GRADUATION

Section 5: Entry Requirements

Entry to the MA will be available to candidates:

- with a first degree in an appropriate subject, such as education, educational philosophy/sociology, instructional design, technology enhanced learning, games technology and artificial intelligence, or
- with a first degree and experience in an appropriate area of practice, such as education, training, games technology and VW development, or
- without a first degree, but with appropriate prior learning and/or experience (will be assessed and managed through the university's current accreditation of prior learning/experience processes, including the Shell Award Framework). The assessment must be successfully completed prior to entry onto the programme. Appropriate prior learning will be assessed as being Bachelor's equivalent, in line with the SEEC Level 6 descriptors (see Appendix 5 of the Contextual Document for this programme).

Entry to CPD activities (i.e. non-assessed) will be open to candidates who have an active interest in developing education in VWs.

All prospective candidates will receive guidance prior to registration on the necessary proficiency in VWs to enable them to take part in the programme.

Section 6: Assessment

Assessment Map

The programme encompasses a range of **summative assessment methods** including; reflective portfolios, travel blogs, practical exercises, a virtual conference presentation, design and creation projects, experiential narratives, private and public presentations and a dissertation (optional).
These are detailed in the following assessment map:

Assessment Map for MA Education in Virtual Worlds

		Practical Exam	Practical Skills Assessment	Oral assessment and/or presentation	Written Assignment	Report / Project	Log / blog	Dissertation	Portfolio
Compulsory Modules Year 1	**Orientation in VWs**			(A) 50			(A) 50		
	Designing curricula		(A) 40			(A) 60			
	Simulations & role play		(A) 40				(A) 60		
	Scripting and building	(A) 60					(A) 40		
Compulsory Modules Year 2	**Philosophy of edn in VWs**			(A)100					
	Sociology of the metaverse				(A) 80	(A) 20			
	AI, bots and NPCs		(A) 60				(A) 40		
	Research methods in VWs				(A)60	(A) 40			
Optional Modules Year 2	**Dissertation**							(A) 100	
	Extended project		(A) 60						(A) 40

Marking scheme

Assessments will be marked by tutors in accordance with the programme marking criteria shown at Appendix 1. A 20% sample of all summative assessments, representative of top, middle and bottom marks, will be moderated by programme tutors. In the case of the dissertation and extended project modules, all assessments will be double blind marked.

Section 7: Student Learning

Teaching, learning, assessment and reading strategies to enable learning outcomes to be achieved and demonstrated

Teaching strategy

The teaching strategy for the programme is based upon a guided exploration model, where students are introduced to a range of theories, practices and philosophies and then are guided through an active exploration of their application to educational environments in virtual worlds. The role of a tutor is therefore essentially as mentor and guide to students with a range of learning preferences and abilities; to assist them in making sense of what they find and to encourage them to develop the transferable faculties of synthesis and criticality, which are fundamental to a true mastery of the subject.

Each 15 credit module has 3 hours per week of tutor contact time, which amounts to 36 hours over the 12 week semester. As 2 x 15 credit modules run in parallel at any one time, students undertaking the normal part time 2 year route through the programme will have 72 hours of module teaching contact plus 12 hours of personal tutorial time per semester. Similar timings are planned for attended sessions for all taught modules, as students are likely to be employed and therefore need continuity and predictability in attendance patterns.

The optional 60 credit dissertation and extended project modules do not have the same planned tutor contact time, as these modules are individually supervised rather than taught in a cohort. Some tutor-led cohort sessions will be offered, but these are likely to be sporadic and responsive to particular issues that arise. Supervision will take place in-world, and also through the use of desktop video-conferencing, synchronous text chat, asynchronous messaging and email.

Students will be fully informed of the expected level of their engagement with the programme, both in attended sessions and during independent study, at the beginning of their studies. Equally importantly, tutors will make their contribution in terms of time, speed of turn-round of queries and accessibility clear to the students and, although we do not foresee the development of formal learning contracts (although we would not rule this out in the future), it is important that both tutors and students understand what each expects of the other.

As described, this programme utilises both “attended” and “distance” modes of delivery and student engagement. For the attended modes the timetable will be 1x3hr session per week per 15 credit module, plus half an hour of tutorial time, as described. The modules will run on different days of the week to avoid the need for persons in full-time employment to spend one full day per week attending the programme. Days of the week and specific times have not yet been decided upon, as the global distribution of the students will have an impact upon this. If the interest from the USA, Australia and New Zealand results in registered students, we are likely to concentrate upon afternoon and evening slots for delivery, but these may shift a little to accommodate student needs. All students will be informed of the timetable for attended sessions well before the start of each module.

The asynchronous parts of the course will be scheduled week by week, and split into weekly folders in Blackboard, which will appear in the Blackboard course at the end of the week before they are due to be studied. The notion of a timetable for distant students is somewhat different from that of an attended course, in that the timing of their interaction with the asynchronous elements will vary from student to student, depending upon their work and other commitments. DL courses are usually designed with schedules rather than timetables for this reason.

Section 7: Student Learning

Learning strategy

"Tell me and I forget; show me and I remember; involve me and I understand." Chinese proverb

The learning strategy for the programme can be summed up as "learning by doing" and is predicated upon a situated learning model. The term "situated learning" was first proposed by Lave and Wenger (1991). They developed the term to describe learning that takes place in the same context as that in which it is applied in practice. The notion of situated learning advances the idea that learning should not be viewed as simply the transmission of knowledge from a giver to a receiver. Learning is rather seen as a social process during which knowledge is co-constructed, and it takes place in physical and social environments which provide an authentic contextual framework. Situated learners learn through socialization, visualization and imitation, and this is particularly applicable to higher education as it is widely recognized that social context is a key element of adult learning (Merriam et al, 2006).
Although Lave and Wenger did not claim that situated learning is a pedagogical strategy as such, it has been applied successfully in many subject settings, including teacher training (Korthagen, 2008), organizational behaviour (Mezias & Lant, 2010), health care information systems (Tong et al, 2011) and adult computer education (Young & Merriam, 2010), for example. In particular, the importance of authenticity in learning contexts is stressed by many commentators and researchers [see, for example, Dede (2009), Webster-Wright (2009) and Park & Park (2012)] and questions of authenticity continue to be addressed in relation to situated learning in online and virtual environments [see, for example, De Freitas (2010); Tamai et al (2011); Cram et al (2011)]. Dede (2009) discusses how studies have shown that immersion in a virtual world can enhance education by enabling situated learning. He then goes on to argue that further studies are needed on the capabilities of immersive media for learning, on the instructional designs best suited to each type of immersive medium and on the learning strengths and preferences these media develop in users.

Although it may at first seem inappropriate for study at Master's level to be concerned with learning by doing, the potential of virtual worlds to support active learning through simulation makes the notion of "learning by doing in context" highly appropriate. There has been a tacit view in education design that the higher the academic level, the less students "do" and the more they "think". This programme challenges that view, as thinking without application is unlikely to result in deep learning. The facilities of immersion, activity and simulation offered by virtual worlds have the potential to bring about a paradigm shift in teaching and learning, which encourages thinking and doing to occur simultaneously. The ability to capture and reflect upon those experiences also encourages and facilitates reflection in a manner that is harder to accomplish in the real world.

It is always easier to describe what will be taught than what will be learned, as each student constructs their own internal knowledge frameworks and filters. An important part of any learning strategy is therefore to help students to recognise their personal preferences and tendencies in learning, and to present each student with clear information about how the programme will operate and what the consequences might be for students with differing learning preferences. For this reason, an online self-diagnostic test will be available on the programme website for the use of both potential and current students. We are very aware of the shortcomings of the many different methods there are to measure "learning styles", and indeed we have deliberately avoided that term. Students can have a number of different "styles", depending upon the circumstances they are in, and in any case we tend to change our approach to learning with experience and age. The diagnostic will not attempt to place users in a particular category, but will attempt to give them some insight into their own learning tendencies and how they might most effectively interact with the learning and teaching approaches used in the

programme. Students may also find it useful to carry out 2 or 3 diagnostics during the course of their registration on the programme, to see if their preferences and tendencies change during their studies.

This situated learning pedagogical approach is also very appropriate for the career enhancement of students undertaking the programme, or parts thereof. The practical application of virtual worlds to new and emerging methods of instruction and opportunities for learning is the key issue that will engage students. Their future careers in education, at any level, are very likely to include the use of new and emerging technologies, and the ability to try out and 'learn from doing' using rapidly developing technologies will both enhance their employability prospects, and enable them to develop their talents during their working lifetimes.

In setting the learning outcomes for the modules which constitute this programme, consideration has been given to the SEEC Level 7 descriptors (see Appendix 1 below), and mapping notation can be found in the learning outcomes for each module description.

Assessment strategy

It is axiomatic that an effective assessment strategy is one that actually tests the desired learning outcomes. The assessment strategy for this programme is founded on the principle that assessment is an opportunity for students to demonstrate their abilities and achievements. It is therefore important that assessments are in a variety of formats that are most appropriate for testing the learning outcomes, and give students with a range of learning preferences and abilities the opportunity to succeed. This is not an argument for reducing standards in assessment; on the contrary, a varied and imaginative assessment strategy, that is not afraid to deviate from the apparent (but misguided) "safety" of exams and essays, presents students with appropriate challenges that stretch them and keep them engaged.

As the learning strategy is one of "learning by doing", the assessment strategy likewise incorporates elements of "assessment by doing". But, we have not lost sight of the level of this programme and the need to test the students' abilities to evaluate, reflect, synthesise and develop a critical faculty, all so vital to Master's study. In modules with a practical flavour, such as scripting and building learning environments, there is both a practical element of assessment (e.g. design of a learning environment or construction of a scripted activity) and a reflective/critical/synthesising element. In other modules that have a more academic flavour, such as the sociology and philosophy modules, the assessment is appropriately academic in nature, but again does not rely on traditional essays. Students are instead assessed through, for example, the production and delivery of a conference paper in the virtual world (the conference will be organised for them on the UWE virtual estate) or the production of an experiential narrative based upon their travels and interactions in virtual worlds. We are also very aware of the danger of over-assessment in programmes which are made up of relatively small modules. When the overall diet of assessment in the modules are considered against other modules at UWE of similar size, they fit well in the general pattern. Additionally,four of the assessment elements in different modules involve the keeping of a log, and this will be undertaken primarily at programme level. One programme log, documenting the students' learning journeys, will be kept and will form part of the summative assessment in some of the modules. In this way we will encourage the formative benefits of keeping learning logs but also utilise them for summative assessment and thereby avoid an over-burdensome assessment load.

Effective formative assessment is vital to support the students, both in their learning and in their preparation for summative assessment. This is especially true for students who do not attend the

university, although attendance in the virtual world reduces the isolation often experienced by more traditional distance learning approaches. Each module has a formative assessment point built-in, together with self-assessment exercises throughout each module, available in the relevant Blackboard course.

Feedback for formative assessment opportunities is provided both by tutors and automatically via pre-set activities in Blackboard and other technologies in use. Feedback for summative assessments is provided by tutors and is available online for students throughout the duration of their attendance on the programme. Because both summative and formative feedback is recorded electronically (e.g. videocasts, podcasts, written templates) it is easily accessible to students, who will be encouraged to create their own personal feedback portfolio at the beginning of their studies, utilising the built-in portfolio facility in Blackboard. Group feedback sessions during the modules will be captured in the virtual world as machinima (video and sound) and made available for students to incorporate into their feedback portfolios.

References

Cram A., Hedberg J.G., Gosper M. & Dick G. (2011) Situated, embodied and social problem-solving in virtual worlds. Research in Learning Technology. 19(3), 259-271.

De Freitas, S. (2010) Editorial: Crossing boundaries: Learning and teaching in virtual worlds. British Journal of Educational Technology. 41(1), 3-9.

Dede C. (2009). Immersive interfaces for engagement and learning, Science, 323, 66-69.

Korthagen F.A.J. (2008) Situated learning theory and the pedagogy of teacher education: towards an integrative view of teacher behaviour and teacher learning, Teaching and Teacher Education, 26(1), 98-106

Lave J. & Wenger E. (1991) Situated Learning: Legitimate Peripheral Participation (Learning in Doing: Social, Cognitive and Computational Perspectives), (Cambridge, Cambridge University Press).

Merriam S.B., Caffarella R.S. & Baumgartner L.M. (2006) Learning in Adulthood: A Comprehensive Guide, (Chichester, Jossey-Bass)

Mezias S & Lant T. (2010) Situated learning and brokerage as keys to successful knowledge production: an experiential review. In Schoonhoven C.B. & Dobbin F. (eds) Stanford's Organization Theory Renaissance, 1970 – 2000 (Research in the Sociology of Organizations, 28, 351-357.

Park K. & Park S. (2012) Development of professional engineers' authentic contexts in blended learning environments, British Journal of Educational Technology, 43(1) E14-E18.

Tamai M., Inaba M., Hosoi K., Thawonmas R., Uemura M. & Nakamua A. (2011) Constructing situated learning platform for Japanese Language and Culture in 3D Metaverse. 2nd International Conference on Culture and Computing, Kyoto, Japan, Oct 20-22. In proc.

Tong Y., Goonawardene N., Tan S.S., Hock H.T. & Cheng O.L. (2011) The influence of job rotation on physicians' system use: a situated learning perspective. At http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1017&context=icis2011. (Accessed 17th January 2012)

Section 7: Student Learning

Webster-Wright A. (2009). Reframing professional development through understanding authentic professional learning. Review of Educational Research, 79(2), 702-739.

Young S.K. & Merriam S.B. (2010) Situated learning and identity development in a Korean older adults' computer classroom. Adult Education Quarterly, 60(5), 438-455

Reading strategy

Although each module has its own reading strategy, there is a tendency for duplication across a set of modules in a programme that can detract from clarity in the reading strategy for the programme as a whole. For non-attending students it is particularly important that an achievable and appropriate reading strategy is developed for the programme, which includes aspects of accessibility to material as well as learning and teaching issues. Parts of the reading strategy here will be found in each module specification, but the reading strategy below is the definitive one for the programme.

Overall strategy

The overall reading strategy for this programme is one of guided development, in support of the teaching and learning strategies. Students will be introduced to module readings in their induction information for each module, which will be available on Blackboard. It will be made clear from where these sources are available, and which books or other texts students will need to purchase (if any). Modules will not normally have more than 2 texts that require to be purchased by students. Modules will guide students through the essential texts on a week by week basis and refer to further reading where appropriate. Further reading will not normally be as guided as essential reading, thereby developing the students' critical faculties.

Operation

Details of essential texts that are not provided by the university will be given to the students no later than two weeks before the commencement of the module. In some cases essential reading is available free of charge from the UWE library, but in other cases students will be expected to purchase essential texts. Guidance on sources for these texts is given in each module, including those purchasable in paper form from online providers such as Amazon, those available electronically, e.g. Kindle, and those available on electronic subscription sites such as Questia. The essential reading provided by the university will be in electronic form and that which covers the subject matter of the module as a whole will be made available at the beginning of the module. Copies of materials that support particular themes, or links to their locations, will be provided on a week by week basis as those themes arise. These materials and links will be in the relevant Blackboard folder for that week, together with suggested starter locations for further literature.

At M level further reading is essential. Students undertaking this programme will not be expected to visit the physical locations of the UWE library, but will make extensive use of its electronic searching and provision services. They will be supported in their literature location and reading/evaluation activities through access to online study support sites at UWE (e.g. The Research Observatory and the ISkillZone), and in-world programme tutorials will also cover finding, organising and evaluating literature. Suggestions will be made for further reading, but they will not be provided as sole sources – rather they will indicate classes of literatures and examples of locations. In this way, the students are guided to become independent and critical users of both sources of literature and the materials they find there.

Section 7: Student Learning

Induction

As students will not be attending the university it is particularly important that they have the opportunity to be introduced to it; specifically the areas of which they will be making most use such as the library. For students enrolled on the programme, induction will take place the week before teaching starts in Year 1, and will include a full introduction to the online use of library and information systems. There will be a particular emphasis on finding and using electronic resources provided by the library, as well as guidance on reading strategy. Induction will also include a full introduction to the university's Second Life estate and other online technologies such as Blackboard.

For students undertaking specific modules for CPD purposes, self-contained introductory tutorials and "walk-throughs" will be available online, which will take them through accessing information in the library, finding their way around the UWE Second Life estate and using Blackboard and other technologies in use. These tutorials will also form useful revision aids for students who have attended online induction sessions.

Description of Distinctive Features and Support

The programme will be studied by students who do not attend the university, and although this could be considered to be a distance learning course, that notion would be misleading. Unlike traditional paper-based, or text-dependant online distance courses, this programme uses a wide range of pedagogical approaches. The particularly distinctive feature of the programme is the socialization and collaboration facilities afforded by virtual worlds, which enable the students to meet and form as a cohort on a daily basis for tutorials, workshops, seminars, practical workshops, discussion, support and access to learning.

Online technologies also enable the programme team to track the students' activities and to spot any student who may be having difficulties or disengaging from their studies early on. In more traditional distance learning courses which depend upon the students mostly studying in isolation, problems of slippage or disengagement can be difficult to identify quickly, and so students can become significantly disengaged before the problem is brought to the tutors' attention. The earlier disengagement can be identified, the more likely the success of tutor interventions and the greater the likelihood of retention and successful completion.

Section 8: Reference Points and Benchmarks - Summary

N.B. There are currently no QAA subject benchmark statements for education.

A full mapping and commentary on how this programme has been influenced by, and how it addresses:

- the QAA framework for HE qualifications in England Wales and Northern Ireland
- the QAA CoP on Master's degree characteristics
- the QAA CoP on collaborative, flexible and distributed learning
- the QAA CoP on disabled students
- the HEFCE approach to Technology Enhanced Learning
- the HEA guidance on Technology Enhanced Learning
- UWE's mission/vision statement
- UWE's Technology Enhanced Learning Strategy
- UWE's guidelines for non-standard entry, and
- research carried out by course team members

can be found in sections 3, 4 and 5 of the contextual document that accompanies this programme specification. For the sake of avoiding duplication, the following is simply a brief summary of how these reference points and benchmarks have been incorporated into this programme, and how they have influenced its design. The application of the SEEC Level 7 descriptors to the learning outcomes of the programme is discussed in the learning strategy paragraph above.

The QAA Framework and Codes of Practice relate to the design and operation of degree courses, and are generally concerned with appropriate academic and access standards. This programme addresses all the major points of those standards and is particularly in-line with the accessibility, flexibility and disability issues highlighted in the standards. The programme is accessible from anywhere in the world where a moderate speed internet connection is available, and on any desktop or laptop computer (currently not tablets or mobile phones, but this is likely to change in the future with the Windows 8 operating system) with a medium standard graphics capability. Students do not need to travel to the university to undertake their studies, and the programme is therefore accessible to students with a range of physical or social disabilities.

HEFCE's approach to TEL is summed up under 3 headings as follows:

- Efficiency
- Enhancement
- Transformation

The proposed MA Education in Virtual Worlds will make a significant contribution in all three of these areas. With regard to efficiency, the programme has the potential to result in considerable efficiencies in relation to student travel, estate costs for the university and the flexibility of study it offers to students in employment. With regard to enhancement, the programme offers the opportunity to explore a form of technology that could bring about a real paradigm shift in education. With regard to transformation, the programme will transform the currently-understood definitions of distance learning, as the students will be able to learn through a far wider range of transactions and interactions has been possible previously.

Section 8: Reference Points and Benchmarks - Summary

The HEA state that they are concerned with technology enabling choice and responsiveness in

- Pace
- Place, and
- Mode of learning

The flexible nature of this proposed programme, and the range of technologies that will be employed, facilitate the students learning at their own pace, within certain boundaries. Those boundaries are not a function of the technology though; rather they are the usual issues of assessment timing and currency of learning that are common to all academic courses.
The course team would argue that the notion of place is becoming somewhat outdated by social networking and communication technologies. Place tends to refer to physical location, and as we have said earlier in this document, it is actually more important to consider "presence" rather than location. Students on this proposed programme will meet their peers and tutors frequently, through the medium of virtual worlds, synchronous and asynchronous communication technologies and live video conferencing. This in turn enables us to explore a range of modes of learning that can now be experienced regardless of the location of the student.

UWE's mission is to make a positive difference to our students, business and society. In particular, it aims to inspire all who come into contact with it, as follows:

I = Innovation
N = Nurturing talent
S = Student experience
P = Participation
I = Internationalisation
R = Research
E = Exchange

The programme proposed here fits this aspiration perfectly, as it is an **innovative** proposal that enables students to **develop their talents** through a **new and exciting experience**, which enables **global participation** and is underpinned by **research** and **exchange of knowledge and experiences**.

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in the module specifications.