E-Revista de Estudos Interculturais do CEI–ISCAP
N.º 10, maio de 2022

EDUCACIÓN SUPERIOR EN LA DÉCADA DE 2020: COMPROMISO ESTUDIANTIL Y EMPLEABILIDAD DE GRADUADOS, ENTREGADO CON PEDAGOGÍA ALTERNATIVA

HIGHER EDUCATION IN THE 2020S: STUDENT ENGAGEMENT AND GRADUATE EMPLOYABILITY, DELIVERED WITH ALTERNATIVE PEDAGOGY

Benjamin Duke[1]

RESUMEN: Propósito de la investigación: Esta investigación proporciona una evaluación crítica de muchas formas de pedagogía alternativa además de las conferencias y tutorías pasivas; que están disponibles para ser utilizados en las universidades de educación superior. La revisión crítica teórica conceptual identifica los diferentes paisajes de aprendizaje, donde las opciones pedagógicas alternativas son más efectivas para enseñar a los estudiantes. Método de investigación: este trabajo de investigación empírico se compiló mediante un análisis de la literatura gris existente, que discutía múltiples tipos de pedagogía. Las fuentes de literatura identificaron la creciente importancia del compromiso de los estudiantes y la empleabilidad de los graduados en la década de 2020. El análisis empírico de la literatura gris estableció cuándo

[1] Dr Benjamin Duke PhD has research interests in; active pedagogy, ageing demography, criticality, curriculum design, European Green Deal, Europeanisation, environmentally sustainable living, experiential learning, gender equality, global social policy, higher education, international development, LGBTIQA++ issues, political science, squatter's social movements and sustainable business. Ben Duke holds a PhD in Social Policy from Keele University (2017), United Kingdom (UK). He currently works or has worked in research positions for UCL, University College London, UK; the University of Northampton, UK; and the University of Nottingham, UK. Ben Duke has had nineteen discussion papers published, including three book chapters, two conference papers and a book review. His most recent article being published in January 2022. He is Deputy Lead Governor for NHS Sheffield, UK, and volunteers for Sheffield MENCAP, UK, assisting vulnerable adults and children with learning difficulties. He also does voluntary work for numerous other UK charities, helping people receive social justice

se puede aplicar cada tipo de pedagogía; además de indicar cómo cambiaría el viaje de aprendizaje de los estudiantes como resultado de la implementación de diversas formas de pedagogía alternativa. Resultados: Esta revisión crítica teórica conceptual reveló que tanto los estilos de aprendizaje pasivos como los activos tienen un valor igual pero diferente en el proceso de aprendizaje de los estudiantes. Los empleadores indicaron que necesitan graduados con habilidades interpersonales, habilidades blandas capaces de escuchar activamente y evaluar cuáles son los problemas de un individuo o un grupo; luego ser capaz de idear y, si es necesario, implementar prácticas efectivas para resolver los problemas identificados. Conclusiones: El análisis de la literatura reveló un claro enfoque en que los estudiantes adquieran agencia real, autonomía, capacidad de razón y pensamiento independientes. La literatura identificó que debe haber una pequeña cantidad de criticidad y pedagogía crítica en la educación superior, para que los estudiantes desarrollen un sentido de autoeficacia, autoidentidad y autorrealización.
Compromiso de los estudiantes y empleabilidad de los graduados: conocimiento y práctica actuales

El aprendizaje híbrido se convertirá en la norma, ya que una mayor proporción de conferencias y tutoriales universitarios se impartirán en línea. Las universidades necesitan incorporar una pedagogía más alternativa, activa, interactiva, de trabajo en grupo, aprendizaje basado en problemas, juego de roles y simulación cuando educan a los estudiantes. La empleabilidad de los graduados aumenta cuando los estudiantes pueden demostrar que son personas motivadas, emprendedoras, capaces con educación académica que quieren apropiarse de su trabajo. Estos son rasgos de personalidad que los empleadores valoran mucho, también reflejan las características de los líderes del sector público, privado y socioeconómico del mañana.

PALABRAS CLAVE: Pedagogía alternativa; Criticidad, Empleabilidad de los egresados; Participación de los estudiantes

ABSTRACT: Purpose of the research: This research provides a critical appraisal of many forms of alternative pedagogy other than passive lectures and tutorials; that are available to be used in higher education universities. The conceptual theoretical critical review identifies the different learning landscapes, where alternative pedagogical choices are most effectiveness in teaching students. Research method: This empirical research paper was compiled by an analysis of extant, grey literature, which discussed multiple types of pedagogy. Literature sources identified the growing importance of student engagement and

graduate employability in the 2020s. Empirical analysis of grey literature established when each type of pedagogy can be applied; alongside indicating how the student learning journey would change as a result of implementing various forms of alternative pedagogy. Results: This conceptual theoretical critical review revealed that both passive and active learning styles, have equal but different value in the student learning journey. Employers indicated they need graduates with people skills, soft skills able to actively listen and assess what an individual or a group's problems are; then be able to devise and if necessary, implement effective practice to resolve identified problems. Conclusions: Analysis of the literature revealed a clear focus upon students becoming acquired with real agency, autonomy, capable of independent reason and thought. The literature identified there needs to be a small amount of criticality and critical pedagogy in higher education, so students develop a sense of self-efficacy, self-identity and self-realisation.

Student engagement and graduate employability: Current knowledge and practice

Hybrid learning will become the norm, as a higher proportion of university lectures and tutorials will be delivered online. Universities need to incorporate more alternative, active, interactive, group work, problem-based learning, role play and simulation pedagogy when they educate students. Graduate employability increases, when students can demonstrate they are self-motivated, self-starters, academically educated capable people who want to take ownership of their work. These are personality traits which employers value highly, they also mirror the characteristics of tomorrow's socio-economic, private and public sector leaders.

KEYWORDS: Alternative pedagogy; Criticality, Graduate employability; Student engagement

1. Introduction

Let's begin by looking at some definitions of student engagement. At this initial stage we get an early sight of how problematical this topic is, there is more than one definition of student engagement (Karcher et al., 2022, p.3; see also Promethean, 28 June 2021). There is wide consensus that student engagement is desirable (Caspari-Sadeghi, 2022, p.2). However there is some contestation throughout the higher education community, as to how student engagement is defined (Resch et al., 2021, p.3; Harrison and Luckett, 2019, p.266). A number of studies demonstrate that student engagement overlaps with but is not the same as student motivation (Jones et al., 2022, p.11; Dewey, 1938, p.76-77). Some authors might define student engagement as attending all lectures, seminars and submitting module assessments on time. Others focus on different aspects of the student experience, enquiring, has the student joined

any of the university's groups, clubs or societies; do they join in university arranged social activities; have they made any friends? (Top Universities, 6 March 2022). Another definition materialises in the form of student involvement in the business of their university, for example, formation of a 'student panel' type approach to student engagement (University of Glasgow, 29 August 2021). My own definition of how to propagate student engagement, is an amalgamation of the above. To facilitate student engagement students should receive in numerous different formats, as many opportunities as possible to become involved in the academic and social aspects of higher education; ensuring the student body is regularly consulted with and heard,in colleges and universities.

This conceptual theoretical review will discuss how alternative pedagogy, different approaches to learning: for example, simulation, role-play, virtual learning environment (VLE), interactive civil society gaming (Spyropoulos et al., 2022, p.3; Veervoot et al., 2022, p.8); and other new innovative forms of 'edutainment' (Elevate Digital Education Retreats, 13 February 2022). A definition of edutainment is a pedagogical approach which combines elements of entertainment and education to attract the attention of learners and maintain engagement (Greve and Tan, 2021, p5). For example, student-centric game design (see Blackboard, 5 January 2022), can be used to promote student civic engagement and democratic participation. Different pedagogical approaches can be introduced by expanding extra curriculum opportunities, such as peer mentoring forums. Peer mentoring forums can be used to focus upon new learning methods such as problem solving, civil literacy, communication skills and teamwork (Nammouz and Smith, 4 February 2022; Arsenis et al., 2022, p.253). Such a policy initiative will help promote leadership development through student engagement, service and/or employment. Students will learn by analysing feedback received during peer mentoring, such critical pedagogy will help increase their graduate employability quotient. Critical pedagogical analysis of the effectiveness of various teaching methods, how people learn, will be included. The discourse will be complimented by discussion on criticality. Criticality is a reflective practice, which can be defined as students discussing their academic experiences with their tutor, mentor and/or peers. (Abbey et al., 2014, p.12; Tyreman, 2000, p.117; Burbules and Berk, 1999, p.45).

Criticality and peer mentoring dovetail neatly, they can work in tandem as critical allies, promoting student engagement and graduate employability. Criticality employs constructive elements of critical thinking, for example, evaluation and debating skills, with critical pedagogy, being reflective of different teaching strategies. A policy shift towards criticality,

after the implementation of instructive or constructive teaching methods, will deliver students with critical reflection skills and enhanced employability (see also Jeffs, October 2015).

Criticality helps to enhance student influence. Students reflect upon their own contributions in simulation or role-play exercises, learning from past mistakes, effectively using Kolb's (1984, p.38) experiential learning cycle theory (see Veine et al., 2020, p.147). A policy to adopt use of criticality in higher education, will better equip students to critically evaluate methods of student engagement and participation. Such students, now armed with experiential learning (Dewey, 1938, p.80) from criticality, will be enabled to influence society's development.

Globally higher education has seen in recent years, an increasing number of students added to its ranks (Baty, World Economic Forum (WEF), 20 January 2022). 2020s students enter university with very different assumptions and expectations regarding their journey through higher education, than their counterparts of the 1990s. The educational transformation in the United Kingdom (UK) has been radical in the last 30 years (Further and Higher Education Act 1992, p.46; Dearing Report 1997, p.21; Roberts Report 2002, p.8; Leitch Report 2006, p.19). In recent times the student body has become more socially diverse (The New York Times, 9 February 2022; University of Colorado, 26 January 2022; Loughborough University, 18 January 2022). Universities have to be much more flexible in its service implementation, to ensure inclusive provision. The demographic profile of the student body has changed; "The student body is more international, more women than men are graduating and choice of fields of study have evolved" (OECD (Organisation for Economic Co-operation and Development), 2021, p.202). A higher proportion of students are older than the typical 18-24 age range. These more mature students have different student/family life balances to manage, often they have children and/or an elderly relative to care for. There are a higher number of part time students who choose to work, who need to be able to support themselves whilst studying. Globally the student body has become fragmented (European Commission (EC), 2022b, p.9). This can lead to student disengagement if students feel their cultural diversity is being inappropriately or insufficiently provided for by their institution (UCL (University College London), 2022, p.16). There are numerous reasons why such disenfranchisement happens, one source is due to poor decision-making practices, students can feel disengaged from formal university processes. These are some of the various causal factors which act to apply pressure on the student during their learning journey. University leaders need to respond to these causal factors, which are threatening student engagement and graduate employability by designing appropriate policies

(Huang et al., 2022, p.4). In recent years there have been initiatives to consult with students and other higher education stakeholders, to identify then co-design student engagement strategies (Johnston and Ryan, 2022, p.27). This co-designing with students' approach will develop policy briefs to facilitate the implementation of new strategies, ensuring the continuance of inclusive provision at universities around the globe. Policy briefs co-designed with students at the heart of university practice, will put student engagement and graduate employability at its core (Elliott et al., 2021, p.321; Woods and Homer, 2021, p.2).

This paper answers a research problem: What will be development trajectory of delivering student engagement and graduate employability skills acquisition higher education in the 2020s. In a sense the reader gains a pragmatic crystal ball, which acts to delineate the direction of travel in the global higher education landscape. The main contribution this paper makes is to alert higher education practitioners, that substantial changes are needed to keep students engaged and motivated. Lectures and tutorials are not a thing of the past; they will continue to have an essential place in higher education transferring academic grounding and technical knowledge. Passive lectures and tutorials alone will not suffice, to equip students with the real-world interact with people skills they will need. For this facet of the student learning journey, active skills such as problem-based learning and team skills are required. Universities will need to focus more on teaching criticality, to provide students with the scaffolding they need to self-learn efficacy and reflective skills. Work-based experiential learning pedagogy acquired during student placements, will be increasingly seen as mandatory training in a growing number of academic disciplines and professions.

2. Critical pedagogy and criticality: Pragmatic applications

COVID-19 has increased the adaptability of many universities globally significantly. The higher education community need to be able to operationalise many different pedagogical approaches to teaching and learning. Universities and colleges need to consider, how different teaching and learning methods can be adapted to equip students with the necessary skills to perform effectively in a profession. Crucially, critical pedagogical analysis needs to take place, to enable students to participate in the many modes of student engagement that are available. One pedagogical response needs to be innovative use of online, computer-based type learning, for example virtual and augmented reality (VAR) technology (Marks and Thomas, 2022,

p.1290). Another example is students learning by engaging with educational games (Cheung and Ng, 2021, p.2). The application of educational game, which requires students to participate in games with pre-set rules enhances learning. The process of educational gamification develops key skills such as collaborative work, communication, decision-making and problem-solving skills. These skills are transferable, empowering the graduate's employability, alongside enabling students to make maximum gains when participating with modes of student engagement. Educational games have a synergy with critical pedagogy, where the democratisation of knowledge can be transferred utilising simulated situations (Myers et al., 2019, p.1). An educational game can be used to enable students to consider different ways of knowing, to critically assess social inequalities. The digital educational game can use role play or simulations of different characters, situations and personal circumstances, to enable students to theorise social issues (Myers et al., 2019, p.2).

Universities and colleges need to obtain best practice actionable advice, which will detail how to operationalise higher education curriculum pedagogic delivery (SPHEIR (Strategic Partnerships for Higher Education Innovation and Reform), April 2021, p.55). A key intention of this advice, is that students learn the critical thinking skills they require, enabling them to evaluate the learning received. In essence the strategy, infrastructure and organisational ethos must be put in place to facilitate for example: using critical pedagogy to learn how different cultures implement their education, health or police service. This process requires a certain amount of pedagogic bridge-building to enable student, to use their own cultural knowledge and that of others, to develop new knowledge (Mortimer and Escalante, 2022, p.9). This for example would equip students to develop strategic critical resource allocation responses; to address unique aspects that have arisen in the social infrastructure of any culture where the graduate is now working. Students, the recipients of alternative pedagogical learning, will be able to give feedback on which methods they found most useful in the learning process. Students will be enabled to influence higher education policy making. Student Panels at the local and national level is an effective policy response, providing a vehicle by which student voices are heard (Natzler, HEPI (Higher Education Policy Institute), 2021, p.55).

Experiential work-based learning should be utilised to increase student engagement. Here students go on student placement, internships and volunteering opportunities, applying what they have learnt in lectures and seminars, in the workplace with real people, in real life situations. 'Criticality', can be defined as the scholarly practice of critical thinking and the

analysis of critical pedagogical thought, during student reflection (Burbules and Berk, 1999, p.45). Criticality is considered by some observers to be an essential competency in higher education teaching and learning (Krupat et al, 2011, p. 626); Alongside also being considered crucial for graduates to become effective practitioners in complex professional environments (Tyreman, 2000, p.119). Criticality is said to have a critical action component, coupled with an emphasis upon personal reflection (Abbey et al, 2014, p.2; see also El-Azar, WEF, 7 February 2022).[2] These latter aspects of criticality should be employed, to identify how experiential learning can be used to facilitate student engagement and enhance graduate employability.

Universities should liaise with employers to promote the use of criticality during student placements and internships (Atfield et al., 2021, p.31). The opportunity for students to critically reflect on how they've developed certain personal attributes, or learnt a particular skill, (critical pedagogy) for example problem solving, will increase graduate employability (Mainga et al., 2022, p.28). There should be serious consideration of making criticality a mandatory facet of work-based experiential learning modules. Criticality, after student placement with a profession for example teaching, nursing or social work, will enhance graduate employability. Jackson et al' (2021) work-integrated learning study, acts to highlight the importance of critical pedagogy and reflection, whist receiving experiential learning in the workplace.

> While one might not expect mastery to graduate level for conflict resolution, supervisors' relatively poor evaluations for numeracy, analysing, and using data and information align with reported skills deficit…, disappointing given their criticality in contemporary work…Perhaps interns did not engage with relevant training, the learning curve was simply too steep in this area, and/or supervisors/co-workers' may have lacked time to support developing these capabilities, the lack of self-reflection in the workplace is concerning, given its pivotal role in connecting theory and practice during WIL (work-integrated learning). (Jackson et al., 2021, p.16)

Criticality is transferable. Students can choose to share their learning portfolio, where receiving indications of learning alignment from peers will help embed as well as transfer learning (Kwan, 2020, p.84). Students returning after their work placement, should be encouraged to apply what they learnt practicing criticality, during student engagement sessions (Jackson et

[2] Diana El-Azar (2022) discusses formative assessment, in which students are encouraged to reflect upon what they have done and then devise a strategy to improve their performance. In this sense, formative assessment is closely aligned to criticality and experiential learning, with students reflecting on past performance.

al., 2021, p.1). Skills learnt from criticality can be utilised in student feedback forums, peer mentoring or student advocacy. Students' empowering of service users in the community skills will be underpinned by the use of criticality (See Utah State Legislation, 2022, p.178).[3] For institutions who have adopted a generic learner involvement strategy, co-design, co-production or co-working, the situation quite often prevalent in further education colleges; criticality represents a useful addition to their student engagement strategies (Rapanta et al., 2020, p.931).

Criticality employs constructive elements of critical thinking, for example, evaluation and debating skills, along with critical pedagogy, being reflective of different teaching strategies (Abbey et al, 2013, p3; Tyreman, 2000, p118; Burbules and Berk, 1999, p45). By practicing criticality, students would reflect upon the issues they faced while working for example on student placement, and how they learnt how to respond. By using criticality, students can inform lecturers, via student engagement, which teaching method, critical pedagogy, worked best for them (Pandolpho, 31 March 2021). The learning process has been enhanced by student engagement, critical pedagogy and criticality. We can now see there is a symbiotic relationship within this triumvirate, which facilitates graduate employability.

3. Generic learning roadmap: towards criticality, student engagement and employability

The learning roadmap **(Fig 1)** indicates how pedagogical choices such as role play, simulation and interactive online game play, included via 'edutainment'; influence how students acquire new skills and knowledge (Bontchev et al., 2022, p.4). Students in consultation with their tutors can decide how they will learn key skills and competencies. Skills not just for use in their chosen profession, but multi-purpose, transferable skills, that enable more productive, active participation in student engagement initiatives (Cheng et al., 2021, p.10).

3.1 Pedagogical considerations to achieve learning aims

The teaching of various learning modules is coordinated for the conceptualisation of course content, designed to achieve the desired learning aims. For this discussion that would be student engagement in all its forms and gradate employability (Watson and Turpie, 2020, p.33). Learning is disposed according to a pedagogical order that tries to relate thematic issues: for

[3] Utah State Legislation (2022) was superseded by 53B-1-102 Utah system of higher education, 7 January 2022.

example, political and civic engagement, being taught in a manner more conducive to an institutions' student body (EC, 2022a, p.16 and p.59). This is the rationale for using 'edutainment' such as interactive online games as a tool to implement critical pedagogy, ideal for 18–24-year-olds. With this pedagogical approach, students develop the coordination, collaboration and cooperative skills, inculcated by pedagogic action, desired by employers (Bourdieu and Passeron, 1990, p.6). Such skills and personal attributes assist modes of student engagement, alongside using representation to influence higher education governance.

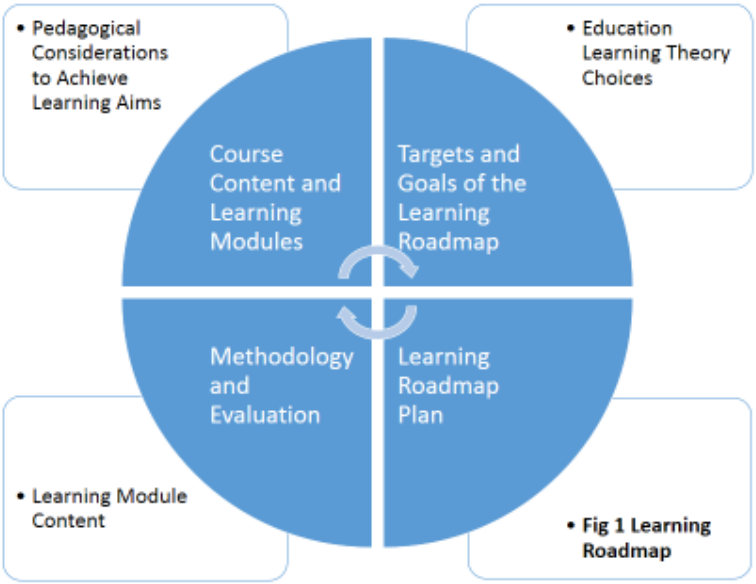

Fig 1 Learning Roadmap Description

3.2 Education and Learning Theory Choices

Modern constructivism theory has student centred learning as its focus. “In cognitive constructivism, learners are perceived to construct new knowledge based upon their prior experience and personal interpretation of the world” (Piaget, 1971, cited in Cheng, 2009, p.207). Problem based learning (PBL) (Awacorach et al., 2021, p.116), taught collaboratively, is a particularly apt constructivist pedagogical tool for building a student’s capacity to learn (collaboratively - see Siu-Yung Jong et al., 2022, p.8; constructivist – see Cambridge International Education Teaching and Learning Team, 27 February 2022). Role plays and simulation likewise encourage criticality, students reflecting upon problems encountered by the individual or group whose situation they were re-enacting. Students now learn by participation, the importance of issues such as ethics, and having agreed governance structures in place to avoid disputes (Berube and Gendron, 27 January 2022). Learning is seen as a process that students are actively enrolled in from within. *“As an extension of cognitive constructivism, social constructivism emphasises the collaborative nature of knowledge construction in group learning under socio-cultural contexts”* (Vygotsky, 1978, cited in Cheng, 2009, p.207).

Instructivist pedagogical teaching approaches are limited in what knowledge they can transfer. Instructivist learning methods are not so adept at teaching students critical thinking skills, or developing personal attributes such as emotional intelligence (See also Kesler et al., 2022, p.44). Constructivist pedagogical approaches, for example interactive ‘edutainment’ games, better teach students understanding of such complex issues as ethics and governance (Maussumbayev et al., 2022, p.3). Likewise, constructivist learning methods equip students by delivering ‘…learning activities meaningful to each learner, so that the learner reflects, searches, uses her capacity for taking initiative and for being creative (Jemberie, 2021, p.2). Also developed, using constructivist learning and the emotional intelligence attributes acquired, is the ability to operationalise dispute resolution. Employers indicate that personal skills for example, graduates who can demonstrate they possess emotional intelligence attributes: for example, being perceptive, diplomacy, tact, receive a higher employability quotient index (Moore, 14 February 2022). Students who have developed such personal skills, will be able to engage in a co-design capacity in student learning, services and student welfare.

3.3 Targets and Goals of the Learning Roadmap

Targets and goals are used to signpost students of the learning aims of the particular module they are being taught. They will indicate what students will be expected to demonstrate they

have learnt, on completion of their assignment (Barnard College, Columbia University (US), 20 February 2022). Such targets and goals could be the student has developed analytical skills. Students must be able to demonstrate critical thinking, achievement of this target is particularly important (ACER, 4 October 2021). Students must be equipped with the evaluative skills to perform an appraisal of different modes of student engagement. Students must also be equipped to critically assess the local context under which initiatives are available, implementing strategy as student engagement evolves over time (Tyreman, 2000, p.118).

3.4 Learning Module Content

This section of the generic learning roadmap dovetails with the targets and goals section; in the sense that the student is informed what they should be learning. Leaning module content can have the pedagogical effect of informing students, how they will be taught and how they will be evaluated. Learning module content should demonstrate a pedagogical fit throughout the whole higher education course; where the learning is focussed upon empowering the student to achieve academic and professional success (Dayagbil et al., 2021, p.2).

Below is a description of an academic exercise: indicating how pedagogical considerations, choice of education theory, the learning aims of modules and how the course content will be evaluated is captured. Readers of this discussion paper may recognise the structure of the academic exercise devised. One learning approach could be to divide a group of 10-20 students into two groups representing a country's parliament. Each group would be presented with a global or regional issue to resolve by discussion, for example, should a country stay within the European Union (EU) or not. This exercise could be changed to suit, for example, the two groups could discuss should a country not in the EU join, what are the pros and cons of either decision. It's by such simulation and role play, that students will enhance their critical evaluation, group working, problem solving, negotiating and debating skills (Chernikova et al., 2020, p.502). Some of these skills employers have indicated are important to them as they make recruitment and selection decisions. The constructivist teaching methods of role play, and simulation serves two purposes. First students learn by role enactment, actively thinking about a current affairs issue, advising how to ameliorate any problems. Secondly, students increase their graduate employability quotient, both at the neo-liberal level by demonstrating they have the pre-requisite, evaluative, report writing, compliance with societal norm and values, skills employers are seeking; and also, at the *"absolute"* and *"relative"* level, the 'duality of employability' (Brown et al, 2003, p110). The 'duality of employability' theory, argued by

Brown et al (2003), introduces a personal element to an employer' measurement of a graduate's employability. This includes an evaluation of a student's personal self-reflection of their engagement ability and employability (Siekkinen et al., 2020, p.535). This places an emphasis on tailoring learning modules to a specific cohort (Scott and Willison, 2021, p.1119).

3.5 Learning Roadmap Plan

The generic Learning Roadmap Plan (LRP) presents the main aims and objectives of the course content and individual learning modules students are about to embark on. It is the formal programme detailing what students will learn, alongside pedagogically how the course content of each learning module should be taught (University of Edinburgh, Senate Education Committee, 2021, p6). The LRP demonstrates the level, nature and extent of what student's professional capability should be, having passed the assignments for the course content, incorporating each separate learning module being taught. The skills formulated by the LRP are transferable, they can be used in student engagement and graduate employability activities (Fakunle, 2021, p.577). Part of professional capability should be an assessment of the student's ability to communicate, to work collaboratively; demonstration of critical thinking skills, for example, by being able to analyse that certain policy recommendations will increase the propensity for disputes. Active listening skills, empathy and the ability to practice criticality are also significant professional capabilities (Rodat, 2020, p.13). The importance of students being able to critically analyse for example, how a project was delivered; how they learnt project management skills can't be understated (Masood and Haque, 2021, p.71). These are the skills students need in order to fully participate in and benefit from student engagement.

3.6 Methodology and Evaluation: Issues and Choices

This section of the learning roadmap is centred on student's education and learning process. Methodology could be based upon student's differing cognitive abilities and past experiences. Evaluation could be based upon student's different abilities and depth of knowledge at the outset of the education and learning process (Umar and Ko, 2022, p.2-3). There would then be a measurement of how far students have progressed, either individually or as a group at the end of the learning module. There could be a comparison of how effective instructive learning is via lectures and tutorials for knowledge transfer, pedagogically as learning method; compared to constructivist learning such as VLE (Azlan et al., 2020, p.11). The methodology can be quite fluid. The exercise could be done to see which students preferred to visit a library and borrow hard copy books or preferred to access the same material by logging online.

Alternatively, a pre-test and an identical post-test could be used, both in marking the learning and for methodology and evaluation purposes. Pre-testing and post-testing are a measurement of a student's knowledge before they began learning, compared to that student's ability after they have experienced a learning process (Fischer and Yang, 2022, p. 12). Using an interactive civil society online game module as an example; the pre-test would be what the student learnt during the course as they worked collaboratively in groups. The post-test is all the marks awarded for the weekly report students wrote, as they participated in the civil society game. Another way to use pre-test and post-test, is to compare two different course's teaching methods, whilst they are being taught simultaneously (see also Warwryzniak et al., 2022, p.8). An example would be, a fully online course, with no lecture, tutorial time, no direct contact with any teaching staff. Compared with a course hybrid, the same learning module and assessment, but students have face-to-face contact with the lecturer. Once again there will have been a pre-test. The post-test will serve to compare how much each of the two cohorts of students have learnt, under the different teaching conditions (Deslauriers et al, 2019, p.19252).

Evaluation could ask should summative teaching method be introduced as a pedagogical response to get more of students to actively participate in student engagement. In summative method, all students receive learning marks for every piece of contribution they make (Bovill, 2020, p.1027). This is particularly beneficial when using constructivist teaching methods, such as group work, role play, VLE, simulation and PBL. Here each individual contribution should count towards the final evaluation. Students benefit by collaborative summative work and the learning of active listening skills, as students work together to solve problems (EC, 2022a, p. 54). Summative method might encourage students to engage in criticality on a group basis, suggesting changes in their own performance which might produce more positive results. Peer mentoring could be developed as a result of learning issues identified, using criticality. Learning marks could be awarded to students during feedback sessions after collaborative work (Byars-Winiston and Dahlberg, 2019, p.131).[4] Such an approach, where everything is evaluated, appears particularly suited to the generic skills required in the Student Liaison Officer mode of student engagement. Employers have indicated collaborative skills have a positive effect upon a graduate's employability (Kassa, 2022, p.4).

[4] This is one of several committee reports discussing various aspects of sciences, engineering and medicine, including how students are taught these subjects. Winiston and Dahlberg, (2019) is an edited volume where no other authors are mentioned. The membership of each committee is listed.

3.7 Course Content and Learning Modules: Educational Aids Required

This is initial easy learning, as students apply a simple, read me first, how to, approach to the learning module. This section should inform students they will be learning about various aspects of societal representation: for example, modes of engagement; civil society; democratic participation. The course content should also inform students, that laptops, notebooks, mobiles and various other handheld devices, may be used. Teaching will be delivered using various pedagogical tools, for example, 'edutainment' and game making pedagogy. Students will be taught societal representation utilising various pedagogical choices to include: blogs, role play, VLE, group work, interactive online games, webinar, online forums, PBL, simulation and video diaries (Sidiropoulou et al, 2022, p.147). Interactive board games, which require collaborative skills and strategic thinking, may also form part of the educational aids.

Conclusions

The COVID-19 global pandemic has brought forward the increase of online learning in higher education. There will be a proliferation in the use of edutainment and gamification pedagogy in higher education during the 2020s. This is important, as the second most common reason why students typically 18-24 years old access a digital device is to play a game (Greve and Tan, 2021, p.5). The paper has discussed the utility of criticality, manifest in its role as a reflective practice; and also as scaffolding, by which students can develop different ways of knowing. Criticality can be developed during experiential learning pedagogy on student placements, where student can learn by doing in a safe environment. Students are then able to reflect upon the results of their actions, alongside devising practices to address mistakes or problems in service delivery. The employer aspect of criticality is seen to be crucial, in providing the opportunities for active learning of real-life work experiences. It should be mandatory that people facing degree programs, for example health and social care professions must include criticality and reflection.

Diversity, equality and inclusion, coupled with the increased intercultural diversity of the student body made a small appearance in the paper. Exposure to and integration with people from different cultures and ethnic backgrounds, form key parts of student engagement and graduate employability strategies. Interaction with multicultural people is increasingly seen as an essential part of the student learning journey. Higher education universities need to make opportunities for such interaction and integration available, either by specific learning modules; or pragmatically,

by having more ethnically diverse students enrolled through admission policies; designed to deliver a multicultural student body in the area served by the university.

The generic learning roadmap helped illustrate how various parts of higher education delivery can be adapted to achieve different learning aims. This is useful for equipping students with appropriate skills in, for example, coding, design, engineering, mathematics; academic areas where people skills although often important are not always essential. Compared to the skills required for student engagement and general graduate employability; where there is much more focus upon a student's personal characteristics, in group dynamics, teamwork and how they relate to other people. Scaffolding from criticality, to enable self-efficacy, self-learning and self-reflection operates nascent in the background, acting to underpin the generic learning map.

Policy responses to address lack of intercultural integration include 'Provide bridging experiences', where academic staff participate in extracurricular activities (Namvar et al., 17 November 2021). These would be events organized in partnership with student societies and/or the campus students union. Another approach is creating communities which represent the student body, this takes time and often can't be done for any number of valid reasons. Pedagogy research suggest that when students see someone like themselves in the faculty, students feel less of an imposter, more at home (Namvar et al., 17 November 2021).

Experiential learning has long had an association with societal engagement in the area where the university is physically located, this is the perennial town and gown relationship (Buzzelli and Asafo-Adjei, 2022, p.2). Participation in work-integrated experiential learning could be increased, by offering some form of credentialed work as a voluntary addition after graduation. Prior to people committing themselves to what is effectively a post-graduation experiential learning scheme, there could be taster sessions and workshops. Active learning and community pairing can be affected with this scheme, enabling students and the university to serve the local area. Post-graduate experiential learning would enable skills matching for graduates who are now qualified, but unsure what they would like to (or can) do next (Buzzelli and Asafo-Adjei, 2022, p.7). Employers, students and employers all benefit, as new innovations or production processes can be tried out during a short placement. Post-graduation work placements are an underused policy response that are probably more versatile than the higher education community is aware.

References

Abbey, Hilary, Jorge E. Esteves, Seven Vogel & Stephen J. Tyreman. (2014) "Assessing criticality in student research reports: Preliminary results from a new educational card sorting activity". *International Journal of Osteopathic Medicine*, 17, pp. 12-21. Retrieved from https://doi.org/10.1016/J.IJOSM.2013.06.004.

ACER. (2021). "Measuring critical reasoning: an essential 21st century skill". *PAT Insight,* 4 October 2021. Retrieved from https://www.acer.org/my/pat/pat-insights/measuring-critical-reasoning-an-essential-21st-century-skill.

Arsenis, Panagiotis, Miguel Flores & Dimitra Petropolou. (2022). "Enhancing graduate employability skills through group video assessment". *Assessment and Evaluation in Higher Education,* 47(2), pp. 245-258. Retrieved from https://doi.org/10.1080/02602938.2021.1897086.

Atfield, Gaby, Wil Hunt & Daria Luchinskaya. (2021). "Employability programmes and work placements in UK higher education". *Department for Education Research Report,* November 2021. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035200/employability_programmes_and_work_placements_in_UK_HE.pdf.

Awacorach, Judith, Iben Jensen, Inger Lassen, David Ross Alanya, Hanen Lassen Zakaria & Geoffrey Olok Tabo. (2021). "Exploring Transition in Higher Education: Engagement and Challenges in Moving from Teacher-Centred to Student-Centred Learning". *Journal of Problem Based Learning in Higher Education,* 9(2), pp. 113-130, 22 December 2021. Retrieved from https://doi.org/10.5278/ojs.jpblhe.v9i2.5262.

Azlan, Che Ahmad, Jeanne Hsiu Ding Wong, Li Kuo Tan, Muhammad Shahrun Nizar A.D. Huri, Ngie Min Ung, Vinood Pallath, Christina Phoay Lay Tan, Chai Hong Yeong & Kwan Hoong Ng. (2020). "Teaching and learning of postgraduate medical physics using internet-based e-learning during the COVID-19 pandemic – A case study from Malaysia". *Physica*

Medica, 80, pp. 10-16, December 2020. Retrieved from https://dx.doi.org/10.1016%2Fj.ejmp.2020.10.002.

Barnard College, Columbia University (US). (2022). "Online Pedagogy Strategies: Restructuring Online Lectures". *Online Pedagogy,* 20 February 2022. Retrieved from https://cep.barnard.edu/online-pedagogy-strategies.

Baty, Phil. (2022). "These are the most international universities in the world in 2022". *World Economic Forum,* 20 January 2022. Retrieved from https://www.weforum.org/agenda/2022/01/international-universities-times-higher-ranking-2022/.

Berube, Janie and Yves Gendron. (2022). "Through students' eyes: case study of a critical pedagogy initiative in accounting education". *Accounting Education* Published online 27 January 2022. (This latest article has been accepted, but has not yet been assigned any volume, issue or page numbers). Retrieved from https://doi.org/10.1080/09639284.2021.1997768.

Blackboard. (2022). "Reflecting on the year in education and what's to come in 2022". *Blackboard Blog,* 5 January 2022. Retrieved from https://blog.blackboard.com/reflecting-on-the-year-in-education-and-whats-to-come-in-2022/.

Bovill, Catherine. (2020). "Co-creation in learning and teaching: the case for a whole-class approach in higher education". *Higher Education,* 79, pp. 1023-1037, 2 December 2019. Retrieved from https://doi.org/10.1007/S10734-019-00453-W.

Bontchev, Boyan, Albena Antonova, Valentina Terzieva & Yavor Danko. (2022). "Let Us Save Venice"-An Educational Online Maze Game for Climate Resilience". *sustainability,* (MDPI), 14(1), article 7, 21 December 2021. Retrieved from https://doi.org/10.3390/su14010007.

Bourdieu, Pierre & Jean-Claude Passeron. (Translated form the French by Richard Nice; with a Foreword by Tom Bottomore; Preface to the 1990 edition by Pierre Bourdieu). (1990). *Reproduction in Education, Society and Culture Second edition.* London: Sage Publications. Retrieved from

https://monoskop.org/images/8/82/Bourdieu_Pierre_Passeron_Jean_Claude_Reproduction_in_Education_Society_and_Culture_1990.pdf.

Brown, Phillip, Anthony Hesketh & Sara Williams. (2003). "Employability in a Knowledge-driven Economy". *Journal of Education and Work,* 16(2), pp. 107-126. Retrieved from www.tandfonline.com/doi/pdf/10.1080/1363908032000070648.

Burbules, Nicholas C. & Rupert Berk (1999). "Critical Thinking and Critical Pedagogy: Relations, Differences, and Limits". In Thomas S. Popkewitz and Lynn Fendler (Eds.), Critical Theories in Education: Changing Terrains of Knowledge and Politics (pp. 45-65) London (UK) and New York (US): Routledge. Retrieved from https://doi.org/10.4324/9780203826256.

Buzzelli, Michael & Emmanuel Asafo-Adjei. (2022). "Experiential learning and the university's host community: rapid growth, contested mission and policy challenges", *Higher Education,* 197, 30 March 2022. Retrieved from https://doi.org/10.1007/S10734-022-00849-1

Byars-Winiston Angela and Maria Lund Dahlberg. (2019). "Assessment and Evaluation: What Can Be Measured in Mentorship, and How?" In A. Byars-Winiston & M. Lund Dahlberg (Eds.), *The Science of Effective Mentorship in STEMM: A Consensus Report of the National Academics of SCIENCE.ENGINEERING. MEDICINE,* (pp. 127-149), Washington, DC: The National Academes Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/n/nap25568/pdf/.

Cambridge International Education Teaching and Learning Team. (2022). "Getting started with Active Learning". *Cambridge Assessment International Education,* 27 February 2022. Retrieved from https://www.cambridge-community.org.uk/professional-development/gswal/index.html#article.

Caspari-Sadeghi, Sima. (2022). "Applying Learning Analytics in Online Environments: Measuring Learners' Engagement Unobtrusively". *Frontiers in Education,* 7, article 840947, 25 January 2022. Retrieved from https://doi.org/10.3389/feduc.2022.840947.

Cheng, Gary. (2009). "Using game making pedagogy to facilitate student learning of interactive multimedia". *Australasian Journal of Educational Technology,* 25(2), pp. 204-220. Retrieved from https://doi.org/10.14742/ajet.1150.

Cheng, Ming, Olalekan Adekola, JoClarisse Albia & Sanfa Cai. (2021). "Employability in Higher Education: a review of key stakeholders' perspectives". *Higher Education Evaluation and Development.* Published online 21 July 2021. (Ahead of print - There are no volume, issue or page number details). Retrieved from https://doi.org/10.1108/HEED-03-2021-0025.

Chernikova, Olga, Nicole Heitzman, Matthias Stadler, Doris Holzberger, Tina Seidler and Framk Fischer. (2020). "Simulation-Based Learning in Higher Education: A Meta-Analysis". *Review of Educational Research,* 90(4), pp. 499-541, August 2020. Retrieved from https://doi.org/10.3102%2F0034654320933544.

Cheung, Sie Yin & Kai Yin Ng. (2021). "Application of the Educational Game to Enhance Student Learning". *Frontiers in Education,* 6, article 623793, 31 March 2021. Retrieved from https://doi.org/10.3389/feduc.2021.623793.

Dayagbil, Filomena T., Daisy R. Palompon, Laurence L. Garcia & Michelle Mae J. Olvido. (2022). "Teaching and Learning Continuity Amid and Beyond the Pandemic". *Frontiers in Education,* 6, article 678692, 25 July 2021. Retrieved from https://doi.org/10.3389/feduc.2021.678692.

Dearing, Ronald. (1997). *Higher Education in the Learning Society.* London: HMSO. Retrieved from http://www.educationengland.org.uk/documents/dearing1997/dearing1997.html.

Deslauriers, Louis, Logan S. McCarty, Kelly Miller, Kristina Callaghan & Greg Kestin. (2019). "Measure actual learning versus feeling of learning in response to being actively engaged in the classroom". *PNAS,* 116(39), pp. 19251-19257, 4 September 2019. Retrieved from https://doi.org/10.1073/pnas.1821936116.

Dewey, John. (1938). *Experience and Education.* New York: Free Press.

El-Azar, Diana. (2022). "4 trends that will shape the future of higher education". *World Economic Forum,* 7 February 2022. Retrieved from https://www.weforum.org/agenda/2022/02/four-trends-that-will-shape-the-future-of-higher-education/.

Elevate Digital Education Retreats. (2022). 13 February 2022. Retrieved from https://www.sheffield.ac.uk/apse/digital/retreats.

Elliott, Ian C., Ian Robson & Adina Dudau. (2021). "Building Student engagement through co-production and curriculum co-design in public administration programmes". *Teaching Public Administration,* 39(3), pp. 318-336, 1 October 2021. Retrieved from https://doi.org/10.1177%2F0144739420968862.

European Commission. (2022a). "Proposal for a Council Recommendation on learning for environmental sustainability". *Commission Staff Working Document,* SWD(2022) 3 final, 14 January 2022. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022SC0003.

European Commission. (2022b). "Communication for the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a European Strategies for Universities: and the Commission Proposal for a Council Recommendation on building bridges for effective European higher education cooperation". *Commission Staff Working Document,* SWD(2022) 6 final, 18 January 2022. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022SC0006.

Fakunle, Omolabake. (2021). "International students' perspective on developing employability during study abroad". *Higher Education Quarterly,* 75(4), pp. 575-590, 24 January 2021. Retrieved from https://doi.org/10.1111/hequ.12308.

Fischer, Ian Douglas and Jie Chi Yang. (2022). "Flipping the flipped class: using online collaboration to enhance EFL students' oral learning skills". *International Journal of Educational Technology in Higher Education,* 19, article 15, 11 March 2022. Retrieved from https://doi.org/10.1186/S41239-022-00320-2.

Further and Higher Education Act. (1992). London: The Stationary Office. Retrieved from http://www.legislation.gov.uk/ukpga/1992/13/pdfs/ukpga_19920013_en.pdf .

Greve, Katherina and Aaron Tan. (2021). 'Re-imagining the role of technology in higher education: the new normal and learners' likes', *Compass: Journal of Learning and Teaching,* 13(3), pp. 1-24. Retrieved from: https://doi.org/10.21100/compass.v14i3.1231

Huang, Xiang, Jiajia Cao, Guojing Zhao, Zehai Long, Guanshuang Han & Xioawei Cai. (2022). "The Employability and Career Development of Finance and Trade College Graduates". *Frontiers in Psychology,* 12, article 719336, 10 January 2022. Retrieved from https://doi.org/10.3389/fpsyg.2021.719336.

Jackson, Denise, Hairong Shan & Stephanie Meek. (2021). "Enhancing graduates' enterprise capabilities through work-integrated learning in co-working spaces". *Higher Education,* 6 September 2021. Retrieved from https://doi.org/10.1007/S10734-021-00756-X.

Jeffs, Cheryl. (2015). "Can Critical Reflection be Taught". *Taylor Institute of Teaching and Learning, University of Calgary,* October 2015. Retrieved from https://taylorinstitute.ucalgary.ca/resources/can-critical-reflection-be-taught.

Jemberie, Lantbeye Wudneh. (2021). "Teachers' perception and implementation of constructivist learning approaches: Focus on Ethiopian institute of textile and fashion technology, Bahir Dar". *Cogent Education,* 8(1), article 1907955, 9 April 2021. Retrieved from https://doi.org/10.1080/2331186X.2021.1907955.

Johnston, Jonny & Ben Ryan. (2022). "From Students-as-Partners theory to Students-as-Partners practice: reflecting on staff-student collaborative partnership in and academic development context". *All Ireland Journal of Teaching and Learning in Higher Education,* 14(1), (Spring 2022). Retrieved from file:///C:/Users/User/AppData/Local/Temp/637-Article%20Text-3561-1-10-20220221.pdf.

Jones, Brett D., Yasuo Miyakazi, Mengyun Li & Stephen Biscotte. (2022). "Motivational Climate Predicts Student Evaluation of Teaching: Relationships Between Students' Course

Perceptions, Ease of Course, and Evaluations of Teaching". *AERA Open,* 8(11), pp. 1-17, 23 February 2022. Retrieved from https://doi.org/10.1177%2F23328584211073167.

Karcher, Elizabeth L., Dawn Koltes, Benjamin Wenner & Jessica Wells. (2022). "Sparking curiosity and engagement through online curriculum", *Poultry Science,* 101(2), article 101577, February 2022. Retrieved from https://doi.org/10.1016/j.psj.2021.101577.

Kassa, Erstu Tarko. (2022). "Exploring Employability of Business Graduates: Evidence from Woldia University". *Journal of the Knowledge Economy,* 4 February 2022. Retrieved from https://doi.org/10.1007/S13132-021-00856-0.

Kesler, Avital, Tamar Shamir-Inbal & Ina Blau. (2022). "Active Learning by Visual Programming: Pedagogical Perspectives of Instructivist and Constructivist Code Teachers and Their Implications on Actual Teaching Strategies and Students' Programming Artifacts". *Journal of Educational Computing Research,* 60(1), pp. 28-55, 8 June 2021. Retrieved from https://doi.org/10.1177%2F07356331211017793.

Krupat, Edward, Jared M. Sprague, Daniel Wolpaw, Paul Haidet, David Hatem & Bridget O'Brien. (2011). "Thinking Critically about critical thinking: ability, disposition or both?" *Medical Education.* 45(6), pp. 625-635. Retrieved from https://doi.org/10.1111/j.1365-2923.2010.03910.x.

Kwan TO, Hing. (2020). "Photovoice as a Tool for Critical Reflection in Communities of Practice for Teachers' Professional Identity Development". *Beijing International Review of Education,* (BRILL SENSE), 2, pp. 77-88. Retrieved from file:///C:/Users/User/AppData/Local/Temp/[25902539%20-%20Beijing%20International%20Review%20of%20Education]%20Photovoice%20as%20a%20Tool%20for%20Critical%20Reflection%20in%20Communities%20of%20Practice%20for%20Teachers%E2%80%99%20Professional%20Identity%20Development.pdf.

Leitch, S. (Lord) (2006). *Leitch Review of Skills: Prosperity for all in the global economy – world class skills: Final Report.* London: HMSO. Retrieved from http://www.official-documents.gov.uk/document/other/0118404865/0118404865.pdf.

Loughborough University. (2022). *Student winners announced for LU Arts project celebrating inclusion at Loughborough University.* Retrieved from https://www.lboro.ac.uk/news-events/news/2022/january/student-winners-announced-for-celebrating-inclusio/.

Mainga, Wise, Reuben M. Daniel & Luis Alamil. (2022). "Perceptions of Employability Skills of Undergraduate Business Students in a Developing Country: An Exploratory Study". *Higher Learning Research Communications,* 12(1), pp. 28-63, 26 February 2022. Retrieved from https://doi.org/10.5590/hlrc.2022.v12i1.1257.

Marks, Benjy & Jaqueline Thomas. (2022). "Adoption of virtual reality technology in higher education: An evaluation of five teaching semesters in a purpose-designed laboratory". *Education and Information Technologies,* 27, pp. 1287-1305, January 2022. Retrieved from https://doi.org/10.1007/S10639-021-10653-6.

Masood, Marwa Mohammad and Md. Mahmudul Haque. (2021). "From critical pedagogy to critical digital pedagogy: a prospective model for the EFL classrooms". *Saudi Journal of Language Studies,* 1(1), pp. 67-80, 24 August 2021. Retrieved from https://doi.org/10.1108/SJLS-03-2021-0005.

Maussumbayev, Rysbek, Rymshash Toleubekova, Karas Kazyiev, Axaule Baibaktina & Altynshash Bekbauova. (2022). "Development of research capacity of a future social pedagogue in the face of digital technologies". *Education and Information Technologies,* 29 January 2022. Retrieved from https://doi.org/10.1007/S10639-022-10901-3.

Moore, Catherine. (2022). "Emotional Intelligence Skills and How to Develop Them". *PositivePsychology.com,* 14 February 2022. Retrieved from https://positivepsychology.com/emotional-intelligence-skills/.

Mortimer, Christine & Maria Alejandra Lujan Escalante. (2022). "Response-able Pedagogy: Teaching through Shakespeare in a Higher Education (HE) transnational partnership". *Culture and Organization,* 2 February 2022. Retrieved from https://doi.org/10.1080/14759551.2022.2031198.

Myers, Christina, Lara S.G. Piccolo & Trevor Collins. (2019). "Game Jams as a Space to Tackle Social Issues: an Approach Based on the Critical Pedagogy". In 'Proceedings of the

International Conference on Game Jams, Hackathons, and Game Creation Events'. *ICPS Proceedings,* Article 2, pp. 1-8, 17 March 2019. Retrieved from https://doi.org/10.1145/3316287.3316288.

Nammouz, Minory & Melissa Smith. (2022). "Internationalize your C I Project Through a Virtual Partnership". *Conference Paper,* 'The Office of Creative Inquiry and Undergraduate Research, 2022 CI + UR Mentor Forum, Watt Centre Auditorium, Clemson University, South Carolina (US), 4 February 2022. Retrieved from https://www.clemson.edu/centers-institutes/watt/creative-inquiry/opportunities/faculty_forum.html.

Namvar, Sara, David Greensmith & Niroshini Nirmalan. (2021). "Co-creation and empowerment: pathways to better student engagement", *Times Higher Education: The Campus,* 17 November 2021. Retrieved from: https://www.timeshighereducation.com/campus/cocreation-and-empowerment-pathways-better-student-engagement

Natzler, Michael. (2021). *The Office for Students' Student Panel in their own words.* In Michael Natzler (Ed), What is the student voice? Thirteen essays on how to listen to students and how to act on what they say. *HEPI (Higher Education Policy Institute) Report 140,* August 2021, (pp. 55-61). Oxford (UK): Higher Education Policy Institute. Retrieved from https://www.hepi.ac.uk/wp-content/uploads/2021/08/What-is-the-student-voice_HEPI-Report-140_FINAL.pdf.

OECD (Organisation for Economic Co-operation and Development). (2021). *Education at a Glance: OECD Indicators.* 16 September 2021. Paris: OECD Publishing. Retrieved from https://doi.org/10.1787/b35a14e5-en.

Pandolpho, Beth. (2021). "Connecting Content to Students' Lives to Boost Engagement". *Edutopia,* (George Lucas Educational Foundation), 31 March 2021. Retrieved from https://www.edutopia.org/article/connecting-content-students-lives-boost-engagement.

Promethean. (2021). "What is Student Engagement". *Promethean Blog,* 28 June 2021. Retrieved from https://www.prometheanworld.com/gb/resource-centre/blogs/what-is-student-engagement/.

Rapanta, Chrysi, Luca Botturi, Peter Goodyear, Lourdes Guardia & Marguerite Koole. (2020). "Online University Teaching During and After the Covid-19 Crisis: Refocussing Teacher Presence and Learner Activity". *Post Digital Science and Education,* 2, pp. 923-945, 7 July 2020. Retrieved from https://doi.org/10.1007/S42438-020-00155-Y.

Resch, Katharina, Mariella Knapp & Ilse Schrittesser. (2021). "How do universities recognise student volunteering? A symbolic interactionist perspective on the recognition of student engagement in higher education". *European Journal of Higher Education,* 3 May 2021. Retrieved from https://doi.org/10.1080/21568235.2021.1919170.

Roberts, G. (Sir). (2002). *SET for Success: The supply of people with science, engineering, technology and mathematics skills.* London: HMSO. Retrieved from http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/d/robertsreview_introch1.pdf.

Rodat, Simona. (2020). "Empathy and active listening in the humanistic social work". In D. V. Voinea & A. Strunga (Eds.), *Research Terminals in the Social Sciences,* (pp. 9-25), Craiova (Rumania): SITECH Publishing House. Retrieved from https://www.researchgate.net/publication/344443250.

Scott, Fraser J. & Debra Willison. (2021). "Students' reflection on an employability skills provision". *Journal of Further and Higher Education,* 45(8), pp. 1118-1133, 29 May 2021. Retrieved from https://doi.org/10.1080/0309877X.2021.1928025.

Sidiropoulou, Charalampia, Panayiota Christodoulidou, and George Topalides. (2022). "Multimodality and creativity in new forms of distance learning assessments; exploring university students' perspectives during the pandemic". In N. Tasler, R.E. O'Brien & A. Spiers (Eds.), *Being creative in the face of adversity: The #creativeHE Annual 2021.* The Creativity for Learning in Higher Education community. Retrieved from https://doi.org/10.25416/NTR.17709860.v4.

Siekkinen, Taru, Elias Pekkola & Teresa Carvalho. (2020). "Change and continuity in the academic profession: Finnish universities as living labs". *Higher Education,* 79, pp. 533-551, 4 July 2019. Retrieved from https://doi.org/10.1007/S10734-019-00422-3.

Siu-Yung Jong, Morris, Gaowei Chen, Vincent Tam, Ming-Tak Hue & Mengyuan Chen. (2022). "Design-Based Research on Teacher Facilitation in a Pedagogic Integration on Flipped Learning and Social Enquiry Learning". *sustainability* (MDPI), 14(2), article 996, 17 January 2022. Retrieved from https://doi.org/10.3390/su14020996.

SPHEIR. (2021). *Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR) Mid-Term Evaluation Report.* April 2021. London: Foreign, Commonwealth & Development Office. Retrieved from https://www.spheir.org.uk/sites/default/files/final_spheir_mte_report_april_2021.pdf.

Spyropoulos, Fotios, Ionnas Trichakis & Anthi-Eirini Vozinaki. (2022). "A Narrative-Driven Role-Playing Game for Raising Flood Awareness". *sustainability* (MDPI), 14, article 554, 5 January 2022. Retrieved from https://doi.org/10.3390/su14010554.

The New York Times. (2022). "Affirmative Action and America's 'Cosmetically Diverse' College Campuses: A debate on the racial equality policy that shapes college admissions in this country". *The Argument,* 9 February 2022. Retrieved from https://www.nytimes.com/2022/02/09/opinion/affirmative-action-the-argument.html.

Top Universities. (2022). "7 Ways this University is Helping Students Find Their Purpose". *Website page updated by Stephanie L.,* 6 March 2022. Retrieved from https://www.topuniversities.com/student-info/choosing-university/7-ways-university-helping-students-find-their-purpose.

Tyreman, Stephen J. (2000). "Promoting critical thinking in health care: phronesis and criticality", *Medicine, Health Care and Philosophy,* 3(2), pp. 117-124. Retrieved from https://doi.org/10.1023/A%3A1009973021449.

UCL (University College London). (2022). "Academic opportunities for targeted investment: 2022 – 2027 Strategic Plan consultation". *UCL Discussion Paper Four,* 10 January 2022.

Retrieved from https://www.ucl.ac.uk/strategic-plan-2022-27/sites/strategic_plan_2022_27/files/academic_opportunities_for_targeted_investment.pdf.

Umar, Muhammad and Ilsang Ko. (2022). "E-Learning: Direct Effect of Student Learning Effectiveness and Engagement Through Project-Based Learning, Team Cohesion, and Flipped Learning During the COVID-19 Pandemic". *sustainability,* (MDPI), 14(3), 2 February 2022. Retrieved from https://doi.org/10.3390/su14031724.

University of Edinburgh, Senate Education Committee. (2021). *Agenda, 17 November 2021. Minutes of previous meetings: 15 September 2021 and 12 May 2021.* Retrieved from https://www.ed.ac.uk/files/atoms/files/20211117_agendapapers.pdf.

University of Glasgow. (2021). "Student engagement". *Institute for Academic Development,* 29 August 2021. Retrieved from https://www.ed.ac.uk/institute-academic-development/learning-teaching/staff/student-engagement.

Utah State Legislation. (2022). *Title 53B. State System of Higher Education.* Retrieved from https://le.utah.gov/xcode/Title53b/C53B_1800010118000101.pdf.

Veine, Sven, Martha Kalvig Anderson, Nina Haugland Andersen, Thomas Christian Espenes, Tove Bredesen Soyland, Patric Wallin & Jonathan Reams. (2020). "Reflection as a core learning student activity in higher education – Insights from nearly two decades of academic development". *International Journal for Academic Development,* 25(2), pp. 147-161. Retrieved from https://doi.org/10.1080/1360144X.2019.1659797.

Vervoot, Joost., Astrid Mangnus, Steven McGreevy, Kazuhiko Ota, Kyle Thompson, Christoph Rupprecht, Norie Tamura, Carien Moossdorff, Max Spiegelberg & Mai Kobayashi (2022). "Unlocking the potential of gaming for anticipatory governance". *Earth System Governance,* 11, article 10130, January 2022. Retrieved from https://doi.org/10.1016/j.esg.2021.100130.

Warwryzniak, Sara, Marcin Korbeki, Ireneusz Cichy, Agnieska Kruszwicka, Tomasz Przybyla, Michel Klichowski and Andrzej Rokita. (2022). "Everyone can Implement Eduball in Physical Education to Develop Cognitive and Motor Skills in Primary School Students".

International Journal of Environmental Research and Public Health, 19, article 1275, 24 January 2022. Retrieved from https://doi.org/10.3390/ijerph19031275.

Watson, Elaine & Tom Turpie. (2020). *Putting historians into work. A discipline-specific example of embedding at the centre of the student lifecycle in Higher Education.* In S. Norton & R. Dalrymple (Eds.), Enhancing Graduate Employability: a case study compendium (pp. 33-39). York (UK): AdvanceHE. Retrieved from https://cris.brighton.ac.uk/ws/portalfiles/portal/8766873/AdvHE_Case_study_compendium_1580306728.pdf.

Woods, Kathryn & Damien Homer. (2021). "The staff-student co-design of an online resource for pre-arrival arts and humanities students". *Arts and Humanities in Higher Education,* pp. 1-17, 13 November 2021. Retrieved from https://doi.org/10.1177%2F14740222211050572.