Building a model for transmedia learning: engaging work integrated learning students.

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This paper presents insights from an ongoing doctoral research project into developing a model for transmedia learning for work integrated learning in higher education. Transmedia learning is defined as a way to learn across different platforms, developing the students' holistic understanding of the topic through collaborative learning, but also developing their own transmedia skills as a part of the process. In this way learning is a social process even though students may not be in a face-to-face classroom environment, as is the case with work integrated learning. The research focuses on developing a model for student learning that is based on co-creation and collaboration, across a range of learning platforms. The study specifically investigates learning across learning management systems, some social media platforms, and the use of Massive Open Online Courses. Five key areas are identified for transmedia learning including informal learning, participatory culture, transmedia play, transmedia skills, and connectedness. This paper offers understanding of the research approach and highlights areas of study currently being researched.

Keywords: transmedia learning, online learning, co-creation

Introduction

Technology Enhanced Learning (TEL) in higher education learning is changing in ways yet to fully be articulated and understood. Transmedia learning is becoming a way to engage younger generations and allow them to collaborate with their peers. Some authors have pointed to how Millennials and Generation Z view learning and the changes taking place in their desire to access knowledge in more bite size formats, embrace blended learning, technology, and the ability to construct their own digital learning spaces (McHaney, 2023; Minarcin, 2020). These factors pave the way for a new way of learning - one that is more networked, co-collaborative and peer focussed. Networks, and the resources now available to both educators and learners, have shifted the monopoly of the higher education institution as the holder of knowledge to a more collective availability of knowledge across the Internet. We've moved into a collective intelligence era where we can draw a lot of information on a subject from many subject experts - some qualified, some not, some peer-reviewed, some not, some valid, some not. The role of the educator is increasingly becoming a curator of this knowledge - drawing down on the most relevant and most industry-focussed knowledge to guide learners toward their career. Jenkins (2008) identifies this need clearly when he says:

> Collective intelligence is going to work best on a scale larger than the individual college or university. As such, the push towards collective intelligence is closely linked towards moves for distance learning and for open courseware. Yet, it may force us to rethink some of the models shaping our first steps in that direction. Most of these efforts start from the assumption that information travels from an elite centralized institution to a range of peripheral locations. Collective Intelligence, however, starts from the premise that information must circulate freely and equally among all of the participating institutions.

This statement was made more than fifteen years ago and while elements of this style of learning has been happening for years in higher education, it is now we are seeing inroads into a more formalised way of this collective learning through transmedia learning. Transmedia learning is a style of learning that seeks to create communities of practice across different platforms and facilitate learning across these platforms. This is a part of both a formal and informal style of learning. There are a few definitions of transmedia learning from several authors that have been developed in different contexts of learning. Most recently Runchina et al. (2022, p.3) defined transmedia learning as the "processes of media convergence that encourage the active participation of users, who are considered prosumers (consumers and producers) of cultural/educational content, and these users are moved by their particular interests or passions across different media platforms to contribute to that narrative". Fleming (2013) states transmedia learning "applies storytelling techniques across multiple platforms

to create immersive educational experiences that enable manifold entry and exit points for learning and teaching" (p.370). Raybourn (2013, p.9) defines transmedia learning as "the scalable system of messages that represents a narrative or core experience that unfolds from the use of multiple media, emotionally engaging learners by involving them personally in the story". Transmedia learning builds on concepts of online learning, technology enhanced learning and even teaching with social media, but develops a strategic way to build an online community and encourage collaboration and co-learning (Tombleson et al, 2016). Transmedia learning differs from blended learning in that a transmedia approach deliberately uses micro moments of learning to connect with students out of the classroom and focuses on how students build communities as a part of this. In addition to this, in transmedia learning students are active co-creators of content (Tombleson et al, 2016). Blended learning is an umbrella term that covers a broad approach to the use of technology in education and how students learn (online, face to face, video etc) and may not focus on communities of practice nor co-learning.

Background

This study stems from instructor observation of student dissatisfaction with the lack of regular face-to-face guidance when undertaking work integrated learning (WIL) specifically within a public relations higher education course. Campus based higher education offer many opportunities for students to engage in face-to-face guidance, however the WIL experience is often completed in isolation to other students and is between the student and the workplace. In a bid to improve the perception, and learning outcomes, this study investigates if transmedia learning encourages student engagement with their peers and tutor during work integrated learning, specifically workplace learning. Two types of WIL are considered in this study. The first is based on students successfully applying knowledge and skills across a work placement duration and reflecting and demonstrating these skills in a professional report and portfolio. The second is students undertaking WIL activities within the classroom through simulation exercises.

Work integrated learning (WIL) has been defined as a national priority in Australia to improve student employability and graduate outcomes (Kay et al, 2019). Many definitions of WIL exist but most seem to point to similar themes. Ferns, Campbell, and Zegwaard (2014, p.6) draw from several authors and state that WIL, "is an umbrella term for a range of pedagogical activities that are designed to enhance the integration of theory and practice." WIL can be understood to encompass more than just work placement and authors define WIL as "placements, internships, practica, supervised practice and even simulations" (Smith, 2012, p.247). This study identifies internships and simulations as these are common WIL-related activities undertaken within the public relations course used in this case study. A significant portion of the study focuses on internship students (68%) and the remaining percentage (32%) focuses on students undertaking WIL activities in class. A student internship sees the student immersed in a work environment and a simulation sees the student immersed in a virtual work environment. Whilst a different experience, both have importance in the understanding of WIL in higher education.

The study discusses the use of Massive open online courses as a part of the transmedia learning. Massive open online courses (MOOCs) and their use in education have been around for the last fifteen years (de Waard 2015). A MOOC environment is the space in which the learning takes place – that is, it is not dependant on a particular platform. A MOOC is a form of a technology-enhanced learning environment which has been defined as "instructional systems through which students acquire skills or knowledge, usually with the help of teachers or facilitators, learning support tools, and technological resources" (Wang & Hannafin, 2005, p.5). The use of MOOCs as a part of the transmedia learning delivery is important to this study because this research extends the use of MOOCs for a purpose beyond what they were designed. MOOCs are a key consideration in designing a course to be delivered across platforms. The theoretical underpinnings for MOOCs come from the concepts of constructivism, connectivism and connective knowledge (Conole 2016; Downes 2012; Siemens 2004). Connectivist learning places the learning responsibilities upon the student to shape their learning experience. The role of the instructor is to shape the environment for the learner (Siemens 2004). Many studies since the original COVID-19 pandemic have indicated the use of MOOCs have been useful in delivering a blended learning model (see Yang and Huang 2021; Goglio, 2022). MOOCs have seen such a resurgence that Wu and Wang (2022) went as far to call 2022 the 'Year of the resurgence of the MOOCs'. They are an important consideration when delivering asynchronous and synchronous transmedia learning and the study has considered their specific use.

Based on a literature review of research surrounding transmedia learning (Tombleson, in press), the author has

distilled key themes relating to how students learn which include participation, production, performance, informal learning, and world building. Participation relates to how students engage and become a part of the network through sharing, informal learning and being producers of content (Erta-Majo & Vaquero, 2023). Production is how the student is both a consumer and producer of knowledge and performance relates to the collaborative process that allows for sharing media (Jenkins, 2006). Informal learning and or play, as defined by some authors (see Alper & Herr-Stephenson, 2013; Dickinson-Delaporte et al., 2018; Herr-Stephenson et al., 2013) is the ability for students to view the learning space as a way to explore knowledge, and world building (Jenkins, 2006) is understanding the nuance and difference between platforms yet understanding they all create a holistic learning experience.

These elements of transmedia learning are explored in this study, to further define how to create a robust transmedia learning environment.

Significance

The significance of this project is both on a pedagogical level, and a theoretical level. There is significant research that has been undertaken on the value of work integrated learning (WIL) and to some extent transmedia learning, and yet none combine these concepts in relation to WIL. Similarly, MOOCs have often been studied in a separate form, rather than a part of integrated use of technology in transmedia learning. From a theoretical perspective this research develops and extends the understanding of transmedia learning of which there is a small but growing body of academic literature (Fleming, 2013; Raybourn, 2013; Runchina et al. 2022; Tombleson, et al, 2016). There is limited theory discussing the effectiveness of using a transmedia approach to higher education as Raybourn (2014, p.247) notes "there are very few integrated applications of transmedia learning in use today by researchers, instructors, or training cadre and therefore few examples of experimental data are available on its effectiveness" and therefore this is an area this study attempts to address. Studies completed to date (see Alper & Herr-Stephenson, 2013; Rodrigues & Bidarra, 2016; Dickinson-Delaporte et al., 2018; Raybourn, 2014) all state future research opportunities for this style of teaching which is a distinct approach and different to online learning and blended learning.

Approach

The research uses a constructivism theoretical approach within an interpretivist paradigm as "individuals seek understanding of the world in which they live and work" and "meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrowing meanings into a few categories or ideas" (Creswell, 2012, p. 37). Social constructivism furthers the concept of individuals seeking understanding about their world, and identifies they are active participants in the creation of their own knowledge. This idea ties in closely with Habermas' Theory of Communicative Action whereby 'actors' or students, seek to understand their role in relation to their participation in a social situation (Habermas, 1981). Thereby it is human interaction which assists with learning, and social interactions may increase the process of learning.

The understanding of knowledge being socially constructed has strong linkages to transmedia learning and its focus on the participatory network of the learner. In addition to this, Habermas' theory can be extended to understand that "learning is not fully controlled by teachers" (Dann, 2015, p. 402) and transmedia learning takes this concept even further, promoting the learning outside the traditional classroom environment and making it a participative process. Using Habermas's theory of communicative action, a theory based on the interaction of subjects in a relationship, this study will argue the philosophical underpinnings of transmedia pedagogy can be linked back to Habermas's theory due to its linkages to pragmatism and meaning being socially constructed.

The following research question will help define this research aim:
Does the use of transmedia learning enhance student connectedness to improve work integrated learning outcomes?

The overarching research question will be addressed by answering:

1. How is the WIL students' experience of connectedness to resources, peers and supervisors affected using the MOOC environment?
2. How is the WIL students' experience of connectedness to resources, peers and supervisors affected using transmedia learning?

3. How are students' learning experiences improved/not improved by use of transmedia learning and the MOOC environment?

In answering these questions, the following research objectives will be met:

- **R01:** Develop a transmedia learning model to improve the delivery of WIL.
- **R02:** Evaluate the effectiveness of using a MOOC environment for WIL for improved student connectedness.
- **R03:** Evaluate the effectiveness of a transmedia learning model in enhancing student connectedness for WIL.

Methodology

The research methods used in this study follow a social constructivist grounded theory approach and draw on interviews, as well as quantitative methods to ensure triangulation of the data. The richness of the insights of the data in this research comes from the in-depth research questions and discussions with students undertaking work integrated learning. Their narratives and experience with using technology, in particular social media, is important in understanding the value of the pedagogy and ensuring, as Laurillard (2008) discusses, that the pedagogy is exploiting the technology, not the other way around. A constructivist grounded theory approach to this methodology is important to understanding the data and the research follows the works of Kathy Charmaz (2012) and her understanding of grounded theory. Curtin University Human Research Ethics Committee (HREC) has approved this study (HREC number HRE2017-0597).
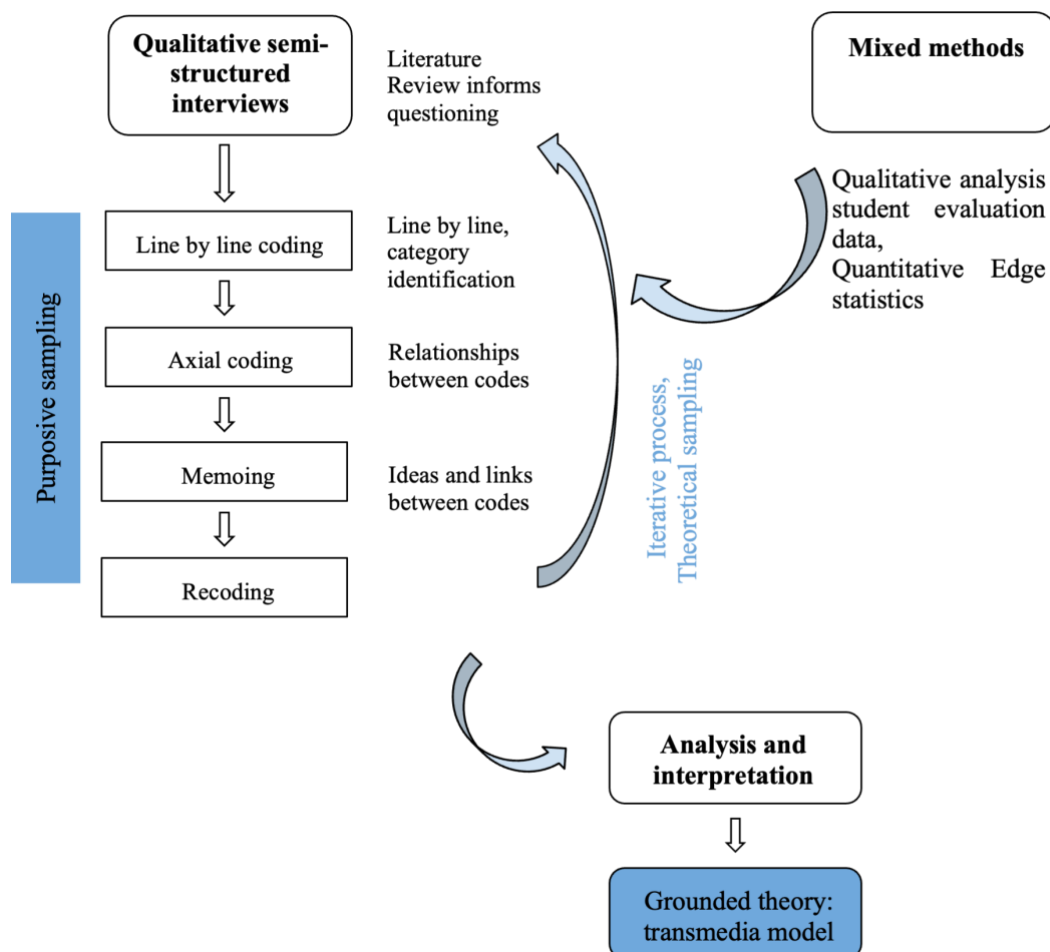
Social constructivism was developed by psychologist Lev Vygotsky (1978) who believed you could not separate the social context from learning (Tu, 2000). Social constructivism differs from the idea of cognitive constructivism in that social constructivists believe social learning takes place first, and then learning or cognitive ability happens on an individual level after this. In terms of education, this is an important philosophical stance to understand and for this study, the researcher believes social learning is a core part of individual learning, hence social constructivism is in sync with the concept of transmedia pedagogy. Garrison et al. (1999) identified three elements essential to education including cognitive presence, social presence, and teaching presence and transmedia learning draws these ideas together for a strategic approach to engage learners.

There are many studies in the field of education that support an interpretivist social constructivist approach using qualitative research methods as their main approach (Lee & Greene, 1999; Pennbrant & Svensson, 2018; Woo & Reeves, 2007). This study seeks to understand the experience of the learner and how connected they feel to one another using a transmedia learning approach. It is their experience and their narrative (through interviews) that will allow connections to be observed and enable the research to draw conclusions based on their reflections. It's for this reason, an interpretivist constructivist approach is considered the most suitable methodology, but also most compatible with research done to date in the education field. Social constructivism has been used in work integrated learning (WIL) models (Ferns et al., 2014) and the reflective nature of some of the tasks undertaken by students in the reported research (i.e., blog reflections and simulation reflections) add weight to the fit of a social constructivist approach. It is acceptable to a constructivist approach that the researcher's experience will also shape the interpretation of the research (Creswell, 2012). This is an important consideration in this study as the researcher was also the teacher of the students, and hence shaped the learning experience.

Based on the social constructivist approach to this study, the methodology uses the grounded theory approach from Cathy Charmaz (2014) which has links to symbolic interactionism and connectivism. Called constructivist grounded theory, Charmaz's view of grounded theory diverts from the 'pure' objectivist approach of Strauss and Glaser (1967) who define grounded theory as an inductive research process that involves qualitative collective of data and analysis to create a hypothesis and/or theory (Glaser & Strauss, 1967).
The qualitative research includes a literature review of the key terms around transmedia learning, and primary data from in-depth interviews as well as narrative analysis of student WIL work using the constructs of Jenkins' elements of transmedia and participatory culture, including barriers to expression, co-creation support, mentorship, contribution importance and social connection (Jenkins, 2006). These terms have helped shape the focus of the interviews, the main source for the qualitative element of this grounded theory study. An outline of the methodology is shown in Figure 1.

Constructivist Grounded Theory Research Design

Qualitative semi-structured interviews

Literature Review informs questioning

Mixed methods

Qualitative analysis student evaluation data, Quantitative Edge statistics

Line by line coding

Line by line, category identification

Axial coding

Relationships between codes

Memoing

Ideas and links between codes

Recoding

Purposive sampling

Iterative process, Theoretical sampling

Analysis and interpretation

Grounded theory: transmedia model

Figure 1: Constructivist Grounded Theory Research Design

The key focus of this study is qualitative, however mixed-method research is being used to enhance the rigour and quality of the data. Interviews have been one of the most widely used tools in undertaking qualitative research (Creswell, 2012). Charmaz and Belgrave (2012) go further to say that in undertaking grounded theory research, the interview is one of the most common methods used for this particular methodology. The interview in grounded theory uses the act of interviewing to 'ground the data', that is the concepts for the research are built upon the coding of the data and then applied to build a theory or concept. Data and analysis may happen in tandem to co-build the idea of an emergent concept and further build on the direction of the interviews to gain more insightful data across time.

Interviews were conducted across a period from 2016-2022 with students in the business school. As this study took place in a teaching context, it was important that students that took part in the study were undertaking learning in a transmedia context. This purposive sampling sought out students that had undertaken a form of work integrated learning either in a second or third year of study. Students that participated were involved in a WIL activity including simulations, work experience and internships.

The interview questions were constructed from the initial literature review - that is, the research did form the grounding of the questions. The questions were broken up into four key sections around student connectedness, teaching resources, participatory culture, and transmedia pedagogy. The interview questions were considered a guide only and hence semi-structured in that if the student wanted to talk about something, the topic was explored in depth.

Students volunteered to be interviewed and interviews were recorded for accuracy, then transcribed and

assigned anonymity. Students were drawn from two locations in Western Australia and Malaysia, reflecting the two campuses where WIL is undertaken. A total of 37 interviews were conducted. A breakdown of demographics is as follows:

- 6 males, 31 females
- 5 overseas students
- 36 local students
- 18 interviews were conducted face to face, 14 were conducted by phone and 5 were conducted via Zoom

The methods of collecting data are as follows:

Table 1: Data collection methods

Data Source	Analysis description	Research Objective
In-depth interviews (primary data)	*Qualitative*: Interviews will be undertaken with students to understand the effectiveness of transmedia pedagogy and its ability to enhance student connectedness	R01, R02, R03
Narrative analysis including (primary data): student evaluation qualitative feedback	*Qualitative*: draw out key themes in reflections to triangulate interviews	R02, R03
Online analytics using the MOOC platform (Edge Insights)	*Quantitative*: Understand student use of site and materials and triangulate qualitative data.	R01, R02, R03

Insights so far

Transmedia learning offers a unique way to ensure students are engaged and connected with their online learning. In a constructivist education model, such as transmedia learning, the literature collectively suggests the learning environment is an important element (Garrison et al., 1999; Seimens, 2005). In transmedia learning the power shifts to the individual and as the role of people, place and technology expands the formal learning environment (Masanet et al 2019). The role of the instructor, the role of the learner and the environment must all be considered, alongside the community both in the classroom, and outside of it. The way information is presented becomes a part of this so that learners can connect their learning across each platform.

Student participants in the study have supported this notion stating: 'But I feel […] each of the platforms delivered the same message in a different way, which then saw you interpret it in a different way, which I think was really valuable…Yeah, I think it was good that you had all of them [platforms] because they all gave something different in a valuable context. Yeah, yeah. Okay.'

Students also saw benefit of this from a learning perspective of their work integrated learning stating: 'There were similar themes with I think it was good to see the whole variety that everyone was doing. Yeah. And that it kind of showed that no matter kind of what PR position you were in, they were all in really different industries as well, there were I think there were quite a few that were mainly in PR agencies naturally.'

These comments show two different benefits to the transmedia learning, the first in reinforcement of messaging in different contexts, relating more to the discipline knowledge and the second in a broader understanding or work placement and the roles of the industry. Connectedness was also a theme with some comments highlighting the transmedia approach did make them feel more connected to their peers as shown in the comment: 'I wouldn't usually…continue my interaction outside of the classroom, like you continue to learn. Yeah. But I wouldn't usually interact with other people outside of the classroom, other than if it was a group assignment. But with this unit, we did. Yeah, I think I don't I don't know really how it happened. But the Facebook kind of was just became a platform where we all wanted to talk to each other about certain things I wasn't even expected or we weren't really asked to, but I kind of just, you know, happened. Yeah, I guess, because it's all like minded people. And we all have the same interest in the topic.'

Themes of connectedness continued with students identifying particular elements that made them feel closer to their learning, through the use of podcasts. As one student commented: '…I feel like even they were really valuable just even if you weren't talking about their assessments and stuff, just to hear someone's voice like, I feel like with the unit, obviously, we're not on campus here, because there's no point I was coming to campus. You feel quite detached sometimes. Yeah. So being able to just listen in to your Facebook lives and to your podcast. You just feel like someone's there. And you're not just by yourself. Yeah, I think that was really helpful.'

It's anticipated as the key themes are drawn out from the interviews and data, it will support the themes identified early important to transmedia learning. In addition, new insights from students will be observed on how this approach to learning has helped them develop a community whilst undertaking work integrated learning.

Contribution

While there are studies (emerging) on the use of transmedia learning (Rodrigues & Bidarra, 2016) and the use of building transmedia skills in learners (Scolari, 2020) more work is needed to identify a robust model for transmedia learning that enhances student connectedness and learning outcomes. Research by Scolari (2020) outlines a taxonomy of transmedia literacy skills however these are very much focussed on how students learn transmedia skills, rather than the use of a transmedia approach to learning. Recent research has presented a clear definition of what transmedia learning is however it does not approach the learning in relation to synchronous or asynchronous learning nor define the activities that are of benefit to the learner (Runchina et al. 2022). Understanding the student experience in relation to their online connectedness and use of technology is explored in this study to understand what the most effective ways are to offer transmedia learning.

Smith (2012, p.248) highlighted what he saw as a missing "unifying evaluation framework that captures the essential, pedagogically relevant features that are shared by most or all WIL-type curricula" and while this study does not seek to present an evaluation framework, it hopes to address the transmedia learning gap in context to work integrated learning. A transmedia learning approach encourages students to put into practice their understanding of their professional knowledge, as a part of their learning – that is, engage across multiple platforms, be co-creators of content, make unique contributions and act as mentors to their peers. These are all transmedia learning concepts important in learning and teaching, but also important in the public relations discipline which makes it an ideal case study to use. This study will address how to deeply embed these concepts for improved learning outcomes.

This research will seek to fill this gap with the goal to create a sustainable model suitable to deliver work integrated learning courses and beyond. From a pedagogical perspective this research aims to add to the growing body of knowledge on transmedia learning, and how it is applicable to develop robust work integrated learning environments.

Conclusion

Understanding how learners change to their environment is a critical part of learning in higher education. Students are continuing to evolve due to environment changes (i.e., the impact of the COVID-19 pandemic) but also due to developmental changes and preferences with younger demographics. Learning management systems have very much been focussed on a 'one size fits all' approach and their size and scale means there is little ability to be agile to current trends and learning styles. Transmedia learning provides space for agility and adaptability. Just as these skills become important for learners – the ability to think across platforms – so too does the approach to learning. Transmedia learning is deepening knowledge through providing different way for learners to create and access knowledge. This is a unique and connected environment that suits many learning modes currently in use including blended, hyflex, online and face to face. A strategic approach to transmedia learning allows for educators to deepen learning and co-creation is world-building and collaborative.

Laurillard (2009, p.6) asks the question "how do we ensure that pedagogy exploits the technology, and not vice versa?" and it is this question that guides this research. More than a decade later, the technology has continued to evolve, and students have continued to evolve in their preference of technology. There's a growing need to understand student preferences for learning and provide bite sized learning, as well as academic resources that have been provided for decades. Changing expectations of the learner, their ability to engage and their desire to

access information 'where they are' calls for higher education to adapt and provide knowledge across platforms, just as learners must learn to think across platforms. Transmedia learning can provide an engaging model for online modes as well as face to face, and most importantly, work integrated learning where students are off-site with no tangible connection to their university other than their learning management system. The model also provides agility from an instructor perspective where content and context can change suddenly. If the transmedia community is strong, a sudden shift to online (from a face-to-face model) has less impact on students.

The key with a transmedia learning approach is in the core elements of participation, production, performance, informal learning, and world building (Tombleson, in press). Platforms that may be used in transmedia learning are likely to change over time (i.e, social media), and it is the learning across platforms that is agile and supporting a networked community where students self-learn, as well as gain knowledge through formal higher education. Transmedia learning aims to evolve learners to co-create, collaborate, and connect with each other.

References

Alper, M., & Herr-Stephenson, R. (2013). Transmedia Play: Literacy Across Media. Journal of Media Literacy Education, 5(2). https://digitalcommons.uri.edu/jmle/vol5/iss2/2/ https://doi.org/10.23860/jmle-5-2-2

Arnau Erta-Majó, & Eduard Vaquero Tió. (2023). Designing a transmedia educational process in non-formal education: Considerations from families, children, adolescents, and practitioners. CONTEMPORARY EDUCATIONAL TECHNOLOGY, 15(3), ep442–ep442. https://doi.org/10.30935/cedtech/13338

Charmaz, K., & Belgrave, L. L. (2012). Qualitative interviewing and grounded theory analysis. Sage Publications Inc. https://doi.org/10.4135/9781452218403.n25

Charmaz, K. (2014). Constructing grounded theory (2nd ed.). Sage.

Conole, G. 2016. 'MOOCs as Disruptive Technologies: Strategies for Enhancing the Learner Experience and Quality of MOOCs'. In Revista de Educación a Distancia (RED). https://doi.org/10.6018/red/50/2.

Creswell, J. W. (2012). EDUCATIONAL RESEARCH: planning, conducting, and evaluating quantitative and qualitative research, global edition. (4th ed.). Pearson Education Limited.

de Waard, Inge. (2015). MOOC factors influencing teachers in formal education. Bachillerato a Distancia, 7(13). https://doi.org/10.22201/cuaed.20074751e.2015.13.64998

Dann, R. (2015). Developing understanding of pupil feedback using Habermas' notion of communicative action. Assessment in Education: Principles, Policy & Practice, 23(3), 396–414. https://doi.org/10.1080/0969594x.2015.1056083

Dickinson-Delaporte, S., Gunness, A., & McNair, H. (2018). Engaging Higher Education Learners with Transmedia Play. Journal of Marketing Education, 42(2), 123–133. https://doi.org/10.1177/0273475318775138

Downes, Stephen. 2012. 'Connectivism and Connective Knowledge: Essays on Meaning and Learning Networks.' National Research Council Canada.

Ferns, S., Campbell, M., & Zegwaard, K. E. (2014). "Work integrated learning" in Work integrated learning in the curriculum. Higher Education Research and Development Society of Australia (HERDSA Inc), 1-6.

Fleming, L. (2013). Expanding Learning Opportunities with Transmedia Practices: Inanimate Alice as an Exemplar. Journal of Media Literacy Education, 5(2). https://doi.org/10.23860/jmle-5-2-3

Garrison, D. Randy., Anderson, T., & Archer, W. (1999). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. The Internet and Higher Education, 2(2-3), 87–105. https://auspace.athabascau.ca/bitstream/handle/2149/739/?sequence=1 https://doi.org/10.1016/S1096-7516(00)00016-6

Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine Publishing Co. https://doi.org/10.1097/00006199-196807000-00014

Goglio, V. (2022). The Diffusion and Social Implications of MOOCs. Routledge. https://doi.org/10.4324/9781003009757

Herr-Stephenson, B., Alper, M., & Erin, R. (2013). T is for Transmedia: Learning through transmedia play. http://www.archive.annenberglab.com/Projects/T-Transmedia; Los Angeles and New York: USC Annenberg Innovation Lab and The Joan Ganz Cooney Centre at Sesame Workshop.

Jenkins, H. (2006). Convergence culture: where old and new media collide. New York University Press.

Jenkins, H. (2008, February 5). Recut, Reframe, Recycle: An Interview with Pat Aufderheide and Peter Jaszi (Part One). Pop Junctions: Reflections on Entertainment, Pop Culture, Activism, Media Literacy, Fandom and More. https://henryjenkins.org/?offset=1204848016000&category=nml

Jenkins, H. (2010). Transmedia Education: the 7 Principles Revisited. Confessions of an Aca-Fan (Blog). http://henryjenkins.org/2010/06/transmedia_education_the_7_pri.html

Habermas, Jürgen (1981). Theory of Communicative Action, Volume Two: Lifeworld and System: A Critique of Functionalist Reason (Book). Translated by Thomas A. McCarthy. Boston, Mass.: Beacon Press. ISBN 0-8070-1401-X.

Kay, J., Ferns, S., Russell, L., Smith, J., & Winchester-Seeto, T. (2019). The Emerging Future: Innovative Models of Work-Integrated Learning. International Journal of Work-Integrated Learning, 20(4), 401–413.

Laurillard, D. (2008). The pedagogical challenges to collaborative technologies. International Journal of Computer-Supported Collaborative Learning, 4(1), 5–20. https://doi.org/10.1007/s11412-008-9056-2

Lee, M.-Y., & Greene, G. J. (1999). A Social Constructivist Framework for Integrating Cross-Cultural Issues in Teaching Clinical Social Work. Journal of Social Work Education, 35(1), 21–37. https://doi.org/10.1080/10437797.1999.10778944

Masanet, M.-J., Guerrero-Pico, M., & Establés, M.-J. (2019). From digital native to digital apprentice. A case study of the transmedia skills and informal learning strategies of adolescents in Spain. Learning, Media and Technology, 44(4), 400–413. https://doi.org/10.1080/17439884.2019.1641513

McHaney, R. (2023). The New Digital Shoreline. Taylor & Francis. https://doi.org/10.4324/9781003447979

Minarcin, R. (2020). Ok Boomer- The Approaching DiZruption of Legal Education by Generation Z. Quinnipiac Law Review, 39.

Pence, H. E. (2011). Teaching with Transmedia. Journal of Educational Technology Systems, 40(2), 131–140. https://doi.org/10.2190/et.40.2.d

Pennbrant, S., & Svensson, L. (2018). Nursing and learning – healthcare pedagogics and work-integrated learning. Higher Education, Skills and Work-Based Learning, 8(2), 179–194. https://doi.org/10.1108/heswbl-08-2017-0048

Raybourn, E. M. (2013, July 1). Transmedia Learning: A Paradigm for Transcending Stand-Alone Training and Education. Www.osti.gov https://www.osti.gov/servlets/purl/1106630

Raybourn, E. M. (2014). A new paradigm for serious games: Transmedia learning for more effective training and education. Journal of Computational Science, 5(3), 471–481. https://doi.org/10.1016/j.jocs.2013.08.005

Rodrigues, P., & Bidarra, J. (2016). Transmedia Storytelling as an Educational Strategy. International Journal of Creative Interfaces and Computer Graphics, 7(2), 56–67. https://doi.org/10.4018/ijcicg.2016070105

Runchina, C., Fauth, F., & González-Martínez, J. (2022). Adolescents Facing Transmedia Learning: Reflections on What They Can Do, What They Think and What They Feel. Behavioral Sciences, 12(4), 112. https://doi.org/10.3390/bs12040112

Scolari, C., A. (2020). TRANSMEDIA LITERACY IN THE NEW MEDIA ECOLOGY. In Transmedia Literacy (p. 16). European Commission. https://transmedialiteracy.org/

Siemens, G. (2005). Connectivism: A learning theory for the digital age, International Journal of Instructional Technology and Distance Learning, 2. http://www.itdl.org/Journal/Jan_05/article01.htm

Sime, J.-A., & Themelis, C. (2020). Educators' perspectives on transmedia identity management: redefining tele-teacher presence. Distance Education, 41(1), 70–85. https://doi.org/10.1080/01587919.2020.1727292

Smith, C. (2012). Evaluating the quality of work-integrated learning curricula: a comprehensive framework. Higher Education Research & Development, 31(2), 247–262. https://doi.org/10.1080/07294360.2011.558072

Teske, P. R. J., & Horstman, T. (2012). Transmedia in the classroom. Proceeding of the 16th International Academic MindTrek Conference on - MindTrek '12. https://doi.org/10.1145/2393132.2393134

Tombleson, B. (in press). Transmedia learning: a literature review, Journal of Technology, Pedagogy and Education.

Tombleson, B., Wolf, K., Gallant, L., Archer, C., & Desai, R. (2016). Teaching transmedia to millennials: A critical reflection on the embedding of transmedia skills in the communication curriculum. Higher Education: The Shape of Higher Education, 39. http://herdsa.org.au/research-and-development-higher-education-vol-39

Tu, C.-H. (2000). On-line learning migration: from social learning theory to social presence theory in a CMC environment. Journal of Network and Computer Applications, 23(1), 27–37. https://doi.org/10.1006/jnca.1999.0099

Vygotsky, L. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press.

Wang, F., & Hannafin, M. J. (2005). Design-based research and technology-enhanced learning environments. Educational Technology Research and Development, 53(4), 5–23. https://doi.org/10.1007/bf02504682

Woo, Y., & Reeves, T. C. (2007). Meaningful interaction in web-based learning: A social constructivist interpretation. The Internet and Higher Education, 10(1), 15–25. https://doi.org/10.1016/j.iheduc.2006.10.005

Wu, B., & Wang, Y. (2022). Formation mechanism of popular courses on MOOC platforms: A configurational approach. Computers & Education, 191, 104629. https://doi.org/10.1016/j.compedu.2022.104629

Yang, B., & Huang, C. (2020). Turn crisis into opportunity in response to COVID-19: experience from a Chinese University and future prospects. Studies in Higher Education, 46(1), 121–132. https://doi.org/10.1080/03075079.2020.1859687