SITUATED ANDRAGOGY: EXPLORING THE INTERRELATIONSHIPS BETWEEN PEOPLE, PLACE AND PRACTICE ON NOVEL EXPERIENTIAL LEARNING JOURNEYS OF FREELANCE LEARNER-PRACTITIONERS WORKING IN THE UK FILM AND HIGH-END TELEVISION INDUSTRIES.

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Abstract

The UK Film and High-End Television production workforce is predominantly employed on a project-by project basis, and employment contracts are often freelance. With the shift in production techniques from analogue (celluloid film) to digital together with the development of new digital technologies, the production workforce needs to engage in continual learning to sustain a career in technical craft areas of film production. Although some training is available through sector bodies such as *Skillset,* there are a number of barriers to accessing training. For example, the cost of taking time away from self-employed work to engage in the training and the challenge that learner-practitioners need to have a period of working in the industry before they can access some resources can inhibit access to these initiatives.

This situation invokes two questions. First, why does operational skills development take place for learner-practitioners working in precarious employment and in the absence of formal training schemes such as those offered by *BFI* and *Skillset*? Secondly, if learning is occurring in this precarious workplace setting, can these learning experiences be expressed graphically by way of a learning model?

The thesis builds on the relatively un-researched area of experiential learning within the context of a freelance workplace. The contribution of the research lies in the way it considers the lived experiences of learner-practitioners working in, or closely with, the camera production unit, in eight different production contexts, and their personal learning journeys.

The research has analysed qualitative data from a series of semi-structured interviews with working practitioners, through the application of four theoretical frameworks: Fiske (1992), Garnett & O'Beirne (2013), Jarvis (2004) and Russ-Eft (2011), identifying patterns and trends in the lived experiences of these practitioners. From this analysis, a model expressing the learner-practitioner's individual experiential learning journey is proposed. The new model shows how the relationship between people and place influences the experiential learning journey of practitioners. The model structures the range of pathways an individual learner-practitioner can choose to take within their own experiential learning journey. The choice of pathways are not only influenced by external factors, but also influence and inform (and are shaped by) an individual's approach to learning, leading to the continued development of the learner-practitioners' practice. The new experiential learning model expresses the holistic experiences of freelance learner-practitioners within the technical-craft domain of film production.

The model provides a contribution to experiential learning, enabling freelance learner-practitioners to explicitly explore the range of opportunities available to them to engage in experiential learning. Practitioners can use the model to reflect on their learning experiences and inform decisions on how to develop and maintain their socio-technical skills, navigating a successful career in an industry of continued technological change. This research contributes to the theory of experiential learning that takes place within a freelance workplace.

Glossary of Terms and Abbreviations

Box Lens	A type of large, zoom lens used in multi-camera live broadcast settings capable of very long focal lengths.
CAA	Civil Aviation Authority – the authorising body who issue flying licences for drone operation in UK.
Camera Production Unit	The activity centre for on-set filming/production. Members include those from the camera crew, the grip department and the lighting department.
Camera Operator	The person responsible for operating camera equipment
Camera Trainee	Early career stage position supporting the camera team in whichever way is appropriate, such as getting equipment ready, providing refreshments.
Cinematographer/DoP	The head of the camera production unit directing the 'look' of the film.
Clapper-Loader/2nd AC	The second assistant camera operator responsible for preparing the camera, film stock or digital resources in readiness for filming a scene.
CoP	Community or Collectivity of Practice. In the case of this thesis a collectivity of professionals with a common goal, working within a mutual project, seeking to resolve common problems through a shared repertoire of, knowledge, actions and language, informally bound by strong hierarchical/familial structures.
Crane	A larger grip device where the camera operator and director sit used for long vertical camera movements
Depth of Field (DoF)	How much of the scene is in focus. Shallow DoF = foreground and background out of focus; Extended DoF = foreground and background in focus.
Focal Length	Denoting the magnifying power of a lens. Long focal length lenses magnify greater than short focal lengths.
Focus Puller/1st AC	The first assistant camera operator responsible for ensuring focus is correct. Also assists with the assembly of the camera.
Freelance	An employment scenario that is determined by a self-employment project-based contract system. Employees are recruited on an 'as-and-when' basis.
Grip	The department mainly responsible for high dynamic camera movements, such as tracking and dollying.
HETV	High-end television. A subsector of the UK screen industries usually producing high quality narrative programmes or series for television viewing.
HoD	Head of Department
Jib	A grip device often used for short vertical camera movements
Learner-practitioner	A term applied to both novice and experienced practitioners used to denote those whose are learning

	through activities carried out as part of one's job either at or away from the workplace.
Lighting	The department mainly responsible for setting up and striking production lighting equipment and lighting control equipment.
On-Set	A situation where production is taking place usually with full members of the production team.
Runner	Very early career stage position providing auxiliary support for the whole camera team.
SCD	Single-camera drama. The production process for many small and large-scale productions. The primary use of one camera to film all scenes and sequences.
Steadicam	A devise worn by a camera operator consisting of a vest, a mechanical arm, and a camera mount intended to provide a wide range of smooth dynamic camera moves by reducing camera shake.
Walk-on Jib	A grip device used by Steadicam operators to get extended vertical camera movements.
Wide-angle lens	A lens type with a wide field of view. Often reducing the appearance of camera shake and having an extended DoF.

1 Introduction

The UK workforce is broadly comprised of employed workers and self-employed workers. Different sectors will have different proportions of each and different job roles within these sectors will often dictate an 'employed' or 'self-employed' status (Kitching & Smallbone, 2012a). Although self-employed status can cover a range of employment activities, such as small businesses, it also embraces a self-employment status commonly known as 'freelance' (Kitching & Smallbone, 2012b). Kitching & Smallbone, (2012a) describe freelance work as 'self-employed without employees' (Kitching & Smallbone, 2012a, p83). Within the UK workforce, the UK film industry is a well-established place of work where the principal structure of work is one of a project-based system (Blair et al., 2001) often with long work days (Evans & Green, 2017) and with freelance contracts being the norm – especially in the area of production. (Blair et al., 2001).

1.1 Freelance and precarious employment

Each production is individually managed and personnel are recruited on an 'as-and-when' basis. This project-based employment structure determines different approaches to the way employees learn (Lahiff & Guile, 2016) and potentially denies learning opportunities to new-comers because of this uncertain work pattern. This is partly because of the project-based arrangement, and partly because much employment – especially within the camera production department – is freelance (Grugulis & Stoyanova, 2009) and irregular work patterns are the norm (Evans & Green, 2017). As such, each freelancer is likely to approach workplace learning differently.

Even though the employment pattern is project based, there still remains strong hierarchical structures within a camera production unit where each member of the crew has their own delineated responsibilities (Elkins, 2020). These hierarchies can present a barrier to learning in that the heads of department (HoDs) tend to have short recruitment windows for productions leading to project heads bringing to the production personnel they know and have the experience to perform in the specific job roles. As a result, the new entrant is an 'unknown' factor in the production unit and is rarely given the opportunity to advance until proven beneficial to the production (Blair, 2003).

1.2 The paradigm shift from analogue to digital

Since the start of the new millennium there has been an evolution in the practice of film and high-end television production. This change has materialized through the simultaneous introduction of digital image capture equipment and the decline of analogue (celluloid) image capture equipment. In a report for the Canadian Public Arts Funders (CPAF) network, Poole & Ho, (2011) highlight several developments in digital media, and how they impact on artistic discipline. They argue that there has been a real impact on the production of Media Arts in areas of:

- Digital Arts/Digital Media/New Media/Interactive Media
- Film and Video
- Writing and Publishing / Literature

- Music Recording

Not only has there been a development in production equipment (and subsequent techniques and practices), where access to film production equipment is more readily available, there has also been a sea change in the exhibition of film at outlets such as cinemas, through the incorporation of digital projectors (Daly, 2010).

Sparke (2014) suggests this change from analogue production and exhibition has provided opportunities for a wider participation in the creation of 'movies'. Moreover, these opportunities are operating at a global level. However, these new technologies, also bring new challenges that were not evident in the celluloid era. New roles such as Digital Imaging Technician (DIT) and 'data wrangler' are emerging job roles as digital production increases. In these roles practitioners need to be conversant with a range of computer technologies software and new practices including, checksum software, colour matching techniques and digital file compression (Elkins, 2020).

Nevertheless, even though access to digital production equipment is increasing and opportunities to exhibit self-made movies are increasing through digital streaming services, such as *Vimeo*, there is still a requirement for highly skilled practitioners at the high-quality production end of the talent pool. Poole & Ho (2011) make the point that:

> "While the tools are accessible, expertise in camerawork or editing still remains specialized." (Poole & Ho, 2011, p22)

This paradigm shift brings a new era to production, but it also brings issues. Digital technologies have transformed high-end production and practitioners now need to have a new range of skills that their forbears did not. There is a concern that a growing skills gap in the workforce may lead to a decline in the overall economy of the Film Industry and as companies reduce their training budget this will impact on the skills development of the workforce (UK Film Council, et al, 2010). As such there are training requirements at all spheres of operation.

1.3 Lack of training opportunities

> "As a Cinematographer, I've had to get used to the fact that my role is constantly changing" (Mather, n.d.)

Although access to digital production equipment makes it possible for amateur or less experienced practitioners to make films, Sparke (2014) contends that there is still a requirement for a highly skilled workforce, where:

> "historically "the look of the thing" was decided by the cinematographer, now everything that is done in front of the lens can be changed post-production by "a spotty teenager" with tech know-how but without the training, skill, and over-arching view and remit of the traditional cinematographer…" (Sparke, 2014)

Screenskills (formally Creative Skillset) is the sector skills council for film and television production. They have reported on some of the skills deficits within the sector, making the point that over half of freelance practitioners report a training need. Why is this significant? Because 90% of practitioners working in production are freelance (Creative Skillset, 2014) meaning potentially 45% of the production workforce has a training need.

In a more recent report Carey et al., (2017) have illustrated that many film and media degree graduates enter the screen industries with little or no experience of professional 'on set' operations; reporting concerns that skills development and up to date training is insufficient with existing education and training provision. As such the success rates for new entrants sustaining a career are low (Carey et al., 2017). The requirement to stay relevant with new technologies presents challenges for new entrants.

Screenskills and the *British Film Institute* (BFI) also offer training opportunities for practitioners via their training schemes (BFI, n.d.; ScreenSkills, n.d.), but these often cost money or have limited places. Given the number of film and media students graduating each year (BFI, 2021), competition to access these courses is high. This is further exacerbated by the freelance employment nature of the camera production unit in the film industry (Blair et al., 2001), where the transitory nature of employment disrupts opportunities for formal training often leaving the learner-practitioner to fend for themselves with regard to skills development (Grugulis & Stoyanova, 2009).

The focus of the research is a technical craft department – the camera production unit. Broadly speaking the camera production unit is made up of those personnel who are working with the camera, grip and lighting team (depending on the scale of the production). One of the main ways in which practitioners learn their craft and gain skills in this department, is through the day-to-day hands-on activities of production, which can be categorised as experiential learning. Often this is undertaken informally and by way of a self-determination to discover new techniques or equipment, or problem solve

challenges met during production. As learning opportunities are encountered, experience is gained, and the practitioners skills set is expanded. However, opportunities for learning are often inhibited for those embarking on a career in the film industry for a number of reasons. Firstly, access to real life production can be sporadic for learner-practitioners. This is because work patterns are based on a project-by-project basis and crews often prefer to work with people they are familiar with or have worked with before (Blair, 2003). Secondly, learner-practitioners starting out are unlikely to have a network of contacts they can draw upon to get work opportunities (Grugulis & Stoyanova, 2012). Agencies and diary services may be a way for learner-practitioners to access production, but often they will need some experience before an agency will recruit them onto their books. Thirdly, financial or geographical barriers exist where resources such as having a full driving licence, and access to a vehicle may prevent learner-practitioners from accessing production if it is outside their geographical parameters (Carey et al., 2017). This is because many film and HETV productions are shot on location and entry level positions may require some driving of production vehicles or getting to distant places. Fourthly, inexperience. Small to medium productions such as HETV dramas and independent films are often on a tight deadline with limited budget. As such, efficiency is demanded by the production and individual teams, and crews simply do not have the capacity to train new entrants in any meaningful structured way (Carey et al., 2017). As a result any experiential learning that takes place is often ad hoc and independently motivated (Creative Skillset, 2010), and is also influenced by the context of the learning experience and the relationships formed and influencing these experiences.

1.4 Experiential learning

Much academic literature has presented and discussed aspects of experiential learning and a number of academics have attempted to express the experiential learning process through a series of models (Dewey, 2007; Dochy et al., 2011; Illeris, 2007b; Jarvis, 1987, 2004; Kolb, 2014; Le Cornu, 2005; Lewin, 1951; Piaget, 1970). Whilst these have been useful in presenting a process of learning, few have considered including external aspects of the learning journey such as interactions between individuals or how the place of learning enhances/inhibits the whole learning experience (Illeris, 2003a). Moreover, expressions of experiential learning by way of a significantly developed model have not been attempted since 2015. Some considered Engestrom's work (Scholtz & Bester, 2018), but many simply extend Kolb's original model (Falloon, 2019; Lieh & Irawan, 2018; Matsuo & Nagata, 2020; Morris, 2020; Scholtz & Bester, 2018). By overlooking the external influencing features of the whole learning experience in the experiential learning model, a research void has been left which, if explored, could shed further light on the holistic experience of the learning journey. By using learner-practitioners as the focus of study, not only would research in this area start to complete some of these omissions, but it would also provide new areas of interest which could be investigated in future research.

This thesis then, builds on existing experiential learning models by considering the learning experiences of new and emerging practitioners sited in the camera production unit of a film or high-end television (HETV) production, located in the UK screen industries. It utilises these experiences to develop a new learning model that incorporates major external influencing factors. The primary focus of the study is single

camera narrative production, but members from other communities, such as multi-camera production, corporate production, commercial production and factual production are also incorporated into the research mainly because, for the freelance practitioner, there is often cross-over responsibilities and a range of operational practice.

1.5 Primary research question

The discussion above, presents some of the challenges for those entering the UK film industry. The paradigm shift in the use of digital technology, the difficulties in finding appropriate training, together with the precarious nature of the employment pattern prompts questions which this thesis seeks to answer:

> Why does operational skills development take place for learner-practitioners working in precarious employment and in the absence of formal training schemes such as those offered by *BFI* and *Skillset*?
>
> Furthermore, if learning is occurring in this precarious workplace setting, can these learning experiences be expressed graphically by way of a learning model?

In order to respond to these questions, an overall aim and stated objectives are presented below.

1.6 Thesis aim

The overall aim of this study is to develop a heuristic model of a self-employed freelance learner-practitioner and their exposure to novel situations leading to experiential learning, which can then be deployed to enhance the practice of workplace learning within this community.

1.7 Thesis objectives

In order to meet the thesis aim, the following objectives will be completed.

1. Identify different models expressing experiential learning.
2. Evaluate these against practices of freelance personnel in a camera department hierarchical structure.
3. Develop a heuristic model of experiential learning that reflects these practices.
4. Identify barriers and drivers facilitating this engagement with experiential learning.
5. Using real-life scenarios, test a model of experiential learning that reflects the practices of freelance personnel in a camera department hierarchical structure.

1.8 Structure of thesis

Chapter 2 defines the methodological parameters to data gathering and analysis at the core of this thesis, highlighting the research instruments applied throughout the research journey.

Chapter 3 considers experiential learning; introducing and critiquing foundational models from academic literature. Through this exploration, chapter 3 highlights deficiencies in these models and proposes auxiliary characteristics of the learning experience found in alternative literature that should be included in a graphical expression of the holistic experiential learning. The chapter includes a conceptual framework as a foundation to the characteristics of experiential learning and concludes with a summary of the theoretical frameworks that contribute to a model of holistic experiential learning in a precarious employment environment.

Chapter 4 provides a detailed context to the target population for this research. It uses features from academic literature and the first industry survey to design an initial experiential learning model. The findings from the semi-structured interviews at the data gathering phase are presented in chapter 5. Themes emerging from analysis are also presented in chapter 5.

Chapter 6 tests the model presented in chapter 4 against the findings presented in chapter 5 and the model is shown to be deficient in its design. A subsequent discussion follows in chapter 7 leading to a revised model being presented in chapter 8. Triangulation is also performed in chapter 8 through using real-life scenarios against this new model. Chapter 9 concludes the thesis, suggesting how the model could be utilised for the community of focus and how its use could be extended in alternative work communities.

The diagram in Figure 1. 1 shows how each of the individual chapters will meet or part meet the stated objectives from section 1.7 above. Throughout the research theoretical frameworks were visited and revisited in order to form the final model. These were then collated. These theoretical frameworks are presented in chapter 3. Figure 1. *1* illustrates the abductive nature of the research which will be discussed in more detail in the following chapter.

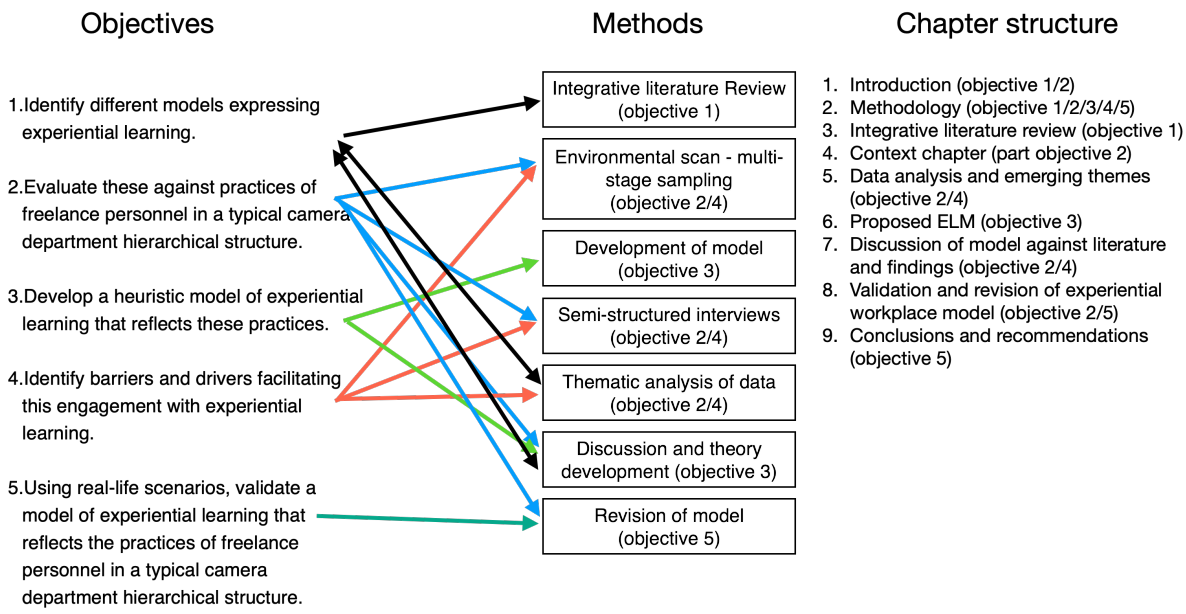


Figure 1. 1: Diagram indicating how thesis chapters will meet research objectives

2 Methodology

2.1 Introduction

“Learning…underpins the nature of our humanity” (Jarvis & Parker, 2005, pxiii)

The research design of this thesis adopts a qualitative methodology. Saunders et al. 2019) comment that a research project has an abductive approach where a conceptual model is developed from empirical data and hypotheses are generated from this conceptual model through further collection of empirical data. The conceptual model is refined through the revisiting of theoretical frameworks and through further analysis using these additional frameworks and empirical data (Saunders et al., 2019). This chapter outlines the research design adopted to support this approach and the gathering and analysis of data that contribute to the theory development of the experiential learning model presented in chapter 8 and the thesis as a whole.

It first introduces the underpinning philosophy of the research. From here the chapter presents the approach to theory development, discussing the core methodological choices of the research. Strategies for gathering data are introduced and the time horizons of this data gathering are discussed. Techniques and procedures for data collection and analysis are then considered and the chapter concludes with a diagram of the research design illustrating where each of the objectives from chapter 1 have been addressed by the design of the research. It is useful to note here that the abductive nature of the research meant that at each iteration of analysis and model development, literature was revisited in order to better develop a holistic experiential

learning model more suited to expressing the experiential learning journey of freelance learner-practitioners.

2.2 Research philosophy (Symbolic Interactionism)

As outlined in chapter 1, this research considers the theory of experiential learning as applied to early-stage career practitioners working in the camera production communities of film and high-end television productions. According to Hickman & Kuhn (1956) interactions between group members and behaviours within a community are socially determined by the actor's definitions – how they interpret meaning. If individuals within a community are to be studied, the influence of the collective membership also needs to be considered. As such, this thesis is viewed through the lens of symbolic interactionism because this philosophy suggests that 1) A community is composed of interacting individuals with shared ideas that define their membership; 2) the shared meanings presented by the community are interpreted by the individual providing the conditions for behaviour; 3) past and future events with our lives are continually influenced by our actions, responses and perceptions; 4) meanings are modified through an interpretative process used by the person dealing with the things they encounter (Meltzer et al., 2020). In terms of symbolic interactionism, the Iowan school focusses on consistencies between connections. They consider that 'the self' is characterized by having a solid core of meanings, grounding interaction in a larger societal and cultural context.

Symbolic interactionism differentiates itself from the traditional ways of generating meaning for things; that of intrinsic meaning but is governed by the response of the other person. For example, a simple wave of the hand from a friend, if ignored, charges

the gesture with emotional meaning and may be interpreted by the friend very differently than if the wave had been returned (Meltzer et al., 2020). In a similar fashion, when practitioners enter the camera production department, their responses to other crew members may elicit responses that either welcomes the them into the 'family' or denies them opportunities to progress their position.

Blumer (1986) states that symbolic interactionism

> "does not regard meaning as emanating from the intrinsic makeup of the thing […], nor does it see meaning as a coalescence of psychological elements in the person [but that meaning] grows out of the ways in which *other persons act toward the person with regard to the thing* [emphasis mine]" (Blumer, 1986)

Symbolic interactionism, then, sees meanings as social products; creations that are formed in and through the defining activities of people as they *interact.* In this way, the actions, responses and perceptions of individuals within a community such as a camera production unit, are influenced by the interactions with other individuals within that community.

In this respect, this thesis adopts an Iowan school of thought (Reynolds & Herman-Kinney, 2003) by way of a structural approach to considering problems encountered by individuals through the shared meanings within freelance workgroups, such as self-employed practitioners working in the camera production unit community.

2.3 Focus of research for this thesis

On-set single camera drama production is the foci of this research. It is characteristic that community members of this study work with and interact with colleagues. In this

respect, relationships create meaning for the learner-practitioner indicating the influence relationships have on the learning experience. This is evidenced by considering Stryker (1987) who suggests that his form of symbolic interactionism begins with the dicta that 'self' guides and organizes behaviour and that 'self' is shaped through the interaction with others asserting that wider factors – such as social structures, systems of position, related roles, how societies are organized – shape this interaction (Stryker, 1987). With this in mind, chapters 7 and 8 explore how these dyadic relationships and the workplace context impact the learning experience.

It might be that

> "[…] the most important tenet of symbolic interactionism is the idea that the individual *and the context* in which that individual exists are inseparable. [emphasis mine]" (Benzies and Allen, 2001)

Chapter 3 discusses the influence of context on the learning experience in more detail.

2.4 Approach to research and theory development

Because of the researcher's background and association with the focus of study (the researcher has production experience, lectures in single-camera drama production, and is a member of BECTU and GTC), this thesis uses a qualitative methods approach to the research. Eisenhardt (1989) indicates that insight of the theorist works in concert with past literature and empirical observation and assists with the theory-building process. In the initial stages of the research a deductive approach was adopted to explore theoretical frameworks in order to develop a basic understanding of experiential learning models. In the early stages of the research this was made through a series of data collection activities where a tentative learning model was presented

and tested using radar charts (a more detailed account can be found in section 6.2.1.). As the research progressed, additional theoretical frameworks exploring learning approaches and dyadic relationships further developed the core theory of experiential learning models. Eisenhardt (1989) suggests that a constant iteration between analysis and literature is especially useful in theory-building as it has the potential to generate novel theory. This abductive approach expanded the research and further analysis led to a final experiential learning model, exploring the experiential learning journeys of freelance learner-practitioners. The final model was tested against real-life industry practice and is presented in chapter 8 towards the end of this thesis.

2.5 An integrative literature review

Because of the iterative nature of theory building, in which seemingly disparate theoretical frameworks were appended and synthesised, an integrative literature review was carried out throughout the research process. Initially drawing from two key themes, the first theme explored experiential learning and associated models. From this initial research a foundational theoretical stance was achieved. As the thesis developed and deficits in the expression of experiential learning models emerged, additional literature was considered in areas where these deficits were manifest. Eisenhardt (1989) comments that in theory-building research, linking results to the literature is fundamental because the findings are frequently supported by a very limited number of cases. This additional literature explored relationship models theory (Fiske, 1992), approaches to learning (Garnett & O'Beirne, 2013) and contextual influences (Russ-Eft, 2011).

For the literature review, the following general search parameters were generated:

- English Language
- Journal Articles (not including book reviews, editorials, or commentaries)
- Books and book chapters (including 'Readers')
- Reports
- Newspaper articles
- No age group limitations
- UK Studies, as much as possible

Search approaches were then determined by a number of strategies.

It was important to get an insight into workplace learning and working in the field of study – Film and High-end television (HETV). An initial literature search provided this insight. First, topic key words were used such as 'Work-Place Learning', 'Apprenticeship', 'CPD', 'Movie Production', 'Film Production', 'Single Camera Drama', 'Freelance', 'Network'. Boolean search terms (AND/OR/NOT) were also used to filter results. A range of databases and search engines were used – such as Google Scholar, VitalSource and BCU Digital Library. To determine the appropriateness of an article, abstracts were reviewed, and if the abstract indicated its appropriateness to the thesis, the full text was subsequently read to confirm the suitability of the article. This insight informed the questions for the first environmental scan, which was subsequently distributed via Google forms as well as the contextual discussion in chapter 4. A more detailed account of this survey is discussed in section 2.9.1 below.

Insight into the work practices of the community being researched provided the background, but more was needed for the core topic of experiential learning. Therefore, concurrent to the environmental scan, a second pass of academic literature was made. This focussed on the core topic of study – experiential learning, and specifically models expressing experiential learning. Books, articles and reports were identified and noted and a core reading list was compiled. From the results of these initial searches, the reference lists of relevant articles were harvested in order to further highlight authors and additional sources for reading. This reference mining developed further the overarching topic areas of 'experiential learning', 'expansive learning', 'informal learning' and 'lifelong learning', 'workplace learning', 'communities of practice' and 'relationships within the communities of practice', with the focus being on novel or new learning situations. The findings provided access to and assembly of over two-hundred texts relating to the field of study and were collated into reference management software (Mendeley) and, where possible, categorised into the associated themes.

2.6 Targeted web search

There are a number of public agencies that promote themselves as representative of the Creative industries. These hold repositories that are also relevant to this investigation. The *British Film Institute* is a charity governed by Royal charter and supports development, education and research into UK film. It also holds archival reports from now defunct government agencies, such as the UK Film Council. *Creative Skillset* (now called *ScreenSkills*) is the sector skills council and although it embraces

the creative industries per se, it also has child-sites centring on specific areas of the creative industries – i.e. Film. These sites were useful in providing reports with data that both highlighted certain issues within the UK Film / HETV Industries and contextualised the focus of the study – freelance workers in the UK Film Production unit.

This research provided an overall picture of the topic area and a foundational element to the thesis. As the thesis progressed iteratively, additional findings were added to the literature review.

2.7 Methodological choice – qualitative methods

Symbolic interactionism is viewed as an interpretive philosophy (Oliver, 2012). Denzin & Lincoln, (2017) comment that a qualitative approach to research is most associated with interpretive philosophies. This is because researchers 'need to make sense of the subjective and socially constructed meanings expressed about the phenomenon being studied' (Saunders et al., 2019, p179). As such, the research for this thesis adopts a predominantly qualitative approach. A qualitative method of data gathering was chosen because as Sarantakos (2013) further indicates a qualitative approach is naturalistic, dynamic, informative, subject-centred, context sensitive, holistic – all elements that the research would benefit from. Moreover, Saunders et al. (2019) highlight that methods used in qualitative research are often unstructured or semi-structured with non-standardised data requiring categorisation at a conceptual analysis stage. Because the focus of the study was practitioners working in the film and television industries, and their accounts may differ, a qualitative approach was

adopted by this thesis. Also, because of the iterative nature of the abductive approach, a sequential multi-phase method (Saunders et al., 2019) research design was chosen for the collection and analysis of the data. The iterative nature of the research, the multi-phase method of the research design, together with the revisiting of literature meant that the overall thesis took the form of a partially integrated mixed methods approach (Saunders et al., 2019). Furthermore, Eisenhardt (1989) has shown that theory-building centred on case studies can involve: either single or multiple cases; numerous levels of analysis; multiple levels of analysis within a single study; and combine data collection methods such as interviews and questionnaires.

In keeping with Eisenhardt (1989), the main strategy for initially collecting raw data took the form of two short industry surveys (environmental scans). The first of these (IS2016) was to identify specific target groups, and to identify additional factors relating to the topic of study of experiential learning in the camera production unit. Surveys were distributed using the authors known contacts and targeted industry events such as *BECTU's Freelancer's Fair.* The survey was designed to confirm the identified group of learner-practitioners from a single camera drama production unit to be a potential community of study. The second industry survey (IS2022) carried out at the end of the research period, was distributed to a targeted community forum (The Guild of Television Camera Professionals - GTC). Questions in each survey used Google Forms to gather information and at the end of each survey participants were invited to provide contact details, if they wished to be included in the next stage of data gathering which was semi-structured interviews (IS2016) and/or testing the final model (IS2022). The opportunity to respond was open for three months for IS2016, but because of time

constraints IS2022 was open for two months only. In total, twenty-four practitioners responded to IS2016 and twenty-five responded to IS2022. The results of the surveys are discussed in chapter 4 – 'Context and environmental scan'.

The first interview schedule was carried out in the early stages of the research. It included six participants that provided the data for core analysis. At the end of the research the second interview schedule included three participants. The results from these are presented in chapters 5 and 8 respectively.

2.8 Time horizons

The constraints of the doctoral research, the commitments of the researcher, and the availability of industry practitioners meant that it was not possible to revisit and repeat study participants in order to perform a longitudinal study of the selected area of focus (the camera production unit). As such, the thesis utilises a cross-sectional approach. However, whilst a longitudinal study was not possible, there was opportunity to carry out two structured surveys: one at the start of the research journey and one at the end. This was pertinent because the COVID global pandemic had occurred during the research period, and the researcher wanted to determine whether the global pandemic had impacted on the experiential learning routines of practitioners. These are discussed in more detail in section 2.9.1 below. A semi-structured interview was also carried out during the research period. Eisenhardt (1989) comments that in case study theory-building research, additional questions can be added to an interview protocol. This was to determine experiences from practitioners within the target population and occurred early in the research programme, contributing to the primary data which was later used in the analysis phase of the research. From data gathered in the initial

industry survey, together with information from literature, a series of interview themes were developed. These themes were then formulated into a topics guide in preparation for the interview stage. The topics included: Occupational Progression (Blair, 2001; Elkins, 2009), Formal Learning (Billett, 2011; Guile et al., 1998), Informal Learning (Eraut, 2004), Supplementary Income (Ashton & Ashton, 2015), Access to Learning Facilities (Creative Skillset, 2010), Social Networks, (Grugulis & Stoyanova, 2012), Job Opportunities (Blair, 2003), New Ways of Learning (Engeström, 2011). This is discussed in more detail in section 2.9.1. and a full list of topics and questions can be found in Appendix 2.i

An open-ended interview was designed to test the final experiential learning model and occurred at the end of the research programme. This is discussed in more detail in section 2.9.1. below. The abductive nature of the research guided the techniques and procedures adopted by this thesis and these are discussed in more detail in section 2.9 below.

2.9 Techniques and procedures

2.9.1 Data handling

Richards (2005) discusses handling qualitative data and makes some suggestions as to how to design the data. Two key questions she asks are: What is the *scope* of the project? What is the *nature* of the data required? In response to these questions, data gathering approaches that were adopted are discussed below.

Two environmental scans (IS2016 and IS2022) were carried out throughout the research. Chapter 4 includes a discussion of the results of these surveys as well comparing each to determine whether there had been any significant differences in practice since IS2016. Targeting a specific population such as the GTC in the IS2022 survey served several purposes. Firstly, it was very likely that respondents would be working in the focus of the research – the camera production unit. Secondly, an additional benefit of such a targeted group was that there were potentially respondents from a range of career stages. This would be useful in testing the model to determine its applicability to both emerging learner-practitioners and also more senior roles. Thirdly the IS2022 survey was used to determine whether there had been any significant differences in practice since the IS2016 survey.

Silverman, (2011) makes the point that, in terms of resources and time, and compared with the other methods, interviews are relatively economical. In this regard then, both surveys provided opportunity for contributors to take part in a more in-depth phase of data gathering by way of semi-structured interviews. Silverman (2020) indicates a constructivist approach provides opportunity to analyse interviews with two lenses; the content and the form. As such, to get a deeper insight into the 'world' of the camera department freelance practitioner, a constructivist approach has been incorporated into the data gathering using these semi-structured interviews. This not only provided biographies of each of the interviewees, it also supported how the interviewees responded to questions on the interview schedule. A semi-structured interview method was chosen as this would more likely disclose personal aspects of feelings, thoughts and values, than as would be with a questionnaire (Bernard, 2006; Silverman, 2011). In this respect the semi-structured interviews provided opportunity for candidates to

respond to identified questions but would also allow candidates to veer off topic if appropriate (Eisenhardt, 1989).

Five respondents from the environmental scan (IS2016) indicated that they would be willing to be interviewed for the project. Of those five, only one was interviewed. This is because of the nature of freelance work preventing a commitment to interview during the interview period. Approaches were made elsewhere via work colleagues, alumni, and industry contacts, and this strategy gleaned more interview participants. Invitations also extended to industry events to try and attract more interviewees. Finally, there were six participants in total ranging across positions and stages of career. Most worked or were working in the camera/lighting department with the exception of one candidate whose trajectory was along the producer route (but their novel experiences were deemed appropriate). The researcher's other primary commitments prevented further opportunities to invite practitioners for interview. Nevertheless, these six participants provide a representative sample because all candidates were from the target population, where they were working as freelance practitioners in the UK film and television industries, and they were predominantly employed in the camera and lighting department. It was important to the research to have a closely defined appropriate population because this helps to control extraneous variations and sets the limits for the findings (Eisenhardt, 1989). As Saunders et al., (2019) suggest, for a homogeneous cohort (such as learner-practitioners or the camera production unit) between 4 and 12 participants would be sufficient for qualitative research of this nature. This resonates with (Eisenhardt (1989), who indicates that for theory-building a number between 4 and 10 cases usually works well.

Saunders et al. (2019) cite O'Reilly & Parker (2012) who indicate that findings are still valid even if the data does not reach saturation point and Eisenhardt (1989) comments that the iteration process stops when the incremental improvement to theory is minimal.

Although a neutral stance was attempted by the use of an interview schedule, it is recognised that the conversational approach to asking questions and the researcher's background may have introduced interview bias at the time of each meeting. Nevertheless, the flexibility in this conversational approach assisted in exploring further the complexity of experiential learning in a freelance employment setting. Also, because of the conversational approach, the length of interviews varied ranging from 50 mins to 135 minutes. These interviews were carried out face to face and make up the bulk of the empirical data for the principle analytical stage of this research project.

A pilot interview was carried out to confirm the schedule would be appropriate and this is also included in the data set making up the six respondents. Extraction of excerpts from this data can be found in 'Chapter 5: Interview stage, emerging themes and presentation of findings'.

Towards the end of the research project, a series of online open-ended interviews were carried out to test the final experiential learning model. This was important to the theory-building activities because it was necessary to confirm the robustness of the model – where its 'framebreaking' theory (the extension of existing experiential learning models) – was grounded in convincing evidence (Eisenhardt, 1989).

Each participant was simply asked “When you were presented with a new challenge, what did you do?” If prompts were needed the questions “What did you take from that experience?” and “How was this used in the future?” were asked. In order that experiential learning in a range of new experiences could be explored, participants were asked to share experiences in areas of ‘new equipment’, ‘new techniques’, ‘new situations’ and ‘new job roles’. Three respondents contributed to this stage reporting on 12 experiences in total. A selection of responses were used to test the final experiential learning model.

2.9.2 Analysis

For the environmental scans, the data was analysed utilizing graphs and charts that were readily available in Google Forms. This data set was downloaded as a CSV file, so that graphs and charts for individual responses could be generated. Combined with literature these were used to assess the landscape of focus to confirm the appropriateness of the target population. This landscape is discussed in more detail in chapter 4 – ‘Workplace context and environmental scan’.

For the semi-structured interviews, a series of analysis techniques occurred. The data was prepared by transcribing each of the interviews, and copies of the transcription were printed. The first stage of analysis used highlighter pens to distinguish a priori themes derived from literature, and coding occurred with all interview transcripts. Using different colours for key themes (such as Particular Skills = Pink; Knowledge = Orange; Behaviour = Red; Protocol = Blue; Dyadic Relationships = Pale green), were

identified. The first sweep of the analysis identified some of the primary issues within the interview text. As analysis progressed, additional themes were introduced, extending the initial group of themes. The second sweep considered text that did not fall into the stated themes, utilizing different colours, allowing additional/subsidiary themes, to emerge.

Transcriptions were then input into Nvivo where word searches and phrase searches were initiated. These revolved around the general theme of 'learn'. Finally, word clouds were generated for each of the candidates, and these were used to further interrogate the data for themes. From this analysis, mind maps were generated so that connections and patterns could be identified in the data and compared to findings in the literature. This initial thematic analysis of the data set, where key themes emerged from the data is discussed in more detail in 'Chapter 5: Interview stage, emerging themes and presentation of findings'.

A collection of excerpts were tested against the initial experiential learning model. This highlighted deficiencies and negative cases via the model, and literature was revisited in order to explore further the experiential learning phenomenon of the respondents. This would not be unusual in theory-building using case studies as Eisenhardt asserts:

> The juxtaposition of conflicting results forces researchers into a more creative, framebreaking mode of thinking than they might otherwise be able to achieve.(Eisenhardt, 1989, p544)

This led to further analysis of the data allowing movement between a deductive and inductive approaches to developing the experiential learning model, where a final version was reached.

Eisenhardt (1989) comments that when theory building, cross-case search for patterns is important within case analysis. As such, pattern matching was also used. Interview excerpts were graphically interpreted against Jarvis's (2004) experiential learning model and matching patterns were then collated into the different categories outlined by Jarvis. 78 excerpts were mapped to Jarvis's model providing 36 variations within Jarvis's matrix. These can be viewed in appendix 7.1.

Although a template analysis may also have benefitted examining the data, there was a concern that a time constriction may develop where the template themes would not fully allow an evolution of a hypothesis. Time constraints and other commitments outside of the doctoral research also prevented other forms of analysis such as explanation building and testing at the first stage analysis. However, a form of this approach was adopted in developing the experiential learning model to its final iteration. A flow chart showing this procedure can be seen in Figure 2. 1 below.

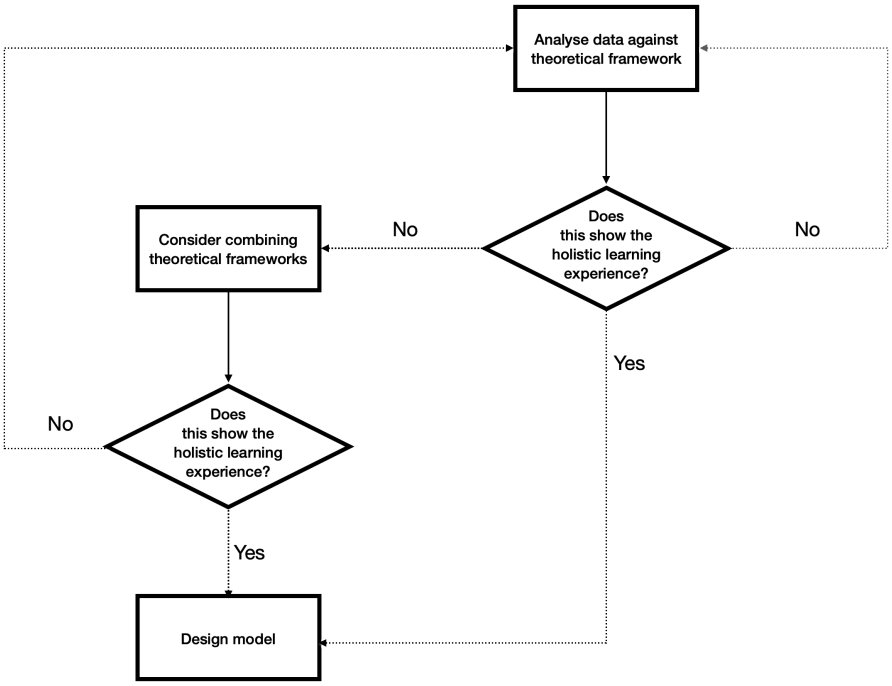


Figure 2. 1: Flowchart showing the process of explanation building and testing analysis

2.9.3 Chapter summary

This chapter presented the techniques and approaches used throughout the research journey for this doctoral thesis. It established a qualitative choice for research discussing an interpretive research philosophy (symbolic interactionism). The chapter illustrated how this philosophy informed an abductive approach to data gathering and analysis. It introduced the focus of the research expressing the targeted population as being those working freelance in the camera and lighting department of the UK film and television industries. Data gathering strategies were presented through discussion of the use of environmental scans semi-structured and open-ended interviews, together with data analysis techniques and specific instruments deployed (Nvivo) for this stage of the research were also discussed. These strategies and techniques were justified using examples and academic literature. Time constraints, pressing

commitments, sample size and interview bias were limitations of the research that were discussed in each section as the chapter progressed but can be summarised here, where a process schematic of the adopted methodology is provided in Figure 2. 2 below.

The next chapter [3] presents the results from the integrative literature review. It attempts to synthesise some of the literature that contributed to the different iterations of the experiential learning model.

METHODOLOGY

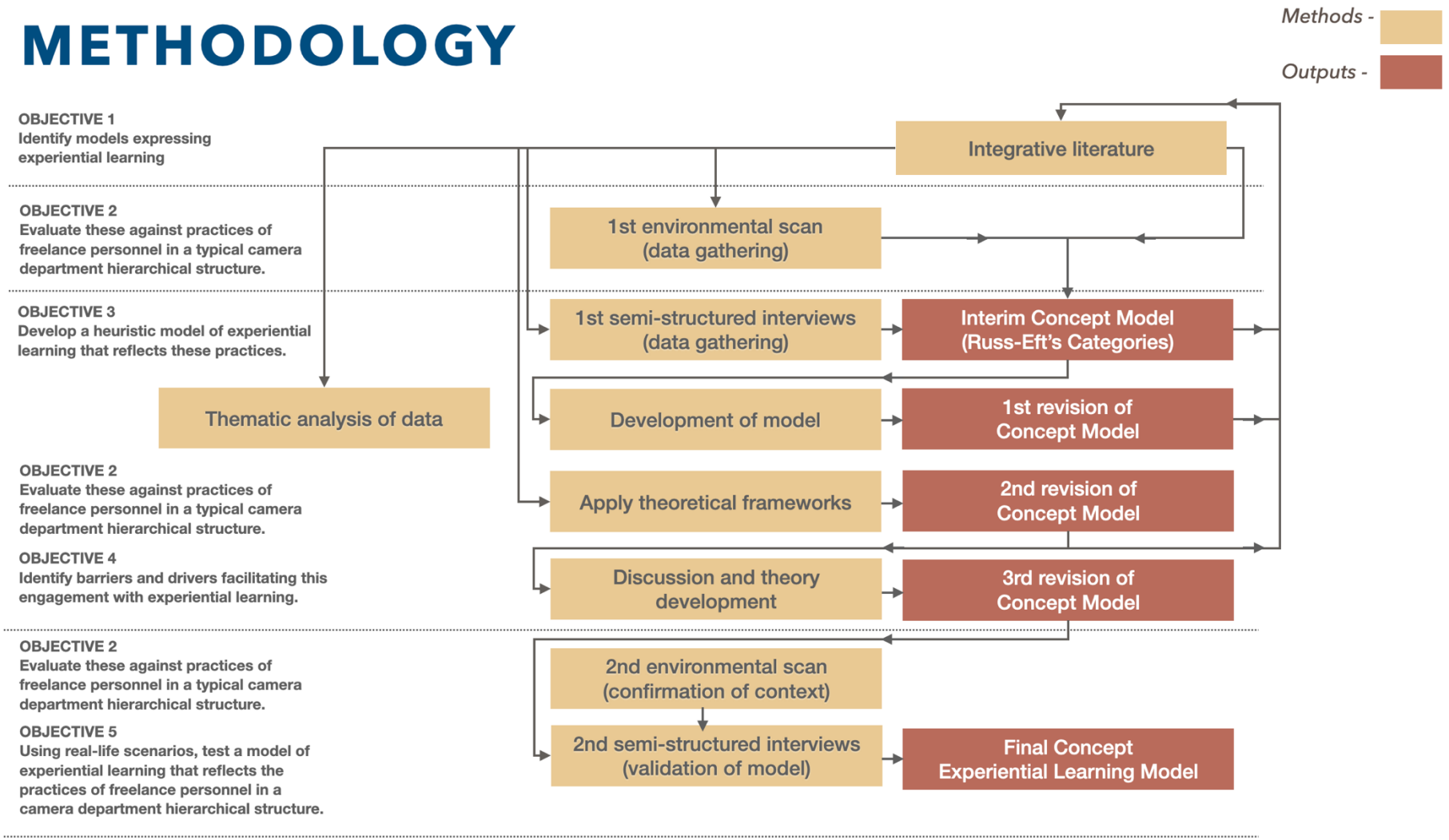


Figure 2. 2: Process schematic of the adopted methodology

3 Models of experiential learning and performance

3.1 Introduction

The purpose of this chapter is to meet objective 1 (Identify different models expressing experiential learning) and supports part of objective 3 (Develop a heuristic model of experiential learning that reflects these practices [of freelance personnel in a camera department hierarchical structure]). To do this, this chapter first considers a number of learning methods as outlined by Davis et a (2013), then introduces seminal experiential learning models. Starting with Kolb (2014) then moving to Jarvis (2004), Le Cornu (2005) and Engeström (2011), learning models are presented as examples to express experiential learning. Russ-Eft's (2011) meta-model of learning theories is used to further explore the learning experience. This chapter shows that these models are not able to fully express the learning experiences of learner-practitioners in novel situations. The abductive nature of the research process for this thesis highlights the need for the synthesis of supplementary concepts that will contribute to the final experiential learning model. From this position, the chapter introduces additional intervening aspects of the experiential learning journey as presented by Knowles (2011), and developed further by Garnett & O'Beirne (2013), informing tutor-centred (pedagogic), learner-centred (heutagogic) or tutor/learner centred (andragogic) approaches to learning. These different approaches to learning start to illustrate a more holistic learning experience and start to illustrate how the environment and third parties influence the learner-practitioner's experiential learning journey. This finally leads to an introduction to Fiske's (1992) relational models theory showing how four elementary dyadic relationships are prevalent in all aspects of life, including the

workplace. It is the position of this thesis, that a holistic model of experiential learning should also include these in its expression.

The chapter shows, then, how there is a multi-faceted aspect to the learning experience than previous experiential learning models have communicated and is used as a foundation to further explore and express the learner-practitioner's experiential learning journey throughout the thesis.

3.2 Learning methods and experiential learning

Davis et al (2013) outline a number of methods that can be applied to the practice of learning and identify features of each of these methods. Using Skinner's ideas of Behaviourism, Davis et al (2013) introduce the notion of basic skills learning through 'operant conditioning'. This is identified by way of repeatable tasks or set of operations, that lead to a routine. Throughout the accomplishment of these tasks, feedback is provided that improves performance (Davis et al, 2013). However, there have been some criticisms of a behaviourist approach to learning. Jarvis et al (2003) comment that with this method the focus is on measurable behavioural outcomes, such as speech, writing and doing. It is often found in traditional education settings that are results orientated.

Cognitive learning is identified by Davis et al, (2013) as information acquisition or use of new terminology or new ideas and is achieved by way of information processing. Jarvis et al (2003) recognise a number of scholars that have contributed to the theories of this learning method, highlighting stages in the evolution of this understanding.

Piaget's five stages of child development is presented as a starting point for the theory of Cognitive learning. However, Jarvis et al (2003) indicate that Piaget's research was limited to child development and his analysis stopped when the child reached the age of 15. Thus, did not discuss adult development. Vygotsky's (1978) work continued analysis through to adulthood arguing that it was a person's mental age that determined development. From this work Vygotsky's (1978) Zone of Proximal Development (ZPD) emerged arguing that development takes place within a restricted zonal area of imitation – we cannot imitate outside of our own personal developmental level of understanding. Jarvis et al (2003) presents Mesirow's ideas on meaning and the transformation of meaning through cognitive methods. This is where a learner transforms their understanding of something based on previous experiences assuming learning is a single process. One criticism Jarvis et al (2003) offer of this method is that learning is not a single process but is a set of complex processes.

Davis et al, (2013) suggest that learning by inquiry is another method of learning. This can be identified as learners reasoning or evaluating through critical thinking placing the learner at the centre of the process. Malcom Knowles's (2011) ideas on self-directed learning (andragogy) supports this and Jarvis et al (2003) comment that his theory of self-directed learning emerged from four 'inquiry projects'. They also include Stephen Brookfield's (1986) work on critical thinking, highlighting four key components of: 1) recognizing and challenging assumptions; 2) challenging the importance of the context; 3) being willing to explore alternatives; 4) becoming reflectively sceptical arguing self-directed learning has transitioned from the individual to the collective learner. Learning in groups or teams is another learning method recognised by Davis

et al (2013) which is identified by way of challenges to attitudes or beliefs, or an awareness from multiple perspectives. They indicate that this is achieved via human communication and a response to the environment. However, Jarvis at a (2003) challenges the description arguing that there is a mutual, proactive process occurring 'acting back' on the environment as a 'collective'.

Using mental models to explore and learn is another method identified by David et al (2013). In this approach learners are encouraged to solve problems through evaluation of a variety of solutions and through making choices. Whilst Davis et al (2013) isolate mental models as a learning method, Peter Senge considers they are part of a wider tool kit for learning in organizations. In this wider tool kit Senge includes personal mastery; mental models; shared vision; team learning; systems thinking.

Davis et al (2013) conclude their list with experiential learning, which can be identified by the immersion of learners in real-life scenarios, through reflection and making meaning. Jarvis et al (2003) highlight a contradiction when interpreting experiential learning. Some interpretations imply that experience is lifelong, whereas other interpretations suggest it is episodic. They argue experience is subjective thought constructed and influenced by a learner's biography which is shaped by cultural and societal conditions. This, in turn, can influence a learner's experience. Subsequent sections below explore experiential learning in greater depth.

3.2.1 Experiential learning – a starting definition.

Experiential learning has many definitions (Davidovitch et al., 2014). Illeris (2007b), for example, defines experiential learning as balancing three dimensions of content, incentive, and interaction, commenting that it is difficult to see the difference between other kinds of learning and experiential learning. Experiential learning, as defined by (Pauleen et al., 2004) is a process of learning through reflection on concrete, often practical, experiences. Experiential learning is unmediated (Davidovitch et al., 2014) and locates learning in work tasks (Beneke & Bezuidenhout, 2011). A key characteristic of experiential learning is that it involves the *active engagement* of the learner (Davidovitch et al., 2014; Illeris, 2007b; Pauleen et al., 2004). It is often informal and is seen as 'invisible' (Boud & Middleton, 2003).

These definitions do not always explicitly mention the role of the learner, rarely do they mention the context/environment where learning takes place (Kolb, 2014).

This research adopts a definition of experiential learning as such: Learning that is intrinsically motivated (Collins & Amabile, 1999) from an actively engaged adult learner (Atkins & Brown, 2002; Knowles, 1976). It is participatory (Fuller et al., 2005), in a specific context (Lester & Costley, 2010) and leads to development of particular skills (Fuller & Unwin, 1998), knowledge (Bhatia, 2015), behaviour (Bandura, 1978; Colley et al., 2003), and protocol (Eraut, 2004).

3.2.2 Experiential learning – foundations.

Expressing experiential learning visually has been attempted by many. As Illeris, (2007b) has indicated, Kolb is most frequently used as a reference to experiential learning. Kolb (2014) for example, locates experiential learning in the centre of a triangle made up from vertexes of Personal Development, Education and Work (see Figure 3. 1).

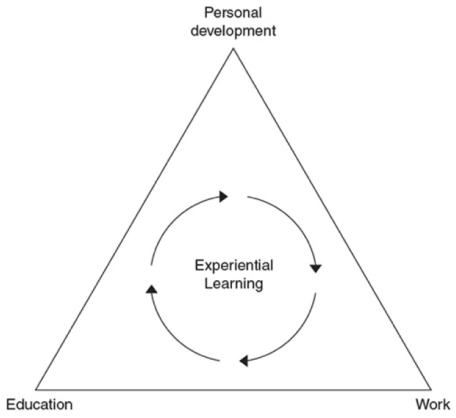


Figure 3. 1: Kolb's Triangle of Experiential Learning (Kolb, 2014)

This location for experiential learning resonates with Boud and Walker's idea of the 'learning milieu' (Boud et al., 1993), where it is the interaction with this milieu that informs the particular learning experience. "It is the *learner* who creates the experience" [emphasis mine] (Segers & Haar, 2011, p59) within the context constructed by the features of the workplace. Building on Kolb's (2014) model as a starting point, Kolb & Fry (1974) indicate that learning deals with *person-environment interactions*.

For this thesis the person↔environment interactions focus on a bridge between what Kolb (2014, p18) refers to as 'integration of learning and work'; and 'on-the-job-training/learning'. Kolb (2014) also suggests that when viewed through the lens of

reciprocal determinism (Bandura, 1978) – where a person's behaviour influences and is influenced by personal factors and their environment – *personal characteristics* (a person's temperament, pattern of behaviour, etc.), *environmental influences* (such as dyadic relationships, working conditions, etc.), and *behaviour* (appropriate conduct, workplace protocol, etc.) all operate in mutual purpose, each factor influencing the others in an *interlocking fashion*. As such, learning through practice – experiential learning – may be influenced by a range of factors such as: context (Stubbé & Theunissen, 2008), character (Eraut, 2007), mood swings (Stoyanova, 2009), educational background (Vermunt, 2005), fiscal demands (Merriam, 2001), prejudices (Eraut, 2007), personality (Forrest & Peterson, 2006), motivation (Skule, 2004), skillset (Webb, 2008), family/cultural background (Ball et al., 2010), personal situations (Kitching & Smallbone, 2012b), cognitive variants (Bransford et al., 1982), and career ambitions (Guile, 2010) .

3.2.3 Experiential learning – Kolb's learning cycle.

Kolb, (2014) has shown that his design of the learning cycle is founded on three key educational theorists that have informed his work: Lewin, Dewy and Piaget.

Lewin's (1951) initial approach to developing a theory of experiential learning borrowed from electrical engineers idea of feedback and followed a process where feedback can be incorporated into the learning experience through analysis of a real experience, informs the construction of a concept, which can then be tested under situations that lead to another real experience, and so the process continues (see Figure 3. 2).

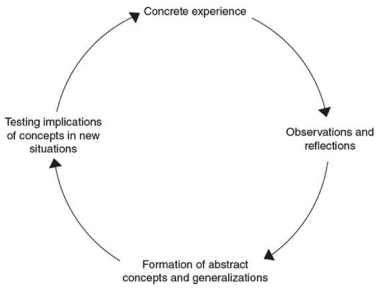


Figure 3. 2: Lewinian Experiential Learning Model (Kolb 2014, p32)

Similarly, Dewey (2007) emphasises learning as a cyclical process of conflict (see Figure 3. 3), yet it differs in that it is more of a developmental process – showing how the cyclical progression informs the next developmental stage of learning.

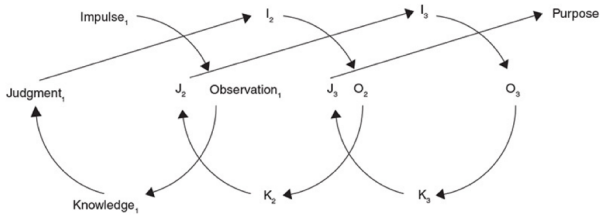


Figure 3. 3: Dewey's Model of Experiential Learning (Kolb 2014, p34)

Although Dewey's body of work has been criticised as too abstract (Edmondson, 2014), there may still be some merit in its propositions that the learning cycle is a developmental process (Kolb, 2014).

With Piaget, Kolb contends that the dimensions of experience, concept, reflection and action form 'the basic continua for the development of adult thought' (Kolb, 2014). He presents Piaget's work as a model (Figure 3. 4) thus:

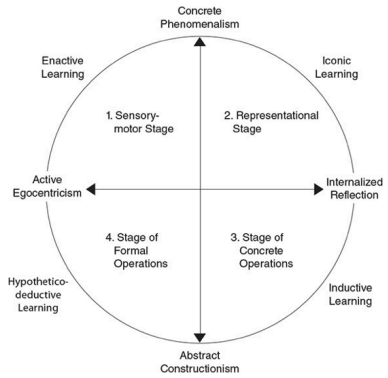


Figure 3. 4: Piaget's Model of Learning and Cognitive Development (Kolb 2014, p36)

Kolb contends that Piaget's model of learning is similar to his because of the cycle of interaction between the individual and the environment. This is supported by Webb (2003a) who presents Mead's (1964) ideas that learning and cognition cannot be isolated from the environment. However, Piaget's model differs from Kolb's in that it shows developmental stages at different cardinal points. Indicating a more complex process than Kolb's model. It is the balance of old and new information – a complex matter of cognitive construction and transformation (Sternberg, 1998).

Kolb, extracts some conclusions about experiential learning from taking these three models as a whole. He first argues that learning is best conceived as a process, making the argument that learning is *relearning* (Kolb 2014) where old ideas are either built upon or disposed of and new ideas are generated, being *shaped* by the experience of the learner. This growth through experience is an important aspect to the development of the working practitioner in the film industry, where personal biographies are likely drawn upon in order to overcome challenges with production.

All the same, Kolb (2014) asserts that these models of experiential learning describe the resolution of conflicts between *opposing* ways of dealing with the world, where

learning is shaped by opposing modes of reflection↔thinking; action↔feeling (Dochy et al., 2022). Kolb also contends that learning is a *holistic* process (Kolb, 2014).

From these foundations, Kolb (2014) developed his own model of experiential learning. Kolb's model differs from Piaget's model in that Piaget was expressing longitudinal human development, whereas Kolb's model is potentially expressing a single experience. Where the learner traverses through a cyclical process of 'Concrete Experience'→'Reflective Observation'→'Abstract Conceptualisation'→'Active Experimentation'. Kolb implies that these four cardinal positions can be expressed in opposition. For instance, he postulates that Active Experimentation is a dialectic to Reflective Observation, and that Concrete Experience is in tension with Abstract Conceptualization (Kolb, 2014). Nevertheless, Webb (2003) resists the notion of linearity, by asserting that Piaget and Dewey's ideas of experiential learning are of *perception*, whereas Kolb suggests they are *modes*.

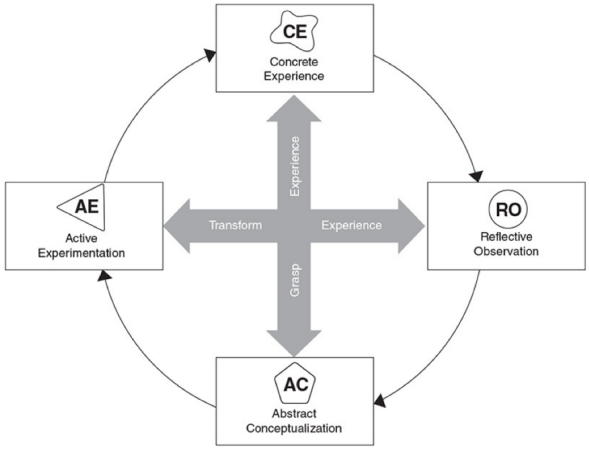


Figure 3. 5: The Experiential Learning Cycle (Kolb, 2014)

In agreement with Dewey, Kolb finally suggests that rather than a cyclical process, the process of learning repeats, but is more helical (Kolb, 2014).

Similar to Kolb's and Dewey's helical proposition, Dochy et al., (2022) also suggest a helical process to learning. Using a revised model of Engeström et al.'s (1999) sequence of epistemic actions in an expansive learning cycle (see Figure 3.6), they discuss seven 'action' steps to the learning spiral, and how new activity emerges in a '*working community'* (Dochy et al., 2022, p218).

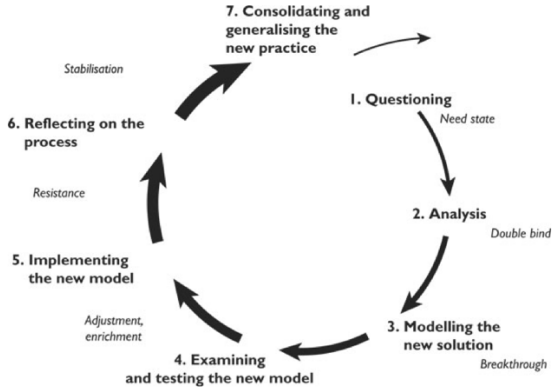


Figure 3. 6: Sequence of Learning Actions in an Expansive Learning Cycle (Dochy et al., 2022)

Central here are the tensions that are fostered, resulting from the transfer of the abstract to the concrete. The ascension from abstract ideas to concrete experience is achieved through these seven specific learning actions (Dochy et al., 2022).

1 The action of questioning, where one might challenge the 'status quo' with the collision of 'mutli-voicedness' influencing this phase
2 The action of analysis is the 'why?' question and is determined through discussion and thought concerning the situation. Historical analysis promote new practices that respond to the contradictions of the situation..
3 The action of modelling a new solution, where it may be facilitated by using metaphors or prototyping as springboards for the articulation of a new idea. The new model is enriched and made concrete in multiple iterations.
4 The action of examining and testing the new model, by running it in thought experiments, simulated situations and small-scale practical tests. Examining the model implies revising and improving, which often means returning to the action of modelling.
5 The action of implementing the new model, where conflicts and tertiary contradictions typically emerge in the organisation as old and new action patterns collide. This phase is typically not quick and requires longitudinal follow-up and support.

6 The action of reflecting on the process, which includes constant reflection and evaluation of the process by the participants. Has the new model proved to be a resolution to contradictions that earlier plagued the activity? Has the model been implemented as planned? Reflection and evaluation require longitudinal data that allow comparisons of the quality of the activity between different points in the cycle.
7 The action of consolidating and generalising the new practice, in which a new form of activity typically requires diffusion and generalisation across multiple sites and tasks, as well as codification of new rules and procedures.

Where Kolb's experiential learning theory is concerned with a learner's internal cognitive process located at an individual level (Kolb, 2014), Dochy et al. (2022) conclude that expansive learning may be the construction of new forms of *collaborative* practice through the solutions presented by the activity system. Expressing experiential learning as a collaborative process where '*multi-voicedness'* occurs, indicates a series of factors are influencing the learning experience which may be external as well as internal. By introducing this notion, Dochy et al. (2022) paves the way for a more holistic experiential learning model to be considered introducing opportunities to exit the learning experience.

Whilst both experiential learning models represent the learning process as a stepwise progression, one key difference between Engeström's (2011) model (cited in Dochy et al's.2022) and Kolb's, (2014) is the open-ended aspect of the circle, providing an exit point to the learning experience, and matching Kolb's conclusion that the learning process is helical.

Below summarises similarities between the experiential learning models presented above.

1. They represent the learning experience as predominantly cyclical.

2. A series of stages/steps are required to traverse through the learning experience.
3. Any omission of stages is not recognised, even if it occurs.
4. Stages are followed sequentially, and do not allow for interrupted or disordered patterns
5. A single direction of travel is often presented.
6. External factors trigger the learning experience.
7. External influencing interventions are not always considered to be part of the learning experience.

Section 3.2.4 below further explores some of the challenges to these models.

This section has presented the development of models exploring the 'Learning Cycle' from Kolb (2014) through to Engeström's (2011) 'Expansive Learning Cycle' (Dochy et al, 2022). It showed the sequence of actions that make up the learning process. From the examples above, learning can largely be considered a stepwise process leading to new forms of practice (Dochy et al., 2022). As will be evident in the discussion below, the learning process is not as straightforward as a stepwise process.

3.2.4 Some complexities of experiential learning models

The experiential learning models presented above commonly indicate the learning process portrayed as a cyclical process of conflict (Kolb, 2014), travelling in a specific (usually clockwise) direction (see figures 3.1, 3.2, 3.3, 3.5, and 3.6) and also infers a specific arrival/departure point. It also supposes that key stages are traversed in order

to get to a final end point (where, for most theorists, the cyclical process starts again). Whilst this might be the case for many learners, this may not be strictly true for all learners. In attempting to meet objective 1, this thesis now considers how these cyclical/helical models have been challenged by other theorists.

In amalgamating Lewin's, Dewy's and Piaget's models, Kolb maintains a four-stage process but refines the four stages into two binaries: concrete experience on the North cardinal point with abstract conceptualisation on the South (CE↔AC); reflective observation on the East cardinal point with active experimentation on the West (RO↔AE). These four stages are connected by a clockwise directional path and are, in turn, interconnected by two opposing binaries, which are expressed as 'experience through to transformation' (West/East connection), and 'experience' through to 'grasp' (North/South path). Greenaway (n.d.) shows there are still issues with Kolb's (2014) model where the four stages on each of the cardinal compass points are presented as binary dialectic opposites and sets up a contradiction to the sequential learning process. Exploring the notion of progressive steps further, Greenaway (n.d.) questions the trend in sequential cyclical learning models proposing *there may be other ways to express this*. It will be noticed that Kolb's interpretation of Piaget's work has intermediate stages and there is no direction of travel, neither is there a situation where each stage is a precursor to the previous one suggesting each may be revisited before moving to the next stage or that stages can be skipped (Forrest, 2004).

Webb (2003) indicates Kolb's experiential learning model is a primitive way to express the learning experience arguing the stages of the cycle are inextricably linked;

interdependent and not so distinct. In this way Webb questions the validity of Kolb's learning model if it is to be portrayed as a sequential journey, arguing that each of the stages of the learning experience could be visited and revisited throughout the experiential learning journey. Elsewhere, Webb (2003a) has deconstructed Kolb's model and has shown the dialectic nature of these binaries to be 'a fiction' (Webb, 2003a) dismantling the structure of Kolb's experiential learning cycle in the process. Furthermore, Wheeler (2012) comments that each of the four stages need to be traversed, in order for learning to take place raising the question 'what if one of the stages is omitted, or skipped over?' Wheeler (2012) has suggested that in the digital age, Kolb's stages do not fully express the experiences of being able to learn using *online technologies*, thus changing the directions and sequential stages of the learning cycle. He states:

> "It is time to develop new models to explain the processes that occur when people learn using socially rich interactive digital media." (Wheeler, 2012)

For Kolb, the entry point can be anywhere in the process – it is, however, most likely to be at the 'Concrete Experience' mode (the place where 'experience' identifies conflict – a problem, say) and reflection can lead to a solution to the conflict). This is partly due to its position at the North cardinal point. All the learning models presented above have 'concrete experience' at the North cardinal point, so this is not strictly a truism, more a trend (Greenaway, n.d.). Other issues still remain and these are outlined in table 3.4 below.

Dochy et al. (2022) present Engeström's (2011) model that repositions the learning experience into a sequence of actions, which they term 'the cycle of *expansive* learning' (Dochy et al., 2022). Again, a cyclical application has been adopted but now has defined entry and exit points. At the entry point, there is a 'state of need', and the notion of 'questioning' is the first action of the cycle. The cycle finally leads to the seventh action of the cycle they term consolidating and generalising the new practice, which ultimately leads to the exit point of the cycle. Whilst this model now provides defined entry and exit points to the learning cycle, some issues still remain.

One of the key criticisms that Jarvis (2011) has of Kolb's 1984 model is that it doesn't consider the complexities of the learning process. Jarvis (1987) argues that the strength of Kolb's (2014) learning cycle lies in the incorporation of three phenomena – 1) the learning process, 2) the relationship of the learning process to knowledge and 3) the style in which this knowledge is acquired, providing a foundation for other theorists to develop. Nevertheless, he argues that it is over-simplistic – suggesting that the model itself is sequential (as are the subsequent models that are developed from Kolb's original model). He also considers Schon's (1984) reflection-in-action and active experimentation ideas, suggesting that Kolb's cycle may not always be sequential. Jarvis (1987) developed a learning model that reflected these complexities and later developed the model further (see Figure 3.7), that considers other events of the learning experience. Jarvis's 2004 version of the model, tries to address some of the challenges that are evident in both the traditional cyclical model, and Dochy et al. (2011) modified version.

3.2.5 Jarvis's model of the experiential learning process

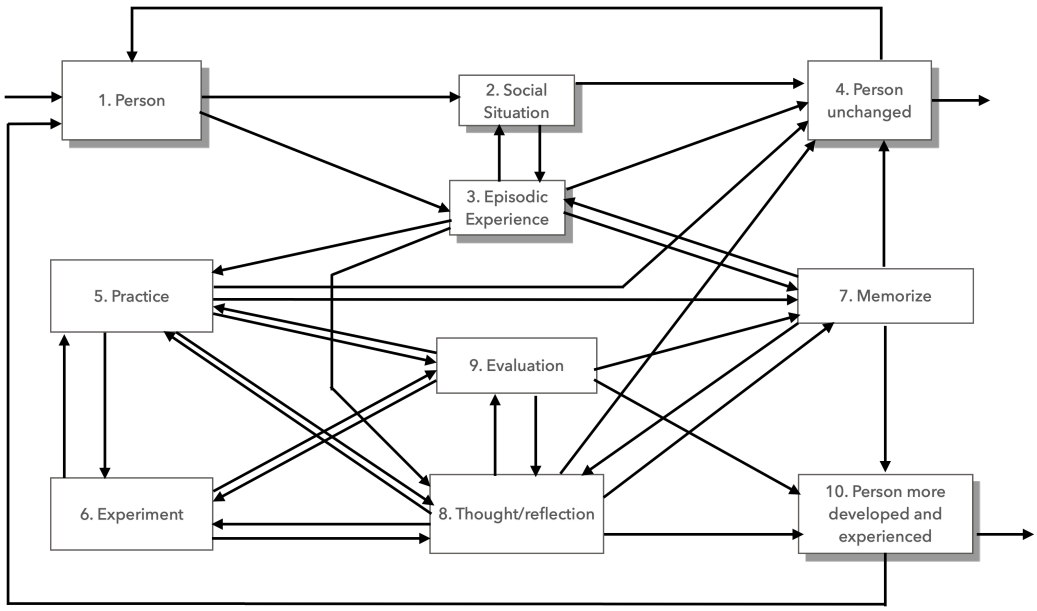


Figure 3. 7: A revised model of the learning process (Jarvis, 2004)

The boxes in Jarvis's latest model (Figure 3. 7) represent the following: Box 1 = the person/biography/experience; Box 2 = social situation; Box 3 = an episodic experience; Box 4 = person unchanged; Box 5 = practice; Box 6 = experiment; Box 7 = memorize; Box 8 = thought/reflection; Box 9 = evaluation; Box 10 = person – more developed and experienced.

The experiential learning model presented by Jarvis progresses from a cyclical representation of the experiential learning journey to a matrix of nodes instead (see Figure 3. 7 above). The advantage of this is that the learner participates in separate aspects of the learning experience in a nonsequential way. Furthermore, depending on the learning experience, it indicates that the learner may not necessarily travel though *all* aspects of the experiential learning journey. The continuous nature of learning is expressed by return arrows from nodes 4 and 10 returning to node 1.

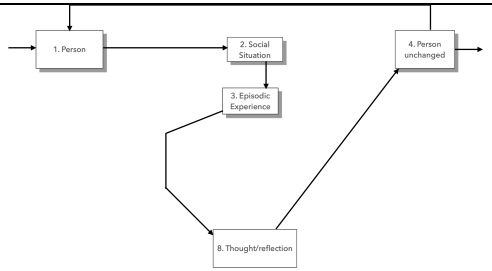
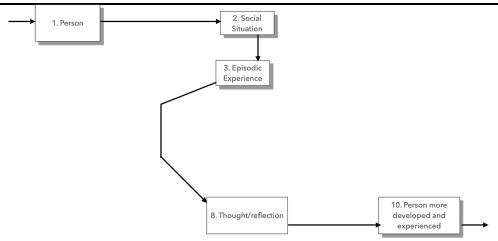
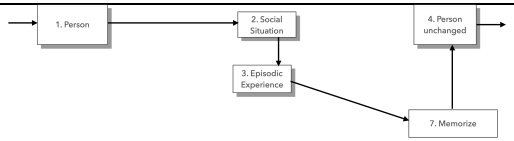
Recognising that his model might also be an oversimplification of the learning process, Jarvis (2004) argues, however, that it also *incorporates the person* in the process of learning together with their personal experiences that they bring to the situation, signifying that:

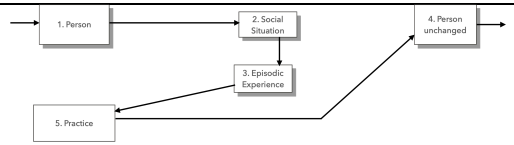
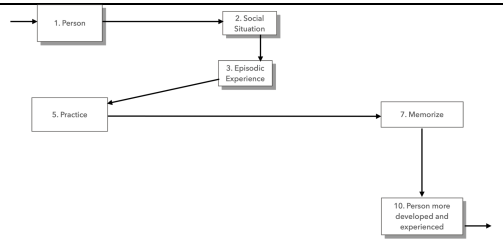
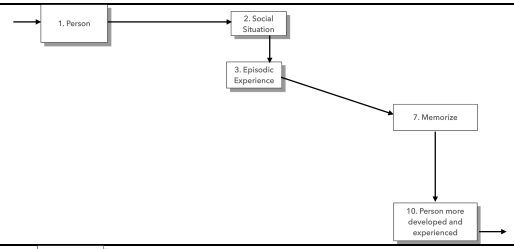
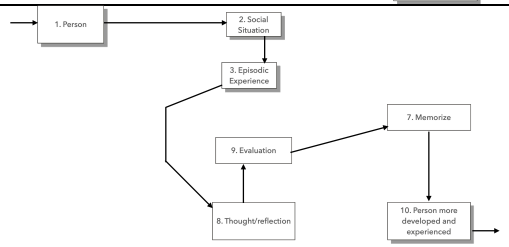
> "…there are different routes through the process and that they all relate to different social situations, different forms of knowledge and have different purposes." (Jarvis, 1987, p36).

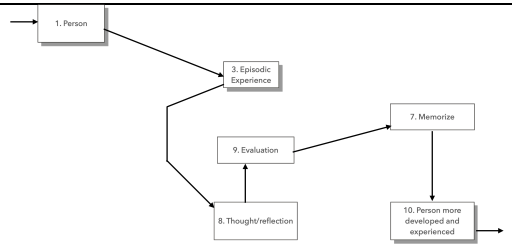
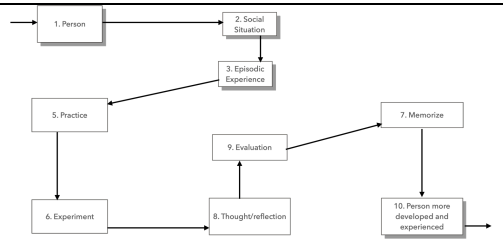
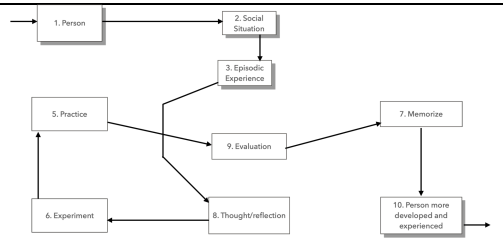
He also comments that the time travelled through the learning pathway may be prolonged or immediate depending on the social situation of the learner (Jarvis, 1987). Jarvis (2004) further discusses different types of responses to the learning process – starting with non-learning responses moving to non-reflective learning responses and finally reflective learning responses. Jarvis presents the learning pathway to the response types as a numerical sequence (i.e. 1→2→3→4, etc.), which relate to the individual boxes. Reflecting on Jarvis's model, Bergsteiner and Avery, (2009) comment that the individual learning routes are obfuscated because they are presented as a number sequence and not interpreted as a graphical model. By utilising Jarvis's *experiential* learning model shown in Figure 3. 7, together with the pathways highlighted in his associated explanation (Jarvis, 2004), it is possible to address Bergsteiner & Avery's (2009) criticism and present Jarvis's various learning pathways graphically (see Table 3. 1 below).

There now follows a brief description of the learning pathways as presented by Jarvis, 2004). As stated above, these pathways move away from a cyclical sequential expression of the experiential learning journey and begins to express the multitude of options in which experiential learning can be expressed indicating the complex and sometimes impromptu nature of the learning experience. Table 3. 1 below summarises these pathways.

Table 3. 1: A summary of Jarvis's learning pathways

Type of learning	**Sub-type of learning**	**Learning pathway* through matrix**	**Graphical interpretation of pathway**	**Jarvis's comment**
NON-LEARNING (NL)	Taken for granted/presumption	*1→2→4* *Person→Social Situation→Person Unchanged*		– Reinforced patterns of behaviour
	Non-consideration	*1→2→3→8→4* *Person→Social Situation→Episodic Experience→ Thought/Reflection→Person Unchanged*		– Learning experience is overlooked because of 'busyness', or 'unawareness'
	Rejection	*1→2→3→8→10* *Person→Social Situation→Episodic Experience→ Thought/Reflection→Person More Developed and Experienced*		– Learner's self-image or comprehension is beyond the learner's ability – opportunity to learn is rejected
NON-REFELCTIVE LEARNING (NRL)	*Pre-conscious knowledge learning*	*1→2→3→7→4* *Person→Social Situation→Episodic Experience→ Memorize→Person Unchanged*		– Experiences are likely to be informed by incidental or unintended learning, such as the acquisition of human culture.

	Pre-conscious skills learning	*1→2→3→5→4* *Person→Social Situation→Episodic Experience→ Practice→Person Unchanged*		– Experiences are likely to be informed by incidental or unintended skills learning, such as when experts adjust their skills without being conscious of it.
	Basic skills learning	*1→2→3→5→7→10* *Person→Social Situation→Episodic Experience→ Practice →Memorize→Person More Developed and Experienced*		– Not necessarily changed externally, but there is some change in the learner
	Memorisation	*1→2→3→7→10* *Person→Social Situation→Episodic Experience→ Practice→Memorize→Person More Developed and Experienced*		– Acquisition of knowledge gained with accompanied ‘guides’ – Also assumes that the knowledge gained is empirical fact and learned by ‘rote’
REFELCTIVE LEARNING (RL)	*Contemplation A*	*1→2→3→8→9→7→10* *Person→Social Situation→Episodic Experience→ Thought/Reflection→Evaluation→ Memorize→Person More Developed and Experienced*		– Learners experience in a *social situation* – Response is to ponder the potential learning situation and make an intellectual decision about it. – Assumes no behavioural output but may well include the possibility of applying the knowledge to a practical situation at a later date.

	Contemplation B	*1→3→8→9→7→10* *Person→Episodic Experience→ Thought/Reflection→Evaluation→ Memorize→Person More Developed and Experienced*		– Learners experience *alone* Response is to ponder the potential learning situation and make an intellectual decision about it. – Assumes no behavioural output but may well include the possibility of applying the knowledge to a practical situation at a later date.
	Reflective cognitive learning/ new skills learning	*1→2→3→5→6→8→9→7→10* *Person→Social Situation→Episodic Experience→ Practice→Experiement→Thought/ Reflection→Evaluation→ Memorize→Person More Developed and Experienced*		– Learner reflecting on their actions, have to ‘think on their feet’
	Reflective cognitive learning/ practice learning	*1→2→3→8→6→5→9→7→10* *Person→Social Situation→Episodic Experience→ Thought/Reflection→Experiement→ Practice→Evaluation→ Memorize→Person More Developed and Experienced*		– Learner reflecting on their actions, have to ‘think on their feet’

Similar to Kolb's, (2014) notion of active experimentation with new skills learning and practice learning, Jarvis (2004) adopts Schön's (2017) idea that most professional people learn from their own practice. Jarvis argues that this is not confined to professional situations, but also incorporates life itself. In this respect, a correlation with Jarvis (2004) and Knowles et al.'s (2011) basis of adult learning (see section 3.4.1 below for a discussion of Knowles) starts to emerge. Jarvis (2004) indeed states that 'Knowles focused upon something quite significant to adult learning, i.e. experience' (Jarvis, 2004, p128) arguing that the distinctiveness of andragogy is in question, but there remain significant relationships between andragogy and experiential learning theory. Moreover, in all these learning experiences (outlined in tablw 3.1 above), Jarvis (2004) indicates emotion also plays a significant part in the process. It seems that the process of learning is now *taking on a new form*. As Seaman (2008) argues: stepwise models '*inadequately explain the holistic learning processes*' (Seaman, 2008, p2). Furthermore, similar to Jarvis's critique of Knowles's andragogy, Seaman (2008) contends that the pattern of 'experience-reflect-learn' may be considered more an *ideology*, rather than a theory of learning (Seaman, 2008).

3.2.6 Developments of Jarvis's model

Le Cornu, (2005) has reorientated Jarvis's (2004) model and illustrated it as a three-dimensional framework (see figure 3.8), arguing this reorientation refocuses the learning experience as an internalisation process, thus making it existential. Firstly, Le Cornu, (2005) portrays the initial three boxes of Jarvis's model (Social situation, episodic experience and person / biography / experience) as interrelated elements of

the learning experience (rather than sequential aspects) locating them on an additional plane above ‘human consciousness and awareness’ (Le Cornu, 2005). In doing this, Le Cornu has shown how the learner’s experience and associated biography are inseparable from the social context and people the learner interacts with (Le Cornu, 2005). Secondly, Le Cornu, argues that reflection is not a discrete element of the learning experience, but should be considered at every stage of the experiential learning journey. By giving ‘reflection’ a prominent place in the learning experience, she acknowledges the importance of reflection at every stage of the learning journey and as part of the internalisation process. Finally, she proposes an interrelated loop between practice, experiment, evaluation and memorise. This both characterises the arbitrary nature of and at the same time alludes to the recursive nature of the experiential learning journey.

Whilst Jarvis (2004) recognises learners have the option to ‘not learn’, Morris (2019) asserts that experiential learning is an effect caused by learner choice. Le Cornu, (2005) further argues that by including non-learning, Jarvis’s model is an overly simplistic view, suggesting that even in the ‘non-learning’ categories (taken-for-granted/non-consideration/rejection/presumption) a form of learning still takes place, suggesting two new outputs: existential change and more experienced (Le Cornu, 2005).

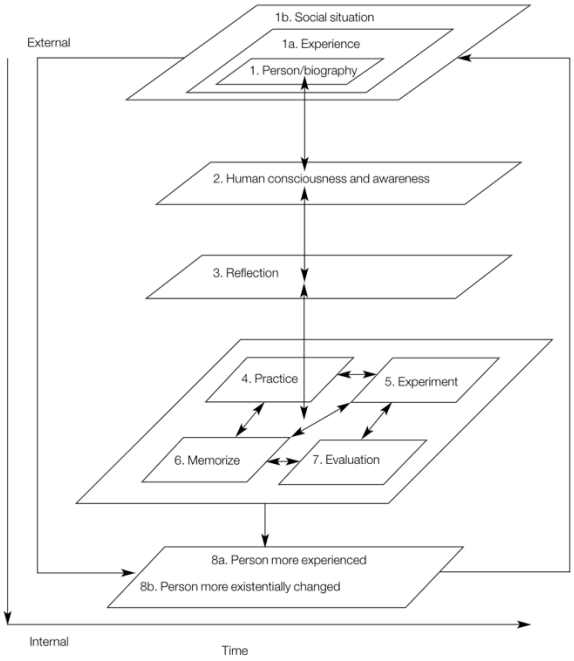


Figure 3. 8: Le Cornu's three dimensional version of Jarvis's model (Le Cornu, 2005)

Through building on Jarvis (2004), Le Cornu's (2005) model illustrates the experiential learning journey as more complex, showing different levels of responses learner's make through the experiential learning journey. Moreover, Le Cornu (2005) has removed from the experiential learning journey a 'non-learning' element and replaced this with an 'existential' aspect to the learning experience. Indicating that learning is constantly happening but is not always evident in the outcomes.

3.2.7 Illeris's comprehensive model of learning

In attempting to further identify experiential learning, Illeris (2007) defines a general model of learning. A criticism from Illeris (2007) is that many learning theories focus on one of two processes: an interaction process operating externally as the learner responds and reacts to 'other people, a specific culture, technology, and so on' (Illeris, 2007, p87) within material, cultural or social environments; and internal psychological processes of acquisition and elaboration in 'always [being] dependent on what has

already been acquired' (Ibid). Whilst Jarvis's (2004) model was concerned with the individual responding to a social situation and an new experience, Illeris (2007) starts to realign the learning process as involving three dimensions of learning. Identifying these as the content dimension, the incentive dimension and the social dimension.

Illeris (2007) further argues that there are four levels of learning. Elsewhere, Illeris (2003b) outlines these four levels of learning. The features of *cumulative learning* is evident in the early years of development where one must learn something 'with no context of meaning or personal importance' (Illeris, 2003b, p171). *Assimilative learning* is where new information is added to an already established pattern or scheme. When a learner is able to fully internalize a scheme or process and is able to apply this in many different circumstances, Illeris (2003a) refers to this as *accommodative learning*. The fourth level of learning is *transformative* or expansive learning, (expressed in the model in figure 3.9 below) and is one that is simultaneously 'restructuring in the cognitive, the emotional and the social-societal dimensions.' (Illeris, 2003a, p402)

In contrast to Le Cornu, Illeris (2003a) describes the notion of non-learning where learning is rejected through developed 'pre-understandings'. This is similar to Jarvis, (2004), where these are activated when a learner encounters situations that do not correspond with personal influences, and thus learning is rejected, or the pre-understandings are distorted to match the learner's own experiences.

But when it comes to non-learning, it is not about processes that are fulfilled but about processes that are *blocked or derailed, partially or totally*.

In describing his model, Illeris (2007) deconstructs learning into the *cognitive dimension* which is placed at one end of a double arrow concerning the individual. At the other end of the double arrow is the psychodynamic or *emotional dimension* of the learner. These two dimensions are activated by the internal interaction aspects of a given situation and operate internally with acquisition and elaboration [where the learner 'builds on' previous experiences]. External interaction, such as participation, communication and co-operation assist the learner by way of integration into communities and strengthens the *sociality* of the learner through the *social dimension*. By having these three dimensions to the learning experience, Illeris (2007) expands on previous learning models illustrating further how internal *and* external factors influence the experiential learning journey.

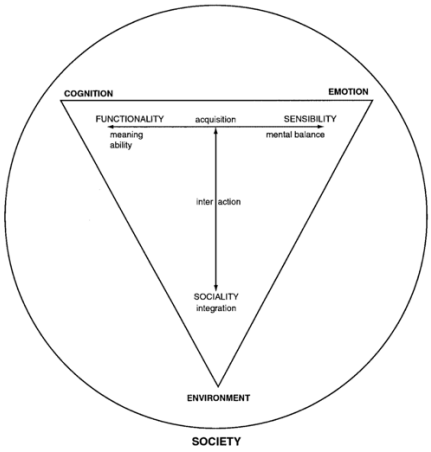


Figure 3. 9: Illeris's fundamental process of learning

3.2.8 Russ-Eft's meta-theory of learning and performance

In also attempting to express theories of learning into a model, Russ-Eft (2011) explores training in the workplace and has developed a 'meta-model' from key learning

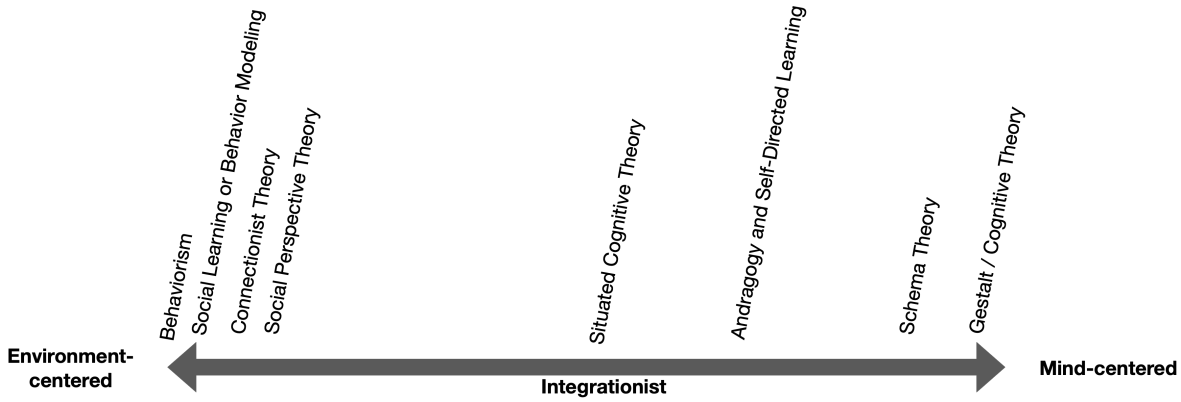
theories (see table 3.2) presented as 'outlines' of the learning experience. Where Russ-Eft (2011) differs from other models is that she lists the key features of different learning theories and locates them into three categories which orientate learning into *mind*-centred, *environment* centred and *integrationist* learning (see table 3.2 below). In doing this, Russ-Eft emphasises the importance intervening factors have on the learning experience.

Table 3. 2: Tabularised learning theories and key features (adapted from Russ-Eft (2011))

Learning Theory	Training Implications
Mind centred	
Cognitive Theory	– Learners are active processors of information. – Learners manipulate symbolic information. – Transfer can be enhanced through encoding specificity, meaning that the stimulus cues in the transfer environment must be encoded with the information being trained. Perceived similarity, not actual similarity, appears to be most critical. – Providing a variety of examples can enhance transfer, leading to general rules
Schema Theory	– Trainees' background knowledge influences the interpretation of incoming information. – Active, involved trainees are critical to success in training. – Since schemata are procedures, strategy instruction, instruction in metacognition, and the use of selective attention are critical.
Andragogy / Self-Directed Learning	– Individualized instruction is needed to match learners' needs and increase relevance. – Training should include individual, group processes, and critical reflection to promote discovery, self-knowledge and self-direction.
Environment centred	
Behaviorism	– Learners are passive recipients. – Information must be organized and broken down into small, simple steps for maximum success. – Learners should be encouraged to make observable responses. – Trainees should be encouraged to make these responses multiple times (frequency), and these responses should be rewarded (reinforcement). – Transfer of training can be facilitated through the use of identical elements.
Social Learning / Behavior Modeling	– New behaviors can be acquired by observing the behavior of models and without actually performing the task and without receiving reinforcement. – New behaviors may, however, not be exhibited until and unless some reinforcement is provided.

	– Behaviors can be changed directly and do not require changes in knowledge or attitudes.
Social Perspective Theories	– The training environment and social and organizational context shape individual learning, knowledge, and thought. – Trainees should have more opportunities to interact with peers and with those having more experience or more skill.
Connection Theories	– Training should encourage the development of proceduralized knowledge rather than limit development to declarative knowledge. – Training should help to develop automaticity of lower-level skills. (Trainees who have developed such automaticity have more mental capacity available for other tasks.) – Training or trainers should support the development of trainee ability to check, proceduralize, or automate skills or processes.
Intergrationist	
Situated Cognition	– Training should facilitate trainees' construction of mental models through problem-solving activities, particularly ill-defined problems. – Training should be "authentic," using realistic situations, leading to trainee's acquisition of the requisite knowledge and the condition for applying that knowledge. – Creating such mental models involves both individual and group construction. – Training should provide settings for group problem solving so that trainees can express their mental models to each other, improve their mental model, and use alternative mental models. – The trainer or the instruction materials should provide aid by identifying "affordances," such as easy routes, resources, or strategies. – Training needs to take place within rich contexts or situations (involving real life tasks or using media to simulate such situations). – Trainees should be supported by "coaching" or "scaffolding" and should "fade" over time.

Placing Russ-Eft's (2011) theories along a continuum indicates how each of the learning theories are centred. In the presented continuum below is can be seen that andragogy is not a fully mind-centred activity and is also influenced by the context.



Russ-Eft (2011) then starts to differentiate between *each of* the theories suggesting that differences can be identified by what she terms the 'input phase', where the theory *makes emphasis of* the learner's background knowledge*,* informing their *approach* to learning (passive recipients, observers, or active processors).

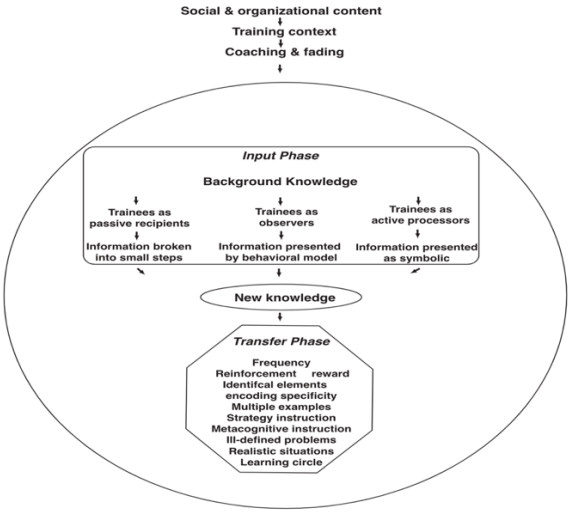


Figure 3. 10: Russ-Eft's Meta Learning Model

In the model presented above, Russ-Eft (2011) indicates that when learners are presented with new knowledge, they enter the transfer phase and many of the theories resonate with this idea. Contrary to other learning models presented above, Russ-Eft's (2011) model removes any sequences of steps that the learner needs to go through and omits any specific direction of learning.

It is the position of this thesis that if a holistic model of experiential learning is to be achieved, elements of each of the three learning orientations (mind-centred, environment-centred or integrated) need to be considered and placed within the learning experience model.

It is worth noting here that Russ-Eft (2011) refers to Behaviourism as an element of the environment-centred orientation of the context. Nevertheless, a number of criticisms have been argued against behaviourist theory (see Knowles et al., (2020) for a detailed account) and the external stimuli required to reinforce specific behaviour. Illeris's, (2003a) model above refers to the sociality of the learner. As such, it may be more appropriate to consider the term 'socialisation' (Illeris, 2009) rather than behaviourism. Cooper-Thomas & Anderson, (2006) introduce the concept of 'organizational socialization', where a new employee is integrated into the organization through the development of skills, knowledge attitudes and/or values (Cooper-Thomas & Anderson, 2006). This integration resonates with Lave & Wenger's (1992) concepts of centripetal movement into a community of practice.

3.3 Expansive learning

3.3.1 Engeström's structure of human activity system

If the stepwise models are inadequate, then perhaps a different approach can be adopted. Engeström's (1987) structure of Human Activity System signposts to a different way of presenting learning. Dochy et al. (2011) highlight Engeström's (1987)

model which represents a *collective* activity system (such as a workplace environment).

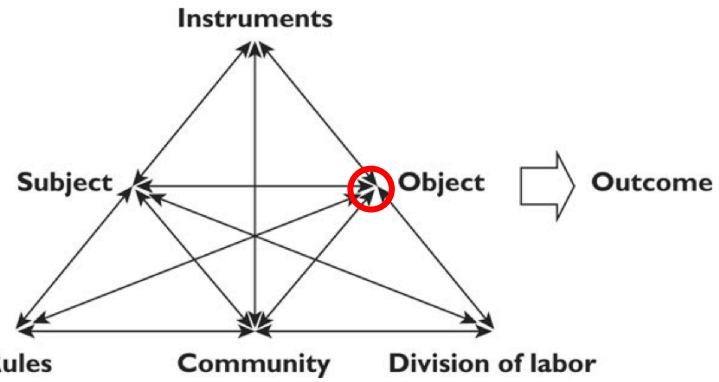


Figure 3. 11: The Structure of a Human Activity System (Engeström, 1987, p78)

Dochy and his colleagues (2011) argue that the uppermost sub-triangle of Instruments, Subject, Object (see Figure 3. 11) represent individual *and* group actions rooted in a shared activity system (Engeström, 2011). Engeström (2011) makes the point that the circle around the terminating arrows at 'Object' illustrates both the inherent ambiguity of the object of activity and the focal role, arguing that:

> "The generalized object is connected to a *societal meaning,* the specific object is connected to *personal use* [emphasis mine]." (Engeström, 2011, p91)

The Subject refers to the individual or group, The Object are actions that are typified by a potential for change (Dochy et al., 2011). For instance, working on the making of a screen production and considering a change in technology (from analogue image capture to digital image capture), the 'problem space' is where activity is focussed, which is in turn is transformed into outcomes via mechanisms that resolve arising conflicts from the use in this new technology. Dochy et al. (2011) further explain that the object is shared by the community component of Engeström's (1987) model comprised of individuals and sub-groups constructing "themselves as being *distinct* from other communities. [emphasis mine]" (Dochy et al., 2011, p130)

The division of labour section of the model refers not only to the hierarchical nature of the community, but also to the community member of similar standing (Dochy et al., 2011). Finally, the rules refer to the *protocols, etiquettes, conventions and practices* that confine actions and interactions within the activity system (Dochy et al., 2011). From the unreflected 'raw state', and with input from the activity system, the object moves to a collectively meaningful outcome.

Dochy et al. (2011), conclude their discussion of Engeström's (2011) model with certain observations such as the fluidity of the object of activity, and how activity systems evolve over a period of time suggesting the focus of analysis encompasses the "*complex interrelations between the individual subject and his or her community* [emphasis mine]." (Dochy et al., 2011, p130).

Table 3. 3 below attempts to summarise these theories of the learning processes and Table 3. 4 highlights issues that arise from each.

Table 3. 3: Summary of experiential learning theories

Author	Stage in the Learning Process	Lewin	Dewey	Piaget			Kolb	Dochy, et al	Jarvis		Le Cornu	Illeris	Russ-Eft
									Process Step	**Departure *Trajectory***		***Dimension***	
Process Steps	Problem ***Encountered***	Concrete Experience	Impulse	Concrete Phenomenalism	1. Sensory-motor stage		Concrete Experience		The Person		Episodic experience	Incentive (emotion)	Social/organisational content/context
						2. Representational Stage							
	Problem ***Definition***			Iconic Learning					Situation	*The Person: Re-enforced, but relatively unchanged*	Human consciousness	Impulse (content)	Input phase
		Observations and Reflections	Observation	Internalized Reflection			Reflective Observation	Questioning	Experience				
				Inductive Learning	3. Stage of Concrete Operations			Analysis					
	Suggestions for change	Formation of Abstract Concepts and Generalizations	Knowledge	Abstract Constructionism			Abstract Conceptualisation	Modelling the new solution	Thought/reflection; Practice; Experimentation *Memorisation*		Reflection	Interaction	New knowledge
						4. Stage of Formal Operations					Practice, experiment, memorise, evaluation		
	Confirmation that change works			Hypothetico-inductive learning				Examining and testing the new model	Evaluation	*The Person: Changed and more experienced*	*The Person: More existentially changed and more experienced*	Integration (environment)	Transfer phase
		Testing implications of concepts	Judgement	Active egocentricism			Active Experimentation	Implementing the new model	Memorization				

		in new situations											
				Enactive Learning.				Reflecting on the Process					
					1. Sensory-motor stage			Consolidating and Generalizing the new practice.					

Table 3. 4: Summary of experiential learning theory criticisms

Author		Lewin	Dewey	Piaget	Kolb	Dochy, et al	Jarvis	Le Cornu	Illeris	Russ-Eft
Criticism of the Learning Models	Oversimplification of the learning process (Jarvis, 2001; Seaman et al., 2017)				✓			✓		
	Not always a cyclical process (Jarvis, 2001)	✓	✓		✓	✓		✓	✓	✓
	Not all four stages are essential for learning to take place (Webb, 2003b)				✓					
	Do each of the four stages need to be traversed? (Forrest, 2004)	✓	✓		✓	✓				
	No intermediary stages (self observation)	✓	✓		✓	✓		✓		
	Constant and consistent direction of travel (self observation).	✓	✓		✓	✓		✓		
	The key stages do not consider previous experiences. (Jarvis, 2001)	✓	✓	✓	✓	✓				
	No defined exit point (Jarvis, 2001)	✓	✓	✓	✓	✓				
	Each of the four stages are set as binary opposites, creating a dichotomy. (Webb, 2003b)				✓	✓		✓		
	Does not consider learner choice throughout the process (Morris, 2019)	✓	✓	✓	✓	✓	✓	✓	✓	✓

	Process is context dependent (Werner et al., 2015)	✓	✓	✓	✓	✓	✓	✓		
	No direction of travel (self observation).			✓	✓			✓		
	The relationship between the four learning modes, at the least, must be described as reciprocal, interpenetrating, and functionally dependent. (Webb, 2003b)	✓	✓	✓	✓			✓		
	"Stepwise models inadequately explain the holistic learning processes that are central to learning from experience" (Seaman, 2008)	✓	✓	✓	✓	✓	✓			
	Two-dimensional models do not reflect holistic experience (Le Cornu, 2005)				✓	✓			✓	✓

3.4 Towards a more holistic expression of the experiential learning journey

The learning models presented above indicate the process of learning as complex and the emphasis within the process can be presented in a variety of ways. Furthermore, the discussion above has introduced the learner as an individual interacting with their surroundings. This interaction plays an important role in the learning experience and it is the position of this thesis that a more holistic expression of the experiential learning journey should include these intervening aspects of the learning experience. Therefore, it is of value to now consider these interactions and the different approaches to learning that intervene with experiential learning.

A number of theorists acknowledge the contribution of 'andragogy' (self-directed learning) on the theory of experiential learning (Brown, 2005; Illeris, 2018; Jarvis, 2012; Russ-Eft, 2011). This chapter now turns its attention to pedagogy, andragogy and heutagogy, and how external dynamics influence these approaches.

3.4.1 Knowles and the introduction of andragogic learning

Through his ideas on how adults learn, Knowles (1973) proposed a new term (andragogy) to describe the self-directed learning experience primarily found in adult education. Criticising the predominant, pedagogic approach to learning, Knowles et al. (2011) highlighted that this is based on assumptions about learners: 1) The need to know, 2) The learner's self-concept, 3) The role of experience, 4) Readiness to learn, 5) Orientation to learning, 6) Motivation.

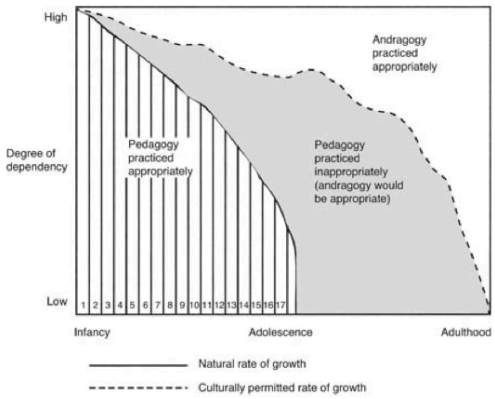


Figure 3. 12: The natural maturation toward self-direction as compared with the culturally permitted rate of growth of self-direction (Knowles Malcolm S. et al., 2011)

Brown (2005) summarises Knowles et al. (2011) propositions that adults best learn when learning is active, self-directed, based on problems, related to their experience, perceived as relevant to their needs and intrinsically motivated.

The principles that Brown (2005) advocates are to develop a learning contract with the learners and establish an effective learning climate. Learners need to be encouraged to critically reflect on their own learning, encouraged to diagnose their 'learning' needs and encouraged to develop their own objectives. The learners should be involved in planning methods and learning content. Learners should also be supported in carrying out their learning plans. Brown (2005) makes the point about Knowles' work that the empirical data appears to have been tested on 'middle-class' adults questioning the validity of the theory to be able to apply to *all* adults. Andragogy as a 'theory' of learning is also questioned in the literature. Hartree (1984) has commented that andragogy is not a theory at all but has indicated that it is a 'set of guiding principles' (from Hagen & Park, 2016).

Adding to the views above, Zmeyov (1998) suggests that the learner's life context and the cooperative relationship of the learner-teacher, influences andragogic learning conditions. Moreover, Hagen & Park (2016) comment that Knowles et al. (2011) developed this theory further and added:

- adults needing to know the reason for learning something together
- adults being driven by intrinsic motivation.

3.4.2 Nine guiding principles

From the discussion above nine guiding principles for learning can be presented.

1. Develop a learning contract with the learners (Knowles et al., 2011).
2. Establish an effective learning climate (Knowles et al., 2011).
3. Encourage learners to diagnose their 'learning' needs (Knowles et al., 2011).
4. Encourage learners to develop their own objectives (Knowles et al., 2011).
5. Involve learners in planning methods and content (Knowles et al., 2011).
6. Support learners in carrying out their learning plans (Knowles et al., 2011).
7. Encourage learners to reflect critically on their own learning (Brown, 2005).
8. Adults needing to know the reason for learning something together (Brown, 2005).
9. Adults being driven by intrinsic motivation (Brown, 2005).

3.4.3 Progressing from andragogy to heutagogy

Borrowing from Garnett & O'Beirne's (2013) work, Jones et al. (2014) argue that pedagogy and andragogy are stages of a learning continuum consisting of pedagogy-

andragogy-heutagogy or the 'PAH continuum'. They make the point that pedagogy is where learning control is with the tutor, shifting as we move through to andragogy, where learning control is shared, then to heutagogy, where the learner determines the learning process. To simplify: pedagogy is teacher-led, andragogy is learner/teacher-led and heutagogy is learner-led learning.

Garnett & O'Beirne (2013) has expressed the PAH continuum as a 'framework to help develop new thinking about learning' and 'is most useful if it helps the learning process in *any context*' [emphasis mine] (Garnett & O'Beirne, 2013, p140)

Table 3. 5: The PAH Continuum (Garnett & O'Beirne, 2013)

	Pedagogy	**Andragogy**	**Heutagogy**
Locus of Control	Teacher	Teacher/Learner	Learner
Education Sector	School	Adult	Research
Cognition Level	Cognition	Meta-cognition	Epistemic cognition
Knowledge production context	Subject understanding	Process negotiation	Context shaping

Table 3. 5 shows how Garnett & O'Beirne (2013) identify in their framework four key elements to the learning experience: Locus of control; Education Sector; Cognition Level; and Knowledge production context. At one end of the continuum, one would find a pedagogic approach to learning (such as the classroom) where the learner has little control over the learning experience, then at the other end of the continuum we can see that the learner has greater control over the learning experience, or a heutagogic approach such as independent research.

Garnett & O'Beirne (2013) caution that:

> "continua are dangerous in education. They can be interpreted as being progress points along the learning journey so that one presumes, *wrongly*, that the learner moves simply from pedagogy to heutagogy. [emphasis mine]" (Garnett & O'Beirne, 2013, p140)

Blaschke & Hase (2015) have outlined some principles for heutagogic focussed learning which mirror some of Brown's guidelines above:

> • Involve the learner in designing their own learning content and process as a partner.
> • Make the curriculum flexible so that new questions and understanding can be explored as new neuronal pathways are explored.
> • Individualize learning as much as possible.
> • Provide flexible or negotiated assessment.
> • Enable the learner to contextualise concepts, knowledge and new understanding.
> • Provide numerous resources and let the learner explore.
> • Differentiate between knowledge and skill acquisition (competencies) and deep learning.
> • Recognize the importance of informal learning and that we need only to enable it rather than control it.
> • Have confidence in the learner.
> • Recognize that teaching can become a block to learning. (Blaschke & Hase, 2015, p81)

Adding to this are Blaschke & Hase's (2015) notion of personal learning environments (PLEs) which offer opportunities for learners to create an 'individualized learning ecology'. A wide gamut of tools such as *web browsers, social media, and other online utilities* are exploited to support a highly learner-centred [heutagogic] experience. Moreover, these tools provide opportunity to operate and enquire on a global platform, further increasing the richness of the learning experience. In their discussion of heutagogic learning, Blaschke & Hase's (2015) also stress the importance of relationships within the experiential learning journey. If a holistic expression of

experiential learning is to be accomplished, relationships within the learning experience should not be ignored. It is to this theme this thesis now briefly turns.

3.5 Relationships within the communities

Relational Models Theory explores associations between members of a community, and different cultures. Fiske (1992) argues that within cultures and communities, humans are fundamentally social creatures. He postulates that there are four basic relational models within most social interactive situations (Fiske, 1992).

Within a community of practice, these relational models are formed via dyadic relationships; relationships that are formed from the day-to-day activities of the community and from the underpinning hegemony of the cultural expectations within that community. Fiske (2011) suggests that people are orientated to different dyadic interactions that form the basis of an interrelating community seeking to make meaning within its boundaries, and that members of such communities seek to relate to each other by way of these four basic models. Fiske's models are 1) communal sharing; 2) authority ranking; 3) equality matching and; 4) market pricing (Fiske, 1992).

Fiske (1992) indicates that the 'communal sharing' relationship is a bounded group, seen as 'equivalent and undifferentiated' associated with identity and belonging. 'Authority ranking' relationships are those that are asymmetrical, where hierarchical structures are a feature of the community. 'Equality matching' relationships introduce egalitarian interactions, where members of the community are expected to perform reciprocal activities. Market pricing relationships, revolve around negotiating and

proportionality, where people's focus is on ratios and rates. Fiske further contends that these different stages can be found in human development and illustrates the different ages these occur. The stages of development resonate with Piaget's theories outlined by Kolb above and there is a potential connection between stages of personal development and the learning experience. The table below summarises selected characteristics of Fiske's dyadic relationships (Fiske, 1992).

Table 3. 6: Table of selected features extracted from Fiske's four dyadic relationships (Fiske, 1992)

	Communal sharing	Authority Ranking	Equality Matching	Market Pricing
Reciprocal Exchange	Belonging to the group.	Superiors appropriate receive tribute from inferiors.	Balanced, in-kind reciprocity.	Exchange for commodities in proportion to what is received.
Contribution	Shared contribution.	Superiors give beneficently. Subordinates are recipients of gifts.	Each contributor matches each other's donations equally.	People assessed according to a fixed ratio or percentage.
Work	Collective responsibility of the group.	Superiors direct and control the work of subordinates. Superiors control product of subordinates' labour.	Aligning allowed tasks so they match.	Work for a wage calculated as a rate per unit of time.
Significance of time	Solidarity.	Temporal priority to superiors, often determined by age or seniority.	Oscillation of turns, of hosting, or other reciprocation at appropriate frequency.	Concern with efficient use of time, spending it effectively.
Decision making	Consensus and unity.	Will of the leader is transmitted through the chain of command.	Everyone has equal say. Also rotating offices.	Rational cost and benefit analysis.
Social influence	Conformity and not stand out as different.	Subordinates display loyalty and strive to please superiors.	Compliance to return a favour. Keep things balanced.	Cost and benefit initiatives. Bargaining over terms of exchange.
Constitution of groups	Sense of unity (e.g. "blood" Kinship).	Hierarchical organisation.	Equal-status peer groups.	Bureaucracy with regulations oriented to pragmatic efficiency.

Social identity and the relational self	Common origins. Identity derived from closest and most enduring personal relationships.	Self as revered leader or inferiority and servitude.	Self as a separate but co-equal peer.	Identity a product of entrepreneurial success or failure.
Motivation	Intimacy motivation.	Power motivation.	Desire for equality.	Achievement motivation.
Moral judgement and ideology	Altruism, selfless generosity. Protecting intimate personal relationships.	Obedience to will of superiors.	Balanced reciprocity.	Rational principles based on the utilitarian criterion of the greatest good for the greatest number.
SUMMARY OF FEATURES				
Some of the features that the cultural implementation rules must specify.	Who is "us" and who is "other", including how people acquire and lose corporate membership.	In what domains may authority be exercised.	Who and what counts as equal. What are the appropriate delays before reciprocating.	What are the ratios of exchange and how do particular attributes affect prices? What counts as a cost or a benefit?
Characteristic mode of marking relationships	Enactive, kinaesthetic, sensorimotor rituals, especially commensurate meals, communion, and blood sacrifice.	Spatiotemporal ordered arrays (i.e. who is in front, who comes first).	Concrete operations so as to balance, match, synchronise, align, or place them in one-for-one correspondence.	Abstract symbolic representation.
Corresponding measurement scale type	Categorical or nominal	Ordinal	Interval.	Ratio
Relational structure	Equivalence relation	Linear ordering	Ordered Abelian group.	Archimedian, ordered field.
Natural selection mechanism	Kin selection according to inclusive fitness.	Adaptive value of submission and dominance behaviours in a linear hierarchy.	"Tit-for-tat" in-kind reciprocity (evolutionary stable strategy, adaptive initially, resistant to invasion).	Adaptive value of specialisation and commodity exchange.
Approximate age when children first externalise the model	Infancy.	By age three.	Soon after fourth birthday.	During 9th year.

3.6 Chapter summary

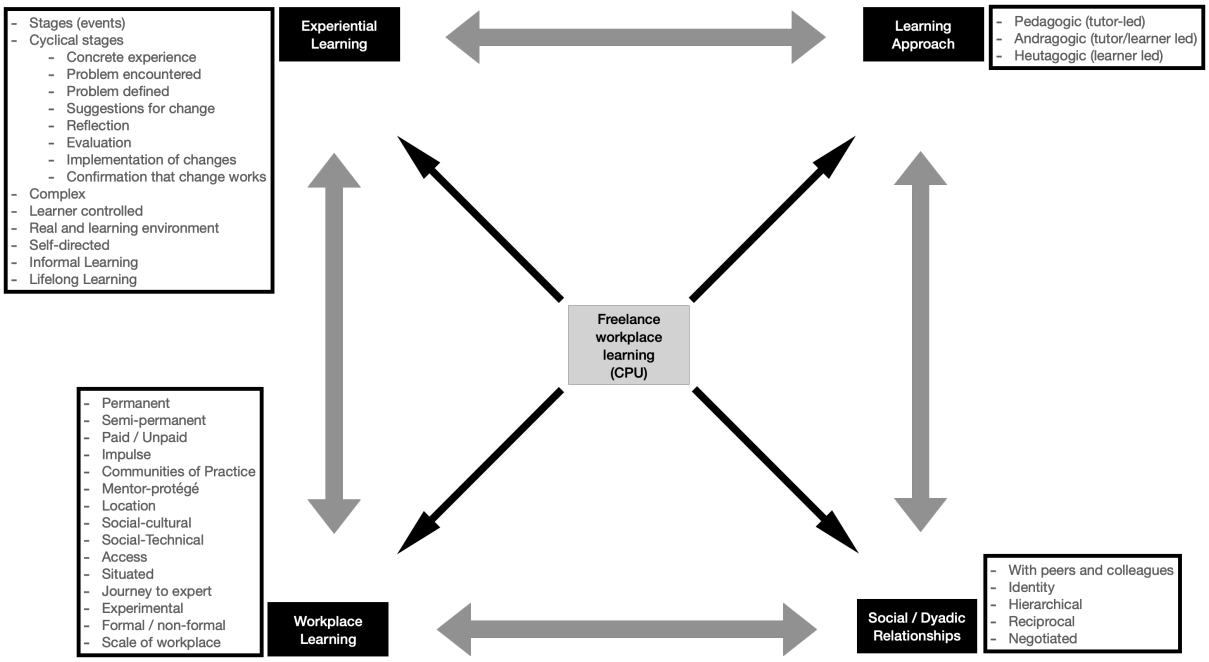


Figure 3. 13: Conceptual framework of experiential learning in a freelance workplace setting

This chapter meets objective 1 by way of an exploration of experiential learning models. A number of the learning models presented were stepwise models (Dewey, Lewin, Kolb, Jarvis), and criticisms from Seaman and Le Cornu showed that a stepwise approach to expressing learning is an incomplete way to fully express the holistic and existential learning experience. Other models were explored including Engeström et al.'s, (1999) model of expansive learning where the learner is viewed as an individual and as Jarvis has indicated, are likely to respond differently to distinctive situations. Through Le Cornu, this chapter also identified that the learning process is complex, and that the learner is often omitted from the learning models, or the models are unable to fully express the holistic experience of the learner-practitioner in a precarious employment context.

It will be recalled that the overall aim of this thesis is to develop a heuristic model of a self-employed freelance learner-practitioner and their exposure to novel situations leading to experiential learning. Through the introduction of the learner into the learning process, this chapter illustrated that pedagogic, tutor-controlled, approaches can enhance/restrict the learning environment. In order to fully consider a more holistic understanding of learning in the workplace as a freelance operator in the camera production unit (CPU), auxiliary experiences that are not simply concerned with experiential learning also need to be introduced into the 'learning milieu'. In highlighting other theoretical frameworks associated with the experiential learning journey that are often omitted from experiential learning models, this chapter extends the scope of the learning experience. These supplementary aspects within the experiential learning journey such as relationships, learning orientation and approaches to learning, highlighted deficiencies in existing models that were previously obscured and provide further evidence to meet objective one.

From the conceptual framework presented in figure 3.13 above, it can be seen, then, that learning is a complex process. From Kolb's cyclical process of experiential learning through to Engeström et al.'s, (1999) notion of expansive learning, the learner is an individual and as Jarvis has indicated, they are likely to respond differently to distinctive situations. This is additionally complicated, when we start to locate learning within a precarious workplace setting or a community of practice (CoP), especially given the irregular nature of freelance work (the dominant employment contract for those working in production).

All the same, it can be observed that there may be a number of ways in which learners are motivated to learn – where they may be taught conventionally with a teacher at the front of the class (pedagogy), through to self-determined learning, learning because of their own self-interest in a subject, independent of any external input (andragogic/heutagogic learning).

It is the position of this thesis that there are four core theoretical frameworks that contribute towards a holistic experiential learning model.

- Firstly, Jarvis's experiential learning model suggest the experiential learning journey begins at the point where the learner encounters an episodic experience. Whilst this may be true, there is little consideration in his model for both the learning context and the relationships within this context.
- Secondly, incorporating the learning orientations of mind-centred, environment-centred or integrated contexts from Russ-Eft's meta-model of learning theories go some way towards responding to this deficit.
- Thirdly, Fiskes's theory identifies key relationships that also influence the experiential learning journey.
- The fourth piece of the jigsaw that is dictated by both the context and the relationships within this context is the learning approach, where pedagogic, andragogic and heutagogic learning approaches also contribute to the overall learning experience.

The identification of the different learning models above meet objective 1. The four core theoretical frameworks will be revisited in subsequent chapters and used to meet objective 3 (develop a heuristic model of experiential learning). The next chapter uses some of the data collected from the first environmental scan together with selected literature to introduce the context of the targeted population. This overview of the workplace of freelance practitioners provides an insight into some of the challenges faced when encountering novel situations that lead to experiential learning for those freelance learner-practitioners working in the UK film and HETV workplace and goes someway to meeting objective 2 (evaluate against practices of freelance personnel).

4 Workplace context and environmental scan

The previous chapter presented some of the synthesized literature used in this research. This chapter contributes to objective 2 by presenting features and characteristics that may be found in the day-to day operations of a single-camera production unit (hereafter simply referred to as the camera production unit). It first sets out a hierarchical structure then discusses new entrants working in a camera production unit. The chapter presents some of the challenges that learning in a precarious employment setting can bring. The industry surveys discussed later in this chapter, provide real-world insight into the central investigation of this thesis: learning experiences of practitioners, within the camera production unit.

4.1 Occupational practices, hierarchy and workplace locale

Hart, (1996) presents the camera production unit as a family suggesting an effort should be made to get along with every member of the crew. Within the camera production unit there is a strong hierarchical structure and Mamer (2009) has proposed a basic crew hierarchy for a camera production unit as follows: The head of department is the Director of Photography (DoP) then the there is a heirarchy through the different ranks to 2nd assistant camera (2nd AC). The tree below in figure 4.1 illustrates Mamer's structure.

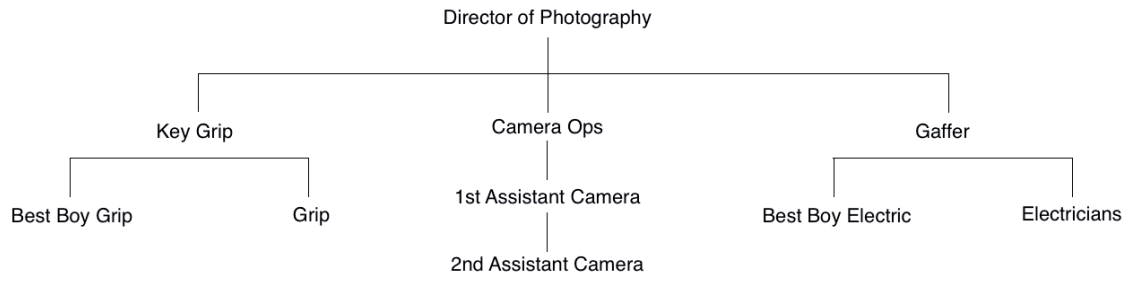


Figure 4. 1: Camera production unit (Mamer, 2009)

Using the centre branch as an example, and with larger productions, Elkins (2009) adds the role of loader/trainee and provides a suggested list of responsibilities of the various roles within the camera production unit. Wales (2016) also adds to the camera department by including a Steadicam operator (and assistant), a Digital Imaging Technician (DIT) and special camera operators/assistants, such as underwater camera operators. Figure 4.2 shows a defining structure of a basic contemporary camera production unit.

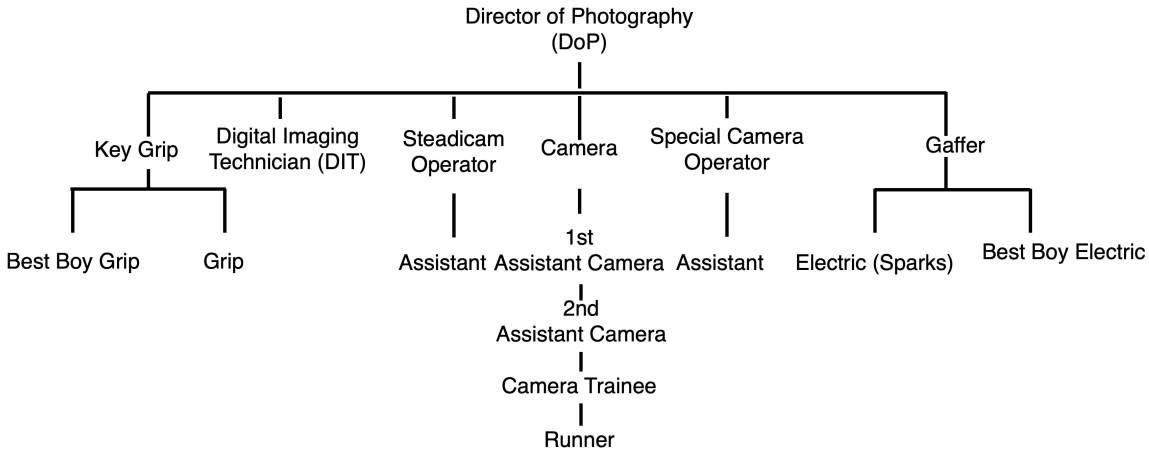


Figure 4. 2: Extended camera production unit hierarchy.

Within this department, development of the learner-practitioner may be informed by a range of encounters. Firstly, Billett, (2011) has shown how context and the associated

'know-how' to support practice may be an overriding influence on the continuing learning experience of the emerging learner-practitioner. Secondly, Blair, (2001, 2003) has posited development of strong professional networks is key to sustaining work and securing 'the next job' (Bridgstock, 2011) in a self-employment workgroup situation. Thirdly, vocational qualifications may also play a part (Guile, 2010) through the introduction of the learner-practitioner to industry via formal and non-formal educational routes. Grugulis & Stoyanova (2012), however, specify this is not necessarily an essential requirement for entry into the industry. Fourthly, individuals and their agency will influence their own development and the associated centripetal movement into the centre of specific community of practice (Lave & Wenger, 1991). Finally, how learner-practitioners view themselves – their own occupational identity (Illeris, 2003a; Lahiff & Guile, 2016) – will form their own learning and may also characterize how others view them.

4.2 Learner-practitioners in the film production community

When an early career stage learner-practitioner enters the world of work within the film industry, they are met with many challenges (BAFTA, 2012). Whichever path they have selected – whether they have graduated from a degree, or simply entered as a runner straight from school – these encounters shape their induction into this unique community of practice (Randle et al., 2010). Eraut (2007) contends early experiences of the learner-practitioner will have a significant impact on their own learning in future experiences and Merriam (2001) has shown that an interesting area of research is

where an emerging learner-practitioner leaves full-time education, to enter and progress a career.

The learner-practitioner's understanding of who they are and how they navigate through this community is fashioned by two interventions. External interventions are where relationships with colleagues, or the production contexts influence their journey whereas internal interventions are where learning approaches may guide how learner-practitioners learn (Illeris, 2003a). The practitioner's specific professional identity also sets out a series of occupational practices that they are likely to adhere to. Described by Bowen & Thompson (2013) as set etiquette or 'setiquette' the learner-practitioner's performance is both contained and demonstrated through their on-set behaviour. As Illeris (2011) has shown, personal identity and perception from others stems from the totality of the learning experience.

4.3 Identification and membership of the community

Telo (2013) recognises that a production unit, as outlined above, can be considered as a community or *collectivity* of practice. Hargreaves & Gijbels (2011) support this view when they cite Manville and Foote (1996) as 'a group of professionals informally bound to one another through exposure to a common class of problems [and] common pursuit of solutions and thereby themselves embodying a store of knowledge' Manville and Foote, (1996, p10). This echoes with Lahiff & Guile's (2016) observations where a community or collectivity of practice may have a mutual engagement in a project; a joint enterprise; and a shared repertoire. This resonates, then, with film production,

where the primary function of the camera production unit is to transfer to moving images, in as high a quality as possible, written words on a page as dictated by the director using appropriate techniques and equipment. As such a suitable description of the camera production unit might be:

> *a collectivity of professionals with a common goal, working within a mutual project, seeking to resolve common problems through a shared repertoire of, knowledge, actions and language, informally bound by strong hierarchical structures*.

In this way, it may be seen that membership within this community may often be met with many obstacles and is founded on a unique set of relations (Elkins, 2009).

Lave & Wenger's (1991) work on communities of practice ignited the field of research into this topic of study. However, where their research investigated communities of practice that were fixed and well bounded, this becomes problematic, when applying the work to flexible, unbounded workgroups (Guile & Lahiff 2012) such as freelance practitioners. These multi-faceted vocational communities have a number of similarities to Lave and Wenger's model – a hierarchy, centripetal movement to progression, (Bunting et al., 2014), yet there is a departure when the practice setting is considered, which tends to be temporary (Bound et al., 2019). Moreover, Kleinknecht et al. (2015) maintain that organizational learning is likely to be inhibited when located in a flexible labour workplace setting.

4.4 The uniqueness of learning in a flexible labour workplace

For the emerging learner-practitioner, on-the-job training often takes place at the periphery of the community and entry into this is challenging for the newcomer (Grugulis & Stoyanova, 2009). Chaiklin (1979) shows through the process of observation and participation, a novel situation is potentially able to further develop the learner-practitioner's personal 'know-how' (Kyndt et al., 2009). This helps the learner-practitioner make sense of what is required, helping them become an active participant of this community. Illeris (2011) asserts that there can be issues within workplace learning activities. Firstly, he argues that workplace learning suffers from the 'Matthew Effect' (whoever has will be given more, and they will have an abundance – Matthew 12:13) and potentially favours those who already have the best education. The second issue highlighted by Illeris is one of learning orientation where work will be subordinate to the necessary undertakings that are required of the job. This is related to the third issue: that of learning disrupting the targeted work – the ultimate purpose of the workplace. Furthermore, this learning is dependent on *key relationships* within (and sometimes outside of) the community.

It can be seen then, that learning as a freelance member of single camera production unit is complex and is influenced by a number of factors. It is from this position, that this research launches. There now follows a presentation of significant findings from two industry surveys. The first survey (IS2016) was carried out early on in the research timeframe with twenty-four respondents completing the survey. A subsequent survey

(IS2022) was carried out towards the end of the research journey for this thesis with twenty-five respondents completing the survey. Both surveys used *Google Forms* and had the same questions, eliciting results that could be compared. It is worth noting that the IS2016 was distributed across a range of professionals working in the industry, whereas the IS2022 was distributed to a narrower group consisting of members of the Guild of Television Camera professionals (GTC) providing data from the targeted field of study – the camera production unit. The IS2022 was also carried out post-COVID19 pandemic, and so it is acknowledged here that responses may be influenced by experiences encountered during this period.

4.5 The industry profile surveys (environmental scan)

Both surveys were anonymous. The IS2016 was distributed by way of existing contacts and new contacts made at industry events. It had three purposes: 1) to determine areas of learning to consider for the main research, 2) to attract potential contributors to the planned semi-structured interviews for the primary research and 3) to confirm this was a suitable area for study. The IS2022 was rolled out towards the end of the research journey (post-analysis and final model design) and was intended be a comparative tool to determine differences in terms of industry practice over the six-year period between the surveys. The IS2022 survey was also designed to attract respondents to share their real-life scenarios that were used to test the final experiential learning model.

Because of the focus of the research – learner-practitioners working in the camera production unit – the target population were freelance practitioners working in the film and HETV industries. By surveying this community, insights into the day-to-day working landscape would help highlight issues that are likely to be encountered by new entrants of this workgroup. These insights would help to contribute to the development of a model expressing their learning experiences. Each survey utilised some filtering questions which enabled a more detailed focus of the cohort. Although both surveys were a snapshot of the industry, they were useful in identifying areas of learning from day-to-day activities of professional practitioners.

Questions were initially drafted, then rearranged and structured into five sub-sections. This approach collated topic areas of 1) perceptions of workplace learning and training, 2) relevancy of job position and context, 3) current learning activities, 4) demographics of the sample population, 5) potential barriers to workplace learning, which could later be explored.

4.5.1 Perceptions of workplace learning and training

Over 16/24 of respondents for IS2016 indicated that they had received four days or less training in the previous twelve months compared to 2022 where 20/25 had participated in less than four days training in 2022. This increase may reflect conditions of the UK COVID19 Lockdown period.

4.5.2 Relevancy of job position and context

Over 20/25 of the 2022 cohort had more than 10 years' experience compared to 8/24 of the 2016 cohort. There were also appreciably more respondents in the 2022 survey who had day-to-day operations in single camera factual production (SCF); 24/25 compared to those from the 2016 survey of 17/24. This difference was also noticed in single-camera drama (SCD) operations where 19/24 of the respondents from the 2016 survey had experience SCD compared to only 11/25 in the 2022 survey. This may be a reflection of the 2022 sample cohort being established in a dominant factual production sector. It is unlikely to be a reflection of the UK COVID19 lock-down as this would have impacted on both factual and fiction productions. It might also be indicating more established members of the community. In terms of what had helped with personal rank/progression, much of the responses showed similar trends. Significantly, however, respondents from the IS2022 survey indicated professional experience was the main driver for progression.

4.5.3 Current learning activities

The IS2016 survey indicated self-directed study was a major aspect to respondents training, where practicing with unfamiliar equipment was indicated as the primary learning activity. This appeared to be more significant for the 2022 group with 20/25 compared to 13/24 the 2016 group. This again may be influenced by the UK COVID19 lock-down period, where practitioners may have found more time to participate in self-directed study and were restricted in participating in formal training.

Asking a colleague was also indicated as important when respondents arrive on the job and encounter unfamiliar equipment with 15/24 in the IS2016 survey and 18/25 in the IS2022 survey. It was also implied by some respondents in the 2022 survey that this is now achieved using social media such as *Facebook* and *WhatsApp* which may account for the increase.

4.5.4 Demographics of the sample population

There was an appreciable difference in the age of the cohort, where 17 of the 24 respondents (17/24) in the 2016 survey were *under* forty years old and 17 of the 25 respondents (17/25) in the 2022 survey being forty years old or *over*.

4.5.5 Potential barriers to workplace learning

The survey sought to determine any barriers to personal training. Noticeably, 'loss of earnings' appeared to be less of a barrier in the IS2022 survey than in the IS2016 survey. This may be that the GTC participants in the IS2022 survey are better established in their career as they are members of a guild, or they simply do not see loss of earnings as a barrier to training. This may also be reflected in the main responsibility of the participant, where the IS2016 survey indicated 6/24 of respondents were department heads (DoPs) compared to the IS2022 where this was 15/25. Training course fees and quality of training were also identified as barriers to learning. Of the 24 respondents in the IS2016 survey, 5 identified access to 'available resources' as a barrier to learning. This was a similar number in the 2022.

4.5.6 Additional comments

Some additional comments from each of the cohorts are presented in table 4.1.

Table 4. 1: Additional comments from environmental scan

IS2016	IS2022
I have always found people to be very approachable and helpful when you need to learn about something new.	Being a trainee supervised by the assistant etc is the best way to learn
Sadly, the mentor system has disappeared in our industry and having seen the kinds of people being churned out by colleges and their lack of professional knowledge and basic studio etiquette, it makes me quite depressed. The general consensus these days is that it's all about the kit, rather than the creative.	When I was starting out in the industry it was very difficult to access technical information. Often the only way was the camera manual. Everything I learned about film was what I was told by older more experienced cameramen. I learned some aspects of video from older cameraman, a technician I worked with, and the manual for the equipment (if anyone knew where it was!) These days there is so much information easily available on forums like the GTC and even more so via Google. It's a bloody treasure trove!!! I remember trying to work out why video and film looked different… it took a while before I really understood the difference between interlaced and progressive frames. And the cameraman I asked about the difference between Control Track and Time Code wasn't able to provide me with a decent explanation. He wasn't very technically oriented, but he was all I had. I just had to bide my time until someone more knowledgeable came into my sphere. I certainly picked up a lot of useful information from manuals and hand-on trial and error.
	Any software based equipment – free fully functioning 30/60 day trials allowing you trial and error in a safe environment really helps. Formal University education gave me a solid base of skills to bring forward into my work but didn't explicitly help get any jobs.

4.6 Discussion

In their Workplace Survey, Creative Skillset (2014) suggest that freelancers in the Film Industry are most likely to undertake training of some form. The literature (Clevé, 2006;

Elkins, 2009; Gill, 2012; Mamer, 2009; Owens & Millerson, 2013; Uva, 2006) highlights a range of activities practitioners are likely to encounter in their day-to-day job, ranging from small-scale drama production (such as a short film) through to large-scale multi camera live production (such as the Commonwealth Games). It is recognised that between single camera production and multi camera production, camera technologies may be similar but may require a different operational process and, as such, different skills requirements (Owens & Millerson, 2013). As such, the different situations freelancers work in and the skills required as a freelancer (if one was working in a range of fields, say) illustrates the more complex approach to learning required if a freelancer is to sustain a career in the industry. The differences in equipment usage and associated learning strategies also suggest other implications in terms of a 'social' context and asking colleagues to help with equipment practice. These differences may well play a part in the transfer of skills across field operations where an unstructured and ad-hoc learning regime is standard in these production settings (Bound et al., 2019). This may be why a hands-on strategy of learning and garnering information from colleagues is reflected in both surveys. Perhaps the comment from one participant is relevant:

> "I remember trying to work out why video and film looked different…And the cameraman I asked…wasn't able to provide me with a decent explanation…I certainly picked up a lot of useful information from manuals and hand-on trial and error.

These interactions are different within the different work-place settings and offer varying opportunities for social integration, which in turn require different [social] skillsets when employed in these idiosyncratic fields.

One of the interesting results for this is that respondents were more likely to opt for 'social interaction' by asking a colleague and/or practicing with the equipment rather than formal routes such as training courses or trade shows and this was further confirmed in the IS2022 survey. It seems respondents valued contact with colleagues and/or practice with equipment more than conventional routes to development.

One interesting aspect to the responses to the question of training and learning was that, although respondents indicated that formal education is not a preferred option for personal development 15/24 (IS2016) and 16/25 (IS2022) of the respondents to this question have undergraduate/post-graduate qualifications.

4.7 Expression of a constructed experiential learning model for self-employment workplace learning

From the literature, from the environmental scan, and from the focussed locale of the study, it is clear that learning is taking place. In view of Seaman's (2008) assertion that a stepwise model (such as Kolb's learning cycle) does not explain the holistic experience of learning, an initial model of experiential learning has been developed using the outlined learning theories from Russ-Eft's (Russ-Eft, 2011) work on a Meta-Theory of Learning. The initial model presented and discussed below, is designed to represent novel experiential learning within a single-camera production unit. Russ-Eft

(2011) suggests the core components of her meta-theory can been mapped onto a continuum. At one end is ‘doing’, where an environment-centred learning process is evident, and at the other end is ‘thinking’, where a mind-centred learning process is dominant, the centre indicates integrating components – part environment and part mind-centred.

For a learner-practitioner, working on-set is very much influenced by what is going on around them. However, there are times when some internal factors influence this experience. As such it was considered that five of these learning theories were most relevant to express the experience of the learner and the learning context. These were used to represent the learner in these contexts and are shown in an interim meta-model presented below in Figure 4. 3.

The connectionist theories that support the automaticity of lower skills and proceduralizing of process have been omitted from the model design, primarily because often each production and each scenario is distinctive and so conventional repetitive action (such as assembly line operations), tend to be concealed by the uniqueness of the working context. Nevertheless, it is recognised that there may be a certain amount of ‘repetition’ on the job (such as equipment assembly), and this is discussed in more detail in subsequent chapters.

Therefore, the five key components of the meta-model that have been identified as contributing most to the learning experience of a freelance learner-practitioner are:

Situated Cognition (SC); Andragogic/Heutagogic learning (AH*); Organizational Socialization (OS**); Social Learning (SL); and Social Perspective (SP) theory. The model in figure 4.3 starts with two core components of Andragogy/Heutagogy and Situated Cognition.

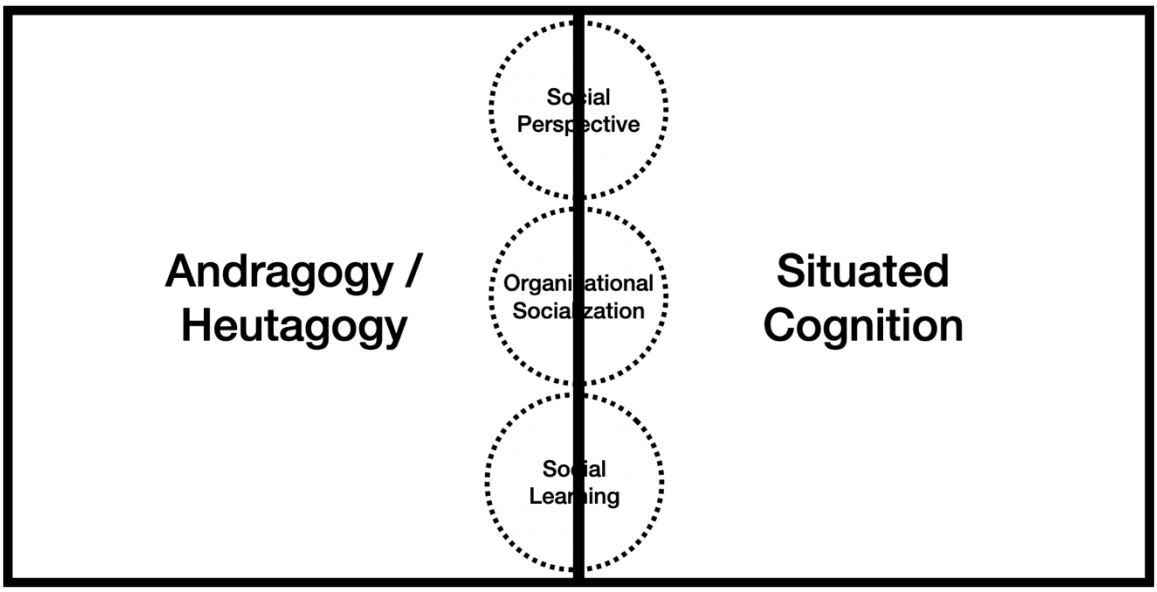


Figure 4. 3: Interim experiential learning model (two core components)

**it will be noted that even though Russ-Eft does not include heutagogy in her model, it has also been included as a descriptor for the self-learning / self-determined learning 'andragogic' component. ** Organizational socialization replaces Russ-Eft's Behaviourism component.*

In this version of the model, two components representing the learner-practitioner in a learning situation or context (situated cognition) and the learner-practitioner adopting a learning approach (andragogic/heutagogic) are presented as predominant. These are represented by two solid 'blocks'. *Situated cognition* embraces the idea that learning takes place within a specific context – a situation or a community of practice. This primarily draws on Lave & Wenger (1991) and Vygotsky (1978) where the learner interacts with those around them whilst learning within a given situation. Learning

within these contexts often takes place within a ‘bounded’ situation but is also often unique to the learner-practitioner’s previous experiences.

Andragogy (Knowles, 1975) and *Heutagogy* (Hase & Kenyon, 2018) can be viewed as two sides of the same coin. Here the ‘block’ represents the learner, where learning is the result of self-directed / self-determined approaches. Russ-Eft, (2011) suggests that a self-*directed* approach can identify learning opportunities that are focussed more on the practical and immediate application of knowledge, because the learner is internally motivated to learn. Hase & Kenyon (2018) further suggest that heutagogy, which is a self-*determined* approach to learning, is also highly internally motivated.

Whilst the priority of on-set activity is production, learning on set is often facilitated by way of problem-solving endeavours, taking place within a real-life situation (the production itself). The learning is also supported through a scaffolding mechanism, where knowledge and mental models are developed through experiences that build upon the learner-practitioners previous ones. For early career practitioners, these experiences tend to be ‘easy routes’ to learning, such as observation of peers, which encourages confidence in the learner and a drive to know more. The learning also incorporates some of Bonk & Kim’s (1998) thoughts on the Zone of Proximal Development (ZPD), where peer-to-peer learning is prevalent.

Utilizing Bandura’s, (2006) concept of human agency through the notion of linkage, the two key components of ‘learner’ and ‘context’ are coupled together by way of three

'embedded' components acting as fortifications to the core blocks of andragogy/heutagogy and situated cognition. These not only act as an integral part of the coupling between the core components of the context making them inseparable, but they also act as a strengthening device for this coupling. Similar to a carpenter's biscuit joint, these components are invisible – almost indiscernible – operating at an almost subconscious level joining – and strengthening – the two key components of learner and context. These are illustrated by dotted circles in Figure 4. 3 above.

At the centre of these – and replacing Russ-Eft's 'Behaviourism' – *Organizational Socialization* (Cooper-Thomas & Anderson, 2006) considers actions of the practitioners that support learning, such as observing on-set protocol ('setiquette'). As the actions of the new entrants are assimilated into their every-day performance, this leads to acceptance within the community and integration into the organization. Therefore, closely related to this is our second fortifying linkage – that of *Social Learning*. Russ-Eft (2011) suggests that, with social learning, learner-practitioners may learn through the practice of observing or imitating, without necessarily requiring changes in behaviour or attitude. Understanding this, provides further opportunities to learn (observe, imitate etc.) and to be further accepted into a community of practice. The last of these 'embedded' joining components is *Social Perspective*, where the environment – the social and the organizational context – shapes individual learning and, as a consequence, this determines how learners see themselves within the community.

As with Le Cornu's (2005) approach, the initial model can also be expressed using three-dimensions (see Figure 4. 4). By doing this, we can see that the three fortifying components of Organizational Socialization (OS), Social Learning (SL) and Social Perspective (SP) are embedded within and between the two main components of the 'learner' and the 'context'. Without them, however, the two key components of andragogic / heutagogic learning and the given cognitive situation may not be unified and, perhaps more importantly, strengthened.

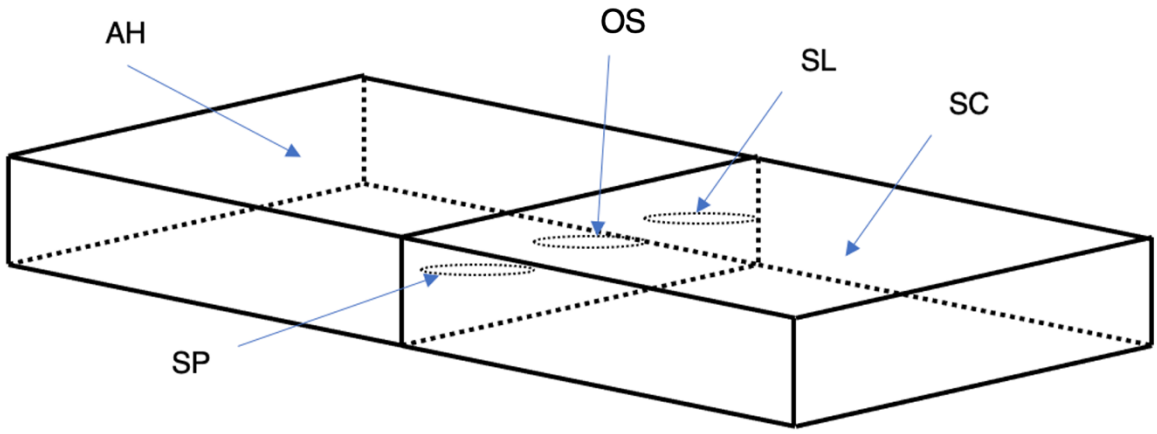


Figure 4. 4: 3D version of initial experiential learning model

The model, then, can be seen as a theoretical starting point that *expresses the experience* of the learner in a precarious, freelance, work-place environment and indicates how – when the experience aligns with the model – opportunities for learning might be optimised.

4.8 Chapter summary

This chapter contributes towards objective 2 by way of highlighting industry practices of freelance personnel in the camera production unit. The development of an initial

experiential model also contributes to chapter 3. Section 4.5.5 contributes to objective 4 by highlighting some of the barriers to learning that are encountered in this workplace setting.

A number of conclusions can be drawn from the above discussion. Firstly, for early career learner-practitioners the project-based irregular employment patterns generate challenges in securing work. Subsequently, this potentially inhibits workplace learning opportunities. This may also be exacerbated by the strong hierarchical structures, the demarcation of responsibilities within the positions of the community of practice, the limitations of the chain of command, and the on-set operational expectations and axioms associated with the camera production unit.

The industry surveys provided a snapshot of real-world day-to-day practice. Nonetheless, they also revealed the significance of collaboration between colleagues and peers and how this helps with learning. Moreover, the more recent survey (IS2022) indicates a growth in the use of social media and online platforms to support day-to-day learning activities of members of the camera production unit. This was most prevalent in the 2022 survey, where – interestingly – the majority of participants were older than in the 2016 survey.

The surveys served firstly (IS2016) as a launch point for primary research and secondly (IS2022) to determine any differences over the six-year period between the two surveys. The results from the first survey also served as a way to inform the

questions used in the semi-structured interviews. These interviews formed the greater portion of the data used for analysing each of the experiential learning models in chapters 6 and 8. Responses from these semi-structured interviews are presented in the next chapter.

This chapter concludes with a prototype experiential learning model derived from Russ-Eft's (2011) work and results from the environmental scan.

5 Interview stage, emerging themes, and presentation of findings

The previous chapter presented two industry surveys that were carried out at the start of the research journey (IS2016) and towards the end of the research journey (IS2022). It was discussed how these were used to attract participants for a more focussed study by way of semi-structured interviews. Chapter 2, section 2.9.1. presented the methodological approach to formulating the questions for these interviews. The purpose of this chapter is to present results from the initial analysis of these interviews and to offer excerpts from these semi-structured interviews.

5.1 The purpose of the semi-structured interview and topics guide.

The purpose of the semi-structured interviews was to further understand experiential learning of freelance practitioners working in film and television industries. Responses to these would then be used as a basis to evaluate practices against experiential learning models (objective 2) and help develop an experiential learning model (objective 3). The interviews also contributed to objective 4 by identifying barriers and drivers facilitating engagement with experiential learning. Themes were generated from literature and eight sections were generated for the interview schedule. An overview of these follows.

The first theme of ‘occupational progression’ was designed to introduce the interview and provide background information for each of the participants and yield insight into how practitioners moved through the occupational ranks. Blair et al. (2001) discuss the importance of informal networks in the freelance sector. In this respect, the

interview schedule was designed to confirm these informal networks and to determine if there were any serendipitous meetings or if respondents had worked in a different capacity (i.e. factual and fiction). It also sought to determine what helped with progression through the occupational ranks (Elkins, 2020). This initial theme also helped as an 'icebreaker' to the interview. Associated with this was a section on 'social networks' (Grugulis & Stoyanova, 2012) and workplace relationships. This was to determine how participants socialised both at work and outside of work, and to ascertain how this impacted on securing future work.

Apprenticeship models have been briefly discussed in the literature (Billett, 2011; Lahiff & Guile, 2016) and, although the nature of freelance work does not usually fit that formal learning structure, a section was introduced to determine 'formal learning' prior to or during the time whilst participants were freelancing. This section was also designed to elicit responses from practitioners with regard to challenging experiences and/or developing understanding of new equipment.

Eraut's, (2004) work on 'informal learning' in the workplace informed a section on mentoring and peer-to-peer guidance in the workplace. This section also sought to explore experiences of voluntary or unpaid work as well as other places of learning.

In their workforce survey, Creative Skillset (2014) identified 'access to facilities' as being a barrier to learning. A section highlighting this was devised to determine how freelance practitioners were able to prepare for a job or to learning new technologies.

This section also sought to explore when practitioners practiced with equipment. Associated with this section was a section on new ways of working (Engeström, 1987) by enquiring about how new technologies have changed working practice and/or job roles.

A section on 'supplementary income' (Ashton & Ashton, 2015) explored where participants had developed other revenue streams or alternative forms of work.

A detailed example of the topics guide can be found in Appendix 2.i which provides further details of the questions for each of the themes listed above.

5.2 Initial coding of transcripts

Section 2.9.2 discussed the methods used to code interview data and provided meta themes that emerged from this exercise. As coding progressed, additional sub themes emerged. The final list of themes, and sub themes that were coded are:

Barriers and Challenges to Learning – with sub themes / key words of: Other Commitments, Temporal, Social, Financial, Logistical, Physical, Geographical, Educational, Confidence, Experience, Psychological, Physiological, Being Career Focussed, Occupational Reputation.

Learning, – with sub themes / key words of: Pedagogic, Andragogic, Heutagogic.

Particular Skills – with sub themes / key words of: Operational, Intellectual, Social, Business, Aspirational.

Knowledge – with sub themes / key words of: A Priori, A Posteriori, Explicit, Tacit, Propositional, Non-Propositional.

Behaviour – with sub themes / key words of: Professionalism, Integrity, Teamwork, Time Keeping, Tidiness, Enquiring; Intrinsic Motivation; Extrinsic Motivation, Movement between Ranks.

Protocol – with sub themes / key words of: Health & Safety, Commands, Responsibilities of Role, Collaboration.

Dyadic Relationships – with sub themes / key words of: Communal Sharing, Authority Ranking, Equality Matching, Market Pricing.

The next section presents extracted data collected from six respondents (including one pilot), making up the multiple semi-structured interviews. The interviewees all have experience in the area considered by the research – that of high-quality UK film and television production, and their biographies can be found in Appendix 5.i. Interviews were face-to-face and ranged from forty minutes to one-hundred and fifty minutes. Interviews were recorded using a digital recorder and were transcribed in preparation for data analysis. For convenience and anonymity purposes, respondents have been labelled CS1, CS2, CS3, CS4, CS5 and CS6.

5.3 Extracts from the semi-structured interviews

The interviews were reasonably open, but questions were designed to elicit responses that would provide data on the key research question:

Why does operational skills development take place for learner-practitioners working in precarious employment and in the absence of formal training schemes such as those offered by BFI and Skillset?

With the continual technological advancements that the recent drive to digital production has prompted (together with the recognized absence of formal training to accommodate these changes), it was important to determine *how* practitioners contend with these new technological developments and the potential challenges they present. Therefore, how respondents learn was integral to the research.

For the learner-practitioner, entry into the industry and how one performs is important particularly for new and emerging practitioners, because the strong hierarchical structures embedded within each department often dictate responsibilities. They also signpost demarcation within specific, confined jobs roles. Respondents reported navigating through some of the challenges that occurred because of these strong hierarchies, indicated the working environment could be 'quite cliquey' (CS4) – a common challenge that new entrants needed to overcome in order to access learning.

Themes that were identified in the data have been grouped into two overarching sections: *the site of learning*, which explores locations in which respondents reported they learn and *how respondents learn*, where different ways in which practitioners learn were reported. The data indicated a number of workplace contexts where learning took place. In order to differentiate these further, eight consistent contexts are listed below, which will be used subsequently to categories learning contexts. These eight contexts are:

1) Paid workplace. This is where respondents were given renumeration for work undertaken. This was not necessarily a drama production unit, but encompassed other type of work, such as filming live concerts, corporate work, music videos, documentaries, etc.
2) Unpaid workplace. Respondents indicated that there were times when they participated in production work without renumeration. This was productions such as personal projects, student work, work experience, etc.
3) Small-scale production workplace. This has been differentiated from paid/unpaid employment and is where respondents commented on working on small-scale single-camera-drama productions (such as high-end television drama)
4) Large-scale production. This has again been differentiated from paid/unpaid employment and includes respondent comments about large-scale single-camera-drama productions (such as long-form drama for cinema).
5) Experimentation at the workplace. This identifies responses from participants as they have commented about when they have experimented or 'played' or problem solved, whilst at the workplace (whether that is paid, unpaid, small-scale or large-scale)
6) Experimentation away from the workplace. This identifies responses from participants as they have commented about when they have experimented or 'played' or problem solved, whilst away from the workplace (practicing at home, etc.)

7) Formal learning away from the workplace. Respondents expressed that there were times when they undertook formal learning outside of the workplace environment.
8) Informal learning away from the workplace. Respondents also expressed that there were times when they undertook informal learning outside of the workplace environment.

5.4 The site of learning

5.4.1 Andragogic/heutagogic learning and the workplace

Having a self-determined (heutagogic) learning approach, means that learning can take place in many different locations. This participant describes how, in the planning stages, they were able to learn to select appropriate equipment, where "you could phone up...a lighting company…saying "I've got a show coming up, can I come in and have a play with the desk?" And they…give you a manual, and you'll just play around with it yourself." (CS3). This informal learning can help a practitioner omit the intermediate hierarchical stages and be "instantly a cameraman…I could only do what I was doing because I was doing music…the way I did it I couldn't have done in any other field…I'd have had to go in as a tea boy and, you know, and work my way up." (CS2).

With similar small-scale live music productions in smaller venues, early stage practitioners reported that they were able to utilise heutagogic learning to explore the limitations of equipment through experimentation – or what some termed 'play'. This interviewee recounts working on live music videos: "It is just creative. So, I can play

with light, composition. I can play with blocking scenes, blocking the musicians. Lighting anything…learning how light bounces" (CS1).

Working on larger scale productions also provides opportunity for self-directed (andragogic) learning. Working with different personnel may reveal other 'people skills' that may need to be developed, where one might learn "That actors need space…not for a formal reason, but just you realise that they got a job to do, the same as you have." (CS2) or learning "how to work with different people of a different hierarchy" (CS5) can add to an early career learner-practitioner's wider skills.

5.4.2 Organizational socialization and large-scale production

When launching one's career, early-career stage learner-practitioners reported that they need to learn the screen industries' social etiquette. CS6, an early career participant, reports that the established medium to large scale screen industries have certain expectations, where the precarious nature of work may make unreasonable demands on the learner-practitioner as "in the beginning like 'Yes. Yes. Yes.' You just have to be so available all the time because you might miss an opportunity…You say 'No' like once. You say 'No' twice – they don't tell you again." (CS6). One might be perceived as unreliable "if you come in and say 'yes, I'm available' and then half-way through you jump ship to another job…it is still frowned upon if you were to accept other work, if you've already said you are available to work for the duration of the shoot." (CS4). Learning to manage these expectations is one of the skills the learner-practitioner must acquire. However, access to a workplace setting and its associated day-to-day activities – the practice of 'doing the job' – was reported by participants as

a good way for practitioners to develop their skills through practice, mainly because "in terms of cinematography, the vast majority learn from hands-on." (CS1). Therefore, the practice of day-to-day workplace activity develops the tacit knowledge of the practitioner because "you learn what will work and won't work…keep it simple." (CS3)

As indicated above, the demands on the freelancer can be quite challenging. This can be seen as a barrier, if the practitioner is very busy. So, even when an experienced practitioner has 'downtime' they may not be motivated to learn, as this interviewee relates about a colleague "when he does get downtime, he wants to use it as downtime." (CS1)

Once the opportunities do arise, observing on-set practice, through experience allows one to develop strategies that encourages employers to invite one back, such as by being helpful. By "having on you…a sharpie…some chewing gum…a spare call sheet…spare batteries, not just for *your* radio" (CS4) means one might get noticed. However, this can all take time where becoming familiar with a role in a large-scale production workplace might be difficult. "[J]ust getting to a point where you understand enough of what is going on around you – when no one's telling you what that is – is something that takes time…it doesn't happen after one, or two days on set. It happens after a few weeks of sustained interaction on set." (CS4). As respondents gained experience in the workplace, they were able to reflect on their own self-confidence, where "A lot of the time it is about confidence I think – because you are used to Uni

and ‘yeah, yeah, I know how to do it’ and then you go in a bigger production and like ‘I don’t’. You, you think like other people might be better than you...” (CS6)

Practitioners also indicated there are benefits through observing whilst on set. Here one can observe interrelationships between departments and personnel – the on-set social etiquette (or “setiquette”) – where you “try and figure out the particular quirks or habits of your other ADs [Assistant Directors] and how they interact with other people. What information they give you freely, what information that they don’t and you need to try and get for yourself…you watch how they speak to each other; you watch how they interact. You watch, you listen…” (CS4)

5.4.3 Organizational socialization and experimentation.

In the foundational stages of a learner-practitioner’s career the effective use of downtime to create opportunities to learn may be through accessing the community of practice. It might be in your “downtime, you actually do go and spend a lot of time watching other people work, ‘cause that gives you the access [to the studios and equipment]. The fact you’re there doing the low-end work gives, gives you the access to the higher end work” (CS2). Access to high-specification equipment, however, is not always possible. As such, practitioners sometimes experiment with equipment that is at their “fingertips which, you know, don’t cost a lot of money.” (CS5) which can also help with basic skills development: “working with DSLRs and phones as well, you know, like most people have an iPhone that is capable of … 4K.” (CS5)

5.4.4 Organizational socialization and formal learning away from the workplace.

Respondents reported that formal courses are sometimes seen as too removed from real-world activities. “I don’t think it is necessarily the fault of an academic course, but there is a lot of [university] students…focused on getting a percentage mark…that percentage mark…is utterly irrelevant when it comes to actually filming something as a job.” (CS4)

Formal courses may also have financial implications for those working in a freelance type of contract. These costs may need to be balanced against the benefits the course may bring, as this practitioner makes the point: “The ones I’ve done… are brilliant. Do they cost money? Yeah, they cost me two-hundred-and-fifty dollars I think, [You might say:] ‘I can’t afford to do that’; [I say:] ‘You can’t afford not to’.” (CS2)

5.4.5 Organizational socialization and small-scale production and unpaid work.

In smaller scale productions there are often opportunities to operate at a higher rank or have more responsibility learning new skills, where ‘setiquette’ may not be so stringent. Unpaid work can also have its rewards: “it is kind of important to take what you can from voluntary projects that you work on, because you never know how they are going to be beneficial towards the future.” (CS5). Recognising the value of unpaid work is important for emerging practitioners as some early career professionals reported that they were paid *after* participating in unpaid work where they “asked me ‘Do you want to come on a shoot for a music video for free?’ and I was like ‘yeah sure’…after that I worked in a couple of music videos with him, paid jobs.” (CS6). As an early career practitioner, there is the possible risk of exploitation and so learning to

be selective is an important trait of working without payment: “it is very rare now that I do anything where a) it is unpaid and b), at that level.” (CS1). Often, as practitioners get more experience, they are “only looking for jobs that creatively fulfil…if I have to do extra work, I only want to do stuff that I really like.” (CS6)

5.4.6 Social perspective and small-scale production

The requirements of the job might not just be operational, but small scale productions may also include a performance element, for example “learning to edit quickly.” (CS5) would be important. As a new entrant, being expected to perform at a specific level with “five, thirty-minute shows in five hours from concept to finish and delivery.” (CS5) can be demanding, yet rewarding, as this respondent states: “for me it was a great experience, because you learn how to edit…you have five minutes to finish an edit.” (CS5).

5.4.7 Social perspective and large-scale production

However, there are times when learner-practitioners can get ignored if productions are large or if the individual positions are not well defined. This can forestall access into the community and lead to a feeling of being ostracised. CS1 reports on their experience as a student runner on a large production, where they were “put in the camera department – so I should have been seen as a Camera Trainee. So, realistically, they should have took me under their wing – but they didn’t. They wasn’t interested in the slightest.” (CS1). This rejection of CS1 from an established team through not being recognised as a member of the peer group, highlights some of the

challenges early career learner-practitioners encounter when starting out and working on large-scale productions.

5.4.8 Social perspective and informal learning at the workplace

If one is formally studying the subject and has a passion for the topic, opportunities for borrowing cameras may emerge. CS6 relates their experience when "the guy that has got the studios and all the kit, he told me a lot of the times if I want to borrow…his cameras, I can because he knows that I know stuff – because at the time I was doing my dissertation so I told him a lot of it." (CS6). Other related work can lead to opportunities to work in the area of intended ambition. CS3 comments: "While I was doing my theatre stuff I started working for a lighting hire company during the day and they were making pop promos…you used to be able to pick up the phone…"Have you got anything for tomorrow?"…"Yeah, come on down", and you'd be sent out on a, a shoot." (CS3)

Respondents also reported that being able to demonstrate competence in using equipment – especially highly specified equipment – opened opportunities for work and extended their operational skills with unfamiliar equipment. Respondents reported, then, that being passionate about their subject and being competent operators, would let others see that they were serious about being in the industry, where "then they would see 'Oh she knows about cameras, maybe she can come next time as Assistant Camera.'" (CS6)

5.4.9 Social learning and small-scale and paid production

In the workplace, freelancers may be able to take advantage of opportunities to learn from those who are more experienced. This early career practitioner reports on a type of instructor-led training: “I did have some sort of training with one of the guys ‘cos he was a [Camera Manufacturer]…Technician…He was like ‘oh let’s take like three hours to go through’ and he would explain to me sort of the same things that they teach at the course…So, he taught me…everything at the time about the cameras and…[we] would do a few hours every day. [*Interviewer: So that was like doing the course but not actually signing on to it?*] … Yeah, yeah exactly.” (CS6)

Taking advantage of a context and identifying opportunities for work is an important networking skill. CS2, an experienced practitioner, reported on early career opportunities garnered through casually visiting TV studios: “if I went anywhere where there was a TV studio, I’d go and visit them [umm] and I’d say ‘Hello. …just want to look round, see how you worked, see what kit you’ve got, see what you’re’…and one of them gave me a day’s work…And that grew…Because I got on with people, they would pass me on to ‘So and so’ needs someone for a day can you do that?” (CS2)

5.4.10 Situated cognition and formal learning away from the workplace.

In mainstream higher education, the ‘classroom’ can be seen as a pedagogic learning environment – where a pedagogic (teacher-led) approach to learning predominates. Although this pedagogic approach to learning is often viewed as the least significant experience for the learner (Knowles et al., 2011), it can be that, with discernment, this can still provide significant experiences for learners to identify and develop their

operational skills. As such, these more traditional routes were reported by some respondents as having a key benefit, where “those practical elements of working on a [university] film set: how to use the equipment that’s, you know, valuable. It is so important, can’t stress that enough.” (CS5).

Some interviewees suggested that a formal, physically located, teacher-led learning environment is in decline, as this experienced practitioner indicates, where “They used to run courses that… went into the, the theory, the technology, the practice… the whole process, the entire process [umm] in fine detail…there were a few courses around like that, they don’t seem to exist anymore.” (CS2). They also reported that – with the expansion of internet access – some of these formal courses have migrated to online platforms, where practitioners can elect to go on specific courses, where “I go on his colour sciences courses but they’re web based courses…they’re two hours a week, as a webinar for eight weeks…you schedule it and you know, you all attend a class.” (CS2)

5.5 How respondents learn

5.5.1 Organizational socialization and large-scale production

Cooper-Thomas & Anderson, (2006) suggest observation is a common method to seek information. Respondents also reported opportunities to look over the shoulder of a practitioner, where they were able to learn to differentiate distinctive production qualities. CS1 recalls their time on a Hollywood stereoscopic film set, where they “got to sit with them for the duration of the whole shoot. I got to learn how 3D works…I was

more interested in the lighting and composition, more than the 3D and all the technical side." (CS1)

It is not only new entrants that benefit from watching others work. More experienced practitioners may need to investigate technical operational issues on unfamiliar equipment. Then they may get invitations to larger productions to observe highly respected practitioners in their workplace, where a "[famous Hollywood director (X)] and [famous Hollywood cinematographer (Z)] sitting there, no-one else is remotely close to them, [Z] arranges for a third chair to be brought in. 'I'm sitting with them as they do it [pause] and so I could see any issues there were with the camera, I learned there before I went and shot. I looked at what they were doing with it…brilliant…and then went and shot." (CS2)

CS4 reported that in the screen industries there exist strong hierarchies, especially with larger productions, where (say) "you have…the *First AD* [Assistant Director]…the *Second AD*…then got *Third AD*s…then got a *Base Third*…Then you have got…*Key Second*…Then you have got your *Crowd Third*…" (CS4). Learning about these hierarchies is also an important aspect of the early career stage development. This might be somewhat problematic for early-career stage learner-practitioners, as "what you figure out very quickly is, it is very cliquey" (CS4).

5.5.2 Organizational socialization and small-scale production.

This observation often provides ways of seeing how your peer group works. Some "found it was best to learn from the other editors [being] able to just shadow them or, you know, just watch from afar…learn from them" (CS5).

5.5.3 Organizational socialization and informal learning at the workplace

Observation is also relevant in smaller scale situation. Practitioners reported how adopting heutagogic learning approaches changed their perspective on the experience, where "I have been with the Chief Engineer … has come over here a few times for it. Five days at a time and I have just sat with him. We have just geeked it out basically…That's a completely different way of learning" (CS1).

5.5.4 Social perspective and small-scale production

Respondents indicated that one way they learn is through communicating to others, or demonstrating to colleagues, complex ideas as this practitioner reports: "often…you will be asked to explain technically how something works […] what are the issues that can arise when you are using that technology?" (CS5). Depending on the context, this may also be part of one's everyday activities, especially if responsibilities require leading a workshop, where "once I have done the workshop on it – I know it inside out. It is new knowledge for the students, new knowledge for myself." (CS1).

5.5.5 Social perspective and large-scale production

Participants reported how, at times, their monetary value in the marketplace may need to be negotiated, in order to avoid exploitation. This practitioner was dissatisfied with the way workplace conditions had changed and comments: "I got a phone call [from

another company (Y)]…he said “I'm doing a quiz show with [famous celebrity] …do you fancy coming up there and doing my moving lights” and I said “Do you know what? I will"…when I broke that news to [the original company (X)] I think they were very upset about it…[X] ended up paying more money.” (CS3)

Mostly, there is an expectation that workplace participation rewards remuneration. Nevertheless, there are times when the experience itself is viewed as sufficient reward. This practitioner recalls an early experience on a large budget production where they had the opportunity to be placed with the head of the camera department “I was told afterwards I should have been paid but I didn't care, I wanted the experience, it was far more valuable to me than any payment.” (CS1)

Even an episode, considered negative, can have benefits: “I always learn; learn something even if it is like a bad experience. Even that job that I didn’t like…I learned a lot.” (CS6)

5.5.6 Social learning and large-scale production

The nature of the strong lines of delineation and its potentially inherent inaccessibility, may mean that opportunities to access more experienced practitioners for information, need to be strategically thought out in the early career stages of learner-practitioners. Through experience on set, one can start to develop a strategy as CS4 reports, where they “have never asked a First AD [Assistant Director] …generally speaking it will be a Third or you know another PA…you can ask The Second AD a question here or

there…this is the other thing–- not directly asking questions to get answers, but just talking to people in general." (CS4)

5.5.7 Andragogic/heutagogic learning and small-scale production

Despite the strong hierarchies and the demarcated lines of responsibility/communication, some experienced participants reported how – when reflecting on their own practice – new technologies were impacting on this structural caste system: "Because of the changes in technology [the traditional structures] are distorting…because my focus puller operates and…I want crew to do each other's jobs, because…someone might run over [A], and [B] might have to do it – so [B] needs to know – on the spot – how to do it." (CS2) This approach means that an early career practitioner may benefit when the experienced practitioner is willing to "share information, you share the whole experience." (CS2)

5.5.8 Andragogic/heutagogic and formal learning away from the workplace

Participants reported that opting for physically located formal courses can prove beneficial. For instance, this interviewee commented that they: "went on [post-production colour grading software] training for five days…to learn [the software] as a post-production tool…[which was] a massive learning curve. Absolutely massive." (CS1)

However, through reflection, practitioners may develop discernment as to the appropriateness of a formal course. This respondent reported the study topic was simply seen as irrelevant, where they "went to college…thinking 'Well, we're on a

proper course here, why are we learning…something so basic as how to wire a plug?'" (CS3).

Online access has also developed a more informal independent way of learning – by neither being on set nor on a formal course. *YouTube* and other online resources are reported by interviewees as beneficial to practitioners where "there are some wonderful things online now, I mean some absolutely incredible things." (CS2). These online tutorials "…are a great starting point obviously…even if you have forty years' experience, it doesn't matter." (CS5)

Highlighting this, one respondent states: "Google *is* my mentor, actually." (CS6)

5.5.9 Andragogic/heutagogic and informal learning away from the workplace

Learning how to find specific information is another skill that also needs to be developed (so that a freelancer can keep abreast of the rapidly changing technology). Discrete online forums, are a way in which this can be achieved as these can prove to be a useful source of information, where "you can learn a lot from that as well because someone will respond with a question and…then you start your own research process…things move so quickly… a lot of resources like books, kind of become very dated very quickly…you know learning from a book…isn't relevant now." (CS5).

Practitioners reported adopting a heutagogic (self-determined) approach to operational practices, where they were determined to learn as they "used to devour textbooks about photography and I had my own dark room when I was younger […]

So, I knew about photography and F-stops and the balance of shutter/aperture and […] you self-taught." (CS3)

5.5.10 Andragogic/heutagogic and informal learning at the workplace

Respondents reported this heutagogic approach to learning carries over to acquiring operational skills whilst in the field, where, "with the help of making sure the [studio] engineers kept the cameras turned on, [umm] just drive myself crazy and learn, and learn, and learn." (CS2). CS6 relates their learning experiences of working for a large brand camera manufacturer, when they were able to develop their technical understanding as "they also gave me a lot of freedom to play with the cameras so they let me like take apart a camera and bits of the camera …" (CS6).

5.5.11 Social cognition and formal learning away from the workplace

When the work starts to increase, early career practitioners need to learn to manage their commitments, as this may be a barrier to learning. This early career practitioner recounts a time when they were studying for their degree: "We got to the thick of our academic sort of hand-ins, that was when I was asked to start come and get the work. So, there was a conflict there. But obviously one I had considered beforehand and made the time for." (CS4).

5.6 Conclusions

5.6.1 The site of learning

Respondents reported that the site of learning took both physical and virtual forms, and that it happened whilst 'on-the-job' and 'off-the-job'. The majority of the learning

was through practice and was informal (i.e. not necessarily structured, as in a formal course).

5.6.2 How respondents learned

Participants also reported learning from peers and from other members of the community within the hierarchy. This was not just learning operational competence, but also behaviours and attitudes – “Setiquette”. Respondents reported how their learning took a heutagogic (self-determined) approach and, when learning independently, they talked about experimentation with resources or what some termed ‘play’. They also reported on learning through observation and through reflection.

5.6.3 Barriers to learning identified in the data

Barriers to learning activities (such as the job being demanding, managing commitments and financial considerations) were also identified in the data and respondents reported learning from these.

5.6.4 Other trends in the data – music video production

Finally, interviewees reported on an overall trend during the earlier stages of their career, whereby they would gain experience in a related field allowing them to develop their skills. This was mostly identified as music video production, but other related fields (such as theatre lighting) were presented.

5.6.5 Chapter summary

The purpose of this chapter was to present the data from the semi-structured interviews in order to explore further experiential learning within the community of freelance learner-practitioner working in the film and HETV industries. The responses highlighted above have contributed to objective 4 by identifying barriers and drivers facilitating engagement with experiential learning. A contribution to objective 2 has been achieved by way of revealing the lived experiences of members of the community in focus. The responses highlighted above have also contributed to objective 3, where in the next chapter these will be applied to an initial workplace experiential learning model.

6 Analysis of proposed model for experiential learning in a freelance context

This chapter introduces the first stages of analysis the experiential learning model presented in section 4.7. It contributes to research objective 2 where an evaluation of practices are discussed in the creation of this model. It also contributes to objective 2 through the initial development of an experiential learning model. The chapter first explores key elements from the experiential learning model devised from literature, Russ-Eft's (2011) work and the environmental scan. It then interrogates these with regard to a holistic model, introducing other factors that potentially explains further the experiences of the freelance learner-practitioner. The chapter concludes by proposing an alternative structure to the model, indicating this needs further analysis (leading to chapters 7 and 8).

6.1 Initial application of findings to the workplace meta-model

The findings from chapter 5, will now be applied to the initial experiential learning model. It will be recalled that in section 5.3 eight contexts were identified within the learning experience of early career practitioners – small-scale production; large-scale production; paid employment; unpaid employment; experimentation at the workplace; experimentation away from the workplace; formal learning away from the workplace; informal learning away from the workplace. (It is important to note that, in terms of these contexts, there is some fluidity. None of the contexts are independent or are not mutually exclusive, 'stand-alone' contexts, but are a representation of the more dominant profile of the context – this being established by way of the presentation of findings, where the categories emerged from that chapter, in this sense there may be

an element of each context, in each of the other contexts). Using these contexts to organise extracts from the interview data, extracts were then applied to the model above, and the ensuing results are presented below.

6.2 Steps of application

By applying the practitioners' responses that relate to the individual contexts the following steps were used to determine differences in each of the learner experience models being expressed by way of the different contexts.

1. Responses relating to the different contexts were collated and categorised into each of the eight contexts. These were then tabularised and scored. '1' was given for a 'positive' extract and '-1' was given for a negative response to the context. For an example see Figure 6. 1 below. CS1 comments that they were "put in the camera department – so I should have been seen as a Camera Trainee. So, realistically, they should have took me under their wing – but they didn't. They wasn't interested in the slightest.". This was seen to be a negative response that was relevant to an environment-centred learning experience – the 'social perspective (SP)' category.

Respondent	Quote	AE	SC	OS	SL	SP
CS1	*"put in the camera department – so I should have been seen as a Camera Trainee. So, realistically, they should have took me under their wing – but they didn't. They wasn't interested in the slightest." (CS1)*					-1

Figure 6. 1: Example of the categorisation of the interview data – Large-scale production.

2. This continued until all of the extracts had been allocated into a context category, a component location and a positive/negative score.
3. The scores in each category were then tallied and a proportional difference between the components was calculated* (see table 6.1) – where there were no responses for any of the categories, a total score of zero ('0') was used and the component size remained static.

Table 6. 1: Proportional differences between components and workplace contexts

	CONTEXT	AE	SC	OS	SL	SP
Proportional difference	Small -scale Production (SSP)	33%	0%	0%	0%	67%
Proportional difference	Large-scale production (LSP)	0%	0%	29%	29%	-43%
Proportional difference	Paid Employment (PE)	14%	0%	41%	23%	14%
Proportional difference	Unpaid Employment (UE)	40%	0%	0%	0%	60%
Proportional difference	Experimentation at the workplace (ExWP)	60%	0%	0%	30%	10%
Proportional difference	Experimentation away from the workplace (Ex-WP)	60%	0%	0%	40%	0%
Proportional difference	Formal learning away from the workplace (FL-WP)	0%	13%	0%	13%	0%
Proportional difference	Informal learning away from the workplace (iFL-WP)	33%	0%	0%	0%	0%

4. These proportional differences were then used on the components for each of the context to determine visual differences between learning contexts (see section 6.2.1). For convenience, the organizational socialization (OS) component was coded blue, the social learning (SL) component was coded green and the social perspective (SP) component was coded red. For example, in table 6.1 under the small-scale production category, it can be seen that the social perspective (SP) component is 67% larger than the organizational

socialization (OS) component and the social learning (SL) component. In figure 6.2 this can be seen as an extended [red] component.

*NOTE: After allocation of the extracts, there were an unequal number of responses for each individual context, ranging from 3 responses for the 'small-scale production context, to 22 responses for the 'paid employment' context. Proportional differences were calculated using a mean value for each of the context settings.

6.2.1 Introduction of a radar chart to the data

An additional step was attempted in order to determine equal expression between the components, where a radar chart was utilised to experiment using the same proportional data. A radar chart was generated using the results from table 6.1 where each component was placed on an axis. This served to illustrate potential bias within the initial model from section 4.7. It can be seen from the radar chart in figure 6.3 'paid employment', there is a greater emphasis on the organizational socialization (OS) component more so than the andragogic/heutagogic (AH) component, which is obscured in the initial model design.

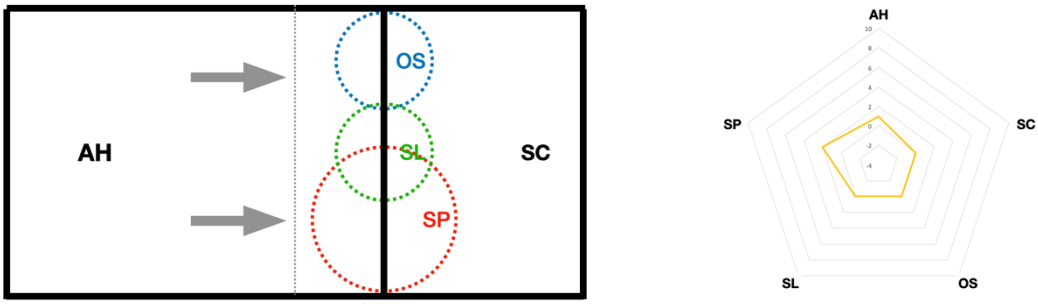


Figure 6. 2: Learning experience model and radar chart for 'small-scale production'

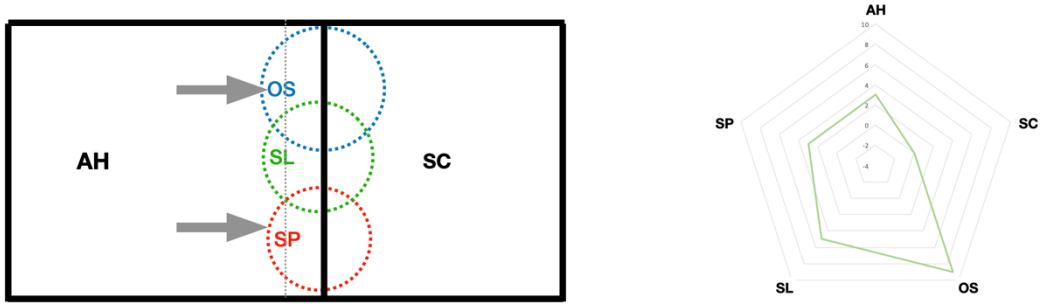


Figure 6. 3: Learning experience model and radar chart for 'paid employment'

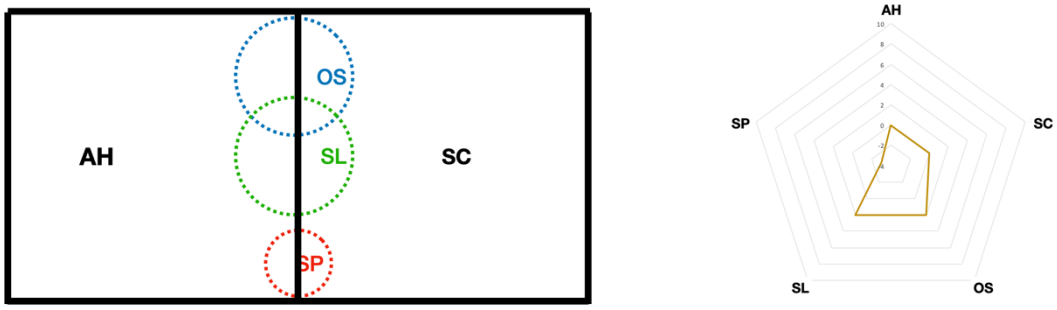


Figure 6. 4: Learning experience model and radar chart for 'large-scale production'

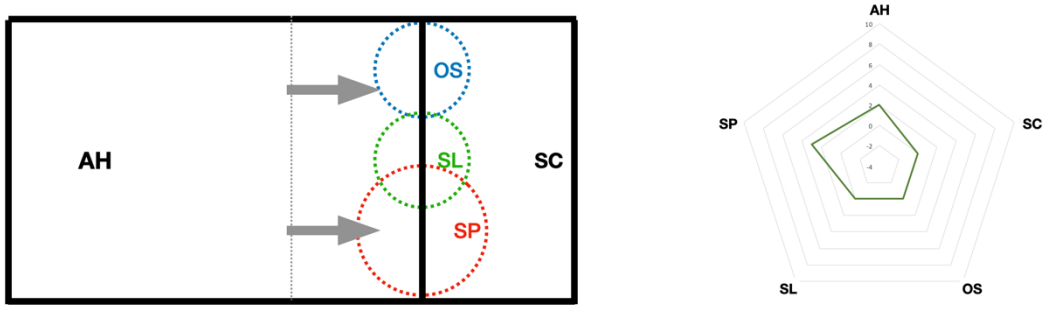


Figure 6. 5: Learning experience model and radar chart for 'unpaid employment'

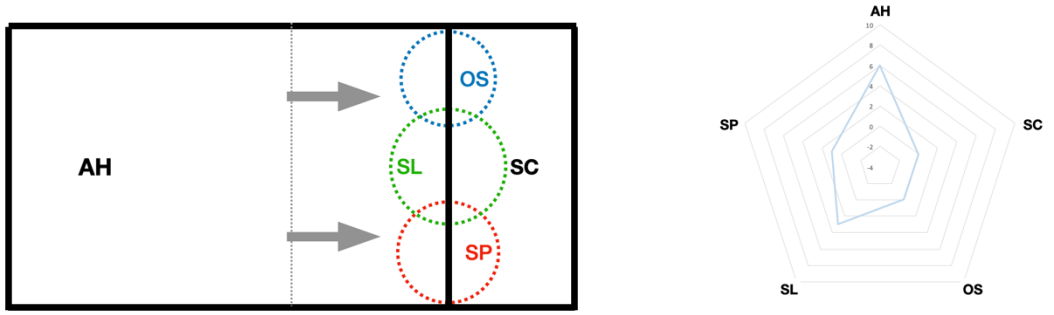


Figure 6. 6: Learning experience model and radar chart for 'experimentation at the workplace'

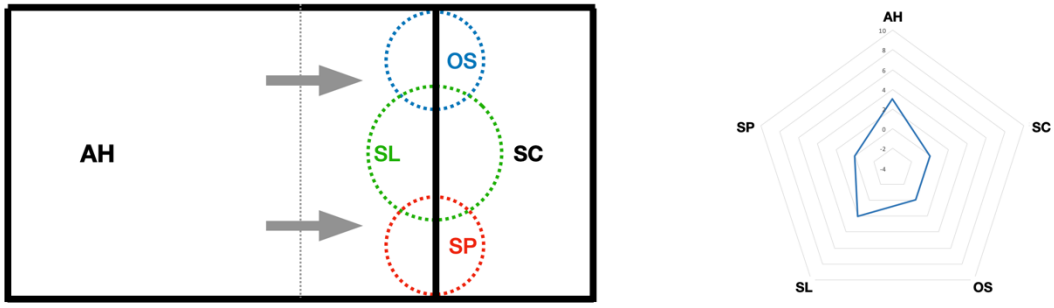


Figure 6. 7: Learning experience model and radar chart for 'experimentation away from the workplace'

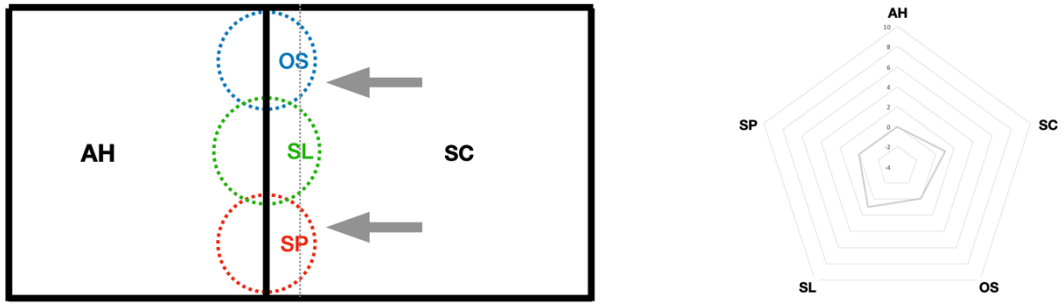


Figure 6. 8: Learning experience model and radar chart for 'formal learning away from the workplace'

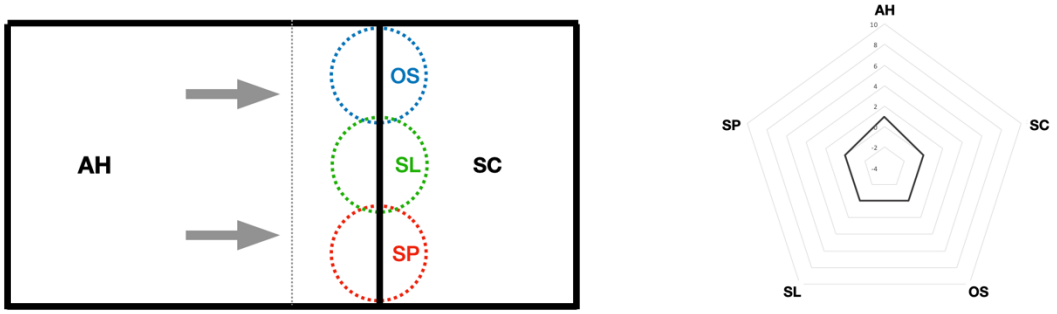


Figure 6. 9: Learning experience model and radar chart for 'informal learning away from the workplace'

It can be seen from the diagrammatical representations of the different contexts above, there are variances in the individual components of the learner experience for each of the different context profiles. For instance, the [red] social perspective (SP) component in the large-scale production context (figure 6.4) is much smaller than the [red] social perspective (SP) component of the unpaid employment context (figure 6.5)

6.2.2 Revision of the workplace meta-model using Venn zones

Although the diagrammatical representations above indicate distinctions between the different workplace contexts, the radar charts have highlighted that an emphasis of the Andragogic/Heutagogic (AH) and Situated Cognition (SC) components from the initial model design in section 4.7 are distorting the diagrams and are creating a bias. As such the current design is unsuitable. It will be observed that:

1. The model does not assume equal proportions between the five components (AH, SC, SL, OS & SP). The andragogic element and the situated cognitive element have dominance over the organizational socialization, social learning and social perspective elements.
2. The radar charts to the right of the diagrams are more balanced indicating proportions between components in the diagrams are compromised and are potentially biased by expressing the andragogic and situated cognition components as rectangles.

With this in mind a new model is expressed below which removes this emphasis, providing an even proportional starting point for each of the five learning context components.

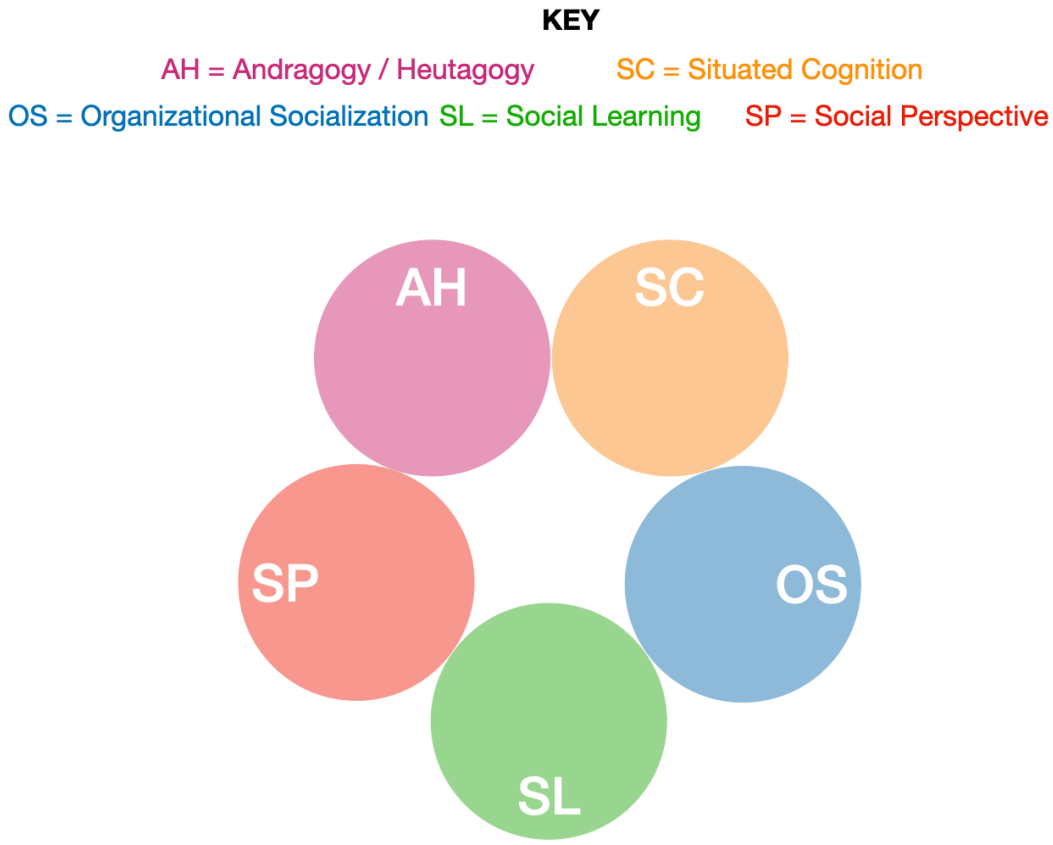
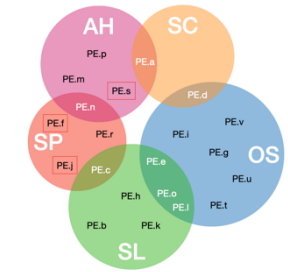


Figure 6. 10: Final Venn diagram version of initial learning experience model with baseline proportions

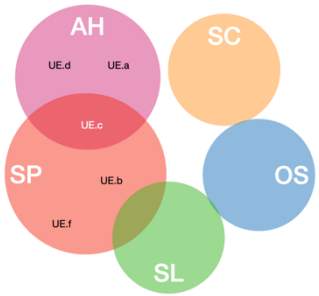
This new model considers all components of the learning experience to be equally proportioned (and equally important) at a baseline. The differences between context can be clearly differentiated and are illustrated in Figure 6. 11 below.

The proportionality of the five components now provides an indication of the type of dominant learning environment that each of the contexts promote. For instance, paid employment and large-scale production contexts have exaggerated organizational socialization and social learning components. This indicates that these learning contexts have dominant features that can be identified from environment-centred learning theories (Russ-Eft, 2011). This would not be unusual because the nature of

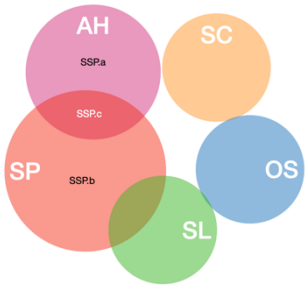
the contexts is to ‘get the work done’, emphasising the environment-centred features such as passive learning observation, and peer interaction. The two ‘experimentation’ contexts, on the other hand, have dominant features that can be identified in the mind-centred literature (Russ-Eft, 2011), such as individualised learning and critical reflection.



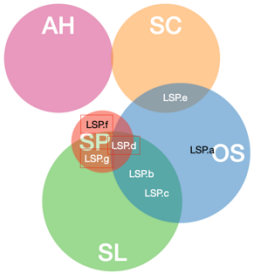
6a. Paid Employment (PE)



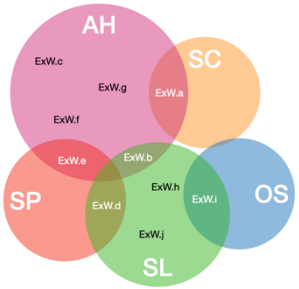
6b. Unpaid Employment (UE)



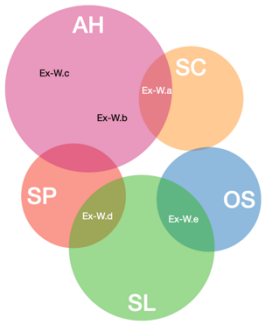
6c. Small-scale Production (SSP)



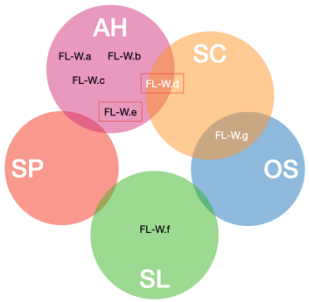
6d. Large-Scale Production (LSP)



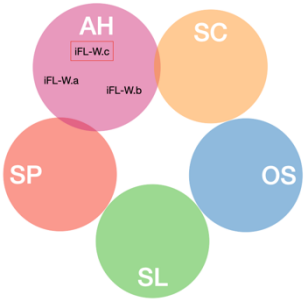
6e. Experimentation at the Workplace (ExWP)



6f. Experimentation away from the Workplace (Ex-WP)



6g. Formal Learning away from the Workplace (FL-WP)



6h. Informal learning away from the Workplace (iFL-WP)

Figure 6. 11: Eight different production contexts emerging from the data

The unpaid contexts and the small-scale production contexts have a balance between environment-centred and mind-centred learning. This can be seen because of the similarly proportioned social perspective (environment-centred) and andragogic/heutagogic (mind-centred) components in each of these contexts. In a similar way, formal learning and informal learning away from the workplace contexts have a balance between these components, also indicating a mixture of environment-centred learning and mind-centred learning. Although there may be an emphasis to complete production – or courses of study – this suggests that there may also be more opportunities for learner-practitioners to have mind-centred individualised learning experiences alongside the environment-centred passive learning experiences.

Whilst the proportionality of the five components can illustrate different learning experiences between the workplace contexts, they are not able to provide details of the holistic view of the learner experience. Jarvis (1987) has discussed the various learning pathways that a learner-practitioner can take, categorising them into non-learning, non-reflective learning and reflective learning. The model illustrated in Figure 6. 10 above, does not express this element of the learner experience. Furthermore, it neither considers the impact of dyadic relationships (Fiske, 1992) on the learning experience. Finally, there is no clear distinction between leader-led (pedagogic), learner-led (heutagogic) or leader/learner led (andragogic) learning experiences as presented by Garnett & O'Beirne (2013) and Hase & Kenyon (2013). Because of this, further analysis to determine a more holistic experience of the learner-practitioner is required. Chapter 7 attempts to do this.

6.3 Chapter summary

This chapter primarily contributes to objective 3 – 'develop a heuristic model of experiential learning the reflects these practices' is achieved using excerpted data from the semi-structured interviews and applying these to the initial experiential model from section 4.7. Proportional calculations provided opportunity to visually determine differences between components in each of the eight workplace contexts. From the diagrammatical representations of these workplace contexts it was determined that a bias had been introduced to the model because of the emphasis placed on the Andragogic/heutagogic (AH) and Situated Cognition (SC) components. From this finding, proportional results were reapplied to each of the five components from a similar starting point. This removed the initial bias, but still provided visual differences between the eight workplace contexts.

In order to determine a more holistic view of the learning experience for the learner-practitioner in the camera production unit, the next chapter discusses this further by applying the findings from the semi-structured interviews to other theoretical frameworks. These are: *learning approach* (Blaschke, 2019; Garnett & O'Beirne, 2013; Hase & Kenyon, 2013), *learning pathways* (Jarvis, 2004) and *dyadic relationships* (Fiske, 1992) discussed in chapter 3. These are also categorised by way of the eight production contexts highlighted above.

7 Discussion

The purpose of this chapter is to highlight the interrelationships between four principal theoretical frameworks in order to discuss further the multi-dimensional learning situations of freelance learner-practitioners through the lens of the interviewees by mapping their experiences to these frameworks. The frameworks draw on 1) Knowles et al. (2020), Blaschke (2012), Garnett & O'Beirne (2013) and Hase & Kenyon (2013) to explore the learning approach, such as tutor-led (pedagogic), learner-led (heutagogic learning) and tutor/learner-led (andragogic); 2) Jarvis (2004) and Le Cornu (2005) to consider different learning pathways, such as non-learning, non-reflective learning and reflective learning; 3) a revisit of Russ-Eft's (2011) meta theory to reflect on environment-centred, mind-centred or integrated orientations informing the learning contexts; and 4) Fiske (1992) to give thought to dyadic relationships encountered in the experiential learning within these production contexts. Similarities and differences emerging from the discussion are summarised at the end of this chapter.

It is intended to show that the orientation of the learning context, the dyadic relationships within these contexts, the learning pathways encountered along the learning journey and the approaches learner-practitioners demonstrate as they do this operate in concert, providing a multi-faceted learning experience for practitioners working in a freelance technical craft area of screen production. It is also intended to act as a catalyst for a redesign of the initial freelance experiential learning model, presented in chapter 4.

7.1 Learning approaches within different production contexts

(Le Cornu, 2005) argues that whatever situation the practitioner finds themselves in, learning will likely take place. This approach also sits with Hase & Kenyon's (2013) concept of heutagogic, or self-determined learning, where the learner-practitioner is exposed to development in the situations they encounter. It is also a feature in Garnett & O'Beirne's (2013) discussion of learning through information technology.

Although not the sole preserve of paid and large-scale productions, there is a priority to 'get the job done'. In the early stages of a career, when a learner-practitioner is trying to grapple with the intricacies of large-scale production, a heutagogic approach through reading and studying about on-set hierarchy in books may be of benefit. CS4 emphasises the point, nonetheless, that it is through experience that early-stage practitioners learn to work through the on-set clique. At an initial stage, say, a learner-practitioner may watch how their colleagues and peers carry out their duties. CS4 reported that as they reflected and built on their lived on-set experience, this promoted an understanding of the job. Through the use of 'scaffolding' (Vygotsky, 1978) and peer to peer learning to enquire of and embrace the appropriate behaviour, CS4 was able to better understand the goings on of on-set practice. This social interaction is important for an emerging learner-practitioner working in a precarious, freelance work environment, and learning to recognise social interaction opportunities is a useful way for new entrants to network and make use of social learning from peers and co-workers (Guile, 2010). From observing the environment, CS4 was able to take action in a way that supported colleagues practically by adopting a 'usefulness' to fellow workers – by having a supply of standard consumable items, that were readily

distributed to those who needed them. The intrinsic rewards and feelings that build competence and confidence are promoted through the helping of others. This effort may lead more senior personnel to trust the emerging practitioner. Bartol & Srivastava (2002) have suggested that trust is a major facilitator of socialization and as emerging practitioners develop their skills, and demonstrate operational competency, senior practitioners will entrust them with more responsibility and will have more confidence in the worker (Blaschke & Hase, 2015). In providing supplies, CS4 encouraged peers to accept him into the community, whilst at the same time these practical actions also developed relationships that led to organizational socialization (OS), where they were able to further glean information from their co-workers. Moreover, asking questions to a senior, more experienced practitioner not only helps to develop the knowledge base of the emerging practitioner, but can also help to confirm the learner-practitioner's understanding of a procedure or process (Amin & Roberts, 2008).

It is not only emerging practitioners that learn from peers and co-workers. Experienced practitioners, such as CS2, commented that they also needed to be able to access practitioners with more experience to enquire of process or equipment operations, where they were invited to attend a Hollywood film set in order to do this. As such, not only is there a hierarchy in the positions of the collectivity of practice, but there is also a *hierarchy of experience* within the wider community, where *knowledge sharing takes place between similar ranking professionals*. Understanding how to access these more experienced practitioners is one of the skills an emerging learner-practitioner develops through heutagogic approaches to learning and through on-set activity and networking.

At the same time the learner-practitioner is adopting a heutagogic approach to developing their skillset *and also* developing organizational socialization with a sense of 'fitting in'; a sense of 'becoming' (Bound et al., 2019). When the process of 'becoming' is denied to the emerging learner-practitioner or is fractured – as was the case of CS1, where they were rejected by their peer group – the organizational socialization may be disrupted, leading to a deficiency of social capital. This barrier to acceptance may result in the learner-practitioner becoming disillusioned with early career opportunities and leaving the industry *because* of the deeply hierarchical nature of large-scale production, where seniority of rank is predominant and one may expect learners to have little control over their learning environment.

In contrast to paid employment, unpaid and voluntary employment explores other forms of skills development, through experiential learning in contexts where the remuneration is not necessarily financial. Examples are passion projects, unpaid work experience, student projects. In these contexts, there is still the emphasis to complete the job, but on smaller unpaid productions the reputation of the crew to bring the work in on time and *within budget* may not be so strong, and learner-practitioners have more opportunity to explore skills development. When volunteering on productions, the learning approach may be different to expectations. An example of this is CS1's work experience of being on set of a large production, where they were able to observe production practices, and asserted that the learning experience was more valuable to them, than getting paid. This experience may be gesturing towards a dominant learning approach in large-scale production and the value of voluntary work, mirroring

CS5's experience of voluntary work. This assertion resonates with Le Cornu's, (2005) contention that 'learning of some form occurs' whatever the outcome, suggesting an understanding from the learner-practitioner that *all* learning experiences may yield some form of usefulness. This may be problematic when volunteering for projects that have dissonance with the learner-practitioner's expectations, and a selection process might arise from this dichotomy. For instance, CS6 testifies "if I have to do extra work, I only want to do stuff that I really like." (CS6). Moreover, when CS6 reflects on their experiences of voluntary projects, they may not only be assessing the challenge of problem-based learning (Boud and Feletti, 1997), but might be indicating how this is key to a successful learning environment as they evaluate and select situations that help them to be self-determined learners.

As with unpaid production scenarios, small-scale production settings indicate a stronger andragogic / heutagogic experience is occurring. Whilst this may be the case, similar pressures may emerge that learner-practitioners may face. There is still the impetus to get the work done, but they might also have a smaller crew; they might have a shorter timeframe in which to complete the production, than with larger scale productions. The smaller crew sizes may yield some benefits, however, such as cooperative learning (Russ-Eft, 2011) where the organizational context has shaped the individual experience. The condensed crew size such as in music videos, may also provide flexibility in achieving the final result, where there may be more willingness from those involved to consider unconventional or alternative outcomes. This was the experience of CS1, where through the interaction with other crew members, CS1 was able to promote their 'discovery' by having the opportunity to 'play' with lights. This

self-determined experimental approach is one where the practitioner can match the needs of their learning with that of the production. In early career learning situations, the learner-practitioner may have opportunities to experiment, to 'play' with equipment and foster discovery of alternative ways to apply technologies and determine the limitations of their practice. This self-determined learning can be enhanced through the characteristics of small-scale production. Moreover, learner-practitioners working independently in small-scale productions have opportunities to challenge social norms and traditions (Tennant, 2018). This holds true for CS2 when they were 'instantly a cameraman'.

At the workplace, conducting this type of trialling, may also promote the extension of workplace relationships. This is evidenced with experiences from respondents, where in the relatively 'safe' environment of the studio, CS2 was able to take advantage of both the studio engineers' expertise and the opportunity to 'seriously play' (Bolton & Delderfield, 2018) with the television studio cameras. Bonk & Kim, (1998) associate 'guided play' with peers, proposing it helps to formulate a type of 'cognitive apprenticeship', and so 'play' can be seen a useful way to develop technical understanding of equipment. Through 'practice experimentation' (Jarvis, 2011), interaction with colleagues and peers can make these experiences more fruitful. The process of reflection is also a useful learning tool. As Brown (2005) suggests, it is not enough to operate equipment with 'blind practice', but if one is to be effective in one's practice, there is a requirement for active analysis *and* reflection, drawing on previous skills and ideas from long-term memory. In this way the 're-tuned' schemata of practice can assist an operative working in the film industry in their selection of equipment. This

type of enquiry develops with experience and, as CS3 conveyed, can present opportunities for the practitioner to experiment (either with new technology, or with previously deployed apparatus). The application of knowledge and technique to new situations is an important step to becoming an experienced practitioner.

For the emerging practitioner, having access to online resources may also develop the learner's own Personal Learning Environment (Blaschke & Hase, 2015), and as CS5 observes, online resources are potentially 'making books redundant'. In the workplace, the recent proliferation of digital resources that can be readily accessed means that increased learning affordances are fostered, this resonates with Blaschke's (2012) observations where online resources, support self-determined (heutagogic) approaches to learning. As CS6 succinctly puts it "*Google* is my mentor" (CS6). Nevertheless, Garnett and O'Beirne (2013) caution that andragogy and heutagogy is not fully realised with online resource-shared learning because it focusses more on the individual. Dynamic online forums such as Cinematography Mailing List (CML) indicate, though, that the community of professionals contributing to the forum fosters a resource promoting heutagogic learning through the open sharing of knowledge. CML contributors are echoing Blaschke's (2012) suggestion that collaborative learning is a key component of the heutagogic learning environment, allowing learners to create shared meaning.

Because the job can be so demanding, practitioners need to have times when they are at rest, or 'downtime', where time is required to reflect on the elements of personal development that will bring the learner into contact with learning environments

(Hargreaves & Gijbels, 2011). CS2's experience is one where the downtime provides openings for development in higher-end work. For working freelancers, downtime may provide opportunities to adopt some of these heutagogic learning approaches and try out new equipment or to work with other creatives. CS2 reported their ambition to do a passion project with another practitioner, after reflecting on the practitioner's proficiency in filmmaking. Competence, then should be seen as a continuous process, not just of personal development, but also of becoming, and of understanding the day-to-day activities both in an individual way, and as a collective activity (Bound and Lin, 2013).

Some respondents had had experience of more formal learning by way of university education. Reporting that activities located in a studio or film set would also be a large part of the syllabus and that they were 'valuable' (CS5). Not all respondents agreed with this. CS4 noted that "a lot of students…are focused on getting a percentage mark…that percentage mark…is utterly irrelevant when it comes to actually filming something as a job." (CS4) This attitude to academic achievement is what Knowles, (1973) identifies as 'dependency' learning – what they 'need to know' to pass a course, which may not necessarily apply to the day-to-day activities of on-set production. Tutor guidance, nevertheless, is still an integral part of the learners' experience in formal settings. For example: when an instructor introduces a learner to the operations of equipment where the student is unfamiliar – being shown 'how to use the equipment' (CS5), the instructor may choose a tutor-controlled (pedagogic) approach to instruction. This is likely because the student may be inexperienced in operations and for very good health and safety reasons, the tutor wishes the learner to be formally

instructed before they are released to using the equipment independently. This tutor-led learning approach is not exclusive to the classroom and can be found in workplace settings. CS6 reported having a workplace-mentor who was also a formal course tutor. In the example of CS6, even though the setting was a workplace 'non-formal' setting, the experience was similar to participating in a formal course, where the mentor guided the learning. It should not be overlooked, however, that there may also be elements of an andragogic approach to this experience, because in a non-formal setting, the learner might have more choice in what is covered in a 'learning session'.

Once learners have gained more experience, they may equip themselves with hardware and know-how, developing a self-directed learning approach (Garnett & O'Beirne, 2013). This self-directed approach may empower the learner and provide them with a sense of experiential maturity (Knowles et al., 2011) where they are less reliant on a tutor. Heutagogic approaches to learning and the development of skills can also be achieved at home, away from the workplace. CS5 reports that the fundamental principles of correct image control can be achieved with more basic equipment such as DSLRs or iPhones.

The contexts in which the learner-practitioner encounters novel learning experiences are many and varied. Moreover, contextual suppositions about the learning approach, whether that is pedagogic, andragogic or heutagogic, may be different to the lived reality of emerging and experienced practitioners. This chapter now turns its attention to the production contexts and discusses them with reference to Russ-Eft's (2011)

work on meta learning theories, exploring mind-centred, environment-centred and integrated (mind/environment centred) learning orientations.

7.2 Environment-centred, mind-centred and integrated contextual learning orientations

It will be observed that in each of the different production/learning contexts the proportions of the elements of the settings fluctuate depending on the focus of the situation. For instance, with paid employment and with large-scale production (Figure 6. 11.a. and Figure 6. 11.d.), the focus is 'to get the job done' and there is a greater emphasis on organizational socialization (OS) and social learning (SL) features of respondents' experiences. With unpaid employment and small-scale production (Figure 6. 11.b. and Figure 6. 11.c.) the focus may be different and the diagrams indicate that there may be a greater emphasis with social perspective (SP) and andragogic/heutagogic (AH) features of the respondents' experiences.

'Setiquette' is often a dominant hegemony that learner-practitioners need to engage with. As emerging practitioners gain experience in these production contexts, and as they observe the surrounding peers carrying out duties, their confidence levels may increase. This echoes Russ-Eft's (2011) presentation of mental models, which are involving both the group and individuals.

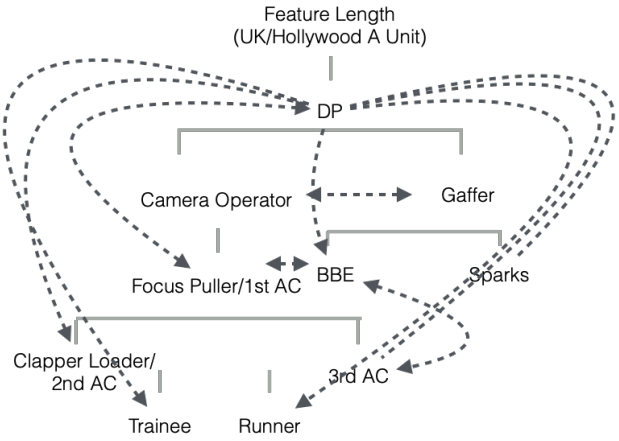
Whilst Russ-Eft (2011) highlights that rich learning contexts are important to a behavioural focussed context, there are times when this context is in contrast to the learner's personal beliefs. For instance, CS2 expresses their concerns of BBC staff

employees taking freelance jobs, having a specific mental model of appropriate behaviour. Moreover, the 'internal processes' are informing their reasoning. For CS2, working as a freelancer, 'setiquette' meant that there were particular 'boundaries' that should be adhered to: those who had salaried jobs, should not take freelance work as well. This not only affords CS2 with a specific perception of the salaried employee (mind-centred learning), but also a higher-order action of expected setiquette (environment-centred learning). In doing this, CS2 is able to express their opinions towards this scenario and confirm their own position concerning this workplace practice, where 'you don't take the bread out of the mouth of freelancers' (CS2). The mental model evident in this scenario could be seen as one of segregation, where salaried employees are separated from freelance employees. In this way the 'affordances' of access to work/learning has been disrupted by a contradiction to the learner's internal model of 'setiquette'.

With large scale productions, then, 'fitting in' to the community is often a challenge for new entrants. Often senior practitioners (such as DoPs) prefer to work with crew they have had previous experience with. For a team that has worked together on productions, there may be a 'familial' bond developed between them, and this could act as an unconscious 'barrier' to a new entrant. CS4 reports on the hierarchical structure of the department, starting with the senior roles, then moving to the junior roles. The dominance of the organizational socialization (OS) element in Figure 6. 11. 6d indicates that a passive learning response, such as observation, is more likely in a context with a strong, well-established hierarchy. This is supported when CS4 perceives "what you figure out very quickly is, it is very cliquey" (CS4). To some extent

large-scale productions support the idea where passive learners as emerging practitioners may benefit from their involvement with this type of production because there is more opportunity to observe, to watch. Through the frequency of 'passive learning', a learner-practitioner is able to develop as they observe the idiosyncrasies of their colleagues, where 'you watch how they speak to each other; you watch how they interact' (CS4). It is important to note, however, that a learner needs to play an active role in the learning process (Cooper-Thomas & Anderson, 2006). Thus, as the emerging practitioner is able to move from job to job, they are able to repeat successful actions that will support their personal development. One may assume that CS4 may have constructed mental models through both their individual experience of observing the work practices of their colleagues and the group dynamics of being 'cliquey'.

There may be other inhibitors to learning through on-set relationships, as is reported by CS4 where they were not asking questions 'directly' to the senior team members. Russ-Eft (2011) makes the point that when one is in an environment-centred learning environment, there should be opportunities to interact with those having more experience or more skills. For social perspective to be relevant, the context needs to provide opportunities for interaction with peers and more experience senior personnel. Because of the reduced significance of this feature in large-scale productions (see Figure 6. 11.d), it further suggests these opportunities are also reduced. Referring to the genomic on-set relationships in the figure below, it can be seen that the single direction communication pathway from head of department (DP) to a lower ranking member of the crew (Trainee), promotes this non-interaction.



Similarly in paid employment (Figure 6. 11. 6a), the expanded organizational socialization (OS) element presents learners as passive recipients to learning (Russ-Eft, 2011). This is relevant to a new entrant in the early stages of their career because they are required to adhere to on-set etiquette ('setiquette'). If, as is illustrated in Figure 6. 11. 6d, the social perspective aspect of the learning experience is diminished, this may also present as an additional diminishing of the social experiences of interactions within this context (Vygotsky, 1978). This is indicated by CS4 where they are intimidated by a perceived disconnect with the community because of a lack of credits on the CV and as a result are not 'given a chance in the first place' (CS4). This deficit of opportunity to interact seemingly supports Russ-Eft's (2011) observations about social perspective. This can be further explored when CS6's experiences are considered, where they were trusted to 'take apart a camera' (CS6). The environment here appears to have been a secure enough one to support the learner to advance their knowledge through the disassembly of expensive equipment. This safe environment, where the learner-practitioner was trusted, helped to shape the learner-practitioner's knowledge and thought. The paid employment model (see Figure 6. 11. 6a.) revealed a reduced, social perspective, in contrast however, this scenario

presented the learner-practitioner as having more opportunity to interact with peers thus resulting in an increased social perspective for CS6. This increased social perspective, together with the increased social learning element of the paid employment context (Figure 6. 11. 6a.) may benefit the potential learning affordances of the learner-practitioner.

The discussion above signposts that paid work and large-scale production contexts stimulate environment-centred learning experiences. This may be because of the exaggerated organizational socialization (OS) and social learning (SL) components of each of these settings (see Figure 6. 11. 6a and Figure 6. 11. 6d). This may also be because of the reduced social perspective (SP) element. When an environment-centred learning context is either inaccessible or unsatisfying the constraints of this situation and the reduction of interaction with colleagues, may have a negative impact on the learning potential, or may shift the learning experience to other priorities away from learning. The position taken here is similar to Illeris (2009), where the learning experience is affected by the environment of the learner-practitioner (Illeris, 2009).

Experimentation in and away from the workplace may also denote this hands-on approach to learning supporting Knowles' (1968) idea of immediate application of practical knowledge. This appears to be counter-intuitive to a 'mind-centred environment', which is evidenced by the amplified andragogic/heutagogic component in experiential learning in and away from the workplace (see Figure 6. 11. 6e and Figure 6. 11. 6f). However, features such as scaffolding, rich contexts, problem-solving are traits of kinaesthetic learning (Lengel et al., 2010). Through hands on learning 'you

learn what will work and won't work' (CS3). This requires a certain amount of critical reflection to support the operational activity, potentially moving the experience towards a mind-centred experience, suggesting an integrative environment. Critical reflection, then, may help learner-practitioners to develop kinaesthetic self-directed learning opportunities.

As a counterpoint to this, it can be seen that with unpaid employment (see Figure 611.b) there is a dominance in the social perspective element of the context. Russ-Eft (2011) has shown that social perspective is an environment-centred learning context, and in this respect, it could be contended the experiences of learner-practitioners will predominantly be environment-centred. This is further affirmed when Russ-Eft's summary of social perspective learning theories is considered, where the emphasis is for more interaction with peers and with those having more experience. Often, unpaid production contexts provide occasions for learner-practitioners to interact with peers and colleagues with more experience. Initial exposure to the small production organization, provides interaction with those more experienced, leading producers to invite learner-practitioners to other paid work.

If a learner-practitioner is supported by both the organisation and by peers within the organisation (Russ-Eft, 2011), they may internalise the social interaction with others around them. As Illeris (2009) has observed, "both the content and the incentive are crucially dependent on the interaction process between the learner and the social, societal, cultural and material environment." (Illeris, 2009, p12). The inner monologue and thought processes stemming from this social interaction, may give rise to

confidence in the learner. This confidence may promote an understanding in the learner-practitioner of *who they are* within the community, which in turn promotes further interaction with peers. This development of the learner's confidence can be seen in CS1's experience where they have moved towards the centre of the community (Lave & Wenger, 1991), identifying more with the 'experts' than with those on the periphery.

Confidence can also be developed through virtual interaction. When CS5 discusses online tutorials there is evidence of individualised instruction. It is important, however, for new entrants to be able to discern appropriate online resources where they can be a real benefit. Online resources, such as ARRI camera simulators, are also utilised by experienced practitioners if they wish to discover the menu and digital workings of a new camera they have not used before. The relevance of these resources then become pertinent. The critical reflection that ensues from using these resources, helps to promote confidence and personal self-knowledge. Nevertheless, with online resources, the limitations are clear: they are only able to show, and not provide 'hands-on' experience and much of the day-to-day activities of a practitioner working the technical crafts area of the film industry is to try out new equipment. There is no substitute to being able to access equipment, which tailors the learner's needs to specific operations. CS3's experience of contacting lighting companies to 'play' with a lighting desk illustrates this point. Furthermore, rental houses often have similar provision, and as such act as resources offering 'hands-on' experience to the emerging and senior learner-practitioner alike, increasing the relevance of the learning experience (Russ-Eft, 2011) of the learner-practitioner.

It can be observed that the organisational context, whether it is mind-centred or environment-centred, may determine the individual learning. Drawing on Jarvis's experiential learning theory, this chapter now considers how the different learning pathways of learner-practitioners are formed by novel learning experiences.

7.3 Non-learning, non-reflective learning and reflective learning pathways encountered in the different production contexts

Adopting a hermeneutic analysis of the excerpts from the interview data, a series of pathways were mapped onto Jarvis's (2004) model in order to compare the learner-practitioners experiences in each of the different learning contexts. Almost universally exhibited in the eight different contexts, was the learning pathway (and variations of such) of 'non-reflective learning; learning about self'. Appendix 7.i presents the range and variations of learning pathways emerging from participants excerpts, and this section now turns to these for discussion.

The simplest learning pathway presented by Jarvis (2004) is that of 'non-learning; taken for granted/presumption' and is manifested in situations, 'where we presume on the world'. Jarvis (1987) has suggested it is associated with Berger & Luckmann's (2011) primary and secondary forms of socialisation. He critiques their theory commenting that it "tends to assume that the society is a homogeneous whole *having only one culture* into which the individual is socialised. [emphasis added]" (Jarvis, 1987, pp29) In this pathway the exit point is encountered after the initial activation of the setting (node 2).

Figure 7. 1: Non-learning / taken for granted learning pathway

Jarvis (1987) discusses a series of possibilities that could initiate this exit route. The lack of 'cultural capital', in that a learner-practitioner may be 'cultural strangers', may create self-perceived barriers preventing the learner-practitioner from approaching the community is one possibility that Jarvis posits. If a divergence occurs between the learner-practitioner's biography and the situation they are in, then there is a possibility the learner may choose to dismiss the situation as a learning opportunity; the learner may presume there are limited opportunities for employment (and subsequent learning experiences). In the figure above a return loop exists from the 'person unchanged' (node 4) to 'person / biography / experience' (node 1). This loop may signify the learner's apprehension with encountering a new situation and the 'presumption' that they will be 'cultural strangers' resulting in a non-learning scenario. Once a practitioner gains experience, though, the presumption might take the form of a of a rejection response, where the pathway may look similar to the 'taken for granted / presumption' pathway. This is evident in CS1's comments about an experienced practitioner, where there are occasions when 'downtime' is needed. In this respect, learners need to perceive the experience as 'meaningful' at the outset for learning to occur (Jarvis, 1987).

> "How they learn and what they learn must relate to both the situation in which they are and their own biography." (Jarvis, 1987, p61)

For CS1's colleague, the downtime – resting from the day-to-day activities of the job – was more meaningful for the practitioner than potential learning opportunities, and so a 'rejection' pathway is apparent. Rejection can also be initiated by third parties. In CS1's experience discussed previously, CS1 felt that the camera crew should have supported them. Not evident in Jarvis's pathways is the idea that obstructive third parties can impact on the learners' journey (as indicated by the large arrow in figure 7.2 below), sometimes creating an unwanted early exit (node 4) to the learning experience. Drawing on Schutz's analysis of 'the stranger' Jarvis (1987) discusses how the learner in an unfamiliar work setting may dismiss the learning potential of the situation, especially if the difference between the situation and the learner's biography is too great. By referring to Gramsci's ideas of hegemony, Jarvis (1987) shows that a learner in the situation such as CS1, may opt for a presumptive non-reflective learning response resulting in *alienation* from the community. Jarvis highlights this further when he comments:

> "Having learned and internalised these cultural expectations, then individuals behave in the manner that they have discovered to be acceptable both to themselves and to the people with whom they interact…The process is one that reinforces the established patterns of behaviour but does little else for the self." (Jarvis, 1987, p29)

A hegemonic discourse may have been established between CS1 and the camera crew signifying CS1 was not welcome on set. This resonates with Jarvis's assertion

that a power and/or status dimension begins to appear in a *non-formal* setting (Jarvis, 2004). In a strong hierarchical setting such as large-scale production, this power/status dimension may be more intensely displayed.

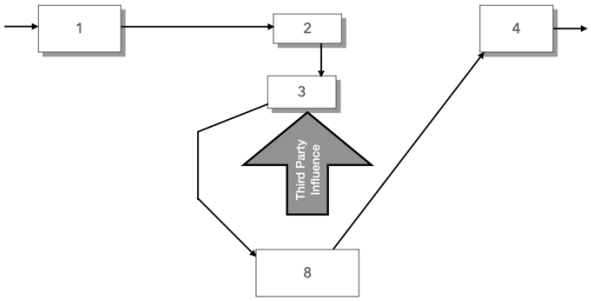


Figure 7. 2: CS1's rejection initiated by third parties

There are two things to notice about CS1's response. Firstly, the exit route is *determined by a third party* (the production crew). Secondly, node 8 indicates some form of reflective thought processes *are* taking place. This echoes with Bergsteiner & Avery (2009), where CS1's route could also exit through node 10, because they are more informed and so

> "… in alienating situations, when our awareness of the world is high, but when we might be unable to change it, then we may actually learn more about ourselves incidentally." Jarvis (2004, p110)

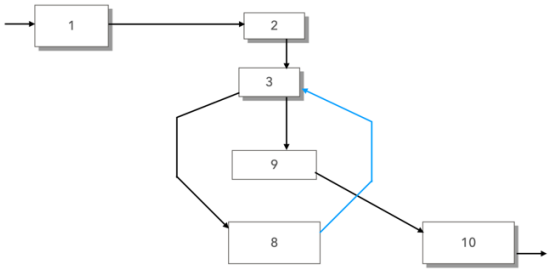


Figure 7. 3: Confidence developed over time

In contrast, figure 7.3 illustrates CS6's own self-doubt about their ability to perform in large productions highlights another pathway associated with non-reflective learning. When CS6 states '…you think like other people might be better than you' indicates their thought and reflection (node 8) of their own insecurities. Nonetheless, CS6 continues to get involved with larger scale productions rebooting the episodic experience (the return loop to node 3). Through reflecting on these, on subsequent jobs, CS6 builds up sufficient 'confidence' to be 'more developed and experienced' (exiting via node 10). This pathway represents a longer period of time, than just a single experience, indicating that personal development may take place over time, and may be a series of sequential steps.

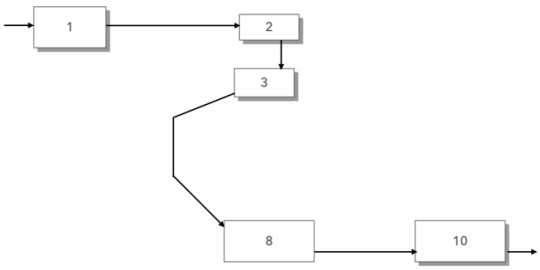


Figure 7. 4: Learning about self – most common pathway

The learning pathway in figure 7.4 presented itself in a range of learning environments and as several variants. This pathway accurately follows Jarvis's route of 1→2→3→8

→10 ‘incidental learning about self – through non-consideration and rejection’ (Jarvis, 2004, p109). Jarvis (1987) and Le Cornu (2005) have purported a learner might not be in a direct or obvious learning setting, yet, where the learner may be learning about themselves, learning may still be operating. The following route permutations to Jarvis’s ‘incidental learning about self’ discuss this in more detail.

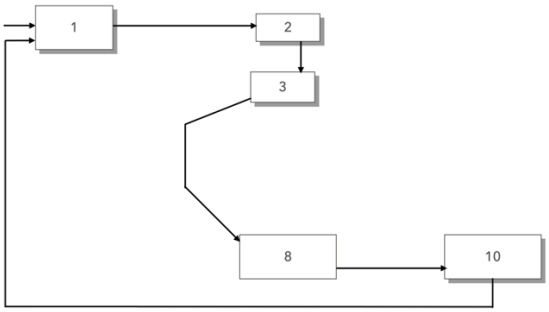


Figure 7. 5: CS4’s experience of considering different job opportunities

Figure 7.5 above represents CS4’s experience of considering different job opportunities. The return loop (10→1) denotes this as a continual process. When a practitioner is working freelance, they need to consider the opportunities afforded in terms of longer-term contracts. Within the production community, there is an expectation that once one is on board with a project, one commits through to the end where “…it is still frowned upon if you were to accept other work” (CS4). In this regard, although the learner-practitioner is not necessarily reflecting on their experiences, there is incidental learning taking place where the learner-practitioner is considering work options in order to maintain relationships with potential employers – and to extend incidental learning experiences. This incidental learning contributes to both the learner’s understanding of the ‘culture’ and also to the learner’s biography, as they become more aware of the accepted practices of the designated culture – ‘setiquette’.

Much of the incidental non-reflective learning, where the practitioner is learning about themselves through non-consideration and rejection, happens in a workplace setting Jarvis describes as 'non-formal'. As such, it is understandable that the learning experience is an incidental one, but one that is still very relevant. Jarvis contends that some people are not able to comprehend some of the situations they are in and are unable to learn from them (Jarvis, 1987). Whilst rejection can be evident in a non-formal setting (as in CS1's experience above), CS5 indicates that through thought and evaluation, an unpaid setting can be transformed to be a positive one by being more 'beneficial towards the future' than getting paid.

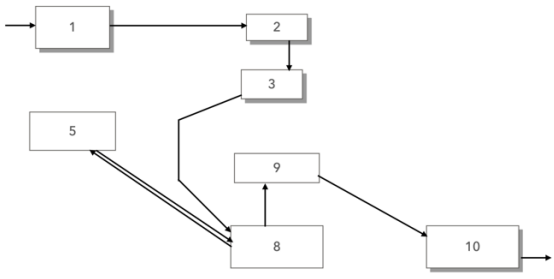


Figure 7. 6: CS6's experience of volunteering for video work leading to paid work later

With voluntary work, learners are often rewarded through the experiences they have. This is illustrated in CS6's experience of getting paid work *after* volunteering for music video productions (see Figure 7.6). Therefore, by reflecting on their learning experiences new entrants exit the learning pathway (node 10) as a 'more informed' learner because they might have an enhanced self-image (Jarvis, 1987). For instance, a respondent who has volunteered for a production might reject future voluntary

positions, and by association learning experiences because they feel they are now more knowledgeable.

Some practitioners evaluate a situation and reject organisational conformity (Jarvis, 1987). When CS2 asserts that they want to develop the skills of the other crew members to learn each other's responsibilities, this indicates a re-evaluation of the expected hierarchy, thus potentially reducing the alienating effect of a hierarchical camera production unit. Jarvis uses Freire's (1985) notion of 'conscientisation' to explain this phenomenon, where he argues learners are aware that they can step outside of the forces that lead to conformity. This action allows them to innovate for themselves.

Another area of non-reflected learning was where learner-practitioners developed their basic skills.

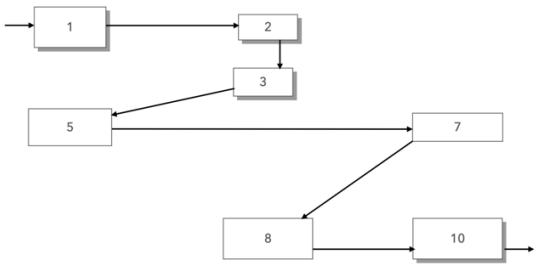


Figure 7. 7: CS5's experience of basic skills learning

Jarvis (2004) indicates that basic skills learning routes through nodes 1→2→3→5→7→10 and is often about repeating and action – mirroring Russ-Eft's 'frequency' (Russ-Eft, 2011), proposing that reflection does not necessarily take place. In this instance,

the repetition leads to memory, where Jarvis provides the example of rote learning (Jarvis, 1987). For CS5, the experience of having limited time to edit programmes indicates a thoughtful element to the learning process (see figure 7.7) resulting in a route 1→2→3→5→7→8→10. When CS5 comments “for me it was a great experience…”, there is clearly some reflection and thought taking place in basic skills learning. It may be that Smith’s (1977) ‘discovery method’, is relevant here – where a learner-practitioner might be ascribed equipment, or a task (to edit quickly) and the learner-practitioner implements the functions of each part or step determining how the equipment/process works. In another example, from a pre-career experience, CS3 shares about devouring textbooks. Through their assertion of being ‘self-taught’ the learning pathway assumes a direction to node 7 where their experiences have been memorised, through repetition of action. In this way the learner is able to reflect (node 8) on their learning journey and exit through node 10 as more developed. This reflective practice is an important component to the learner-practitioner’s career journey. Drawing on Schon, Jarvis (1987), presents the idea that reflection *on* practice and reflection *in* practice reduces ‘overlearning’ and practitioners are able to reflect on previous experiences as a recourse to solving problems they may encounter in the immediate situation becoming evident before them.

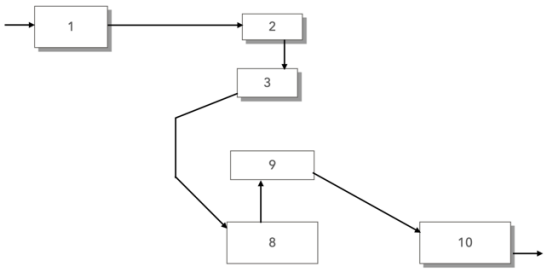


Figure 7. 8: Reflecgtive learning – contemplation; memorization node omitted

Figure 7.8 shows a variation emerging from the data of the 'reflective learning - contemplation' pathway that was the most prevalent in a range of contexts. The route through Jarvis's expressed model above (for a 'social' reflective contemplative learning experience) included memorization (node 7). However, as can be seen in figure 7.8 much of the data after analysis appeared to omit this element of the learning pathway. Having reflection (box 8) and evaluation (box 9) positioned in the learning pathway helps a learner-practitioner to contemplate and identify potential learning opportunities. When a new entrant is not working, often the response is "I can't learn because I'm not working". Jarvis (2011) suggests that a perceived and identified disjuncture between the learner's experience and biography motivates learning, which can be achieved through either formal interaction or informal interaction. Similar to Illeris's (2007a) assimilative learning, it is possible to apply the knowledge to a practical situation at a later date. Using Argyris & Schön's (1996) theory of single loop learning as an example, Jarvis shows the contemplative response is primarily a reactive response situated in the formal organisation. This is evident in CS4's reflection of the hierarchical structure of the department they are working in which can be seen in figure 7.9 where there is the potential to have a return loop from exit point 10 to node 1 indicating a *protracted experience* with the practitioner starting the learning process again over time.

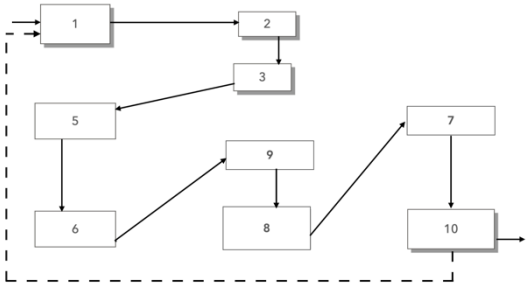


Figure 7. 9: Cognitive learning from 'hands on' experiences

'Reflective learning – cognitive learning' was the more complex of the learning pathways proceeding from the data analysis. Figure 7.9 illustrates CS1's individual experience of learning from 'hands-on' is an example suggesting a modified process. Whereas Jarvis's 'reflective learning – cognitive learning' pathway has a route 1→2→3→5→6→8→9→7→10, CS1's route above is in contrast to Jarvis's model initially travelling from practice (node 5) to experimentation (node 6) to evaluation (node 9) *before* thought and reasoning (node 8). It then resumes Jarvis's pathway and travels to memorization (node 7) and finally the person changed (node 10). Jarvis (2004) asserts that in these type of learning experiences, there is a continuous loop where learner-practitioners are evaluating (node 9) and reflecting (node 8) on their experiences and the accelerated thought processes are activated with little time for memorisation of the situation. That the excerpts are mainly from practitioners discussing the workplace, may indicate this type of pragmatism – where practitioners are required to move quickly to the next solution. Hence, memorisation potentially takes place, but is more intuitive. The dotted output loop from node 10, indicates the repetitive nature of this learning experience.

In contrast, CS3's assertion that you find out what works and what doesn't displays a loop from node 5 (practice) and node 6 (experimentation) delineating the experimental nature of the situation (see Figure 7.10).

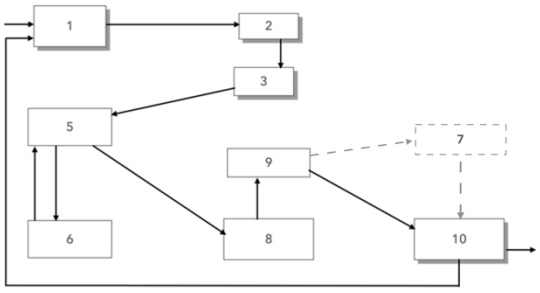


Figure 7. 10: Reflective cognitive learning – new skills learning

Jarvis (2004) indicates that pragmatic knowledge may be learned; proposing that this type of learning relates closely to Kelly's (1963) understanding of human beings as scientists.

This loop (5→6→5→6) suggests CS3 may have spent time developing these ideas. At the point of interview CS3 was experienced and had reached a senior position. In this way this resonates with Jarvis's idea that a learner may feel freer to demonstrate their new skills, the higher up the social hierarchy the learners are. This is significant, partly because of the heutagogic nature of the learning approach in 'practical' learning environments (hence the inclusion of box 5) and partly because CS3 had reached a higher rank in the hierarchy of the production team. CS3's experience of learning 'what works' reflects this notion of experimentation informing experience at a higher ranking level. Even though it was omitted from the initial analysis, it might be that memorisation

(a dotted node 7 in figure 7.10 above) should be included because the acquisition of knowledge may include memorisation of ‘what works’.

Away from the social situation, Figure 7.11 indicates emerging and experienced practitioners may still perform developmental practices.

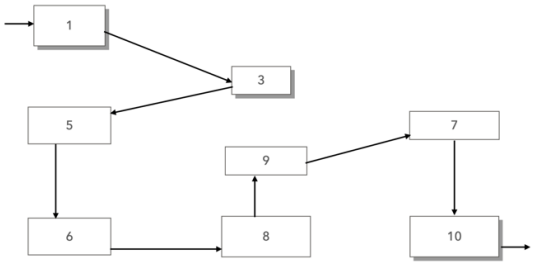


Figure 7. 11: Cognitive learning away from the social situation.

It can be seen in the learning pathway in Figure 7.11 above that the social situation (node 2) is omitted. This is because CS5 emphasises they use equipment that is at their ‘fingertips’ suggesting access to equipment they own in a domestic/private setting. Again referring to Schon, Jarvis remarks that reflection in practice prevents ‘over-learning’ or ‘mindless performance skills’ (Jarvis, 1987) – the situation where repeated activity eventually prevents progress. This is an important aspect to the new entry learner, who will be developing their skills both at the workplace and away from the workplace. After time, the emerging practitioner may consider approaches that will both enhance and support their practice when returning to the production community. Utilising equipment that is at hand, provides opportunities for new entrants to learn rudimentary procedures.

In the discussion above, it was proposed that third parties may have an influence on the learning experience of the learner-practitioner. This chapter now turns its attention to dyadic relationships found within the workplace using Fiske as a vehicle for discussion of this topic.

7.4 Dyadic relationships influencing the learning experience

Fiske (1992) highlights key features that indicate the type of dyadic relationship encountered. This is not always a mentor-protégée or employer-employee relationship but could also be a peer-to-peer relationship. It will be recalled that each of the four social relationships presented by Fiske had dominant traits. Market pricing (MP), for example, emphasises the negotiating trait of a relationship, whereas equality matching (EM) highlights the reciprocity characteristics of relationships. Authority ranking (AR) underlines superior/subordinate hierarchical type relationships, and communal sharing (CS) is emphasising identity (Fiske, 1992).

In workplace situations, the relationships formed may influence the learning journey of the learner-practitioner. As already highlighted above, the priority for large-scale production is to complete the job. There are also strong demarcation characteristics shaping the organization. Dyadic relationships, therefore, may also be determined by the learning context. For example, the barriers CS1 encountered when attempting to work on a large-scale film set, infers an authority ranking dyadic relationship. This is because there appears to be subordinate/superior relationships, where the ‘will of the leader is transmitted through the chain of command’ (Fiske, 1992c, pp 695). Fiske (1992) postulates that with an authority ranking relationship, those in a higher rank

have certain advantages over their subordinates. However, Fiske also suggests this brings a level of responsibility, where the subordinates are often entitled to protection or pastoral care (Fiske, 1992). CS1's disconnected experience is contrary to this assertion by Fiske and gestures to other factors influencing the relationship. CS1's inexperience of large-scale production, may have influenced their passivity, especially if CS4's assertions are considered, where large-scale productions are cliquey, or that insufficient 'cultural currency' will influence superiors' expectations of subordinate performance. There may also be a hegemonic discourse influencing CS1's behaviour, whereupon their acceptance of being ignored, is part of CS1's own axiomatic belief of early on-set practices. Nevertheless, it seems appropriate to place this into an authority ranking (AR) dyadic relationship.

Whilst learner-practitioners often encounter a hierarchical structure, not all respondents viewed involvement in the same way. CS6 reflects on their episode as a 'bad experience' but concludes, however, that it is also worthwhile perceiving they were 'learning a lot' viewing this as a benefit to workplace experiences. The reciprocal balance of learning a lot, may be interpreted as an equality matching relationship. It may not be good initially, but CS6 may use knowledge gained in future operational practice and the 'compliance to return the favour' (Fiske, 1992) subsequently benefits the production community as a whole.

In a different large-scale production scenario, where CS1 had agreed to unpaid voluntary work, the encounter may be interpreted as a communal sharing type relationship. In this instance, CS1's contribution to the production was minimal, where

they were simply observing on-set operations, yet were accepted as part of the production community. Fiske makes a distinction, where 'what you get does not depend on what you contribute only on belonging to the group' (Fiske, 1992, p694) represents a communal sharing relationship. A sense of belonging (Bound, 2019) is an important aspect of early career experiences, where Bound et al comment:

> "Identity, then, is about being and becoming to particular occupational practices" (Bound et al., 2019, p35)

This sense of becoming may be more apparent when experimenting in the workplace because this requires cooperation from team members if it is to be successful. This cooperation is a feature of Fiske's equality matching (EM) dyadic relationship. This perception of equal status may be generated by more senior personnel, shifting the relationship away from hierarchical authoritative associations towards benefitting the community or 'equal-status peer groups' (Fiske, 1992). The precedent where CS2 wished to match experiences between crew members stems from a pragmatic attitude where filming can carry on regardless of absences from operational personnel. Initially, this appears to be an authority ranking relationship because CS2 is the superior member. Nevertheless, there is also an encouragement to match each other's skills. It may be interpreted, therefore, that this is inclining towards an equality matching dyadic relationship. This shows that dyadic relationships are not necessarily static but are *dynamic in nature* and are influenced by individual and community activity (Fiske, 1992).

When a learner-practitioner is experimenting independently away from the workplace, dyadic relationships are not easily defined. Often, though, learner-practitioners assemble colleagues to practice their craft at times when they are not committed to a project or production. The scenario where the highly experienced CS2 and a colleague 'desperately wanted to work together' appears to highlight a 'desire for equality' (Fiske 1992). In this relationship there may be evidence of reciprocity, where everyone has an equal say. This is highlighted in the comment 'I've gotta work with this guy' illustrating how CS2 potentially sees themselves as a separate but co-equal peer, generating an equality matching (EM) dyadic relationship.

One does not have to contribute equally when belonging to a community of practitioners. Fiske highlights a feature of communal sharing (CS) as 'What you get does not depend on what you contribute, only on belonging to the group.' (Fiske, 1992, p694). When a practitioner is not required to work, there may be opportunities to access facilities and make use of these during this quiet period. This is in accord with CS2's experience above where the studio engineers were willing to help CS2 with access and operations of studio cameras during times when they were not being used, indicating a communal sharing (CS) dyadic relationship. For learner-practitioners, being aware of a willingness of colleagues and peers to assist with their skills development is an important trait. Learner-practitioners need to be able to recognise when they have been accepted and are part of a community.

With small-scale independent productions and unpaid settings, negotiation of responsibility and salary is potentially more flexible. In Fiske's characteristics of *social*

identity, market pricing (MP) is the closest correlation to the type of relationship evident in the data. With CS1's experience discussed earlier, independence of being able to compose, and block musicians, signposts a self-defined role where they were free to 'play' with the elements of the music video (light, blocking, etc.). This independence may also lead to early career practitioners having the confidence to be able to negotiate conditions of pay, or the advantages of the experience. Fiske (1992) argues that this negotiation constitutes cost-benefit ratios, which are core features of market pricing relationships. As learner-practitioners become more experienced, they may be more able to enter a market pricing relationship through negotiating projects they will work on and the benefits these experiences will return.

Moreover, as a practitioner gains more experience, they not only progress through the occupational hierarchy, but may also encounter a range of dyadic relationships as indicated by Fiske (1992). Fiske suggests each stage of child development has its dominant dyadic relationship making the argument that child development leads to progressive steps in dyadic relationships. The initial relationship infants learn is one of communal sharing (CS). Here the emphasis is on identity within the community. From here there is a hierarchical understanding of relationship, the realisation of authority, and the consequences of disobeying authority. A reciprocal relationship (equality matching) then reveals itself as children become aware of 'turn-taking'. Finally, market pricing (MP) relationships – where negotiation become prevalent – are evident in child development. A practitioner may experience dyadic relationships accordingly, as their career develops. For instance, early-stage career relationships may form at the communal sharing (CS) level, where identity and belonging is moulded by

membership and common origins (just starting out). Then, as the learner-practitioner progresses through the hierarchical ranking system, their dyadic encounters may present as authority ranking (AR) relationships, where their identity is shaped through superior-subordinate experiences. As continued progression occurs, the dominant dyadic relationship may feature equality matching (EM) characteristics as learner-practitioners see themselves as a co-equal and identity is formed through keeping up with reference group (Fiske 1992). Finally, an experienced practitioner may start to negotiate their own worth, and identity is formed through a product of entrepreneurial success, or how much one gets paid. Thus, market pricing (MP) dyadic relationships may dominate.

The suggestion that specific dyadic relationships are evident as learner-practitioners progress through each stage of their career is a simplistic view of what is happening. It would be more appropriate to suggest a learner-practitioner will encounter all these dyadic relationships in their day-to-day practice, not just through career progression. All the same, what this shows is that the experience of the learner-practitioner at all levels regularly encounter these relationships, further adding to the complexity of the learning experience.

7.5 Chapter summary and conclusions

It may be observed that in large-scale productions, an authority ranking dyadic relationship might promote an alienating effect, and access to the community is restricted to observation. This learning through watching may introduce novel

behaviours in learners, without the requirement for reinforcement. In this respect ‘shadowing’ may be an important first step for emerging practitioners to start engaging with community members. Where restricted access to senior members is prevalent and a ‘sense of belonging’ is denied the emerging learner-practitioner, this may reduce the confidence of the learner-practitioner, creating a disjuncture in the learner-practitioner that they may never recover from. Access to learning experiences may also be denied when there is a dissonance between the learner-practitioner’s expectations and the ‘setiquette’ of production. This dissonance may fracture the process of ‘becoming’, creating an alienating effect, where the learner-practitioner becomes a ‘cultural stranger’. This may be more evident in large-scale production and paid employment, yet can be somewhat mitigated through the utilisation of ‘flipped’ learning using online resources. Organizational socialization, social perception and social learning can further mitigate against alienation and aid in strengthening the experiences of the emerging learner-practitioner and the more experienced learner-practitioner, helping them move centripetally into the community of practice.

It should be recognised that the precarious nature of freelance work often imposes downtime on the early career stages of the freelance learner-practitioner. All too often this time is spent on trying to find the next job, whereas at times it might be better utilised to evaluate and plan a learning trajectory to enhance personal development through the work they try and do, and the colleagues they meet along the way. It might be that voluntary work not only supports learner-practitioners in skills development, but also in the soft skills of negotiation. Moreover, through contemplation and a heutagogic learning approach, emerging practitioners have affordances to learn about

themselves in different situations, where learning takes the form of environment-centred characteristics such as working with peers and learning from those with more experience. The scale of production, then, may have an influence on the learner-practitioners and the subsequent learning experiences they face through the ranking of and access to professionals. For example, it was shown through the experiences of CS1, CS2 and CS6 that recording music videos and live music events provided learner-practitioners opportunities to develop their technical craft and quickly enhance their standing in the community. Assembling colleagues to practice the craft is another way for learner-practitioners to develop networks and relationships. For instance, inviting a first assistant camera (1st AC) to work at a higher rank, such as cinematographer, on a short film, may help them develop their skills, and to demonstrate their on-set practice.

It follows that with small-scale independent production, there are indications that experiential maturity is occurring providing confidence in the learner-practitioner to venture into larger productions. In this way, opportunities to become conversant with new technologies or new techniques that present themselves in different scenarios or context may allow learner-practitioners to become familiar with these, potentially fostering a correlation with self-esteem and confidence levels. Moreover, it has been shown that inexperienced and experienced practitioners alike learn about themselves when they move away from traditional expectations or the status quo of the production environment. As such, in smaller production contexts, evaluation is a core element to the learning experience, and opportunities for basic skills learning are increased in these contexts. It also seems that the orientation of the learning context has an

interrelationship with the dyadic relationships formed in the experiential learning journey. In this respect, the experiences of learner-practitioners in smaller production environments might have a more focussed dyadic relationship, whereas larger scale-production environments may promote emerging practitioners to experience a wider array of dyadic relationships –from a more reciprocal peer-to-peer equality matching (EM) relationship to that of a more controlling authority ranking (AR) relationship. Nevertheless, where pedagogic approaches to learning are prevalent (because the dyadic relationships are dictating this) an emerging learner-practitioner may be operating under a 'dependency learning' experience, whereby in the early career stages of the beginner learner-practitioner, pedagogic, or 'tutor'-led approaches to learning may be prevalent.

Third party influences, then, may also play a part in the formation of the learning pathway. Where the influence of a third party helps the learner discover more about themselves, an underlying motivation is often activated impelling the learner into action. In this respect, a 'negative' response to a learning experience, may still benefit the learner-practitioner, which can trigger alternative routes to learning. This is potentially because of the community 'familial' expectations of shared responsibilities leading to reciprocal expectations from community members. Interactivity between peers, colleagues and other core personnel within the production environment, may enhance incidental learning and support preconscious skills development, whereas in contexts where the primary goal is the production output (such as paid work and large-scale production), attention is required by the learner-practitioner to keep to the on-set social conventions. When conflicts arise within these authentic settings, higher-order

thinking through mental models may help to resolve some of these conflicts and this higher-order thinking can potentially assist emerging practitioners with forming opinions that may be carried through to other workplace scenarios.

There not only appears to be a hierarchy of rank, but there also appears to be a hierarchy of experience, where practitioners of similar rank can learn from each other through the collective experiences of the vocation. It is useful for learner-practitioners to be aware of options to develop their experiences and self-knowledge, so that opportunities can be exploited as necessary, and it seems this is much more likely to happen with unpaid, or small-scale or small independent productions, where the strictures of 'setiquette' and responsibility demarcation are more relaxed, leading to an enhanced social perspective. It might be the community as a whole may need to rethink their traditions, by assigning a 'mentor' at the early stages of a learner-practitioner's development. This mentor does not necessarily have to be part of the direct production team, neither do they need to be a high-ranking practitioner, but should have enough knowledge of the assigned role to support the new entrant, encouraging interaction with peers and colleagues.

It seems 'guided play' with peers and experimentation may provide a 'cognitive apprenticeship', where emerging learner-practitioners are able to develop skills and knowledge, through the practice of problem solving. This social interaction with peers and colleagues is a fundamental attribute to a self-employment work environment. As such, where more mind-centred learning is active in the context, such as self-directed

learning, there appears to be a correlation with the dyadic relationship, which may present itself as equality matching (EM).

There appears to be a correlation between learner independence and the learning pathway, which links with the orientation of the learning context. Environment-centred components, such as social perspective, and behaviourism potentially enhances or inhibits reflective learning, transforming it to non-reflective learning if a strong environment-centred orientation is present in the context. The exception to this is with social learning, where a strong reflective learning pathway appears to be present. Involvement within a social learning situation does not, however, necessarily preclude a learning encounter. Moreover, 'solitary' learning is possible in a setting populated by peers and colleagues. This 'solitary' learning utilises digital resources promoting a private reflective learning experience and may prevent 'over-learning' – an important restraint for the learner-practitioner. The development of knowledge from this approach leads to opportunities for the learner-practitioner to receive cultural acceptance and can be a leveller between peers and colleagues. Furthermore, as emerging practitioners learn more about themselves and their place within the community through the accepted practices of the culture, learner-practitioners are adding to their biography, which informs future learning. Practitioners are also able to develop knowledge and understanding of fundamental practices by utilising equipment that is accessible to them, be that personal equipment, or borrowed equipment.

The discussion above has presented multi-faceted responses learner-practitioners have to novel situations, and the excerpts from the semi-structured interviews yielded

many more examples of the dyadic relationships, learning pathways, learning approaches, and learning orientations found in a workplace learning environment. A table representing these is presented in Appendix 7.ii. Learning, then, is a continuous process and should not be considered a singular or one-off event. Moreover, the learning experience will take many different forms because of the context, the dyadic relationships and the individual biographies of the learner-practitioners.

Finally, it seems that each experience of a learner-practitioner is unique and is not only influenced by the context, but also by the relationships formed within that context. Additionally, the influence of the context or the relationship specific to the encounter of the learner in the personal learning environment, is not easily predicted. At the same time, there may also be collective learning experiences being faced where learner-practitioners are working together. Furthermore, Jarvis's model presents two exit points where the learner-practitioner either leaves the experience changed or not-changed. Bergsteiner & Avery (2009) have proposed that only one exit point to the experience is relevant where the person is more developed and experienced because 'learning will always take place'. Adopting this assumption of development and experience, the excerpts presented above, indicate the exit point from the experiential learning journey can be further divided into learners being a) 'informed', where have learned about themselves or their environment, and b) 'transformed', where their skill set has developed or been enhanced. The next chapter will consider this analysis and revise the freelance practitioner workplace model presented in chapter 5.

8 Revision of workplace model

The previous chapter presented the interrelationships between four key theoretical frameworks that discussed pedagogic, andragogic, heutagogic learning approaches as posited by Blaschke, (2019), Garnett & O'Beirne (2013), and Hase & Kenyon (2013) contextual learning orientations of mind-centred, environment-centred or integrated learning contexts presented by Russ-Eft (2011), Jarvis's (2004) learning pathways and dyadic relationships as theorised by Fiske (1992). It used excerpts from the semi-structured interviews to consider the different experiences of learner-practitioners in each of the frameworks set in the eight different production contexts outlined above.

This chapter turns its attention to a revision of the initial freelance experiential learning model presented in chapter 4. It uses the discussion in chapter 7 to build on the previous model and explores avenues that lead to a construction of a new version representing the multi-dimensional experiences of the learner-practitioner. A detailed discussion of this process follows.

8.1 Development of the model

It will be recalled that features from the initial experiential learning model (Russ-Eft's (2011) orientations to learning) were deficient in expressing the range of characteristics present in the overall learning experience of the learner-practitioner. For instance, Fiske (1992) asserts that dyadic relationships influence how we react and respond to each other, by bringing meaning to the relationship. It will also be recalled that these characteristics were then evaluated and utilising structural deconstruction techniques to interpret the data, were analysed independently.

Jarvis's (2004) model was used to interrogate the learning pathways of each of the excerpts from the semi-structured interviews found in chapter 5. From this exercise, it became apparent that there were variants to the pathways proposed by Jarvis (2004), in his original work, indicating the pathways in which learner-practitioners learn are many and varied. The exercise also revealed variants to Jarvis's (2004) response types can expose meaningful or deficient learning situations. By exploring these, this exercise was able to show how production practitioners do not necessarily conform to Jarvis's (2004) response types. Moreover, these variants also support Le Cornu's (2005) assertion that node 4, the person re-inforced but relatively unchanged, still indicates [existential] learning. Furthermore, the exercise showed how *the context* of the practitioner potentially influences the learning pathway, and subsequently the learner-practitioner's response to the potential learning situation. In this way, it can be seen that the learning process is indeed a complex one and incorporation of Jarvis's (2004) pathway into a holistic experiential learning model should also be considered.

Finally, Garnett & O'Beirne's, (2013) work on learning approaches (pedagogic, andragogic and heutagogic) applies to the focus of this study of freelance learner-practitioners and how they learn at and away from the workplace. Using the excerpted data, an exercise exploring the learning approach from Garnett & O'Beirne (2013) explored how this impacted learner-practitioners' learning. This exercise also indicated that different production scenarios influence the learning of emerging learner-practitioners as they find their own ways to learn. There subsequently follows a

discussion of the model's evolution incorporating these core features of the learning experience.

The first iteration of the model (Figure 8. 1) presented two circles indicating the learner encountering a context, then encountering the different traits of this context as they travel through the experiential learning journey. The traits are generated from Fiske (dyadic relationships), Russ-Eft (learning orientations), Jarvis (learning pathways) and Garnet and O'Beirne (approaches to learning). This is shown by way of a sequential, stepwise experiential journey meeting with dyadic relationships first then proceeding through to approaches to learning. This was to indicate how the different characteristics from the four theoretical frameworks influenced the experiential learning journey. It also introduced two exit points. These were similar to Jarvis where one states the learner is transformed, and one is where there is no change in the learner.

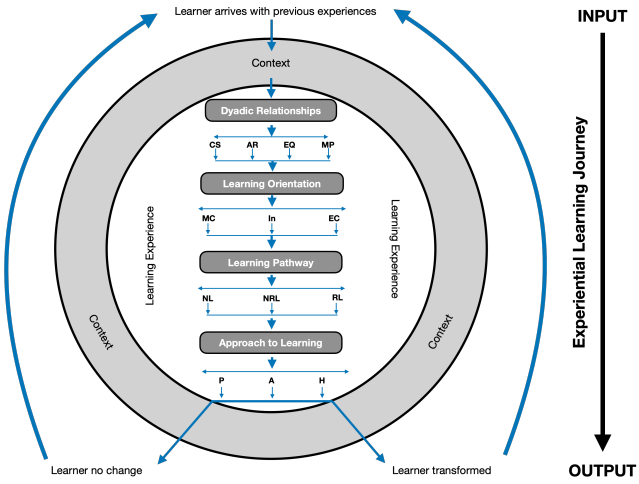


Figure 8. 1: First iteration of experiential learning model

Whilst the model in 8.1 indicated a trajectory through the experiential learning journey, it also showed that dyadic relationships were the first event encountered in this experience. However, this was not evidenced in the data discussed in chapter 7 as it

might be that learning orientations (context) influenced the learning journey first, or that both equally influenced the learning journey. It also seemed that they were interconnected. The second iteration of the learning model (Figure 8. 2) incorporate this thinking and locates these two traits side-by side.

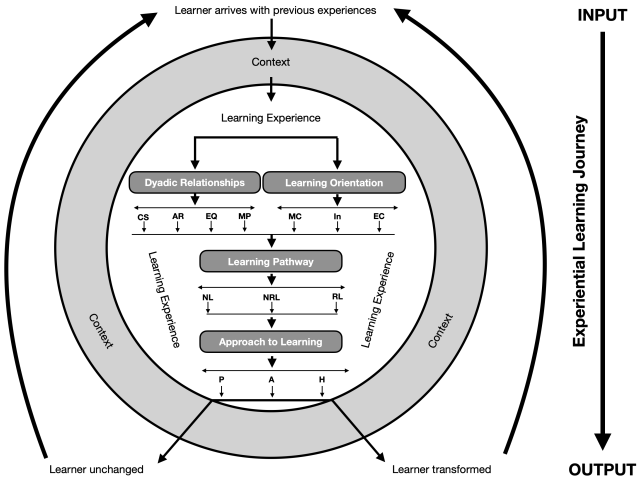


Figure 8. 2: Second iteration of experiential learning model

Another observation of the learning model in figure 8.2 was that detail of each of the characteristics of the model was confusing the direction through the model and so these were simplified (see figure 8.3).

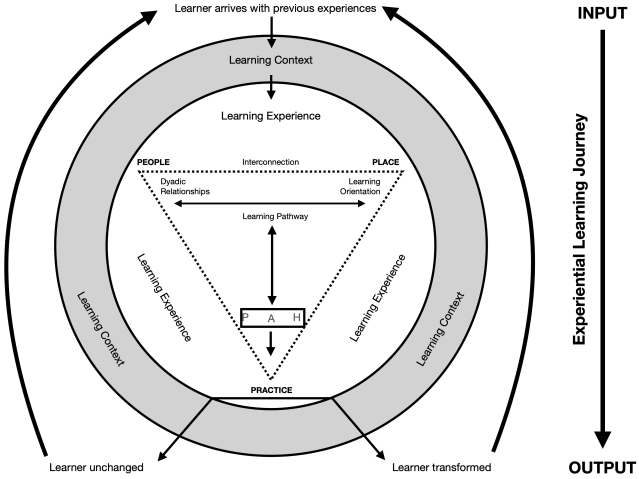


Figure 8. 3: Third iteration of experiential learning model

In figure 8.3 a simplified description of the dyadic relationships (People) and the learning orientations (Place) have also been introduced. An equilateral triangle has

also been introduced to further simplify the model. It will also be observed that trajectories a now bi-directional indicating movement around the triangle and the potential to revisit people and place before exiting the experiential learning journey. Because the influence of the context is now figuring in 'place' the outer circle has been removed from figure 8.4 below. It will also be noticed that the exit points now indicate how the learner is transformed (by developing skills) or informed (by acquiring new information).

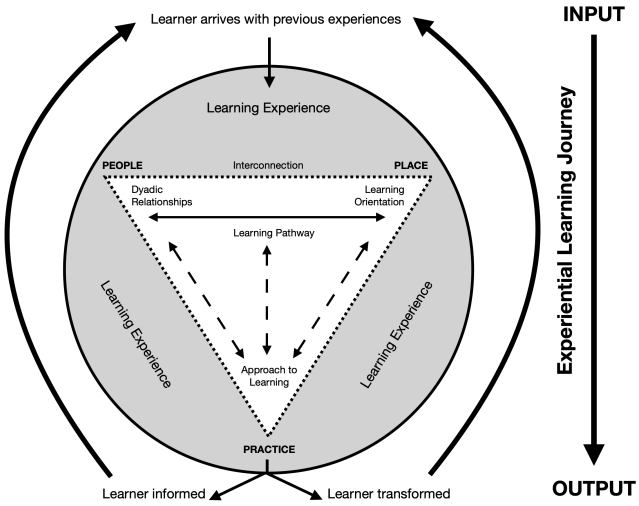


Figure 8. 4: Fourth iteration of experiential learning model

There now follows a discussion of the final iteration of the experiential learning model.

8.2 Further development of the model

It will be recalled the conclusion from the model presented in chapter 5 was that it was deficient and was not able to show other features of the learner-practitioners' novel experiences. For instance, in chapter 7 it was shown that when a practitioner enters a learning experience, they are bringing with them previous experiences that make up their biography. This biography may inform decisions from the learner-practitioner as

to how they will respond to the learning opportunity. This is represented in figure 8.5 by a circle.

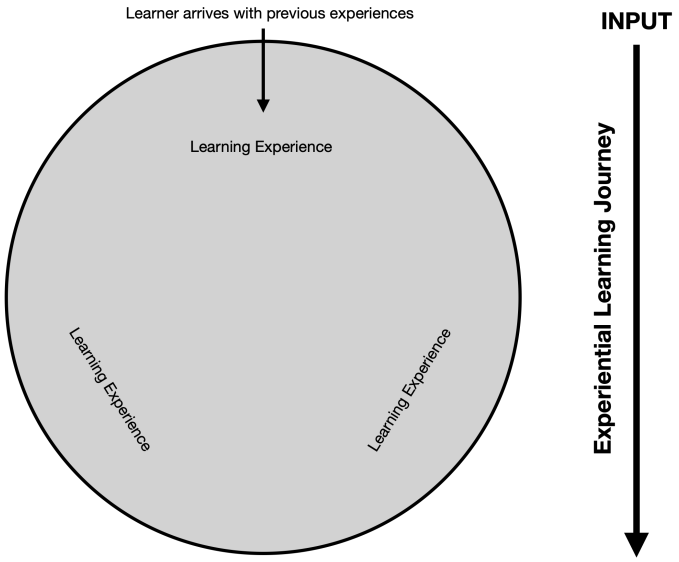


Figure 8. 5: The learner arrives at a learning experience with a biography

Jarvis's (2004) discussion of the learner-practitioner emphasises the importance of the learner's biography. As such, the model references Jarvis's assertion where the learner enters an encounter with previous experiences. This is the start of the learning journey, where there is an input element to the experience. Here the model points towards an agentic learner taking an active role in their learning experience. The model also borrows this idea from Russ-Eft's (2011) meta-theory model which includes an 'Input' stage to the learning journey, suggesting the learner is on a trajectory to a transformation stage.

When a learner-practitioner encounters a potential learning experience, this will be embedded within a 'place'; a context. This is usually, but not exclusively a workplace setting. As evidenced previously, this may be a large-scale production or an unpaid

position, or an experimental situation. In any of these, the learning focus of the 'place' will be directed to either an environment-centred, mind-centred, or integrated learning orientation. An example of how these orientations operate is with CS4's large-scale production experiences, where they had the form of an organizational socialization type environment-centred learning experience featuring observation, and passive learning as dominant ways for CS4 to engage with the learning encounter.

Whist the learner enters the learning context, they are simultaneously faced with members of the workplace community; the 'people' who they will interact with and will enhance or inhibit learning experiences. In these interactions, dyadic relationships are formed and shape the opportunities for learning. These dyadic relationships are often *determined by* the learning context and elicits an *interconnection* between place and people as illustrated in figure 8.6. below.

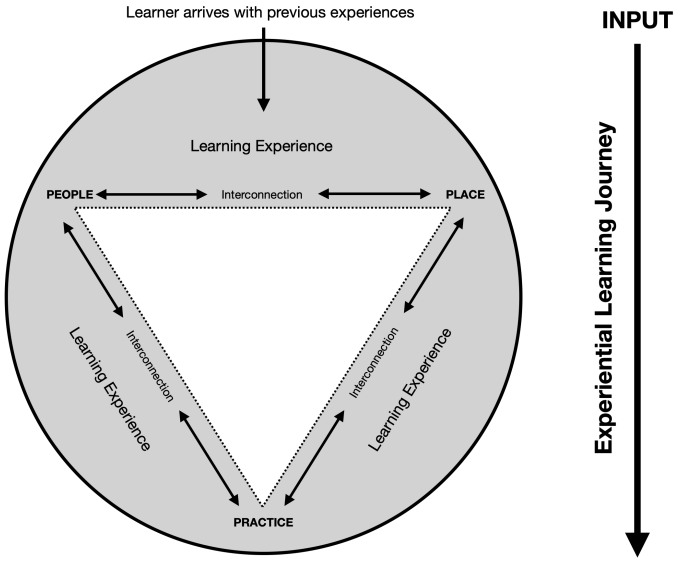


Figure 8. 6: The learner encounters the context and members of the workplace community influencing their practice.

These two features of entering the learning pathway are presented on the diagram at two points of a triangle preparing the way for a third point which is the implementation of the learning experience in the practice of the learner-practitioner. Again, there are interconnections. Firstly, the place will influence the type of practice that will emerge from the learning experience. For instance, a large-scale, environment-centred workplace setting, where demarcation of responsibility and hierarchical structures are pronounced, will present a different learning experience to a small-scale unpaid production. Secondly, the relationships formed in either of these settings will likely steer the personal learning journey of the learner-practitioner. Both of these will be influencing the practice of the learner-practitioner

It can now be seen how the trinity of people, place and practice inform the learning encounters of the technical craft learner-practitioner. But what of the triangle? It is the contention of this thesis that the triangle represents the complexities of the learning journey, or what could be referred to as ‘the learning milieu’ (Boud et al., 1993). As the learner-practitioner travels along the learning journey, a series of characteristics emerge and develop, influencing the way in which the learner-practitioner responds to features of this journey. Some of the traits of this experience are discussed subsequently.

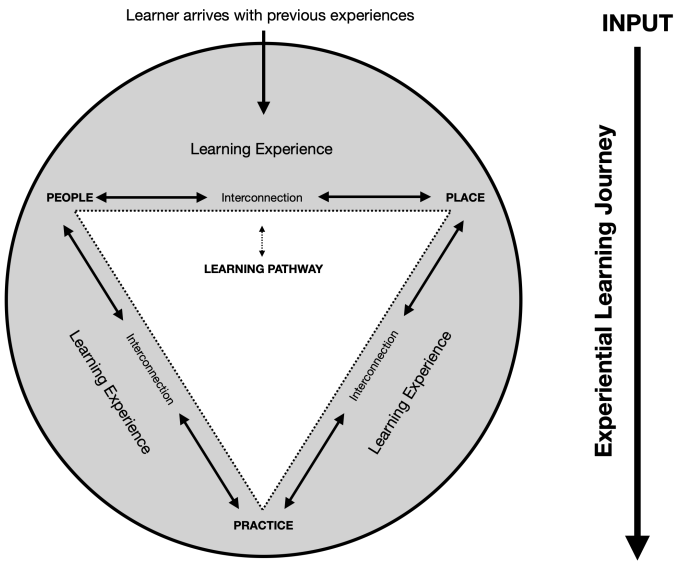


Figure 8. 7: Learner's initial responses to the learning experience

After encountering the place of learning and the people who will be part of this place, the learner will start to develop strategies to foster the learning experience. These strategies may range from talking with peers to practicing techniques. Prior to these strategies the learner will have experienced a learning pathway as expressed by Jarvis (2004). It was established previously that whatever setting the learner may be in, learning is likely going to happen (Le Cornu, 2005). The previous chapter offered examples of different learning pathways using excerpts from the respondents of the semi-structured interviews located in different contexts. Using Jarvis's terminology, it was established that the learning pathways may follow a non-learning route, a non-reflective learning route, or a reflective-learning route. It was also established that the route could not be easily predicted, being determined by the context and the third-party influences on these pathways. Whilst Jarvis contends that the learning experience is complete (or repeats) at the end of these pathways, it should be considered that there may also be a continuation of the learning experiences. This is

further influenced by the context, the people and the learning pathway. For example, CS4 describes how they consider different job opportunities commenting they ‘may not have enough credits in their CV’ (CS4). Once this is achieved, CS4 may develop strategies to compensate for the lack of film credits and, depending on the setting, these strategies will be adopted in accordance with the approach to learning, using pedagogic, andragogic or heutagogic approaches. The learner exits the learning milieu with new knowledge or understanding which can be applied to their practice. This is illustrated in figure 8.8 below.

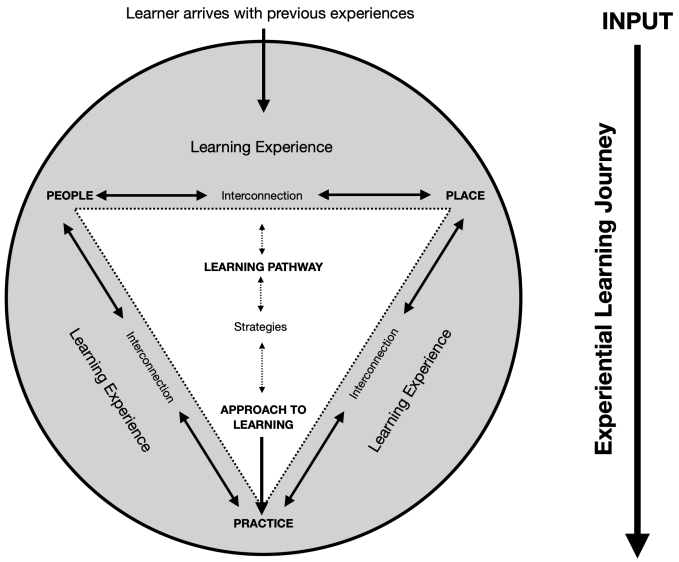


Figure 8. 8: The learner adopts strategies after exiting the learning pathway adopting learning approaches

It will be noticed that at any point in the learning milieu, the learner can return to a previous stage. For example, after adopting a strategy of learning ‘what will work and won’t work’, CS3 returns to the learning pathway to apply reflective learning to the experience (illustrated by the double arrowhead). This introduces a new strategy. This back-and-forth direction eventually leads to an adopted learning approach which may be, for example, a heutagogic, self-determined learning approach. From here CS3 applies what they have learned to their practice.

One strategy that can be adopted is to do nothing. This is evident in another scenario, where CS1 was prevented from joining the camera production team as a camera trainee. Therefore, CS1's experiential learning journey appears to be short lived. They entered the learning experience by way of a large-scale production with strong hierarchical structures. Upon encountering the people CS1 would interact with, there was a dismissal of CS1 from the team, thus forcing an exit to the learning pathway. In order to show this, additional arrows will need to be included, and can be viewed in figure 8.9.

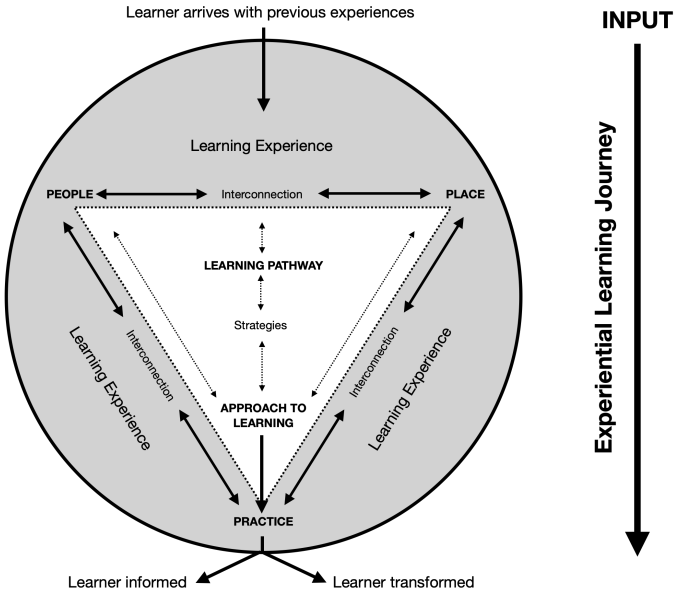


Figure 8. 9: Arrows indicating short-cuts through the learning milieu

It will be noticed that these arrows are also double-headed and can lead to a return to place or people, where the learner-practitioner may reflect on the experience, or simply move to the approach to learning. In the example presented above, CS3's involvement with the crew is restricted inferring a short-cut to the approach to learning. Why not

illustrate CS3 as exiting the learning experience? Because learning is still taking place. This is in accord with Le Cornu's (2005) notion that learning will always take place. Through the hegemonic discourse occurring in this setting, CS3 may adopt a heutagogic approach to learning. In this case, CS3 may not emerge from the learning experience as *transformed*, where their skills or operational techniques have been developed, but will exit the learning experience more *informed* as illustrated in figure 8.5 above.

Currently the mode expresses the journey through the learning milieu as a series of stages. Considering the complexity of the learning experience, additional pathways through the learning milieu can be expressed (see figure 8.10). In this way, it can be demonstrated that the learner-practitioner may continue to venture through the learning milieu, returning to one aspect, or omitting other stages as they do so. It is also evident that this journey is not easily predicted.

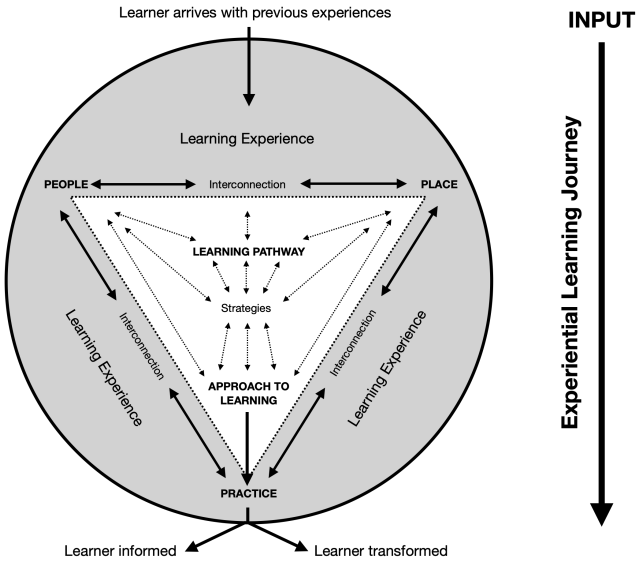


Figure 8. 10: Further complexities of the learning milieu

The final iteration of the freelance learner-practitioners' experiential learning model (see figure 8.11) presents a final output (where the learner is informed or transformed) and a return loop to a new or other learning experience from these outputs. Each of the outputs illustrate the learner-practitioner's unique experience, and the global pathway to the right of the diagram illustrates the learner-practitioner's holistic experience.

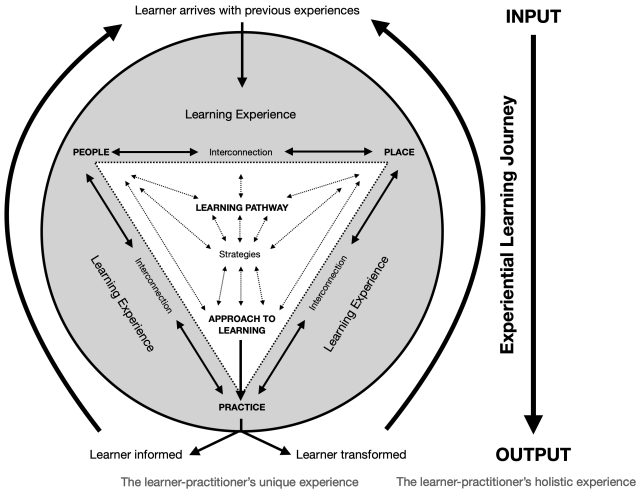


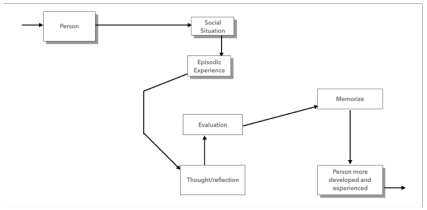
Figure 8. 11: The final iteration of the experiential learning model showing a return loop to the next learning experience.

8.3 Testing the model

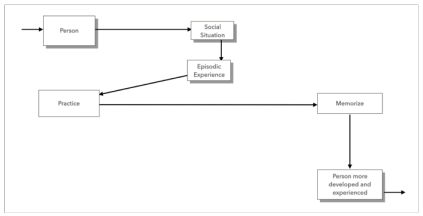
Interviews were carried out after the model had been revised, and a series of scenarios emerged from these interviews which were used to interrogate the model in Figure 8. 11.

There were four topic areas featured in the interrogation: operating new/unfamiliar equipment; developing a new technique; working in a new situation; and performing in a new role. Respondents were required to share their personal narrative relating to the four topics and were asked to provide details on what they did, what the experience gave them and was this used in future work/projects.

An example from each of the four topics are offered below and are extracted from the interviewee's responses.



LP1: Reflective learning (contemplation)



LP2: Non-reflective learning (basic skills learning)

APPROACH TO LEARNING
HEUTAGOGIC

DYADIC RELATIONSHIP
AUTHORITY RANKING

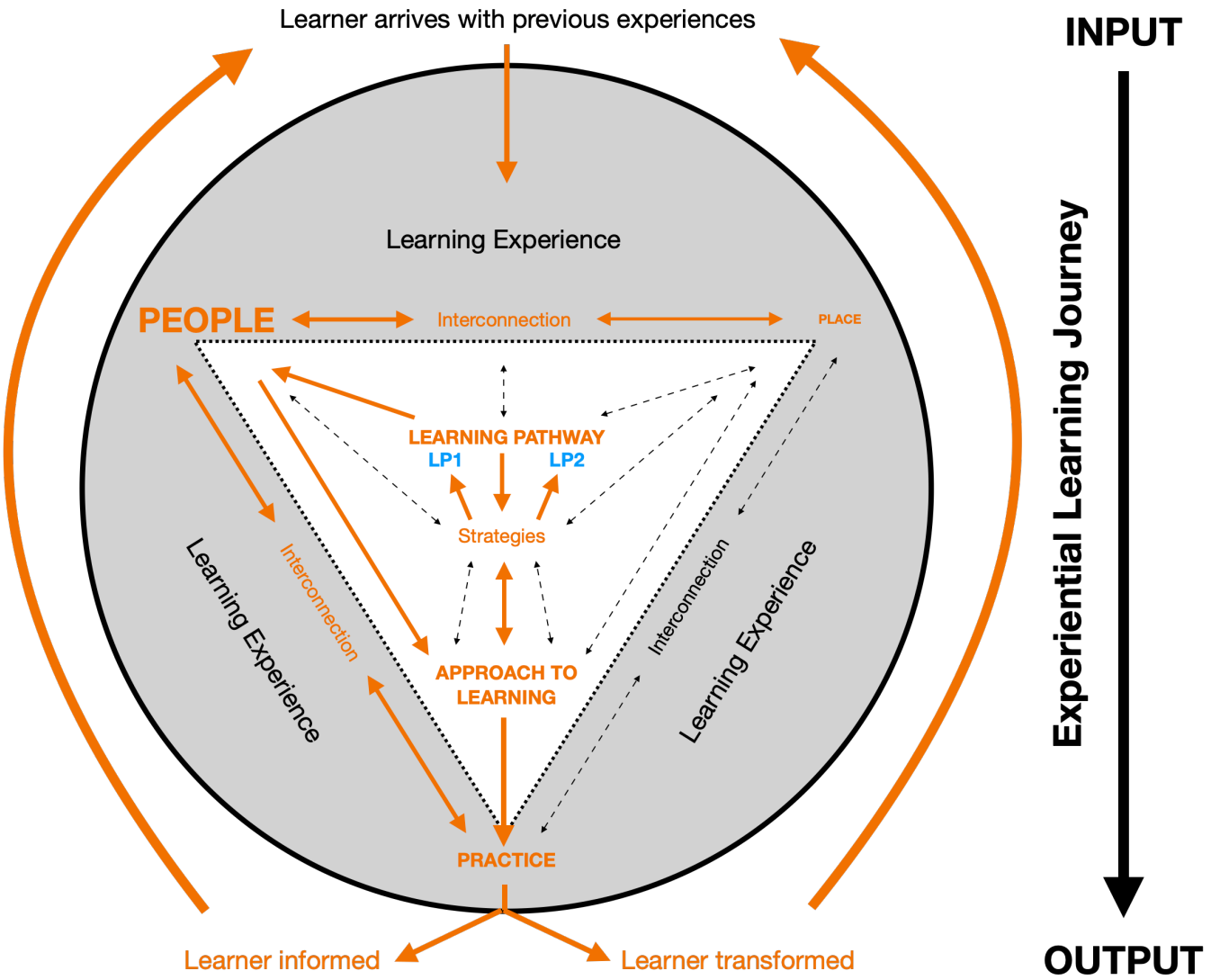


Figure 8. 12: Scenario 1 – New technique – the vertical sweep

8.3.1 First scenario: Music video – new technique, a vertical sweep

In this scenario, the learner-practitioner arrived on set and the director required a dynamic camera movement using specialist equipment (a Steadicam), where there was a continual movement – a vertical sweep – from low mode to high mode. Ordinarily, it can take up to forty-five minutes to swap-out from filming in 'low' mode to filming in 'high' mode. This is because the viewing monitor needs to be detached and re-attached once the new mode has been established because if the monitor is not removed and re-attached in the new position the operator is not able to view the image and is filming 'blind'. The director's decision to have this action, from low to high, in one movement resulted in one half of the operating mode being filmed without a monitor.

Although the Steadicam operator had previous experience with music videos, and with operating a Steadicam, they were a) not familiar with the required low-to-high dynamic camera movement and b) did not have appropriate equipment (a second monitor) to perform the move accurately. The practitioner was minded to try and attempt the camera move with the equipment they had access to.

In this scenario then, the learner-practitioner enters a new learning experience. Within this experience the learner-practitioner encounters 'PLACE'; a mind-centred learning context. This is because the context orientates the learning (Russ-Eft, 2011) as the experience of the practitioner includes critical reflection as they need to implement problem solving activities to complete the task required of the director. Concurrently, they also encounter 'PEOPLE'; the director requiring a dynamic camera movement

that the learner-practitioner is unfamiliar with, creating an *interconnection* between PLACE and PEOPLE because of the new technique required of the director. Thus, the denoted dyadic relationship is one of authority ranking (Fiske, 1992) because of the 'superior/subordinate' relationship between the director (superior) and the learner-practitioner (subordinate).

In the interview, the practitioner comments that they initially accessed a forum to find out more information about this challenge. Here the learner-practitioner has travelled straight to a heutagogic learning approach (indicated by the solid orange line within the learning milieu triangle from PEOPLE to APPROACH TO LEARNING). As such the learner-practitioner has implemented a *strategy* by accessing an online forum. This strategy imitates Jarvis's contemplative reflective learning pathway (Thought/reflection→ Evaluation→Memorize→Exit) and is indicated on the diagram above as 'LP1'. On the forum, the learner-practitioner found out that 'flying blind' can be mitigated by use of a second monitor so that viewing can be achieved throughout the vertical 'sweep' from low mode to high mode; the effect the director wanted. However, the learner-practitioner does not have this device and there would be insufficient time to arrange for one to get to the shoot.

The learner-practitioner continues through the experiential learning journey by adopting a second strategy. This is indicated by the solid orange line from 'LEARNING PATHWAY' to 'Strategies'. In this strategy, the learner-practitioner utilises a wide-angle lens to determine if the effect can be achieved by flying blind without a monitor. Here the learner-practitioner is imitating Jarvis's non-reflective basic skills learning

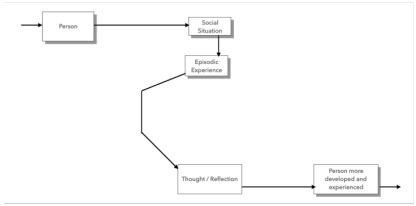
pathway (Practice→Memorize→Exit) and is indicated by 'LP2'. This is a non-reflective pathway, because the learner-practitioner is simply practicing the shot over and over to try and achieve the desired effect. The LEARNING APPROACH remains a heutagogic one.

After recording some of the takes, the learner-practitioner shows these recordings to the director, who agrees the shots and implements the technique into the overall shoot.

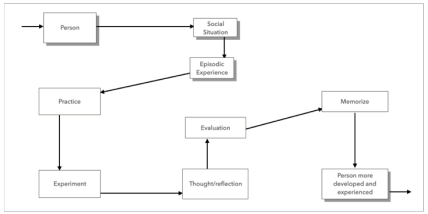
Through this experiential learning journey, the learner practitioner has added to their PRACTICE and exits the learning experience both *informed* (the respondent purchased a second monitor for future work) and *transformed* (the learner-practitioner has acquired a new skill).

Somethings to notice with this scenario. Firstly, the director had a strong influence on the experiential learning journey. Therefore, this is signified by emphasising 'PEOPLE' in the top part of the triangle. Secondly, despite different strategies being incorporated by the learner-practitioner, in this scenario the authority ranking dyadic relationship remained static and the heutagogic learning approach remained static.

The next scenario illustrates how the *dyadic relationship* and the *approach to learning* are reorientated as the experiential learning journey proceeds.



LP1: Non-learning (rejection)



LP2: Reflective learning (new skills learning)

APPROACH TO LEARNING
REORIENTATED
PEDAGOGIC → HEUTAGOGIC

DYADIC RELATIONSHIP
REORIENTATED
AUTHORITY RANKING → MARKET PRICING

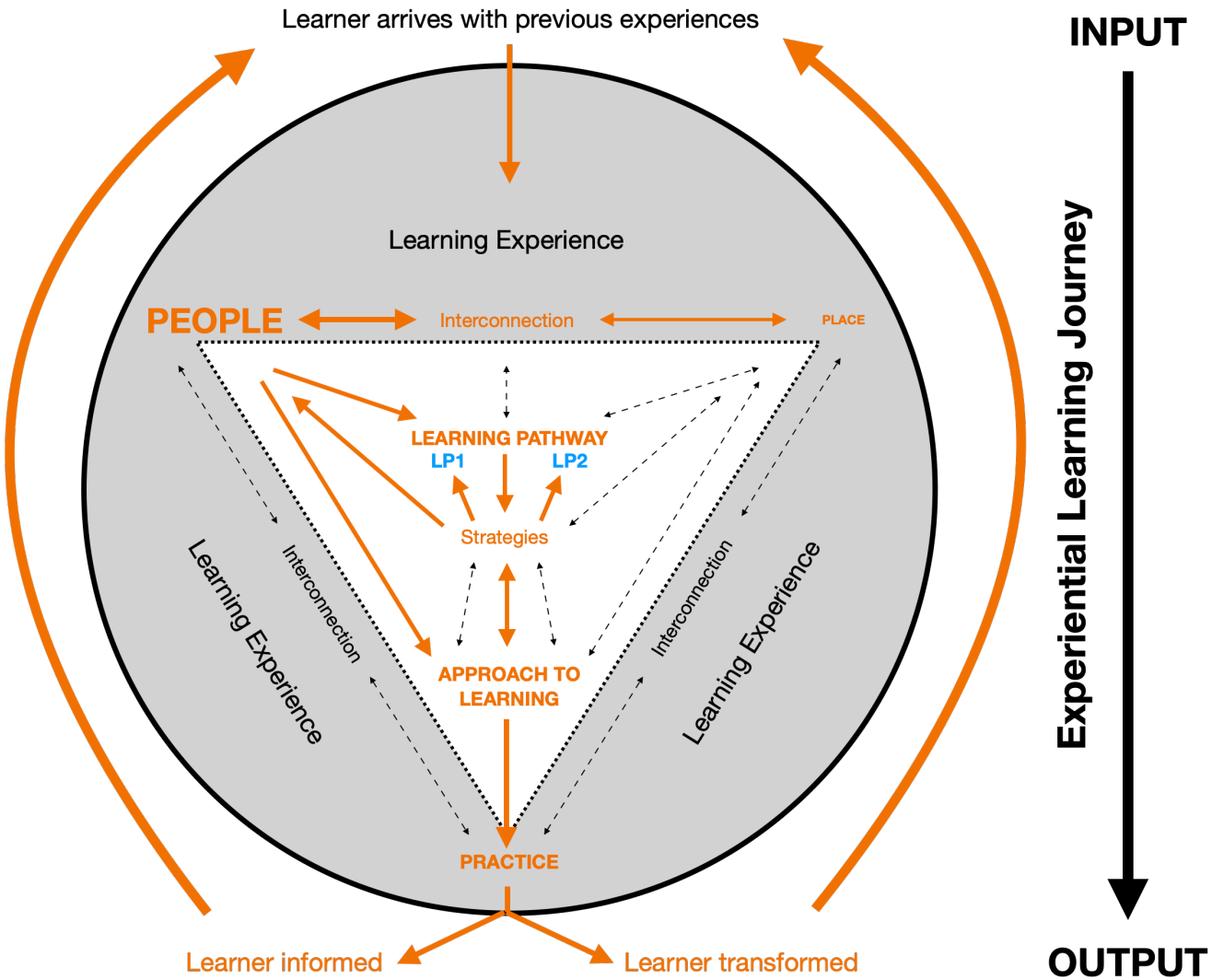


Figure 8. 13: Scenario 2 – New job role as drone operator

8.3.2 Second scenario: Drone operator – new job role

In this second scenario the learner practitioner was required to operate a drone to the directors' specifications. However, the operator was familiar with the capabilities of the drone and considered the requests from the director was not sufficiently exploring the possibilities of the drone or the operator, resulting in frustrating the operator's creative ambitions. The challenge in this scenario is for the drone operator to convince the director of the potential of the drone. After the learner-practitioner demonstrates what the drone is capable of, the director readjusts their requirements to integrate the drone operator's ideas.

The learner-practitioner enters the experiential learning journey with previous experiences of Steadicam operations, hobbyist skills of drone operations and a Civil Aviation Authority (CAA) licence to fly a drone.

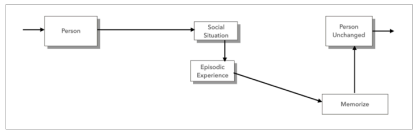
The 'PLACE' the learner-practitioner encounter in this scenario is again a mind-centred learning environment, where the context influences the learning (Russ-Eft) indicating an andragogic/heutagogic approach to learning. The learner-practitioner also encountered PEOPLE, by way of the director. The respondent recounted how the director had fixed ideas of what the drone shots should be. The respondent also commented that these shots were not utilising the drone to its full capability and tried to discuss this with the director. However, the director was insistent on the drone being used in the way he wanted. The director's insistence on specific shots indicates an authority ranking dyadic relationship and also emphasises the importance of the relationship on the experiential learning journey. This is again signified by the

emphasising the word PEOPLE and again denotes and authority ranking dyadic relationship.

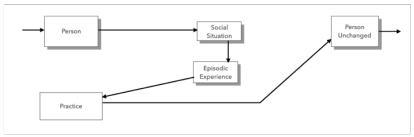
In the diagram above, the journey travels from the director (PEOPLE) to the first learning pathway (LP1). Jarvis discusses non-learning pathways, where a learner rejects learning. It will be recalled that this can be triggered by a third party, and in this scenario, the director's insistence of specific drone shots triggers a non-learning rejection response (Thought/reflection→Exit) in the learner-practitioner as they carry out the director's requests. The respondent then commented that subsequent to this initial filming, they used their lunch break to apply previous drone experiences and demonstrate the potential of the drone, recording these manoeuvres. This is illustrated by a solid orange arrow moving from LEARNING PATHWAY to 'strategy'. The frustration of the learner-practitioner is signified by a solid arrow to the LEARNING APPROACH suggesting a pedagogic approach, because the director is leading the encounter. This strategy leads to learning pathway 2 (LP2) indicating a reflective learning new skills learning pathway (Practice→Experiment→Thought/reflection→Evaluation→Memorize→Exit) by cementing the drone manoeuvres. From here the learner-practitioner develops a strategy of showing the director the drone footage (indicated by a solid orange arrow from 'strategy' to PEOPLE) and the new ideas that were possible. The director likes the ideas and the learner-practitioner utilises the drone to the satisfaction of the learner-practitioner and the director resulting in a reorientation of the dyadic relationship to one of negotiation or market pricing (Fiske, 1992). This is also illustrated

by the LEARNING APPROACH , which is now reorientated to be a self-determined (heutagogic) LEARNING APPROACH .

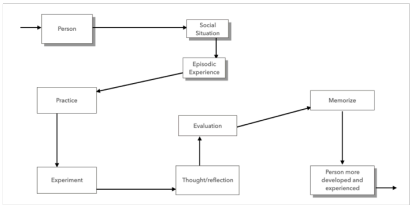
The learner exits the experience both informed because they are more confident about offering creative ideas to the director and transformed as they have developed soft skills that will help them negotiate in future scenarios.



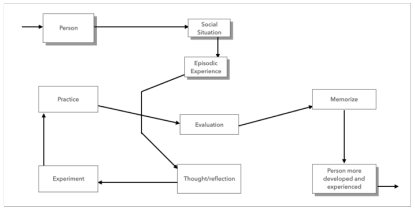
LP1: Non-reflective learning (pre-conscious knowledge learning)



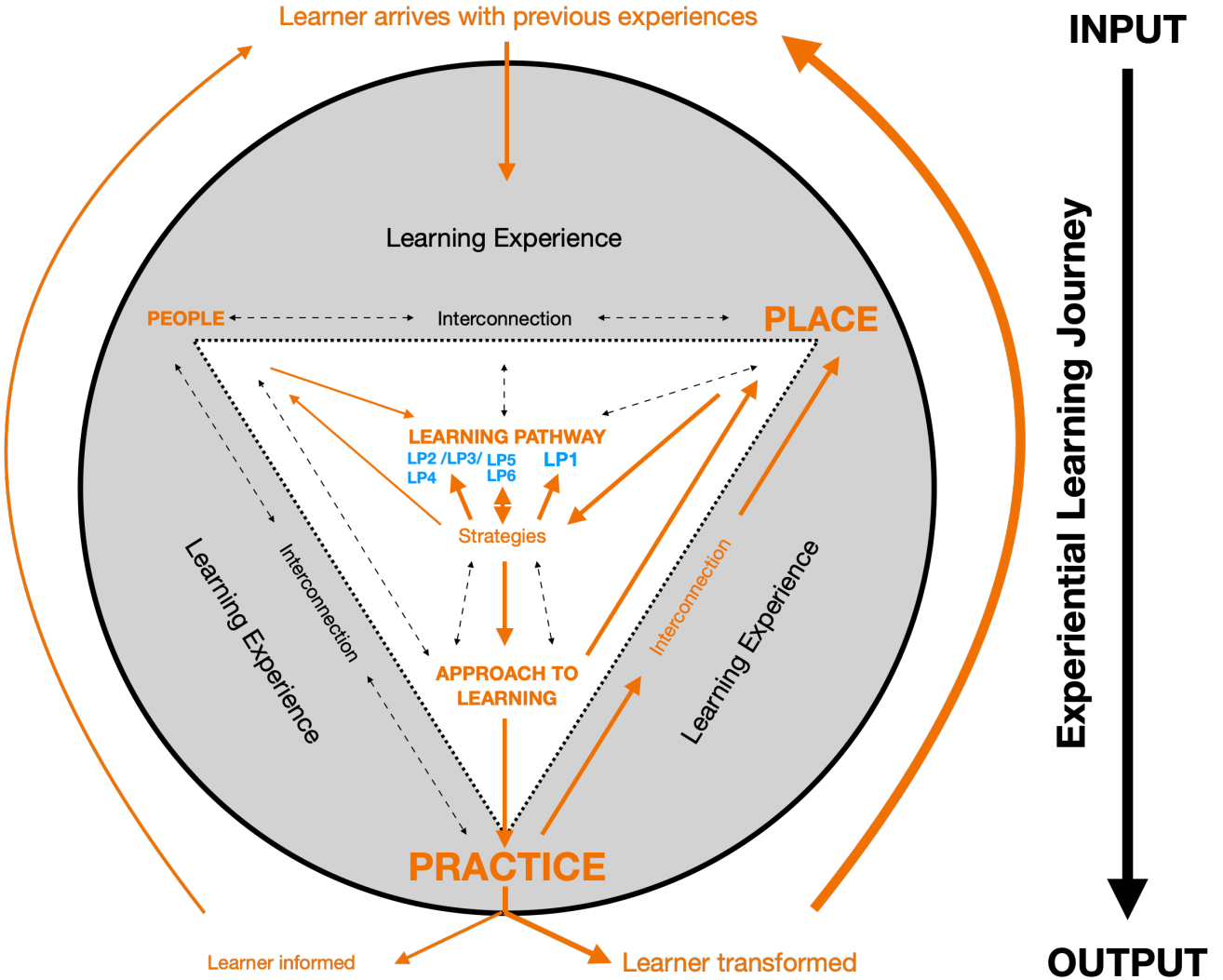
LP2 ~ LP3 ~ LP4: Non-reflective learning (pre-conscious skills learning)



LP5: Reflective learning (new skills learning)



LP6: Reflective learning (practice learning)



APPROACH TO LEARNING
ANDRAGOGIC/HEUTAGOGIC

DYADIC RELATIONSHIP
COMMUNAL SHARING

Figure 8. 14: Scenario 3 – Getting familiar with new lighting system

8.3.3 Third scenario: Equipment – new lighting system

This scenario represents the experiential learning journey occurring over a few weeks. It will be recalled that experiential learning is not necessarily the preserve of emerging learner-practitioners, but there may be times when experienced learner-practitioners encounter novel experiences that trigger and experiential learning journey. This scenario is where a practitioner has fifteen years' experience but is becoming proficient in the operations of a new lighting system that has been introduced into the market and the practitioner has invested in. The lighting system uses a beam of light and a series of reflectors, rather than different lighting fixtures, to light a scene. The challenge for this scenario is to incorporate the new lighting system into the daily activities of the practitioner. It is also useful to know that the practitioner was working independently as a camera/lighting operator.

The learner-practitioner first enters the experiential learning journey at an industry trade show, where they saw the new lighting system being demonstrated by the manufacturer. It is here that the learner practitioner encounters the first 'PLACE', where they are learning by 'observing'. This observation denotes the context as a dominant environment-centred orientation to the learning context (Russ-Eft, 2011). In contrast to the organizational socialization learning characteristics of an environment-centred orientation (passive learning), the learner-practitioner makes an active response by way of purchasing the new lighting system they have viewed at a trade fair. This is considered to be 'strategy 1' and is indicated on the diagram above by a solid orange arrow travelling from PLACE to strategies. The LEARNING PATHWAY associated with this experience so far is a non-reflective learning pathway and shown

as being LP1. Jarvis refers to an ‘intuitive’ learning experience as ‘pre-conscious’ and it is evident that this is being experienced by the learner-practitioner in the trade show, where they are encountering pre-conscious knowledge learning (Memorize→Exit).

After ordering the system, the learner-practitioner emailed the company in order to gain operational insight. The learner-practitioner also read company literature on the new system and watched a series of YouTube videos demonstrating the new system and contacted industry forums to determine other practitioner experiences. This was all done at home, partly because the UK had entered a COVID 19 UK government-imposed lockdown situation. Whilst PEOPLE were contacted during this time, the principal learning context for the learner-practitioner was their home and so PLACE become a prominent element of the learning milieu. In addition to this context the learner practitioner skills were being adjusted (to accommodate a reflective light system rather than an illumination light system). Jarvis suggests that when experts adjust their skills, they enter a pre-conscious skills learning pathway (Practice→Exit). This is illustrated in figure 8.10 by a thin orange arrow where the learner-practitioner contacted the various PEOPLE whilst developing strategies to find out more information about the new lighting system. This is also illustrated by the pathways LP2, LP3 and LP4. The LEARNING APPROACH in this part of the journey is predominantly a self-determined (heutagogic) LEARNING APPROACH and the PLACE (the learner-practitioners home) has been reorientated to become a mind-centred andragogic learning context. Russ-Eft argues that with andragogic learning, there should be an element of ‘individual tasks, group processes, and critical reflection to promote discovery, self-knowledge and self-direction’ (Russ-Eft, 2011, p659). Although the

learner-practitioner was operating the new equipment independently, it could be argued that communication with social media forums, and the manufacturer meets the requisite ‘group processes’ outlined by Russ-Eft to align this with a mind-centred (andragogic) learning experience.

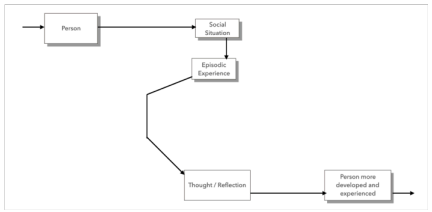
At some point during this part of the learning journey the new system arrived at the learner-practitioners home. This is the second ‘PLACE’ where learning took place and a bold orange arrow from LEARNING APPROACH to PLACE illustrates the arrival of the new equipment and the home-based context away from the workplace. PLACE 2 has now been reorientated to become a mind-centred learning environment.

It can be seen from the diagram in figure 8.10 strategies were implemented by the learner-practitioner in terms of developing understanding of the new lighting system and practicing with it. This leads to a new LEARNING PATHWAY (LP5) which is a reflective learning pathway leading to new skills learning (Practice→Experiment→Thought/reflection→Evaluation→Memorize→Exit). This new skills learning determines an andragogic/heutagogic LEARNING APPROACH.

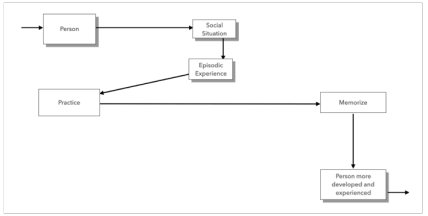
After practicing with the new lighting system, the learner-practitioner had an opportunity to use the new system in a real-world environment on a job. This led to a third PLACE which was at the workplace on a small-scale production. The mind-centred (andragogic) learning environment is maintained. Even though the mind-centred learning environment is maintained, in this new place, the learner-practitioner commented how in a real-world context the equipment needed further refinements in

order to achieve the desired lighting look of the scene, leading to further experimentation. This experimentation supports Jarvis's reflective learning pathway of practice learning where the learner experiences Thought/reflection→Experiment→Practice→Evaluation→Memorize→Exit. Again, the APPROACH TO LEARNING adopts an andragogic/heutagogic method where the learner-practitioner is developing their tacit understanding and skills through self-determined learning. From here the learner-practitioners PRACTICE is greatly enhanced and they exit the experiential learning journey transformed, because they have developed a new skill set utilising this new reflective lighting system. They are also informed to a certain degree because of the different way to light a scene.

It can be seen in the above example, that the key element to this learning journey are PLACE and PRACTICE and that dyadic relationships are not necessarily evident. This is because the learner-practitioner was working solo much of the time when using the new lighting system.



LP1: Non-learning (Rejection)



LP2: Non-reflective learning (basic skills learning)

APPROACH TO LEARNING
REORIENTATED
ANDRAGOGIC → PEDAGOGIC

DYADIC RELATIONSHIP
REORIENTATED
COMMUNAL SHARING → AUTHORITY RANKING

Learner arrives with previous experiences

INPUT

Learning Experience

PEOPLE → Interconnection → **PLACE**

LP1 **LP2**

LEARNING PATHWAY

Strategies

Learning Experience

Interconnection

APPROACH TO LEARNING

Interconnection

Learning Experience

PRACTICE

Experiential Learning Journey

Learner informed

Learner transformed

OUTPUT

The learner-practitioner's unique experience

Figure 8. 15: Scenario 4 – Education to Industry

8.3.4 Fourth scenario: Situation – transition from education to industry

The fourth scenario is one where an emerging learner-practitioner is entering early career episodes of industry from an education environment. In this situation a supervising camera operator shows the learner-practitioner how to assemble a live broadcast camera, then hands over to the practitioner to continue with three other cameras to assemble. The challenge in this scenario is the transition from university practice to industry, where there is an expectation to work independently because there are no longer opportunities to ask tutors for help if a learner-practitioner is unsure of assembly. There is also the challenge of the assembly and operations of unfamiliar apparatus.

The learner-practitioner entered the experiential learning journey with some previous experiences embedded in formal education and the diagram above uses this as a starting point for the experiential learning journey. The learner-practitioner's first encounter is the formal educational university context, and to begin with the discussion below considers this. The second encounter is a 'live outside broadcast' scenario, which is new to the learner practitioner. This context incorporates some elements to an environment-centred orientation of learning, where the learner-practitioner is required to observe how the live broadcast camera is assembled driving this environment-centred orientation (Russ-Eft, 2011). However, it also incorporates some andragogic elements of to the learning environment orientation, such as individual tasks. Here then, the orientation perhaps shifts towards an integrationist orientated environment such as a situated cognition orientation. There are clues as to this when

we notice it is a real-life rich learning context. However, when exploring Russ-Eft's (2011) presentation of a *situated cognitive* learning orientation, certain characteristics are indistinct. These are where the trainer should provide easy routes to learning and trainees should be supported by 'coaching' or 'scaffolding' (Russ-Eft, 2011). It will be shown subsequently that these characteristics were missing from the emerging learner-practitioner's experience, which may be why the episode was not as satisfactory for the learner-practitioner as perhaps it could have been.

In this episode, the learner-practitioner first encounters the PLACE. This is a formal educational university setting. This setting orientates the learning as a social learning, environment centred learning context. This resonates with Russ-Efts' work and also with the analysis in chapter 6 where there was a prominent social learning characteristic to formal learning away from the workplace. In addition to the learning orientation, the learner-practitioner is also operating university equipment. As noted by CS4 in the previous chapter, formal education is far removed from the realities of day-to-day production, especially with work such as live outside broadcast experiences. This is reasonable as individual 'box lens' cameras are likely to cost in the region of one-hundred thousand pounds. Education centres are not able to provide those type of experiences. On the other hand, the PEOPLE encountered by the learner-practitioner in a university setting are likely to consist of peers and lecturers and may be more available than personnel in a workplace setting, providing guidance and encouragement where necessary or appropriate. At the same time, this would likely present communal sharing type dyadic relationships, because of the desire to

conform [to university expectations]. The interconnection between PEOPLE and PLACE is illustrated in figure 8.11 and returns the learner-practitioner to PLACE.

The limitations of available 'live broadcast' equipment in an educational setting aligns the LEARNING PATHWAY towards a non-learning 'rejection' pathway (Thought/reflection→Exit). This is because it is likely that the only opportunity for learner-practitioners to experience this type of equipment is through thought and reflection (through studying about the operational aspect of such equipment). This is different to Jarvis's (2004) rejection response in that in has been influenced by a third party (the university's limited equipment resources). The deficiency in operational practice leads the learner-practitioner to consider alternative resources to generate knowledge of the live broadcast cameras where they seek out networks and online resources to assist, resulting in an andragogic/heutagogic approach to learning.

It is at this point in the experiential learning journey that the early career practitioner is offered work on a real-life live broadcast, which is illustrated by an arrow returning to PEOPLE.

In the real-life workplace setting the emerging learner-practitioner encounters the supervising camera operator and the PLACE where the live broadcast occurs. The commanding nature of the supervising camera operator generates an *authority ranking* dyadic relationship with the learner-practitioner because they are directing the work of the other learner-practitioners. In terms of the PLACE, the opportunities to

interact with peers and to access those with more experience would denote this as a social perspective, environment-centred orientation. Here the learner-practitioner follows a LEARNING PATHWAY closest to Jarvis's (2004) non-reflective *basic skills learning* pathway (Practice→Memorize→Exit), where they are introduced to equipment assembly, via the supervising camera operator and then are expected to practice this independently on three other broadcast cameras. Where the supervising camera operator is demonstrating assembly of the equipment to the learner-practitioner a tutor-centric, or pedagogic approach to learning is evident. This is partly illustrated by the supervisor's instruction to the emerging learner-practitioner and expecting them to 'get it' straight away, and partly demonstrated by the learner-practitioner's inability to continue assembling the other broadcast cameras because of their limited experience and may need further instruction. It could be argued that at this point a heutagogic approach to learning was presented as the supervising camera operator handed assembly of the other cameras over to the learner-practitioners. However, Blaschke & Hase (2015) argue that heutagogy operates in conjunction with basic competence, and so by the supervising camera operator not developing the learner-practitioner's understanding through reinforcement (Russ-Eft, 2011), the learning orientation is incomplete and any future learning is thwarted.

Here the learner-practitioner exits the learning pathway *informed* because they are aware of additional preparation required for new experiences but are also *transformed* as they have been introduced to live broadcast cameras.

The scenario above demonstrates a certain naivety with both the experienced practitioner and the inexperienced learner-practitioner. The inexperienced learner-practitioner's expectations were potentially shaped by a formal educational setting where guidance is provided throughout the learning journey. The experienced practitioner's expectations were that they would only need to demonstrate assembly of equipment once, and then hand over to the emerging learner-practitioner. This may well have been informed by previous experiences with learner-practitioners. In real-life scenarios, the priority is to 'make the day', and in this respect it would be unreasonable to expect the senior technician to devote their time showing the inexperienced learner-practitioner how to assemble an unfamiliar piece of equipment through either coaching or scaffolding, and to reinforce this behaviour. This illustrates some of the barriers real-life industrial practice introduces to the learner-practitioner. Perhaps the emerging learner-practitioner could have prepared more (i.e. view some YouTube instruction videos prior to the event), or perhaps the senior technician could have gestured to some useful resources before handing over independent assembly to the inexperienced practitioner. Clearly there are some issues here, which need to be considered by all parties in real-life industry scenarios.

8.4 Chapter summary and conclusions

The initial experiential learning model presented in chapter 4 was shown to be an inadequate expression of the holistic learning experience when analysed in chapter 6 using the semi-structured interview data from chapter 5. The initial model in chapter 4 primarily utilised Russ-Eft's, (2011) theoretical framework, using the data from the

semi-structured interviews and applying them to the four theoretical frameworks discussed in chapter 7. This highlighted the importance of equally significant features of the experiential learning journey such as the relationships encountered (Fiske, 1992), the learning pathways negotiated (Jarvis, 2004) and the approaches to learning (Garnett & O'Beirne, 2013). These additional features have enhanced the initial model presented in chapter 6 and have led to a revised model presented in section 8.1 above. Therefore, the model presented in section 8.2 primarily contributes to objective 3 where a heuristic model has been developed reflecting the practices of freelance learner-practitioners working in the camera production unit. It also contributes to objective 2 where an evaluation of real-life practices in this department have been tested in the four scenarios in sections 8.3.1 to 8.3.4 above. These sections also contribute to objective 4 where the model is to be tested using real-life scenarios. Using real-life scenarios to test the model illustrates how the learning experiences of the freelance learner-practitioner extend beyond 'process' and is influenced by people, place and practice. The model above also supports Le Cornu's (2005) assertion that whatever situation a learner is in, learning takes place. In this way the model extends understanding of the learning experience of learner-practitioners working in a freelance capacity in the UK Film and HETV industries.

Another advantage of the experiential learning model expressed above is that it can be applied at a macro, such as the 'new lighting system' example above, or a micro level such as the 'vertical sweep' example above. It can focus on individual learning steps, or it can be utilised to express a more holistic view of the learning process.

The next chapter concludes the thesis and provides recommendations for how the model can be used in the future.

9 Conclusions

The introduction in chapter 1 outlined three main barriers to learning for freelance learner-practitioners working in the film and television industries. The first being the precarious nature of the employment landscape, where employment is mostly project-based (Blair, 2001). Secondly, there is a dearth of formal training opportunities for freelance learner-practitioners. Even when opportunities do arise, the competition for places is so fierce, many never get the chance to participate in these formal schemes, relying instead on 'on-the-job training' (Grugulis & Stoyanova, 2009). Finally, in recent years there has been a paradigm shift in the technology used in the camera production department, where a move from analogue film to digital film has presented a number of new challenges to community members of the camera production unit which has also impacted on the learning opportunities of learner-practitioners (Poole & Ho, 2011). These led to the formulation of a research question which asks: Why does operational skills development take place for learner-practitioners working in precarious employment and in the absence of formal training schemes such as those offered by *BFI* and *Skillset*? Which was answered by the development of an experiential learning model.

With this in mind, this chapter firstly discusses the extent to which the research question has been addressed as well as how the aim and research objectives have been achieved, thus leading to the development of a model illustrating the complexities of the experiential learning journeys of freelance learner-practitioners working in the UK Film and television industries. From this, research contributions are highlighted

and the implications of this research on the community of focus are presented. Limitations of the research are subsequently discussed and recommendations for further research are finally presented.

9.1 Review of objectives

This thesis set out to develop a heuristic model that would express the experiential learning journeys of freelance practitioners working in the UK film and high-end television industries. The focus of the study was the camera production department in film and high-end television production settings as this would best represent the freelance nature of the employment contracts, where a large portion of the workforce is freelance.

9.1.1 Objective 1 – Identify different models of expressing experiential learning

Chapter 3 presented a literature review identifying experiential learning models. Starting with a discussion of experiential learning where theorists such as Kolb, and Jarvis were considered. Illeris's (2009) model of learning was subsequently presented, highlighting the cognitive and psychodynamic aspects of the learning experience. From this discussion, it was evident that these models were not able to reflect the holistic experiences of learner-practitioners; more was affecting the learning experience in the workplace, than these models alone were indicating. Some of the deficiencies of these models included an oversimplification of the learning experience, constant and consistent direction of travel through the learning model, key stages do not consider previous experiences, opposing learning stages create a dichotomy (a

full list can be found in table Table 3. 6). By not having a holistic representation of the learner-practitioner's experience, a gap is formed in the understanding of learning in a precarious employment setting. The chapter then transitioned into a discussion of andragogic approaches to learning, and relationships within the learning environment, two influencing factors to the learning experience further illustrating the gap in experiential models presented in the current academic literature.

The theoretical models in chapter 3 were used as a departure point for exploring other auxiliary experiences of the learner-practitioner in the workplace, such as relationships, contexts, and workplace expectations, which were often omitted from experiential learning models. The omission of these auxiliary factors from expressions of the learning experience constrains debates of the holistic experience of learners. Including them in models about learning, provides opportunity for these auxiliary experiences to be considered in future research. It is the position of this thesis that acknowledgement that these auxiliary experiences existing as part of the learning experience, benefits the academic community insomuch that the debate surrounding experiential learning can be extended to include these in future expressions of experiential learning. Acknowledging these auxiliary experiences are part of the holistic learning experience also helps to identify potential strategies (some of which have been discussed in chapter 8) that can be considered throughout the experiential learning journey, strategies which can supplement the learner-practitioners' own biographies. This identification of what is occurring in the freelance workplace further highlights the deficiencies of current experiential learning models.

9.1.2 Objective 2 – Evaluate these against practices of freelance personnel in a camera department hierarchical structure

By utilising an environmental scan, chapter 4 provides context to the area of study – the UK film and high-end television industries. It introduces the hierarchical structure of the camera production unit illustrating some of the challenges learner-practitioners encounter in the early stages of their career and presented some of the preconceptions practitioners had about learning. Some of these matched the literature regarding the confusion between learning and training, and also about informal learning in the workplace. This industry survey provided a snapshot of industry practice intimating at two key factors: 1) the project-based nature of the freelance environment inhibits opportunities for learning that other more workplaces may afford and 2) a more collaborative learning experience occurs than many of the existing models expressed. The semi-structured interviews presented in chapter 5 revealed the practices of freelance personnel were often in contrast to how many of the experiential learning models suggested learning happened. For example, access to online resources materialised as an integral aspect to the learner-practitioner's experience, thus leading to a more self-determined, heutagogic learning approach. This was prevalent in the workplace and outside of a workplace context (although participants reported how online resources were utilised differently in the different contexts) and it became apparent that these online resources acted as a range of ancillary support mechanisms to the lived experiences of learner-practitioners. This

was also not indicated in much of the experiential learning models further challenging some of the assumptions of the workplace learning environment.

Respondents from the environmental scan and the semi-structured interviews in chapter 5 testified to much learning occurring as part of the day-to-day activities within the camera production unit. These opportunities to learn were often fostered by the demands of the job. By utilising online resources as well as on set practices as tools for learning, respondents indicated numerous incidents leading to learning. It was also demonstrated that foundational learning can take place away from the workplace in formal and informal ways if learner-practitioners can access or if they own equipment, again not recognised in current experiential learning models.

Chapter 5 concluded that the site of learning and the relationships with surrounding personnel influenced the learning experience and how practitioners learned, and a refinement of current experiential learning models was required if these were to be appropriately expressed.

9.1.3 Objective 3 – Develop a heuristic model of experiential learning that reflects these practices

The findings from chapter 4 and from chapter 5 prompted experimentations with new forms of experiential learning models. This was initiated in chapter 5 where Russ-Eft's theoretical work was used to develop an initial model. After applying the data to the model in chapter 6, deficiencies with this preliminary model became apparent. Firstly,

it did not sufficiently indicate how dyadic relationships were influencing the learning trajectory. Secondly, the initial design reflected, what was thought to be predominant components of mind-centred influences (such as andragogic/heutagogic learning) adjoining interactive influences (such as situated cognition) with embedded bolstering influences from environment-centred attributes (social perspective, social learning and organizational socialization) to the learning experience. However, these two dominating competing components of the model (situated cognition and andragogic/heutagogic approaches to learning) ostensibly skewed the influences of these other components resulting in a bias in the subsequent diagrammatic representation. Thirdly, although Russ-Eft's meta-model had been used to build this model, it was not fully expressing how learning was orientated because of the context. Fourthly, andragogy featured in the model, but it was not clear how pedagogy and heutagogy featured. Fifthly, relationships occurring at the place of learning were not included. Finally, this initial model was not sufficiently expressing the complex learning pathways that make up the holistic experience of the freelance learner-practitioner. This led to a discussion in chapter 7 highlighting the influence of additional characteristics on the learning experience within the eight different production contexts. Chapter 8 uses the analysis from chapter 6 and the discussion from chapter 7 to remodel the experiential learning journey of the freelance learner-practitioner underpinned by the four theoretical frameworks outline above. This new model incorporated wider traits of the experiential learning journey resulting in a significant development of the experiential learning model. Firstly, in the experiential learning model presented in Figure 8. 11 the direction of travel through the learning experience

is fluid rather than being a single direction. This provides further insight into the choices learner-practitioners make in their daily activities. Secondly, the inclusion of the four theoretical frameworks in the model illustrates the complexities of the 'learning milieu'. In doing this, the model signposts to a range of factors influencing the learning experience, such as the context where the requirement to get the job done (an environment-centred, behaviourist orientation) takes priority, or the dyadic relationships (authoritative, say) within the learning environment, making it a dynamic situation, where the learner-practitioner needs to make numerous decisions. Thirdly, the model expresses an evolutionary experience, where past experiences are also considered in the learning journey. There may be past experiences from previous learning opportunities, or near past experiences from direct experimentation (for example trial and error experiences with camera menu settings). This evolution of previous experiences contributes to the overall holistic experience of the learner-practitioner. Finally, the model can be applied to micro or macro learning experiences.

9.1.4 Objective 4 – Identify barriers and drivers facilitating this engagement with experiential learning

The semi-structured interviews presented in chapter 5 highlighted challenges learner-practitioners encountered in their lived experience. It also presented incentives to learning.

Barrier 1. The priorities of production and the demands of the job direct the learner-practitioner to 'need-to-know' learning. This resulted in learning that was often

unstructured and ad-hoc. This potentially acts as a barrier for learner-practitioners to realise their ambitions for targeted discovery at the site of learning, whether this is at the workplace or elsewhere.

Barrier 2. The hierarchical nature of the camera production unit together with the demarcated responsibilities found in large-scale production upholds an exclusivity to on-set operations. This led to some early-career stage practitioners testifying to being ignored completely by crew. This ostracization presents another challenge for the emerging learner-practitioner in that it inhibits access to more experienced colleagues, where expertise can be imparted, appeared to be restricted and learner-practitioners often had to find alternative ways to garner information such as consulting peers or accessing online resources.

Barrier 3. There was an expectation that early-career learner-practitioners would be ready for work as and when demand required. There was also an expectation that long hours would ensue. The erratic work pattern and long workdays not only dictate financial barriers for emerging practitioners – limiting the type of formal courses they can register with, but it also makes physical and psychological demands of the practitioner where often they need their downtime to be downtime.

Barrier 4. The experiences of learner-practitioners in smaller production environments appear to have more focussed dyadic relationships. In this way a reciprocal, equality matching type dyadic relationship reflects the ‘desire for equality’ (Fiske, 1992) in the

learner-practitioner and this can be intensified by larger production contexts, where the emerging learner-practitioner may feel more ‘out of place’ or ‘out of step’ with the community, especially if these are very early career experiences. As may be expected, larger scale-production experiences introduce learner-practitioners to a wider array of dyadic relationships – differing from a more reciprocal peer-to-peer equality matching relationship to that of a more controlling authority ranking relationship. Furthermore, demarcation and the resulting restriction of responsibilities in job roles influences the dyadic relationships within that context with a consequential impact on learning opportunities. In these environments, learner-practitioners will be required to retain the social norms of the micro-community through setiquette, and this refashions the resultant learning experience, shifting it towards more passive, observational experiences. It is not to say that there is no merit for this type of experience of the learner-practitioners, but in an industry where the predominant learning style is kinaesthetic, passive observational experiences have limited benefits for the learner-practitioner.

Nonetheless, chapter 5 also indicated drivers to learning where there were some factors identified in the data that enhanced learning opportunities.

Incentive to learning 1. One of the barriers to learning paradoxically was also one of the main drivers to learning – that of the priority of production. Practitioners indicated that the requirements of an upcoming job prompted a learning activity where they needed to become familiar with a new piece of equipment or a new technique. In

smaller-scale productions, this presented opportunities to work with colleagues in order to get acquainted with unfamiliar techniques or equipment promoting a positive learning experience. This also strengthened the bond between peers.

Incentive to learning 2. Superiors imposing job roles on subordinates was another motivator to learning. Some experienced practitioners encouraged a more egalitarian approach to the workplace by seeing the value of colleagues becoming familiar with the responsibilities of each other's duties. This resulted in a 'shared demarcation of duties'.

Incentive to learning 3. There were times when learner-practitioners simply wanted to experiment. This was more evident in small-scale productions where practitioners had time to support a less restrictive learning environment. Smaller scale and unpaid productions, then, provide opportunities for early-stage career practitioners to negotiate roles and responsibilities within production settings, transforming dyadic relationships from equality matching to market pricing, with its consequential benefits to the learner-practitioner. For example, one key element to the learning experience that appeared from the respondents was that of 'play' or experimentation. CS1's experience of small-scale production meant that they were able to negotiate opportunities to experiment and develop lighting techniques.

Identifying barriers and drivers prompted additional literature enquiries. This additional literature review further contributed to the development of the experiential learning

model presented in chapter 8, by highlighting the importance of third parties as well as the environment on the learning experience.

9.1.5 Objective 5 – Using real-life scenarios, test a model of experiential learning that reflects the practices of freelance personnel in a camera department hierarchical structure

Chapter 8 tested the new model against real-life scenarios from practitioners currently working in the UK Film and television industries. The four scenarios consisted of a new technique, a new job role, new equipment, and a new situation. In each of the scenarios the model was a more accurate representation of the experiential learning journey of freelance learner-practitioners, than previous experiential learning models had expressed. Not only was the new model able to illustrate the complex trajectory of the learner-practitioner, but it could be applied over a variety of learning timeframes. The scenarios also illustrated that the model can also be applied to those practitioners with more experience but are encountering new situations, concluding that the model may potentially be applied to a wider community than the camera production unit making it a universal model of experiential learning.

Chapter 5 discussed the motivation to learn – this might be the demands of the job, or the interests of the learner, or requirements of learning new equipment. Chapter 8 consolidates these motivations by navigating individual real-life learning experiences through a new experiential learning model, and showing how these motivations are realised and expressed through the experiential learning journey. The model

presented in chapter 8 shows the multiplicity of potential experiential learning journeys outside of conventional training routes (it also illustrates experiential learning journeys within conventional training routes) and emphasises the impact of people, place and practice on the learning experience. In doing so chapter 8 answers the second governing enquiry from chapter 1: If learning is occurring in this precarious workplace setting, can these learning experiences be expressed graphically by way of a learning model?. Moreover, the new experiential learning model can be used to express experiential journeys of varying temporal lengths. It is the interrelationships between people, place and practice, that provide (and sometimes deny) opportunities for emerging and more experienced practitioners to learn.

9.2 Research contributions

9.2.1 Research contribution one – interrelationships between people, place and practice

In evaluating existing experiential learning models, chapter 3 highlights deficiencies in how these models express experiential learning through paying little attention to how the learning context and the relationships within this learning context influence the learning. Moreover, experiential learning is rarely considered in a freelance workplace setting. Chapter 3 presented some of the characteristics of these deficiencies, together with exploring supplementary theoretical perspectives such as learning orientation. Through this research, it was found that the learning experience was influenced by additional interrelational factors of people, place and practice. Through integrating these theories, nuances of different learning experiences have been

exposed resulting in the potential extension of the boundaries of experiential learning models.

Chapter 3 indicates that Kolb's experiential learning model is overly simplistic. As others have shown (Engeström, 1987; Illeris, 2007a; Jarvis, 2004), learning is a more complex phenomenon than Kolb's model purports. Through the introduction of the influencing external factors of people and place as part of the new learning model (and by association as part of the experiential learning journey), together with the twin outputs of the learning experience, the holistic experiences of the learner has been extended. This extension portrays learning as more than an individual cognitive experience, but also illustrates how learning experiences can be collective. Clearly there are implications for educators. In designing courses, especially those with a highly kinaesthetic learning experience, educators not only need to consider the methods used to introduce topics, but also need to consider the context in which these are presented. Moreover, the influence of relationships within the learning environment also need to be considered. For training providers, this may require a rethink in the strategies supporting training needs. The model also provides an opportunity for placements of early-career learner-practitioners within 'accommodating' workplace departments to be scrutinised to determine their suitability for a rich learning experience.

9.2.2 Research contribution two – new perspectives of the experiential learning journey

The model in chapter 8 brings a new perspective on learner-practitioners' experiential learning journey through the lens of early career stage or emerging practitioners working in the camera production unit. The model contributes to the field of experiential learning through this new perspective and offers a more holistic example of the unique learning experiences of professionals working in the technical craft area of the UK Film and television industries. It is the position of this thesis that this model not only expresses the experiences of this particular community but can also be applied to a more universal experience of learning.

The development of the experiential learning model, through the lens of a technical craft area suggests learning experiences within a precarious workplace setting is possible. Moreover, other technical craft areas such as sound, as well as non-technical craft areas such as production may benefit from the way in which the learning model illustrates the range of experiences that can occur. Similar to Jarvis's approach, it is also possible to guide these learning experiences, by applying the new experiential learning model to unique scenarios and assist the learner-practitioner in navigating the uncharted experiences they encounter.

9.2.3 Research contribution three – new targeted community of freelance camera production unit

Although research had been carried out in the area of experiential learning in a freelance workplace in the creative arts (Bound et al's., 2019 work being a notable contribution), almost no experiential learning research had focussed on the camera production unit and how this freelance employment context shaped the learning experience of the technical craft practitioner. The focus of the camera production unit in this study has attempted to address this. It was also shown through the real-life scenarios that a similar phenomenon happens in multi-camera settings. Moreover, the nature of the erratic freelance work pattern and the sporadic opportunity for formal learning reveals the determination of practitioners to learn 'by any other means' through the utilisation of online resources, peer groups and a variety of contexts. In this way, a deeper understanding of the learning activities has been achieved through focussing on this specific workplace community.

There has been little research focussing on the camera production unit and the deeper understanding of the idiosyncrasies of this community leads to opportunities to support early career stage learner-practitioners. This support can be integrated into formal as well as more informal learning programmes. Initiatives from Skillset could be enhanced by the implementation of the experiential learning model as a way to explore workplace learning in specific craft departments. Moreover, using the model to consider other similar workplace scenarios where precarious employment is evident,

may shed light onto alternative learning practices that could be introduced into the camera production unit learning experiences.

9.2.4 Research contribution four – scale of production influences the richness of the learning experience

The scale of the production context also had a bearing on how practitioners learned. Chapter 5 revealed how members of the production team were closer or further away to the centre of the community relative to the scale of production. Given the nature of small-scale production and unpaid production scenarios, where the boundaries of job role demarcation are somewhat blurred and given the deciding factors that practitioners make towards working in such contexts, such as how volunteering on a project will benefit the practitioner, this would be expected. However, in some instances, this benefitted practitioners because they were able to accept higher ranking positions, within smaller productions leading to richer learning experiences. For others, larger-scale productions introduced alienation, as they were not accepted into the community, or the production team was seen as 'cliquey'.

Understanding how the scale of productions can lead to richer learning experiences could be used to strategize career trajectories of new entrant and early career practitioners in this industry. The awareness of how production scale influences the learning experience provides opportunities for support networks to be established utilising industry partners, thus further enhancing early career learning experiences.

9.3 Impact on current practice

There are certain assumptions associated with training in the film and television industries, where it is either often difficult to access training initiatives or there has been a decline in formal training schemes. In recent years, mentorship schemes have been introduced by mainstream sector agencies such as *BFI* and *Skillset*, but competition for these is fierce and early-career learner-practitioners find it challenging to access these in any meaningful way. Furthermore, although barriers remain for learner-practitioners to learn, this thesis has drawn attention to existing alternative routes for entry-level practitioners to learn their craft. The proposed experiential learning model provides a means for learner-practitioners at all levels to consider their current practice and inform future decisions on how to advance their socio-technical skills, leading to a better management of a career in an industry of continued technological change.

'Play' is an integral part of the learning experience for practitioners working in the industry. If learner-practitioners can generate opportunities to develop their skills through experimentation (i.e. through volunteering on small-scale projects, or requesting access to equipment from a rental house) their abilities will be reinforced, impacting on their perception of themselves in the wider community. The proliferation of online resources as indicated by the semi-structured interviews and the industry surveys, can go some way to achieving this and are an addition to the freelance learner-practitioner's toolbox. For example, many camera manufacturers now have online simulation sites that imitate digital operations of their cameras. Having

strategies that utilise these resources appropriately empowers the learner-practitioner and increases their confidence levels so that they are more accepted into the community.

Chapter 5 alludes to skills development being only one facet of the learning experience for entry level practitioners. Becoming familiar with learner-controlled vs mentor-controlled learning approaches, how the environment orientates the learning experience, reflecting on the relationships formed through the hierarchical structures and resulting strictures of on-set practice can only benefit the emerging freelance learner-practitioner. Importantly, these features of the development of the learner-practitioner are not necessarily included in the study diet of conventional film and media courses. All of this takes time and often emotional investment. Were educators to incorporate some of these characteristics of the kinaesthetic learning experience into formal courses, emerging practitioners may have a better chance of survival in an industry that is notoriously difficult in which to get established. Moreover, encouraging new entrants to get experience outside of a structured course at an early stage in their development further enhances their chances to start to get familiar with operational practice and get established.

9.4 Limitations

It is recognised that the research presented in this thesis has certain limitations. Although the research adopted a qualitative methodology overall, the environmental scans introduced a quasi-mixed methods approach through the use of quantitative

analysis. As such integration with the qualitative interview data was challenging because of seeming contradictions in each of the data sets. For example, the first environmental scan revealed limited participation from different demographics such as female contributors and more experienced practitioners. However, this was somewhat addressed during the first phase of interviews where more experienced technical craft operators and female learner-practitioners were included to provide potential insight into these other experiences. It is recognised that the second phase of interviews designed to test the final iteration of the experiential learning model included responses from multi-camera factual practitioners, a group outside of the initial parameters of the focus of study – single camera drama production. Whilst this could have skewed the results of the test phase, the inclusion of these members of the wider production community served to support the testing of the model demonstrating its functionality across a range of screen operations. It is also recognised that the recent pandemic might have had an impact on the learning strategies of the respondents to both the second environmental scan and the interviews employed to test the model. Indeed, one respondent admitted to using the lockdown period to develop their understanding of new lighting equipment.

The limited sample size of respondents to the semi-structured interviews in the primary data gathering exercise introduced another challenge. The initial phase consisted of only six respondents. Moreover, because of the semi-structured nature of the interview schedule, the resulting data from each of the respondents differed greatly relative to each other. The ensuing excerpts in chapter 5 and subsequent analysis of data in

chapter 6 reflects this disproportionality, potentially influencing the calculations conducted in chapter 6. Although more data may have mitigated this somewhat and would have provided a more comprehensive picture of each of the learning contexts, the time constraints of the research restricted any further data gathering of this type. It is recognised that additional research outside of the scope of this thesis would be required in order to give greater credence to the findings of this chapter. All the same, as discussed in chapter 2 sufficient data was collected that would prove appropriate for the nature of this research. Furthermore, the high volume of empirical data provided value to this phase of the study, and provided an impetus for it to be fully utilised in chapters 5, 6 and 7.

Tensions still remain with this expression of the experiential learning journey via the final learning model. Does the complexity of the model obscure other nuances of the experiential learning journey? In other words, are there other avenues that are beyond the scope of this research that could be explored which are supplemental to the model.

Furthermore, do other technical craft areas, such as sound production, reflect some of the findings of the research and is the model representative of freelance learner-practitioners in technical craft roles, or can it be applied in other 'non-creative' professions, such as accountancy, engineering and law? In addition, can the model be successfully applied to other self-employment workplace settings and is it relevant to the learning experiences found in permanent or long-term learning environments, such as formal education institutions and apprenticeship modes of learning?

9.5 Future work and future research directions

Currently the experiential learning model presented in chapter 8 satisfies the aim of this thesis and reflects the holistic experiences of those working as freelance in a technical craft position. However, as indicated in the previous section, to build on this thesis further research may yield enhanced results to the findings in chapter 8 and signpost to the development of the model, highlighting nuances omitted from the latest version.

9.5.1 Research the psychodynamic dimension of experiential learning

Illeris (2007) alludes to a psychodynamic dimension to the learning experience, which resonated with some of the work presented by Jarvis's (2004) experiential model. However, these were beyond the scope of this research and have not been explicitly included in the model presented in chapter 8. More research is required to determine how psychodynamics influence the learning motivations and the resulting experiential learning journey.

9.5.2 Develop a library of strategies to assist with day-to-day activities

In order to aid learner-practitioners with the development of their skillset and their understanding of the workplace environment of single-camera production, the strategies element of the model could signpost learner-practitioners to a variety of resources that they could utilise in their day-to-day activities. For example, using the data from the semi-structured interviews, four avenues of development could be presented.

- The first would identify the characteristics of a learner-practitioner in a freelance workplace setting; highlighting the issues the erratic nature of freelance work, and the consequential limited opportunities for learning that are associated with this employment pattern.
- The second avenue would introduce how freelance learner-practitioners can incorporate experiential learning into their day-to-day practice. For instance, the topics outlined above could be a departure point for investigation for learner-practitioners entering the freelance marketplace.
- The third direction would consider how technology could be embedded into this experiential learning. This might present utilisation of learner-practitioner resources that are already at their disposal, or might guide the learner-practitioner towards specific online resources such as camera simulators.
- The fourth route would present wider opportunities for experiential learning, synchronising with the first theme, it would introduce the emerging practitioner to workplace contexts, guiding the learner towards appropriate ways to work with colleagues in order to benefit the learning journey.

9.5.3 Longer range studies of the field

The thesis used a cross-sectional approach to gathering data. However, a longitudinal study incorporating other technical craft areas as well as single and multi-camera operations may determine nuances between learning experiences. Moreover, exploring the impact of the recent pandemic on learning practices may also reveal how a freelance practitioner has incorporated new practices into their learning experiences.

9.5.4 Apply the model to other industries

Finally, other industries where predominant freelance work patterns dominate could be explored using the experiential learning model. Comparisons could then be made between other technical craft departments. Furthermore, including more traditional learning activities (i.e. classroom activities or CPD from employees in other sector with permanent employment contracts) into this research would widen the reach of the experiential learning model and test it against these scenarios.

9.6 Chapter summary

This chapter summarised the findings of this thesis. It showed how the aim and objectives presented in chapter 1 had been met through the research of this thesis and through the development of a heuristic experiential learning model. The proposed experiential learning model presented in chapter 8 addresses some of the deficits of other experiential learning models discussed in chapter 3 that had omitted certain features of the experiential learning journey. These auxiliary characteristics such as relationships, learning approaches, influence of the environment and the learning type and other contributions of the research were then presented. The chapter also presented the impact of the research, whilst acknowledging some of the limitations of the thesis. The chapter culminates in a discussion of future work and future research which would assist with day-to-day activities of freelance learner-practitioners, as well as extended studies to determine additional nuances of the model, such as the psychodynamic effects of experiential learning on the motivation of learner-practitioners.

Whilst the focus of the study is single-camera drama production, testing of the proposed experiential learning model also provided illumination to the learning practices of multi-camera production operators potentially steering future research towards other industries and sectors further exploring the interrelationship between people, place and practice.

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APPENDICES

Appendix 2.i. List of questions and topics guide for semi-structured interviews

1. **Occupational Progression (Elkins, Blair)**
   - 1.1. Describe **how** you got your First Job in the industry > Second Job > Third Job
   - 1.2. Describe your journey through the ranks – **How** did you progress through the ranks.
   - 1.3. Reserving the work for specific DoP
   - 1.4. Have you worked in another capacity (i.e. factual > fiction)
   - 1.5. Describe any chance meetings and how they influenced your job.
   - 1.6. **What** has helped most with progression?
   - *1.7. Prompts*
     - 1.7.1. Relationships
     - 1.7.2. Place
     - 1.7.3. Experience

2. **Formal Learning (Guile – The media apprenticeship paper / Billet - Tailor Apprenticeship)**
   - 2.1. What qualifications have you gained prior to freelance work?
   - 2.2. What experience have you gained prior to freelance work?
   - 2.3. What qualifications have you gained whilst freelancing?
   - 2.4. Describe any experiences during your freelance work, that have challenged you beyond your level of experience.
   - 2.5. What has helped most with understanding kit you use?
   - *2.6. Prompts*
     - 2.6.1. Prior Experience / Prior Qualifications
     - 2.6.2. Challenging Experiences
     - 2.6.3. Training Courses
     - 2.6.4. Qualifications

3. **Informal Learning (Eraut)**
   - 3.1. Do you have a Mentor?
   - 3.2. Do you meet with peers regularly?
   - 3.3. What other interaction do you have with industry?
   - 3.4. Who do you go to, to get support and advice?
   - 3.5. Describe where / when you feel you got to find things out?
   - *3.6. Prompts*
     - 3.6.1. Mentor system
     - 3.6.2. Voluntary unpaid work
     - 3.6.3. Places of Learning
     - 3.6.4. Funded voluntary work

4. **Supplementary Income (Ashton & Ashton)**

4.1. What portion of income is not from production?
4.2. Where is this portion of income coming from?
4.3. Have you tried funding from alternative sources, such as CCC?
4.4. Prompts
    4.4.1. Type of work
    4.4.2. Extent of travel

5. Access to Learning Facilities (Creative Skillset)
5.1. How do you get to grips with new technology / new techniques?
5.2. How do you improve skills or prepare for the next job?
5.3. When do you practice with equipment?
5.4. *Prompts*
    5.4.1. Trade shows
    5.4.2. Training centres (SONY @ Pinewood)

6. Social Networks (Grugulis & Stoyanova)
6.1. Who do you mix with most?
6.2. Do you socialise with crews during/after job?
6.3. Portion of friends in industry?
6.4. Prompts
    6.4.1. Voluntary unpaid work
    6.4.2. Production networks
    6.4.3.

7. Job Opportunities (Blair)
7.1. Have you ever declined work whilst waiting for confirmation of job with a DP you regularly work with (if a DP, then ask if they have expected the crew to reserve themselves for a job)? Expand.
7.2. While waiting for larger jobs, what other smaller jobs in similar role have you taken.
7.3. Describe the role of an agency in getting work for you.
7.4. Other larger jobs in different capacity
7.5. How far have you had to travel to secure regular work?

8. New ways of working (Engeström (1987) – Human Activity System.).
8.1. Can you describe how some of the newer technologies that have been introduced into the film production process has changed the way you work?
8.2. Have there been any developments in terms of new job roles?
8.3. How have you managed to get up to speed with these new technologies?
8.4. Prompts
    8.4.1. New processes
    8.4.2. New job roles
    8.4.3. Informal learning.

Summary
Occupational Progression

Formal Learning
Informal Learning
Supplementary Income
Access to Learning Facilities
Social Networks
Job Opportunities
New ways of working

Appendix 5.i. Biographies of respondents to semi-structured interviews

Respondent #1 (CS1)
CS1 Works at a large inner city post-1992 university. He has about ten years of experience in the screen industries. Studying for an undergraduate Graphic Design course, he started to get occasional corporate work filming talking-head type interviews. By the time he reached his third year he was getting smaller jobs, working on short films as an assistant camera and set up a company filming live music events (using multi-cameras) once a month in London and music videos. He continued his studies at post-graduate level and started to forge a career in the industry working on Hollywood films, smaller budget feature films, music videos, commercials and short films. He has experience of assistant work and recently as cinematographer (Head of Department). He has also developed his skillset in Motion Control Camera Operating. He continues to work at the university, but also continues to work in jobs at all ranks (depending on the scale of production).

Respondent #2 (CS2)
CS2 is an experienced practitioner with nearly fifty years of experience in the screen industries. He founded a well-respected online forum that is used by many professional cinematographers and has a good international reputation as being an expert in his field, verified by being a visiting professor at a post-1992 University.

He started as an assistant stills photographer in London in the 1970s eventually going self-employed attempting to get work as a freelance photographer. Not earning enough as a photographer, he supplemented his income with other jobs, whilst building up the photography client base. As he started getting established, he then ventured into moving images and started filming live music concerts around the country. At the same time, he worked in a film processing lab, where the live music concerts were filmed at evenings and weekends. At some point in his early career he became seriously ill and, after he had recovered, decided to work in the Middle-East working for a large communications company – multi-skilling as a film camera operator, film processor and film editor.

It was during this time that he started negotiating ‘knowledge sharing’ with his colleagues and peers, whereby he would teach TV Cameramen to use film equipment, in return to them teaching him to use TV equipment. After this he came back to UK and got work, as a TV camera operator doing live links for American TV stations. From these experiences, he returned to the Middle-East to become a news / documentary camera operator.

After twelve months, CS2 returned to UK and worked as a freelance TV camera operator in two large Northern television studios utilising studio down-time and his spare down-time to learn about the different cameras and develop his operational skills. CS2 got a ‘big break’ in freelance work when a fellow freelance operator got a staff job in the south of England and gave all his contacts to CS2.

In the late seventies he joined a London TV Facilities company, filming high-profile pop videos and high-profile TV programmes. During this time he was also contacting manufacturers for operator manuals and developed a reputation for being an expert in camera technologies. Shortly after this he started demonstrating cameras for manufacturers at international trade shows.

CS2 eventually set up his own facilities company in central London, where he applied his knowledge of film operations to video cameras and used these skills to film high-profile music tours. During one major tour he suffered a serious illness, being off work for three months at which point the company failed and went bankrupt. A deal was negotiated for another company to buy the liquidated company. Because of his positive working relationship with the new owner, in this new company, he was given shares in this new company and in the mid-eighties he sold his shares in this company and went freelance as a camera operator in commercials and documentaries.

During the late eighties CS2 signed up with a crewing agency and in the early nineties simply focussed on commercials and music videos where he also set up an industry respected online forum for professional cinematographers.

Shortly after the turn of the millennium he filmed his first long-form feature. Shortly after this, he shot his first Hollywood feature, and shortly after that filmed a high-profile TV series.

He continues as consultant and practitioner.

Respondent #3 (CS3)
CS3 is an experienced lighting director, with over thirty years' experience in the industry. He is London based, and started out in theatre. After a short while, he landed a day job at a lighting hire company, setting up and rigging lights for music videos. He then worked freelance on feature films, and other commercial work. After about five years, he became a programmer for a newly developed dynamic lighting rig. From this he was an associate with a famous TV Lighting Director and worked on Large Light-Entertainment Television productions in UK and Europe, up to the early 1990s. He then went back to running a small local theatre.

From here he worked for the BBC on children's television, music shows, quiz shows. He then went to work on large shopping channels, then some live outside broadcast work for a large Sports TV Company. From this he made contact with a large American company lighting for large stadium sports events.

He continues to work as a freelancer in the television sector.

Respondent #4 (CS4)
CS4 is a recent graduate from a science degree film course run by a post-1992 university. He was a mature student when he joined the course, and knew the area that he wanted to work in. His main aspiration is to be working in the production

department (Producers, First Assistant Directors, Location managers, etc.). He has organisational experience from the Territorial Army and also has a number of years work experience in a range of customer facing jobs in cafes and restaurants, and teaching English as a Foreign Language.

During the first year of his degree, he was working on a number of local short films in order to build up his 'Runner's CV'. This took the form of different projects inside and outside of the university. In the middle of his second year, he enrolled with a diary service, which provided him with a limited number of days of paid, professional work leading up towards Christmas time. This changed, towards the end of the second year, as the summer – the production season – approached. This continued until after graduation, where he made the decision to move to London and work on a number of different types of productions – from commercials to corporate films.

He has worked on large-scale productions (over three-hundred crew), and more medium scale television work. He continues to work in the industry and is determined to develop and forge a career as a producer.

Respondent #5 (CS5)
CS5 is also a recent graduate from a science degree film course run by a post-1992 university.

During his degree, he was working part-time for a large national camera retailer. After graduating he was able to negotiate a transfer to a Central London branch, with the intention of reducing his hours and starting his career in London. However, he found London to be too expensive to do that and so took on a full-time position.

During this time, he met clients and whilst working full-time at the camera retailer, secure the occasional freelance work, filming events. Working full-time with unpredictable hours, meant that it was increasingly difficult to arrange shoots, and organise filming. After a year of this he left his job and tried to find work. Unable to do so he set up as full-time self-employed, but he soon found himself without consistent work and sign on for unemployment benefit.

He finally landed a job working for an international television company assembling edits for their sport programmes. This was a challenge for CS5 because his training was in film production, rather than television. Initially the contract was for two weeks, but this was extended to four months and leading to the job title 'Head of Digital'. While at this job, he was contacted by a company where CS5 accepted an entry level job in post-production. This was a difficult decision for him, at the time, because he had previously worked at a senior level.

He is currently working in the post-production company as an assistant online editor.

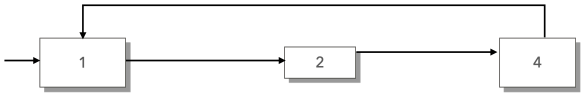
Respondent #6 (CS6)

CS6 is another recent graduate from a science degree film course run by a post-1992 university. At the end of the second year of her degree, she also did a mixture of paid and unpaid work on a number of shorts films and music videos. Between the second and third year of her degree, she worked on a feature film. Shortly after graduation she worked on some drama projects (in the second unit camera team) for a large UK broadcaster. She also did work for an animation company during this time as behind-the-scenes camera operator and lighting, and some editing of the animation.

Her first full-time job after graduation was working for a branded camera rental house based in the largest studio in UK, mainly preparing cameras for corporate clients.

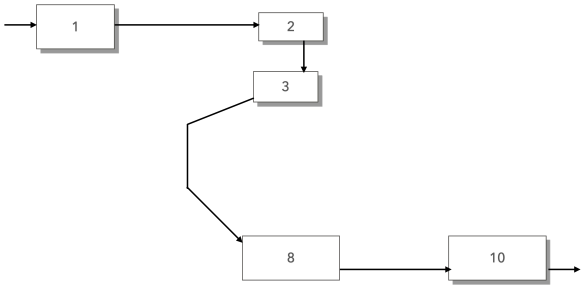
She currently works for a company in London working in corporate productions, and takes the opportunity to do personal projects outside of work.

Appendix 7.i. Examples range of learning pathways from semi-structured interviews



a.

b.



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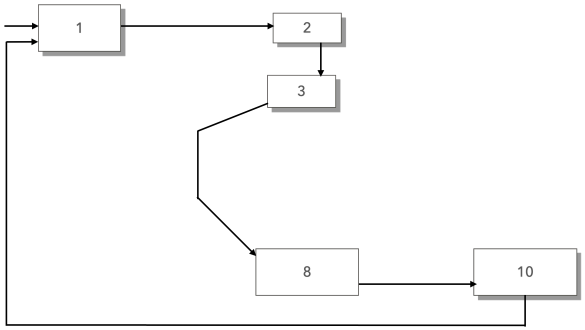

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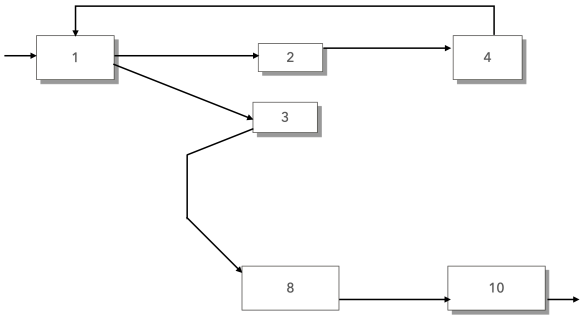

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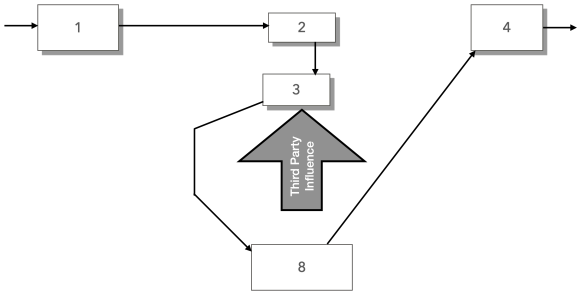

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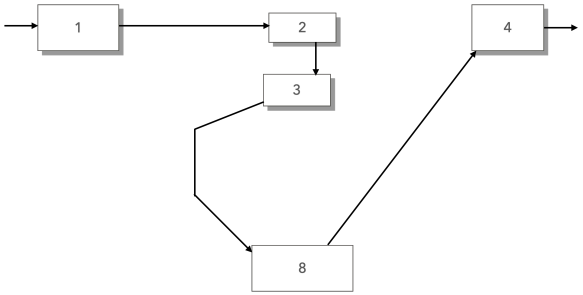
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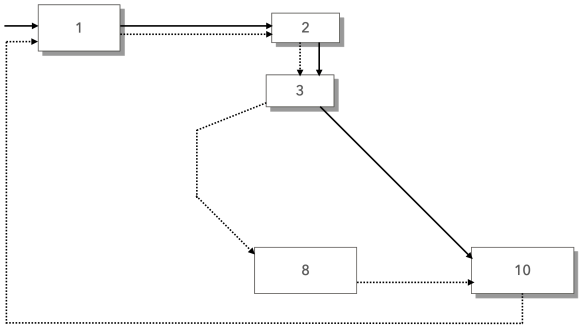
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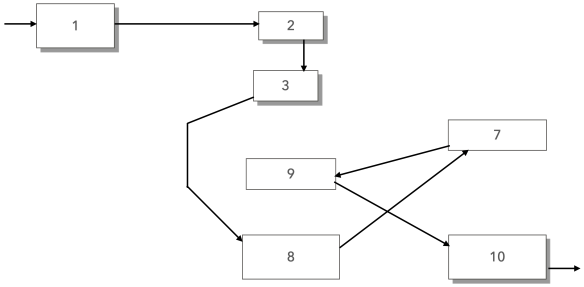
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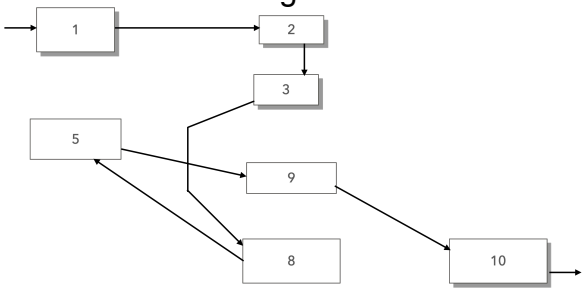
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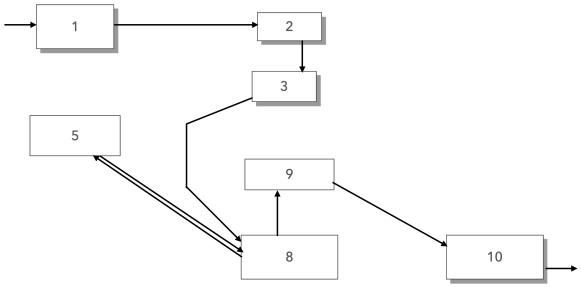
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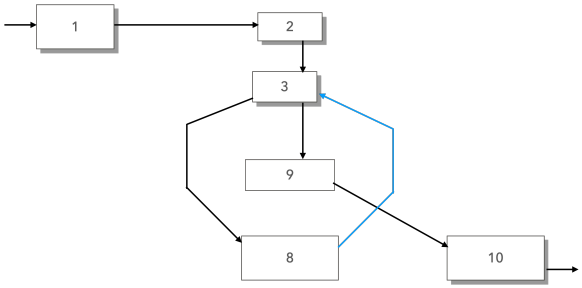
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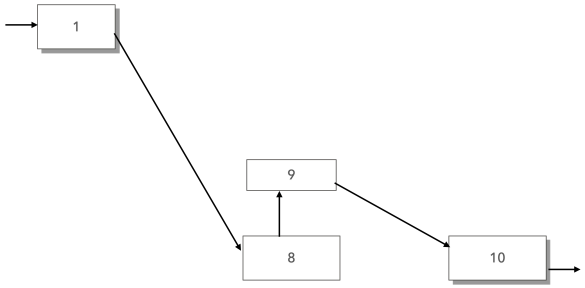
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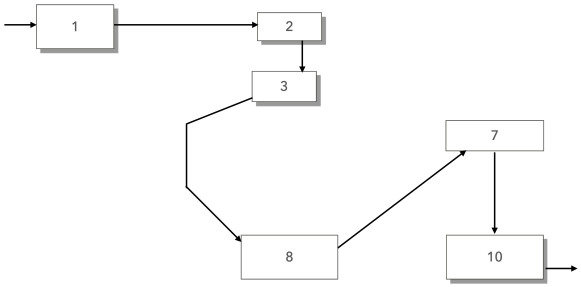
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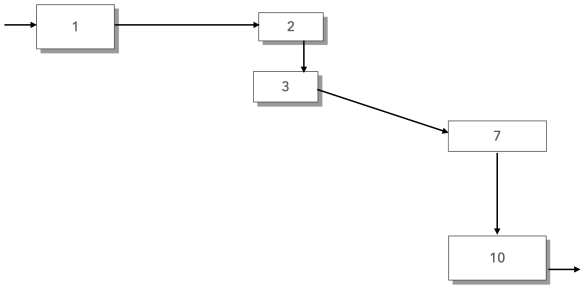
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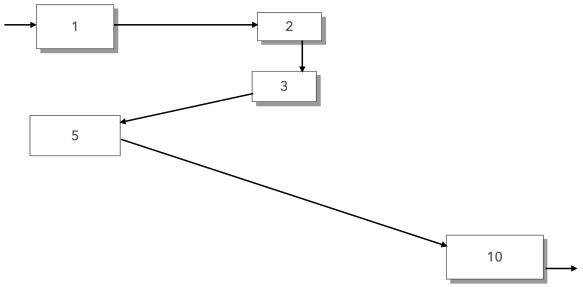
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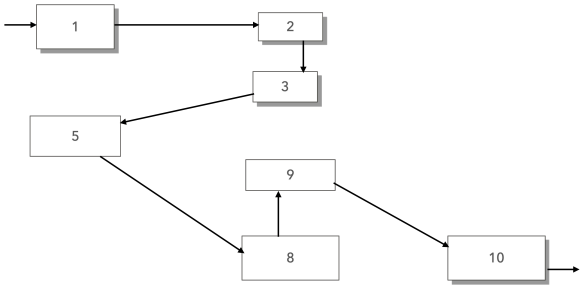
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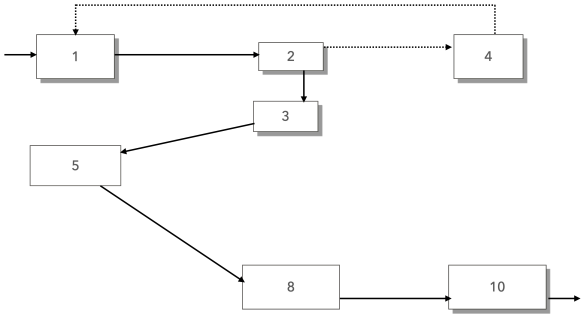
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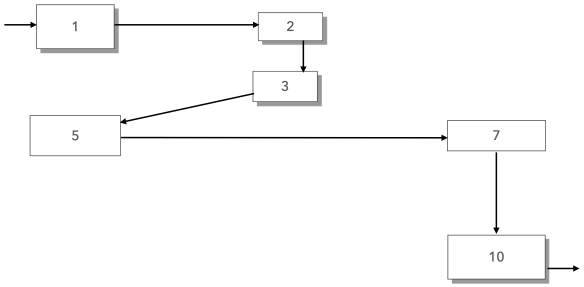
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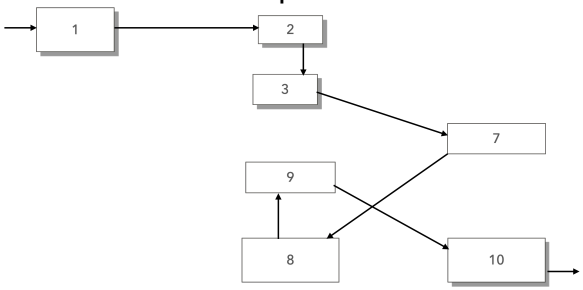
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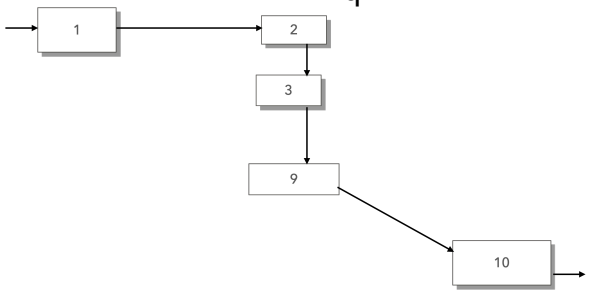
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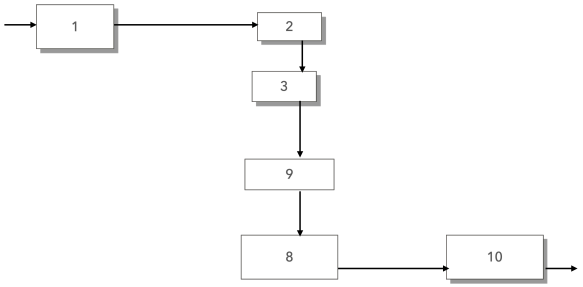
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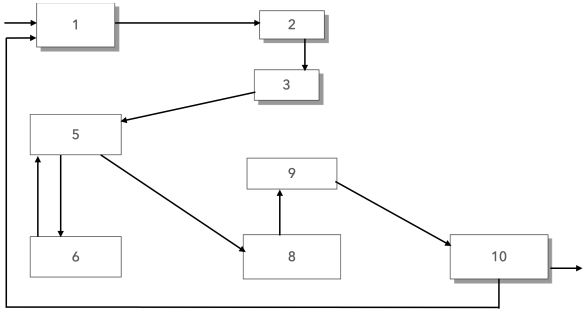
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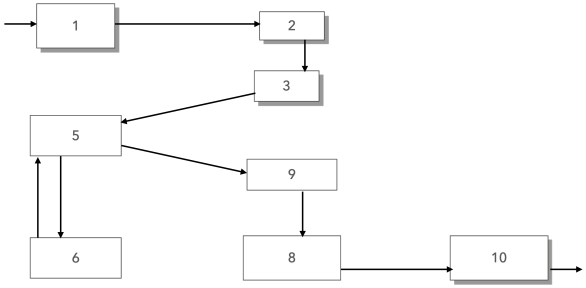
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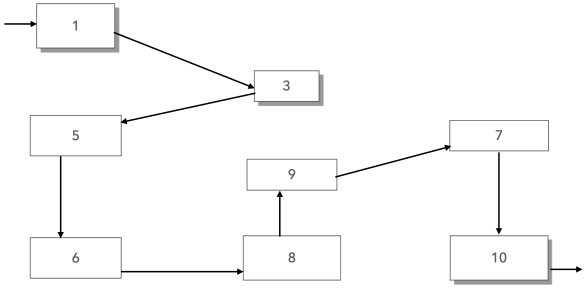

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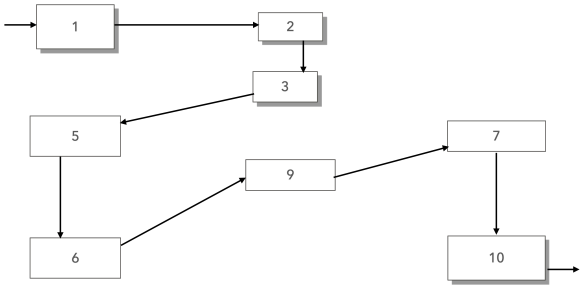

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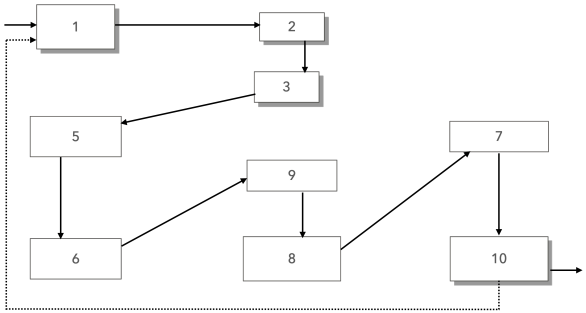

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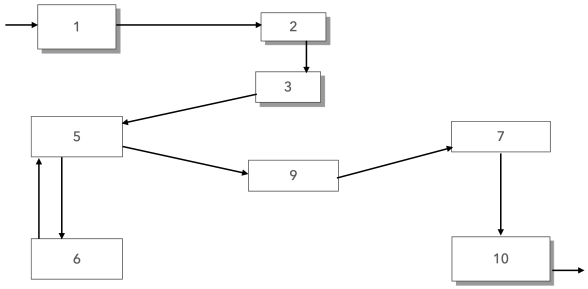

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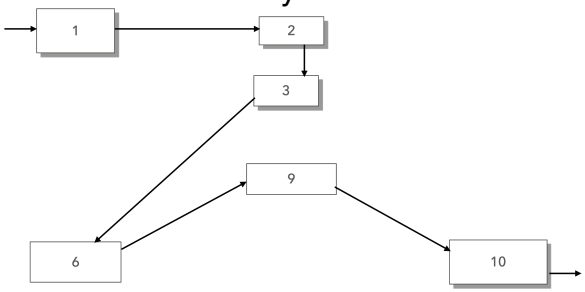

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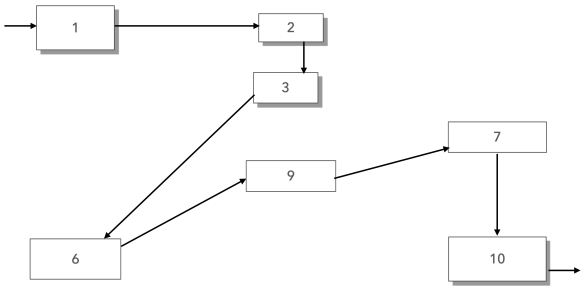

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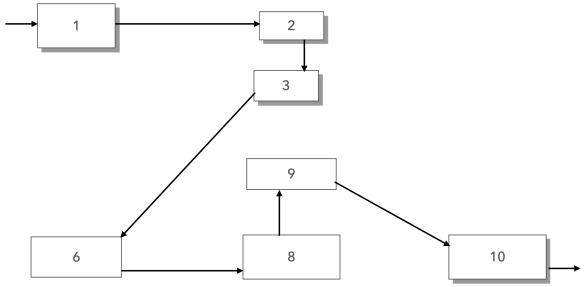

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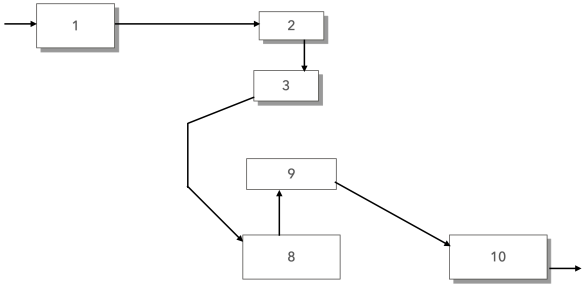

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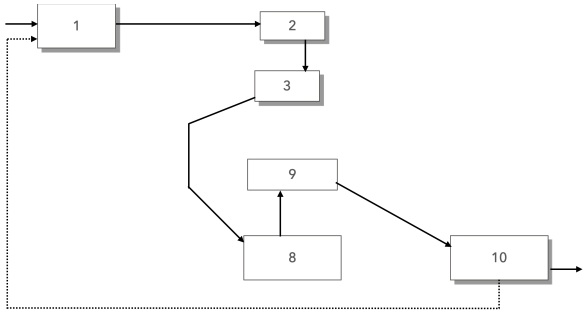

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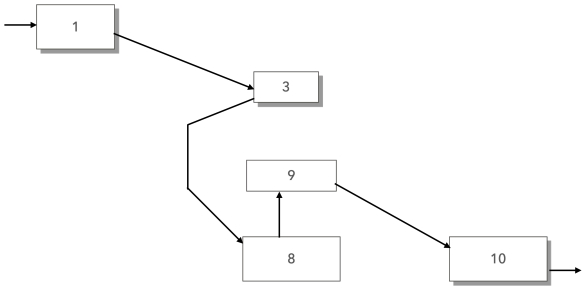

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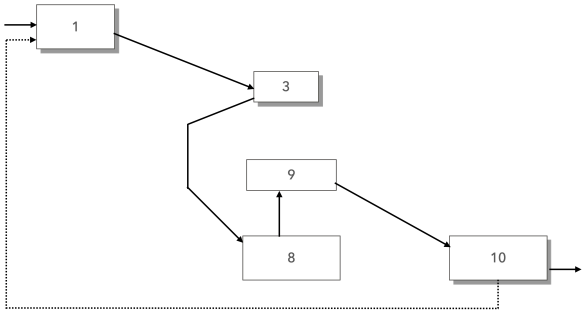

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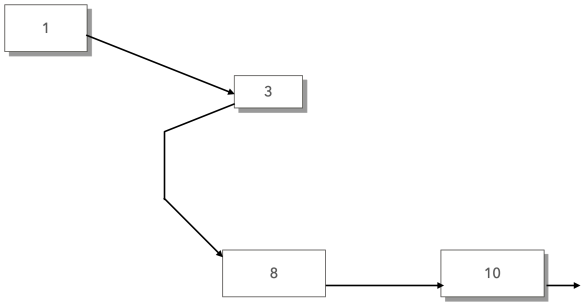

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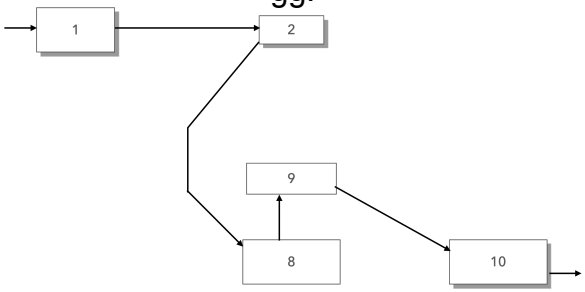

jj.

Appendix 7.ii. Table of results from application of data to four theoretical frameworks.

Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
PE	Mainly H Some A & P	RL & NRL	Slightly exaggerated AH (mind-centred)	EM, AR (-)
PE	Mainly A Some H, Some P	RL & NRL	Slightly exaggerated SL (environment-centred)	CS
PE	Mainly A Some H, Some P	Mainly NRL Some RL	Highly exaggerated B (environment-centred)	All four
PE	No data	No data	Nominal SC (Interactionist)	No data
PE	Mainly H Some A	NRL NL & RL	Slightly reduced SP (environment-centred)	EM, MP (-) AR (-)
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
UE	H	RL & NRL	Exaggerated AH (mind-centred)	EM
UE	Mainly H Some A	RL & NRL	Highly exaggerated SP (environment-centred)	MP
UE	No data	No data	Nominal SL (environment-centred)	No data
UE	No data	No data	Nominal B (environment-centred)	No data
UE	No data	No data	Nominal SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
SSP	A & H	RL	Exaggerated AH (mind-centred)	EM
SSP	H	NRL	Highly exaggerated SP (environment-centred)	EM
SSP	No data	No data	Nominal SL (environment centred)	No data
SSP	No data	No data	Nominal B (environment centred)	No data
SSP	No data	No data	Nominal SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
LSP	A & H	RL	Nominal AH (Mind Centred)	EM
LSP	H	NRL	Highly reduced SP (environment-centred)	EM, AR (-)
LSP	Mainly H Some A	NRL / RL	Highly exaggerated SL (environment-centred)	No data
LSP	Mainly H Some A	RL	Highly exaggerated B (environment centred)	No data
LSP	No data	No data	Nominal SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*

ExWP	A & H	RL	Highly exaggerated AH (Mind Centred)	EM
ExWP	No data	No data	Slightly exaggerated SP (environment centred)	No data
ExWP	A & H	RL & NRL	Exaggerated SL (environment centred) – because of border.	CS
ExWP	No data	No data	Nominal B (environment centred)	No data
ExWP	No data	No data	Nominal SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
Ex-WP	A & H	RL	Highly exaggerated AH (Mind Centred)	EM
Ex-WP	No data	No data	Nominal SP (environment centred)	No data
Ex-WP	No data	No data	Exaggerated SL (environment centred)	No data
Ex-WP	No data	No data	Nominal B (environment centred)	No data
Ex-WP	No data	No data	Nominal SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
FL-WP	Mainly P, Some A, Some H	Mainly RL, some NRL	Slightly exaggerated AH (Mind Centred)	EM, MP (-)
FL-WP	No data	No data	Nominal SP (environment centred)	No data
FL-WP	A & H	RL	Slightly exaggerated SL (environment centred)	EM
FL-WP	No data	No data	Nominal B (environment centred)	No data
FL-WP	No data	No data	Slightly exaggerated SC (Interactionist)	No data
Context	Learning Approach	Learning type	Learning orientation	Dyadic relationships
	Garnett & O'Beirne	*Jarvis*	*Russ-Eft*	*Fiske*
iFL-WP	Mainly H, Some A	Mainly NRL, some NL	Slightly exaggerated AH (Mind Centred)	EM, MP (-)
iFL-WP	No data	No data	Nominal SP (environment centred)	No data
iFL-WP	No data	No data	Nominal SL (environment centred)	No data
iFL-WP	No data	No data	Nominal B (environment centred)	No data
iFL-WP	No data	No data	Nominal SC (Interactionist)	No data