ENGAGEMENT AND INTERACTION IN BLENDED WORKPLACE LEARNING: A CASE STUDY

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adult learning, blended learning, blended workplace learning, business, corporate, e-learning, face-to-face, learning and development, human resource development, learner engagement, learner interaction, mature learning, online, organisation, training, workplace learning,
Abstract

Businesses invest in employee development and staff training programs in order to meet objectives. To enhance their investment they must also keep up with the rapid advancement in technological innovations in the provision of effective learning programs. Effective learning programs are those that provide opportunities for learners to engage, and this engagement happens through interaction with the learning content, with the facilitator, and with other learners. In order for workplace learning programs using blended learning (combining online and face-to-face modes) to be successful, the learners need to engage and interact in both the online and face-to-face modes. Current blended learning research is largely focused on the educational context, and physical aspects of blends have had more attention than the learning design and psycho-social aspects of blended learning. Moreover, there is a need for blended learning to be researched specifically in relation to adult learners in the workplace.

Accordingly, this study explores blended learning in the workplace, applying theories of adult and workplace learning, and highlights the importance of engagement and interaction. A blended learning program within an organisation is analysed as a case study, focusing on the way learners engage and interact. The individual, program, and workplace factors that facilitate learner engagement and interaction in the blended workplace program are identified. Additionally, the role of human interaction in the blended learning program is highlighted.

The findings advance current knowledge of blended learning to adult learners in the workplace, with a focus on learner engagement and interaction. Practically, this study has implications for workplace learners, as well as for human resource
development professionals, and designers and facilitators of blended learning programs for workplaces, taking into account the various factors that influence learner engagement and interaction in blended workplace learning.
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List of Abbreviations

HRD = Human Resource Development

BWL = Blended Workplace Learning

BE = Behavioural Engagement

CE = Cognitive Engagement

EE = Emotional Engagement

LE = Learner Engagement

LI = Learner Interaction

PICF = Participant Information and Consent Form

ROI = Return on Investment
Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: QUT Verified Signature

Date: August 2016
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Chapter 1: Introduction

In the current digital age, organisations are faced with the need to keep up with and harness the potential benefits of technological advances in learning. Blended learning, defined as a combination of traditional face-to-face learning and modern online or computer-mediated learning (Graham, 2006), is one method that addresses this need. The Australia People Development and Training Expenditure Survey conducted by iHR Australia (2013) found that 52% of the respondents' organisations used blended learning. Blended learning has proved effective by extending the reach of training (increased access and flexibility), learning effectiveness, optimising developmental cost and time, and optimising business results (Graham, 2006; Rossett & Frazee, 2006; Singh, 2003; Singh & Reed, 2001). It is a popular delivery mode in education and workplace learning settings and is predicted to increase in use (Bonk, Kim, & Zeng, 2005; Georgsen & Løvstad, 2014; Kim, Bonk, & Oh, 2008; Kim, Bonk, & Teng, 2009). However, research in blended learning is still relatively new in the educational sector, and even more so in the corporate sector (Bliuc, Goodyear, & Ellis, 2007; Graham, Henrie, & Gibbons, 2013; Halverson, Graham, Spring, & Drysdale, 2012; Kim et al., 2008; Margaryan & Collis, 2004; Stacey & Gerbic, 2008).

Learning and development needs are growing globally as one of the most pressing business issues, and businesses are investing heavily in learning and development to acquire the skills they need (Eighteen, Haims, Stempel, & Vyver, 2015). In 2012-2014, the average expenditure of organisations in the US, on training and development per employee per year was $1200. (ATD Research, 2014, 2015). In 2010, Australian organisations spent between $0 and over $1000 per employee per
year, and this amount was predicted to rise (Australian Chamber of Commerce and Industry, 2011). Clearly the investment into learning and development by companies is high, and so it is important that the learning programs offered are effective. Given the increasing cost of learning and development, the need for organisations to keep up with learning technology and have effective workplace training programs, as well as Graham’s (2006) prediction that the use of blended learning will continue to grow, it is crucial to have a better understanding of the phenomenon of blended learning. A lack of understanding of such a key innovation could prove to be a costly loss to organisations investing heavily in learning and development. Thus this research addresses the need for a deeper understanding of the application of blended learning in the workplace.

This chapter first outlines the rationale of the study and the context of the research along with important terms and their definitions. Subsequently, the research questions and methodology used in this study are briefly described. Finally, an outline of the remaining chapters of the thesis is presented.

**Purpose of the Study**

The purpose of the study is to explore learner engagement and interaction in blended workplace learning (BWL). This research addresses the call for blended learning to be adapted to adult learners (Korr, Derwin, Greene, & Sokoloff, 2012) and also the call for blended learning research to focus on psycho-social and pedagogical aspects of a blend (Graham et al., 2013) by exploring engagement and interaction of adult/mature learners in the workplace. This study analyses the psycho-social and pedagogical aspects of learner engagement and interaction in one type of blend. It also analyses the phenomenon of blended learning in the context of the workplace, where training and development arise as secondary business needs, as
opposed to in educational institutions, where teaching and learning is the primary business (Sloman, 2007). Thus the study aims to more directly be of benefit to the areas of staff learning and development and human resource development (HRD). This study contributes to current knowledge on BWL by linking the psychosocial and pedagogical aspects of engagement and interaction to learners' experience of blended learning in the workplace. It presents the factors in a BWL program that influence learner engagement and interaction, and how they do so. This research has implications for learners as well as designers and facilitators of blended learning programs in organisations. The design and facilitation of BWL programs must take into account the importance of providing learners with engaging and interactive learning experiences, and the various factors that influence learner engagement and interaction. Further, the role of human interaction in BWL is highlighted through its impact on engagement.

**Background**

This research is based on a foundation of learning theories which have emerged from the various schools of thought in psychology such as behaviourism, cognitivism, and social theories (Schunk, 2012). Together these theories highlight that learning consists of observable change in behaviour through internal psychological mechanisms, and is influenced by external environmental factors.

Learning consists of internal psychological processes and external interaction processes (Illeris, 2011), similar to the acquisition and participation processes proposed by Sfard (1998). The internal and external processes of acquisition and participation together involve cognition, emotion, and physically taking part in learning activities (Illeris, 2011; Sfard, 1998), and are reflected in the three
dimensions of learner engagement: behavioural, cognitive, and emotional, as identified by Fredricks, Blumenfeld, and Paris (2004).

Engagement is what makes learning meaningful (Gutierrez, Baralt, & Shuck, 2010; Wlodkowski, 2010). It is an important factor in learning (Chametzky, 2014), and is a commonly used criterion for evaluating the quality of a learning experience (Stein & Graham, 2014). Learner engagement is said to happen through learner interactions with the learning content and with the instructors and other learners in the learning program (Chametzky, 2014; Moore, 1989). Thus the two key variables of interest in this study are learner engagement and interaction in BWL.

This research on learner engagement and interaction in BWL draws on learning theory, especially the branches of adult learning and workplace learning. Adult and mature learning principles are important to understand, as the learners in BWL are adult employees rather than children or youth. Workplace learning concepts highlight the context of the learning and how learning in the workplace differs from school or higher education.

Adult learning theory and andragogical principles (Knowles, Holton, & Swanson, 2005) describe six elements that are necessary in understanding how and why adult learners engage in a learning activity. These include the learner’s need to know, the learner’s self-concept, the role of the learner’s experiences, the learner’s readiness to learn, the learner’s orientation to learning, and the learner’s motivation. Delahaye and Smith (1998) also describe five mature learner principles that are similar to these: learner responsibility, learning-for-life applications, learning by reflection on experience, support and respect for fellow learners, and learning by experimenting. Both the andragogical and mature learner principles view the adult or mature learner as autonomous, responsible, and self-directed, and these are important
aspects that will be considered in order to analyse how adult learners engage and interact in a BWL program.

Workplace learning theorists have repeatedly stressed that work and learning cannot be separated when discussing workplace learning (Billett, 2000, 2004, 2011; Evans, Waite, & Kersh, 2011; Shuck, Rocco, & Albornoz, 2011; Vaughan, 2008). Specifically, Billett’s (2000) concept of co-participation highlights the relationship between the worker and the workplace: the workplace affords learning opportunities through work or learning programs in which individuals in the organisation choose to participate. Here learner engagement is seen through active participation or engagement in work and learning. Chametzky (2014) uses the term engagement to refer to both learner engagement as well as employee or worker engagement, thus again reiterating that workplace learning is not separate from the practice of work itself.

As a popular approach used in workplace learning, BWL addresses the need for workplaces to keep up with technological advances in providing effective learning and training programs for their employees. Graham (2006) categorises blended learning systems with a pedagogical focus, into enabling, enhancing, and transforming blends. Enabling blends have the lowest focus on pedagogy, while transforming blends have the highest. This study investigates a BWL program utilising an enhancing blend, having some focus on pedagogy, but with its main purpose being increased productivity. The need for blended learning research to focus on the psycho-social aspects (Graham, 2013) as well as the pedagogical rather than the physical aspects of the blend (Graham et al., 2013) is addressed in this research through an exploration of the elemental construct of learner engagement,
which happens through learner interaction (Chametzky, 2014; Moore, 1989; Stein & Graham, 2014).

While blended learning research concerning engagement is largely focused in the higher education sector (George-Walker & Keeffe, 2010; Korr et al., 2012; Means, Toyama, Murphy, & Baki, 2013), workplace learning researchers also premise that learner engagement is critical for learning effectiveness, and that a better understanding is needed of the learning methods to promote engagement, and how they do so (Noe, Tews, & Dachner, 2010). Korr et al. (2012) also suggest that future research should focus on adapting and customising blended learning for adult learners. In order to design and facilitate effective blended learning programs for adult learners in the workplace, it is important to first understand how BWL facilitates these learners' engagement and interaction. Engagement and interaction are crucial for the effectiveness of any BWL program, and thus finding what influences them is a necessary step in the process.

It is important to clarify the definitions of learner engagement and interaction that are adopted for this study. Learner engagement is defined as “the emotional and mental energy that students are willing to expend during a learning experience” (Stein & Graham, 2014, p. 51). From an educational perspective, Fredricks et al. (2004) theorised that student engagement is made up of behavioural, cognitive and emotional engagement. Interestingly, these terms have also been used to define and describe employee engagement (Kahn, 1990; Shuck & Wollard, 2010) as well as learner engagement in the workplace (Gutierrez et al., 2010; Noe et al., 2010). The current study on workplace learning draws on these definitions and descriptions for learner engagement. Learner interaction is the interaction that learners in a learning program have with the instructor, other learners, or course material (Chametzky,
Learner engagement occurs through three types of learner interaction: learner-content, learner-facilitator, and learner-learner interaction, which have been identified and defined by various authors (Chametzky, 2014; Moore, 1989; Stein & Graham, 2014). The terms and definitions used in the current study for both learner engagement and learner interaction are presented in Table 1.1.

Table 1.1

*Terms and Definitions Used in the Current Study*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Learner Engagement</td>
<td>“the emotional and mental energy that students are willing to expend during a learning experience” (Stein &amp; Graham, 2014, p. 51)</td>
</tr>
<tr>
<td>Behavioural Engagement</td>
<td>Learners’ physical participation and involvement in following instructions and doing the learning activities (Fredricks et al., 2004)</td>
</tr>
<tr>
<td>Cognitive Engagement</td>
<td>Learners’ thoughtfulness and willingness to put effort into understanding new ideas or mastering new skills (Fredricks et al., 2004)</td>
</tr>
<tr>
<td>Emotional Engagement</td>
<td>Learners’ positive and negative feelings or reactions relating to the learning activities and learning environment (Fredricks et al., 2004)</td>
</tr>
<tr>
<td>Learner Interaction</td>
<td>The interaction that learners in a learning program have with the instructor, other learners, or course material (Chametzky, 2014; Moore, 1989; Stein &amp; Graham, 2014)</td>
</tr>
<tr>
<td>Learner-Content Interaction</td>
<td>Learners interacting with learning content or resources during and outside of learning activities (Moore, 1989; Stein &amp; Graham, 2014)</td>
</tr>
<tr>
<td>Learner-Facilitator Interaction</td>
<td>Interaction and communication that learners have with program facilitators during and after the learning program (Moore, 1989; Stein &amp; Graham, 2014)</td>
</tr>
<tr>
<td>Learner-Learner Interaction</td>
<td>Interaction and communication that learners have with one another during and after the learning program (Moore, 1989; Stein &amp; Graham, 2014)</td>
</tr>
</tbody>
</table>
This study aims to explore the factors that influence learner engagement and interaction in BWL and to examine the link between learner engagement and interaction. In order to address these research aims, this research asks the following three research questions:

- RQ 1: How does BWL facilitate learner engagement?
- RQ 2: How does BWL facilitate learner interaction?
- RQ 3: What is the relationship between learner engagement and learner interaction in BWL?

Methodology

This research adopted a case study design to explore learner engagement and interaction in a BWL program. A qualitative approach was appropriate for the purpose of this study given the relatively nascent state of research (Edmondson & McManus, 2007) in BWL. The type of research questions also pointed towards a qualitative research approach and specifically a case study design (Yin, 2009). The sample case used in this study was a BWL program that an organisation had implemented for the professional development of its employees in supervisory roles. The data collection methods included interviews with facilitators and 15 interviews with past participants of the BWL program, as well as a review of the online module of the program. Observations from the online module and facilitator interviews were utilised to provide an understanding of the BWL program used, while the interview questions for past participants gained information about their engagement and
interaction in the BWL program. Participation in the interviews was voluntary and the privacy and confidentiality of participants was ensured.

The rigour of this qualitative study and the soundness of the research has been addressed in terms of credibility, transferability, dependability, and confirmability (Shenton, 2004). Data were analysed using thematic analysis (Braun & Clarke, 2006).

**Structure of the Thesis**

This thesis is divided into five chapters: Introduction, Literature Review, Methodology, Findings, and Discussion and Conclusion. This *Chapter 1 – Introduction* establishes the research base, gives the purpose and aims for this research, and also presents a brief overview of the methodology. This chapter is followed by *Chapter 2 – Literature Review*, which provides an understanding of the current knowledge in BWL, identifying the research problem, and providing a framework for the research. *Chapter 3 – Methodology* gives a detailed description of the study's design, including data collection and analysis methods, the case BWL program, ethical considerations, and design limitations. Then, *Chapter 4 – Findings* details the findings of the qualitative analysis, and provides a detailed explanation of the themes that emerged from the data. Finally, *Chapter 5 – Discussion and Conclusion* reflects on the contribution this study makes to current knowledge on BWL, implications for practice, as well as suggestions for future research, and the thesis is then concluded.

**Chapter Summary**

This introductory chapter has outlined the background and rationale for this research. Firstly, the purpose of the research was explained and the research base was
established through an overview of the key literature relating to BWL, and the key
terms for the research were defined. Then the research aims and research questions
of the study were outlined. This was followed by a brief description of the
methodology and finally the structure of the thesis was presented. The next chapter
reviews current and relevant literature and provides the framework and theoretical
basis for this research, ending with a presentation of the research questions.
Chapter 2: Literature Review

Chapter Overview

This research on blended workplace learning (BWL) draws on three main bodies of literature – adult/mature learning, workplace learning, and blended learning literature. Most of the research in blended learning has come from the education field and forms a basis of knowledge that is transferred to a workplace setting. In investigating this different context, two considerations need to be made. First, much of the education literature deals with primary, secondary, and tertiary student learning. Workplace learning on the other hand, concerns adults, so andragogy, or adult learning is one of the focal points of this study. Second, workplace learning is influenced by not only the pedagogy or teaching strategy (in this case andragogy or learning strategy), but also by the culture and context of the organisation. This research focuses on learning specifically in a workplace setting.

This study seeks to understand the links between BWL, learner interaction, and engagement. The literature review first outlines the relevant key concepts in the current understanding of the learning process, the importance of learner engagement and interaction, and adult/mature learning principles. Following this, workplace learning is discussed, with a focus on learner engagement and interaction. Next, the topic of blended learning, its importance in workplace learning, and its impact on learner engagement and interaction is addressed. Finally a conceptual framework of the study is presented and research questions proposed.

Learning Foundations

Adult learning and workplace learning theories arise from basic theories of learning that have their roots in the social sciences such as psychology and sociology
Different learning theories have emerged from the various schools of thought in psychology, such as behaviourism, cognitivism, and social theories (Schunk, 2012).

Behaviourism, through focusing on an observable change in behaviour, plays an important role in understanding adult learning, where the focus is on the learner – the person in whom the change is expected to occur (Knowles et al., 2005). Cognitive theories stress that learning involves internal mental phenomena – such as thoughts, beliefs, and feelings - which are inferred from what people say and do (Schunk, 2012). The focus of cognitivism is again on the individual person, and specifically on the mental processes of learning (Schunk, 2012). Bandura’s social cognitive theory (Bandura, 1989, 1991) bridges the gap between behaviourist and cognitive theories. It stresses that human beings think about how changing their behaviour will alter the consequences (Bandura, 1989, 1991; Sigelman & Rider, 2003). Similar to the social cognitive theory is Vygostsky’s (1896-1934) sociocultural perspective which holds that the socio-cultural context and the interactions within it play an important role in the shaping of cognitive processes (Gauvain, 2008; Sigelman & Rider, 2003).

The behaviourist, cognitive, social cognitive, and sociocultural perspectives together guide our understanding of adult learning and workplace learning, as they highlight that learning involves an observable change in behaviour through a collection of internal psychological mechanisms, and is influenced by external environmental factors and the interactions within a sociocultural context. These theories underpin the ‘psycho-social’ foundations of learning, a term referring to an involvement of both psychological and social aspects (Merriam-Webster.com, 2015).
The next section delves into the psycho-social processes of learning that have been illuminated by these psychological theories.

**Learning: Internal and External Processes**

Learning is both an individual and a social process (Illeris, 2003). It includes two essentially different processes: an external interaction process between the learner and the social, cultural, and material environment; and an internal psychological process in which new impulses are connected with prior learning (Illeris, 2011). Reference to internal and external processes are similar to the two essential parts of learning, acquisition and participation, proposed by Sfard (1998). Illeris (2011) refers to these as the acquisition process and the interaction process.

Acquisition stresses the individual mind in the process of learning, while participation emphasises the interaction and interdependence between the individual learner and others (Sfard, 1998). Acquisition involves cognition and emotion; it contains the content and incentive dimensions of learning (Illeris, 2011). Stein and Graham (2014, p. 51) use similar terms to define the concept of learner engagement, as “the emotional and mental energy that students are willing to expend during a learning experience”.

Participation refers to taking part in or being a part of the learning activities (Sfard, 1998). This interaction process of learning is of a social and societal nature, and is determined by time and place (Illeris, 2011). The individual interacts with an environment that includes elements such as other people, a culture, and technology of the time (Illeris, 2011). Various other authors also describe learner interaction to be an aspect of the learning process (Chametzky, 2014; Moore, 1989; Stein & Graham, 2014). As the internal and external processes of acquisition and
participation are together central to learning, they will be further analysed in terms of learner engagement and learner interaction, which are discussed next.

**Learner Engagement and Learner Interaction**

Engagement and interaction by the learner play an important role in learning (Chametzky, 2014). Engagement in learning has been called “student engagement” as much of the research in engagement in learning is in the fields of schooling and tertiary education (Carini, Kuh, & Klein, 2006; Fredricks et al., 2004; Kuh, 2003). Definitions of student engagement encompass the concept of participation in educational activities resulting in desired educational outcomes (Hu & Kuh, 2002; Krause & Coates, 2008; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). Fredricks et al. (2004) originally identified three dimensions of student engagement that include behavioural, cognitive, and emotional engagement. They state that “behavioral engagement encompasses doing the work and following the rules; emotional engagement includes interest, values, and emotions; and cognitive engagement incorporates motivation, effort, and strategy use” (p. 65).

The current study adapts the above definitions and descriptions of student and learner engagement for adult learners in the workplace. Thus, for the purpose of this study, learner engagement is defined as any or all forms of behavioural, cognitive, or emotional engagement that a learner exhibits in the BWL program. Behavioural engagement is defined as a learner's participation and involvement in following instructions and doing the learning activities (Fredricks et al., 2004). Cognitive engagement is defined as a learner's thoughtfulness and willingness to put effort into understanding new ideas or mastering new skills (Fredricks et al., 2004). Emotional engagement is defined as a learner's positive or negative feelings or reactions relating to the learning activities and learning environment (Fredricks et al., 2004).
Learner engagement is a commonly used criterion for evaluating the quality of a learning experience, and it has been asserted that learning experiences that are not engaging will not be effective in the long run (Stein & Graham, 2014). Without engagement, learning has no meaning (Wlodkowski, 2010, p. 228). Engagement plays a crucial role in helping adult/mature learners make meaning of what they are learning (Gutierrez et al., 2010). It is also linked positively to learning outcomes such as higher order thinking (Carini et al., 2006). Thus engagement is an important variable that needs to be considered in learning research. Educational researchers (Holley & Oliver, 2010) stress that further studies are needed to identify how individuals experience and cope with engagement, as this will help to develop better pedagogical approaches and policies that respond to learner needs. Moreover, Graham et al. (2013) point out that in blended learning literature, there is little known about the “pedagogical attributes that actually influence learning outcomes” (p. 28). For these reasons, learner engagement is an important variable of interest in this study analysing the impact of BWL on learner engagement.

Learner engagement happens when the learner interacts (Chametzky, 2014). Moore (1989) distinguished three types of interactions through which learners engage during the learning process: (i) learner-content interaction, (ii) learner-instructor interaction, and (iii) learner-learner interaction. Moore (1989) refers to learner-content interaction as the “interaction between the learner and the content or subject of study” (p. 2). According to Moore (1989), this is the defining characteristic – it is the process of cognitively interacting with the learning content that results in change. Learner-instructor interaction is the “interaction between the expert who prepared the subject material, or some other expert acting as instructor” (Moore, 1989, p. 2). Learner-learner interaction refers to the “interaction between
one learner and other learners, alone or in group settings, with or without the real-time presence of the instructor” (Moore, 1989, p. 4). Stein and Graham (2014) also identify the same three types of learner interactions that are used to create learner engagement. These three types of interactions emphasise that the learner engages with the content, instructor, and fellow learners within the learning environment.

The current study adapts the above definitions and descriptions of learner interaction for adult learners in the workplace. For the purpose of this study, learner interaction is defined as any or all forms of interaction with the content or human interaction with the facilitators or learners in the BWL program (Moore, 1989; Stein & Graham, 2014). Thus the three kinds of learner interaction in this study involve learner-content, learner-facilitator, and learner-learner interaction.

Interpersonal interaction as well as interaction with course content or material are both important for engaging learners (Stein & Graham, 2014). From an educational perspective, Wegmann and Thompson (2014) describe engagement through human interaction as the passion and excellence of participation in learning activities by making contributions and building on those of others during discussions. The recent study by Blasco-Arcas, Buil, Hernández-Ortega, and Sese (2013) confirms that interactions with instructors and other learners positively influence engagement which in turn improves learning performance. Chametzky (2013a; as cited in Chametzky, 2014) presents that, ideally, peer interaction and content interaction would happen simultaneously for maximum benefit as they work together to allow deeper learning. Stein and Graham (2014) also maintain that activities using more types of interactions are more engaging than activities using only one type of interaction. Moore (1989) stressed that educators using any sort of media need to plan for all three kinds of interaction; hence, with the various blended learning
options that technology now affords, it is necessary to consider these three learner interactions in BWL. Thus, the importance of learner interaction for effective engagement in learning makes learner interaction another key variable in this study on BWL.

Having identified learner engagement and learner interaction as key variables of interest, engagement and interaction in adult learning must be considered, as this study focuses on adult learners in the workplace. In line with the suggestion by Korr et al. (2012) that future research should focus on adapting and customising blended learning for adult learners, this study on BWL focuses on the engagement and interaction of adult workplace learners. Therefore, adult learning principles that explain how and why adult learners engage, are discussed next.

**Engagement and Interaction in Adult Learning**

Adult learning is central to the theory and practice of HRD (Knowles, Holton III, & Swanson, 2015), and thus to this study on BWL. Thus, it is important to consider the tenets of adult learning as they differ from learning in children and youth. Malcolm Knowles is often considered as the father of andragogy or adult learning (Knowles et al., 2005). Andragogy was a term coined by a German school teacher, Alexander Kapp in 1833 to distinguish adult learning from pedagogy, or learning as it occurs in children (Knowles et al., 2005; Reischmann, 2008). Pedagogy is the art and science of teaching children; it assumes that the full responsibility of learning (what is learnt, how, when, and if it is learnt) lies with the teacher. However, as learners mature, so does their need and capacity to be self-directed in their learning. Psychologically, adulthood is reached when an individual arrives at a self-concept of being responsible for his/her own life, of being self-directing (Knowles et al., 2005). Thus, andragogy, according to Knowles (1980, p. 43), is the 'art and
science of helping adults learn'. It is based on two attributes: that adult learners are self-directed and autonomous, and that the role of the teacher is a facilitator of learning rather than a presenter of content (Pratt, 1998).

Adult learning is comprised of various components, and engagement is one that plays an important role in helping adult learners to make meaning of what they are learning (Gutierrez et al., 2010). The following six key elements of andragogy (Knowles et al., 2005, pp. 64-69) shed some light on how and why adult learners engage in a learning experience or activity:

1. The need to know: adults need to know why they need to learn something before they undertake to learn it.

2. The learners' self-concept (dependant to self-directed): Adults have a self-concept of being responsible for their own lives and decisions.

3. The role of the learners' experiences (growing reservoir of experience – learning resource): Adults have a wider range of experience when they come into a learning activity, which becomes a valuable resource for learning.

4. Readiness to learn (developmental tasks of learners' social roles): Adults become ready to learn the things they need to know and do to cope with real life situations.

5. Orientation to learning (immediate application of knowledge, problem-solving): While learning for children and youth is subject-centred, adult learning is problem-solving oriented and learning takes place faster when there is perceived real-life application.

6. Motivation (external to internal): Adults are motivated to keep growing and developing. Although adults are motivated by external factors such as better jobs and promotions, the more powerful motivators are internal, such as increased job-satisfaction, self-esteem, and quality of life.

These assumptions about the adult learner affirm that the psychological and social maturation of adults are more crucial than their biological age (Knowles et al.,
Similarly, Illeris (2003) also asserts that the learning process is not exclusive to biological maturation or ageing, but extends to functions such as personal development, socialisation, and competence development. Delahaye and Smith (1998) further suggest that andragogy and pedagogy are used to describe the learner in terms of learner maturity, which has four characteristics: content base, motivation, responsibility, and learning skills. These authors argue that mature learners possess higher levels of these characteristics. Content base is the learner's existing knowledge, the lack of which can be made up for with the second characteristic of learner maturity - motivation, or the interest and need to learn. The third characteristic of learner maturity is taking responsibility for their own learning, and lastly, learner maturity refers to the learning skills and educational experiences a learner possesses.

The learner maturity characteristics are similar to those of an autonomous, responsible, and self-directed learner as described by Knowles et al. (2005). The characteristics of a learner, in terms of learner maturity, play an important role in learning. This perspective suggests that some adults may have a more mature self-concept than others, and may hold an important implication for this study; whether or not adult workplace learners or in-service learners are more responsible for and self-directed in their learning than adult university students due to the reasons for undertaking the learning in the first place. Therefore in considering which training model to use for staff training and development, the most important variable is the trainee (Delahaye & Smith, 1998). Existing research on trainee characteristics serves to highlight the importance of the trainee in workplace learning (Grossman & Salas, 2011; Kamen, Veilleux, Bangen, VanderVeen, & Klonoff, 2010; Orvis, Horn, & Belanich, 2006; Tziner, Fisher, Senior, & Weisberg, 2007). By consolidating the
work of different authors, Delahaye and Smith (1998) put together five principles of learning that are exclusive to mature learners (who possess higher levels of learner maturity), and are effective in trainee-centred learning processes. The five mature learner principles described below incorporate andragogical principles, and also help explain how and why adult learners choose to engage in a learning experience or activity.

1. Learner responsibility: Mature learners take responsibility for their own learning and appreciate active learning, as well as involvement in the decision making, design, and delivery of training. They use the training experience to enhance their future self-directed learning.

2. Learning-for-life applications: Mature learners engage in any learning that is relevant to their current learning project, while absenting themselves from those learning activities which they consider irrelevant to their needs.

3. Learning by reflection on experience: Mature learners learn new guides to their future behaviour by reflecting on their own rich background of experiences and on the communicated experiences of others. Thus learning experiences must allow for discussion, sharing, and reflection.

4. Support and respect for fellow learners: Mature learners prefer and expect learning activities in a social context, where interaction is encouraged, sharing is expected, and support is provided. Such a learning context should have established ground rules and ultimately depends more on the learners than the trainer.

5. Learning by experimenting: Mature learners are willing experimenters, creating ongoing experiences by having the opportunity and courage to experiment with new approaches. Feedback on these experiments must be detailed, accurate, and encouraging so that further attempts are made and are increasingly productive.

The above mature learning principles have some similarities with the andragogical principles of Knowles et al. (2015). Although the andragogical
principles do not contradict the role of human interaction in the learning environment, this is an additional aspect highlighted by Delahaye and Smith’s (1998) mature learner principles. Thus the mature learner principles correspond with the andragogical principles and also highlight the importance of learner interaction with facilitators and other learners, as depicted in Table 2.1.
Table 2.1
*Mature Learner Principles Corresponding with Andragogical Principles*

<table>
<thead>
<tr>
<th>Mature Learner Principles (Delahaye &amp; Smith, 1998)</th>
<th>Andragogical Principles (Knowles et al., 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner responsibility</td>
<td>The need to know</td>
</tr>
<tr>
<td></td>
<td>The learner’s self-concept</td>
</tr>
<tr>
<td></td>
<td>Readiness to learn</td>
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<tr>
<td></td>
<td>Motivation</td>
</tr>
<tr>
<td>Learning-for-life applications</td>
<td>Readiness to learn</td>
</tr>
<tr>
<td></td>
<td>Orientation to learning</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
</tr>
<tr>
<td>Learning by reflection on experience</td>
<td>The role of the learner’s experiences</td>
</tr>
<tr>
<td></td>
<td>+ Role of human interaction</td>
</tr>
<tr>
<td>Support and respect for fellow learners</td>
<td>+ Role of human interaction</td>
</tr>
<tr>
<td>Learning by experimenting</td>
<td>Orientation to learning</td>
</tr>
</tbody>
</table>

The mature learner principles and andragogy provide a good foundation for understanding the way adult/mature learners engage in a learning experience and also implicitly express the presence of learner interaction. Specifically focusing on blended learning, a study by McDonald (2013) found that self-motivation, organisation, discipline, time management, and experience with technology, are skills required by adult learners in a blended course, providing evidence that adult/mature learning principles apply just as much to blended learning as to other learning approaches. The principles of adult/mature learning are thus applicable across a range of situations and provide a basis for this study. In this research on BWL, the context of adult learning is the workplace. Therefore, the next section will
focus on workplace learning and concepts related to engagement and interaction in workplace learning.

**Workplace Learning**

Workplace learning has received research attention for over two decades, and workplace learning theory has evolved as learning concepts have expanded to include formal and informal learning, and individual, group, and organisational learning (Hager, 2011). The defining feature of workplace learning among HRD practitioners and scholars has been the recognition of both formal and informal learning but these constrain the breadth of workplace learning (Jacobs & Park, 2009). Colley, Hodkinson, and Malcolm (2003) suggest that formality and informality should be considered attributes of all learning situations. The workplace functions as a context for formal employee training as well as for incidental, on-the-job learning; thus formal, informal, and semi-formal learning are necessary for effective workplace learning. (Tynjälä, 2013). Clark (2003) promotes that, ideally, formal and informal learning must be blended or combined, which is highlighted again in the section on blended learning. This section on workplace learning will discuss the nature and purpose of workplace learning and workplace learning theory, specifically the concept of co-participation, which highlights the importance of learner engagement for workplace learners.

A point of clarification before delving into the nature and purpose of workplace learning is that workplace learning does not necessarily mean learning at or in the workplace as a physical location; part of workplace learning could be training at an off-site location. Moreover, the context of workplace learning is not merely physical but also sociocultural, including other people, organisational structure, culture, and technology (Illeris, 2011). Also, more than ever before, technology bridges the gap
between physical and virtual work and learning spaces. Thus, workplace learning is not only considered to be learning which takes place in the workplace, but also learning for work and learning through work, a concept analogous to Billet’s (2000, 2001a, 2001b) suggestion of co-participation, where both the learner and the workplace play a role in the individual's learning. Therefore workplace learning may take place in any learning environment (physical or virtual, on-site at work or off-site), something that has become increasingly possible due technological innovations.

Workplaces are “dynamic, multi-faceted organisms that adapt to and are changed by a number of economic, political, and social forces, some of which are out of their control” (Fuller & Unwin, 2011, pp. 56-57). One of the aspects of the dynamic workplace is the relationship between the learner and the workplace (Billett, 2000, 2001a, 2001b). Due to the dynamic nature of the workplace as well the various processes and dimensions of learning, workplace learning is understandably not just a one-way process, rather, an interaction between workplace, learning, and the learner, as affirmed by Vaughan (2008). Workplace learning processes are woven into daily work processes; the most importance sources of workplace learning are the challenges, the organisation of work, and the social interactions at work (Hoyrup & Elkjaer, 2006).

While the workplace itself constitutes a rich environment for learning, its primary purpose is to produce goods and services (Fuller & Unwin, 2011; Illeris, 2011). Therefore, learning, training, and development are derived activities; they take place as a consequence of business needs, not for their own sake (Billett, 2001b, 2002c; Sloman, 2007). An increase in employee training programs is argued to be a necessity as companies strive to maintain a competitive workforce (Albrecht & Pirani, 2007). So although learning is an integral part of business practice, the
business practice is itself an integral part of the organisational dynamics that restrict or enhance the richness of the business as a learning environment (Evans et al 2011). With this background of the nature and purpose of workplace learning, workplace learning theory and specifically the concept of co-participation (Billett, 2000, 2001a) will be discussed next as it relates to learner engagement and interaction of the workers as learners.

**Workplace Learning Theory**

Workplace learning theory has evolved over the years, and has been influenced by traditional psychological theories of learning (such as behaviourism, cognitivism, and social learning theories) as well as sociocultural theories from sociology and social anthropology (Hager, 2011). These theories highlight the individual and social aspects of learning (Illeris, 2003) which are also seen in workplace learning. Cognitive and behaviourist theories have emphasised the importance of the individual as an autonomous learner, while the sociocultural theories of workplace learning have elevated the various social aspects of learning (Hager, 2011). Individual and social learning are both important aspects of workplace learning (Hager, 2011). Thus workplace learning is generally analysed on two levels: individual and group/organisational (Tynjälä, 2013). In this study, workplace learning will be analysed at the individual level, with the focus on the way in which the individual learner engages and interacts in BWL. The importance of the individual's engagement and interaction in workplace learning is highlighted in Billett's (2000, 2001a) concept of co-participation and also in the link between learner engagement and employee/work engagement, as discussed next.
Engagement and Interaction in Workplace Learning

Co-participation is central to understanding workplace learning pedagogy (Billett, 2001a, 2002c, 2004), or more precisely, workplace learning andragogy. It constitutes a duality that highlights the individual factors as well as the social/contextual factors that influence learning. According to Billett (2000, 2001a), co-participation is comprised of workplace affordances and individual engagement, and the interdependence of the two concepts.

Workplace affordances refer to the learning opportunities that are provided or afforded by the workplace through invitation to participate in work activities (Billett, 2001b, 2011). These affordances, in conjunction with how the individuals choose to engage or participate in these activities, with guidance and support from the workplace, are important in understanding the workplace as a learning environment (Billett, 2001b). The outcomes of the learning or training programs (formal and informal, or structured and unstructured) depend on these affordances, which are established within work norms and practices (Billett, 2001b, 2011). The degree to which learners have opportunities to respond to workplace affordances plays a considerable role in their learning in the workplace (Billett, 2002b, 2002c). Billett (2001b) found that learners who were afforded the richest opportunities for participation showed strongest development.

Individual engagement refers to how individuals choose to engage with the opportunities that are afforded them (Billett, 2011). Workplaces provide learning experiences that are different from those in an educational institution, but still focus on engagement (Billett, 2001a). Engagement is central to extending knowledge and developing transferable outcomes (Billett, 2001a). Hence it is necessary for workplace learning programs to not only present knowledge and information but also
provide for learning activities that are relevant, applicable, and transferable. Billett (2004, p. 321) asserts that “the kinds of activities and interactions that individuals participate in will be central to their learning”, and that this engagement may be either in work activities or organised learning processes in the workplace. This statement suggests that co-participation includes engagement and interaction in the workplace setting. While Billett (2004) maintains that learning in an educational setting is distinctly different to learning through engagement in work activities or formal learning processes within the workplace, it has been noted that workplace learning is not just learning at, in, and through work, but also learning for work, which may include formal training.

Engagement has been examined as an important factor in learning performance not only in the educational context but also for the workplace (Berg & Chyung, 2008; Slotte & Herbert, 2008). Billett (2001a, 2001b, 2002a, 2002b) and Chametzky (2014) also use engagement interchangeably to refer to both learner engagement as well as employee or worker engagement. This could be because of the nature of workplace learning – that it is not separate from the practice of work itself. Billett (2001a, 2002b) reasons that this is another way that learning in the workplace differs from learning in an educational institution, that learning through work activities takes place in the target context (workplace) and does not need to be transferred from the training setting to the workplace setting.

It is clear that work and learning cannot be separated in the discourse of workplace learning, with an emerging link between learner engagement and employee engagement in the workplace learning phenomenon. Noe et al. (2010) contend that Kahn's (1990) psychological engagement theory referring to engagement in the workplace can be also used to build a stronger theory of
workplace learning. Kahn’s (1990) engagement theory illustrates three psychological conditions that are necessary to promote engagement at work: meaningfulness, safety, and availability. Meaningfulness refers to the feeling that one will receive a return for his or her effort. Safety refers to being able to express oneself without the fear of negative consequences. Availability refers to the readiness or the sense of having physical, emotional, and psychological resources to engage. Engagement is strongest when all three dimensions are present. Adults who find meaningfulness, safety, and availability engage themselves cognitively, emotionally, and behaviourally (Kahn, 1990). This may be reflected in the optimal and even enjoyable experience that Csikszentmihalyi (1996) calls “flow”.

While Kahn (1990) presents an engagement theory for the workplace in general, Noe et al. (2010) argue that it is especially important in learning contexts and therefore may be used to understand learner engagement in the workplace, implicitly suggesting a connection between learner engagement and employee engagement. From their review of literature, Shuck and Wollard (2010) conceptualised that employee engagement occurs on three different levels: cognitive, emotional, and behavioural. They provide a working definition of employee engagement as “an individual employee’s cognitive, emotional, and behavioural state directed toward desired organisational outcomes” (p. 103). Although this is presented as a definition of employee engagement more broadly, Gutierrez et al. (2010) use it to describe engagement in adult learning, again implying a link between learner engagement and employee engagement. While the boundaries between workplace learner engagement and employee engagement have been fuzzy, the emergent link between the two concepts serves to highlight the importance of learner engagement in workplace learning. Understanding that work and learning cannot be separated
from a study on workplace learning, and that engagement is important in both work and learning points to the need to know what facilitates engagement for effective workplace learning (Noe et al., 2010). This study aims to address this need in the popular practice of BWL.

The concepts of co-participation and employee/work/learner engagement highlight the importance of engagement and interaction in workplace processes including workplace learning and formal workplace learning programs. This research thus focuses on the impact of BWL on learner engagement and interaction. Having considered the role of learner engagement and interaction in adult learning and workplace learning, the concept of blended learning is discussed next.

**Blended Learning**

With a constant push towards business effectiveness and keeping up with advances in technology, computer-mediated learning, e-learning, or online learning plays an important part in workplace learning (Remtulla, 2010; Wang, 2011; Ziob & Mosher, 2006). Businesses as well as training organisations have a need to keep up with changing technology in order to continue providing efficient services and having a competitive advantage (Fuller & Unwin, 2011; Mahajan & Chaturvedi, 2013; Ziob & Mosher, 2006). Some characteristics for the future of workplace learning through virtual or e-learning environments include easily accessible training, greater collaboration, and a focus on business performance and results, all of which will transform learning and performance in the workplace (Regan & Delaney, 2011). Thus, learning is changing because technology is advancing. However, merely adding technology to the learning environment does not necessarily improve learning. In the words of Wu, Tennyson, and Hsia (2010, p. 126), “technology alone does not cause learning to occur”. Some adults may need more
time, training, and support to get accustomed to and feel confident using modern technologies within their learning or workplace settings (Evans et al., 2011). With the use of technology, the learners' interests and situations need to be taken into account, so that technology does not become a barrier to learning and thus undermine motivation (Evans et al., 2011). Therefore what must be considered is how technology can be used to serve the purpose of learning. Blended learning aims to address this issue; it is an approach that essentially combines technology with traditional models of learning for more effective learning outcomes. This section on blended learning will first outline its definition, purpose, components, and types of blends; then, blended learning will be analysed in the context of the workplace, ending with a focus on the role of engagement and interaction in blended learning.

**Defining Blended Learning**

The term ‘blended’ learning implies a combination or mixture, and it may also be referred to as “hybrid” or “mixed mode” learning (Picciano, 2014). Although blended learning has rapidly gained popularity over the last decade, the idea of blending is not new, but has been utilised through the centuries. Clark (2003) identifies the six major waves of technological innovation in learning: writing, printing, broadcast media, consumer storage media, PC and CD-ROM, and internet technology. With each wave of technology, new forms of blended learning arose, and we now have an array of web-based options available (Clark, 2003). Thus blended learning seems to be an organic phenomenon that has occurred through the various advancements of learning technology. This background of technological innovation in learning informs the most commonly accepted definition of blended learning: “Blended learning systems combine face-to-face instruction with computer-mediated instruction” (Graham, 2006, p. 66). According to Graham (2006, p. 66), blended
learning is “a combination of instruction from two historically separate models of teaching and learning: traditional face to face learning systems and distributed learning systems”. He states that it is imperative that blended learning experiences incorporate both face-to-face and computer mediated elements. Other authors have also developed similar definitions of blended learning being a combination of virtual/online and physical/face-to-face instruction (Sands, 2002; Ward & LaBranche, 2003; Wegmann & Thompson, 2014; Young, 2002), or containing different types of offline and online components (Clark, 2003).

Current researchers on blended learning in the educational arena, George-Walker, Hafeez-Baig, Gururajan, and Danaher (2010) affirm that Graham's (2006) definition is a useful starting point in theorising blended learning. Thus, in this study on BWL, Graham's (2006) definition is adopted, in that blended learning combines face-to-face and online modes. However, an adaptation of the definition is necessary to recognise adult/mature learners in the workplace, where the focus is learning rather than instruction or teaching. For the purpose of this study, blended learning is defined as “a combination of face-to-face and online learning modes that may include a variety of face-to-face and online components”, rather than a combination of instruction methods. Although this definition is narrow, it is the core of what blended learning is, as the physical and virtual learning modes pervade the various components of blended learning that may be combined to create effective blended learning programs. One example of blended learning is the flipped classroom model, where learners rotate between face-to-face guided learning such as in a classroom, and off-site learning from online content (Christensen, Horn, & Staker, 2013; Staker & Horn, 2012). The reason for blending face-to-face and online learning modes is
discussed next, and the benefits of blended learning for learners and organisations are identified.

**Purpose of Blended Learning**

Blended learning is emerging as the predominant learning model of the future, more than either online or face-to-face modes alone (Watson, 2008). It is a preferred model for utilising the internet to maximise instructional effectiveness (Dziuban, Moskal, & Futch, 2007) and combines the benefits of physical and virtual learning environments (Mitchell & Honore, 2007). Graham (2006) maintains that the challenge of blended learning is in capitalising on the strengths while avoiding the weaknesses of physical and virtual learning modes. Studies have shown that blended learning is better than face-to-face or online methods alone (Fearon, Starr, & McLaughlin, 2011; George-Walker & Keeffe, 2010; Hamilton & Tee, 2010; Klein, Noe, & Wang, 2006; Korr et al., 2012; Lim, Morris, & Kupritz, 2007; Yuen, Deng, & Fox, 2009). From a meta-analysis of 45 studies on blended learning, Means et al. (2013, p. 2) found that “the advantage over face-to-face classes was significant in those studies contrasting blended learning with traditional face-to-face instruction but not in those studies contrasting purely online with face-to-face conditions”. Fearon et al. (2011, pp. 449-450) believe that blended learning “represents an entirely different and altogether more pragmatic pedagogic view, compared with its narrower, pure eLearning predecessor”. Some of the benefits afforded by blended learning are improving learning effectiveness, extending reach, optimising development cost and time, and optimising business results (Adams, 2013; Hamilton & Tee, 2010; KilKelley, 2009; Singh & Reed, 2001).

From an educational perspective, Oliver and Trigwell (2005) argue that blended learning research requires an analysis from the perspective of the learner,
and that the learning experiences must be varied. Clark (2003) says that learners blend anyway and learn through many encounters, so a single form of delivery is not an option. The next section will discuss the various blended learning components that provide for a range of delivery methods and learning opportunities.

**Components of Blended Learning**

Blended learning, combining face-to-face and online learning modes, consists of a number of elements. Different authors have used the terms ingredients, dimensions, and components to describe the constituents of a blend (Clark, 2003; Rossett, Douglis, & Frazee, 2003; Singh, 2003; Singh & Reed, 2001). The common theme they all present is that blended learning includes online/virtual and offline/face-to-face/physical modes, which is to be expected. However, they also contain a variety of components of which the online and offline modes may consist.

Clark (2003) describes various types of online and offline components. The online components include tutoring, coaching, or mentoring; collaborative learning; learning content, knowledge management, and the web; and mobile learning. The offline components include tutoring, coaching, or mentoring; workplace learning; print, electronic, and broadcast media (Clark, 2003). Some authors present other components along with the online and offline modes: synchronous and asynchronous learning; self-paced and live, collaborative learning; structured and unstructured learning; custom and off-the-shelf content; and learning, practice and performance support (Singh, 2003; Singh & Reed, 2001). Other authors have also expanded on the face-to-face and virtual modes and include components such as formal and informal learning, synchronous and asynchronous collaboration; self-paced learning; and performance support (Rossett et al., 2003; Rossett & Frazee, 2006). Summarising this variety of learning methods and tools, it can be said that blended learning
consists of a wide range of offline and online components that include formal and informal learning; synchronous/live and asynchronous/self-paced learning; collaboration; mentoring/coaching; on-the-job learning; and performance support.

The flexibility provided by the combination of physical and virtual modes in blended learning is made possible through the wide range of components in a blended program. This flexibility is evidenced by authors stressing the importance of combining formal and informal learning in blended learning (Baldwin-Evans, 2006; Clark, 2003), as well as by Rossett and Frazee's (2006, p. 2) assertion that blended learning “integrates seemingly opposite learning approaches”. Each component plays an important role in the overall blended learning experience, but these elements come together to form a blended learning course or program, without negating the important aspects of each individual element. For example, blended learning may make use of the advantages of self-paced learning, while also allowing live interaction (Hofmann & Miner, 2009). Thus the characteristics of the components of a blend – individually and combined – are what make for an effective learning program. Each of these components used in blended learning has the potential to be incorporated through either face-to-face or online modes, or perhaps both, based on strategically maximising the strengths and reducing the disadvantages of online and offline formats.

As has been reviewed, there is a range of components that may comprise blended learning through a combination of face-to-face and online modes. These elements may be blended in different ways for different purposes. Although this study investigates learner engagement and interaction in BWL, the analysis of the BWL elements, and their individual influences on learner engagement and interaction are beyond the scope of this research. However, these elements have been
reviewed to provide an understanding of the case BWL program investigated in this study described in Chapter 3. The presence of certain blended learning components, and the way these components are combined determines the type of blend. The next section analyses the types of blends, and introduces the type of blend that is used in this study.

**Types of Blends**

The vast number of ingredients that make up blended learning, using both face-to-face and online learning, may be combined in different ways. A number of authors have presented various models for the categorisation of blends. Clark (2003) suggests a model that categorises blends according to their simplicity or complexity. He presents four levels of blends: component, integrated, collaborative, and extended (or expansive) blends. A component blend contains two or more blended learning components that can function on their own in the absence of the others. In an integrated blend, the components are integrated with and dependent on each other to provide cohesion. A collaborative blend brings further cohesion to the components by offering collaborative facilities such as mentoring and coaching. At the fourth level, an expansive blend incorporates on-the-job learning, made possible by having learning resources available before and after a learning event. Clark (2003, p. 39) also notes that “the workplace is where most actual learning takes place”, and that the expansive blend includes learning at and through work. Clark’s (2003) categorisation model helps to recognise the type of blend mostly identified with workplace learning. Two other blend categorisation models are analysed as they are relevant in further identifying the type of blend used in this study.

Graham (2006) describes four levels of blends: activity level, course level, program level, and institutional level. In this model, the blends are classified
according to their scope or where they are used, whether in an activity, course, program, or institution. At the activity level, online and face-to-face modes are combined in one learning activity. A course level blend is one that contains distinct face-to-face or online activities as part of a course. At program level, there are courses that are undertaken face-to-face, and those that are undertaken online. Institution level blending occurs when there is organisational commitment to blended learning. This study utilises a program level blend and investigates a blended learning program containing two courses: an online module and a face-to-face workshop.

The focus of learner engagement and interaction in this study calls for a model of categorisation that is based on the psycho-social and pedagogical aspects rather than the physical structure of a blend. (It should be noted that in the instances where the literature mentions “pedagogy” and its related terms, it refers to the broader aspect of teaching/learning methods. However, in this study, these terms are more precisely understood to pertain to andragogy and the way adults/mature learners learn.) In addition to the different levels of blending, Graham (2006) also developed a categorisation of blended learning with a focus on pedagogy, identifying blends at three different levels: enabling blends, enhancing blends, and transforming blends. As this model of categorisation of blends has a focus on pedagogy, Graham and Robison (2007) use the four fundamental characteristics of effective learning environments presented by Roschelle, Pea, Hoadley, Gordin, and Means (2000) to identify improvements in blended learning pedagogy: active engagement; participation in groups; frequent interaction and feedback; and connections to real world contexts. Since learner engagement and interaction are crucial to learning, and a key focus of this study, Graham's (2006) model of categorisation of blends is used
for the purpose of this study, as it has a focus on pedagogy and active learning through interaction. Although concrete definitions for the different types of blends are not given by Graham (2006), Graham and Robison (2007) describe the different types of blends in terms of the scope, purpose and nature of the blend, as shown in Table 2.2.
Table 2.2

*General Description of Blend Categories by Scope, Purpose, and Nature (Graham & Robison, 2007, p. 90)*

<table>
<thead>
<tr>
<th>Transforming Blend</th>
<th>Enhancing Blend</th>
<th>Enabling Blend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> Scope: large (course level or many activity level blends) Purpose: improved pedagogy Nature: affordances of environment used for a move towards active learning</td>
<td><strong>B.</strong> Scope: small (activity level) Purpose: improved pedagogy Nature: affordances of environment used for a move towards active learning</td>
<td><strong>D.</strong> Scope: any size Purpose: access/convenience Nature: affordances of environment used for increased access/convenience</td>
</tr>
<tr>
<td><strong>C.</strong> Scope: any size Purpose: increased productivity Nature: affordances of environment used for increasing instructor or learner productivity</td>
<td></td>
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</table>

Graham and Robison (2007, p. 104) state that enabling blends “focus primarily on providing access and convenience to students”. They offer flexibility to learners by providing the same learning opportunities through different modes (Graham, 2006; Graham & Robison, 2007). The main focus of enhancing blends is increased productivity; there is no focus on active learning, rather, the blends offer improvements in the efficiency and/or effectiveness (Graham & Robison, 2007). Enhancing blends do provide incremental changes to pedagogy though additional resources and supplementary materials, but do not radically change the way learning occurs (Graham, 2006; Graham & Robison, 2007). In enabling and enhancing blends, using technology to transform pedagogy is not the dominant focus (Graham & Robison, 2007). In a transforming blend, as the name suggests, there is a “radical
transformation of pedagogy” (Graham, 2006, p. 13) by enabling intellectual activity made possible through different technology; in this manner, technology (online learning modes) is used intentionally to promote learning. The primary purpose of a transforming blend is improved pedagogy; the focus is a shift towards active learning pedagogy by using the face-to-face and technological affordances in the blended environment (Graham & Robison, 2007). In participating in such a blend, “learners actively construct knowledge through dynamic interactions” (Graham, 2006, p. 13).

Learner interaction, especially human interaction, comes into play at this level of blending. This may also explain the greater abundance of examples of transforming blends in corporate learning found by Graham (2006), where workplace interactions are crucial to workplace learning.

Although this categorisation of blends comes from blended learning literature in the educational sector, it helps to identify the different types of blends that may be present and most effective in transforming workplace learning for adult learners. Graham's (2006) transforming blend specifically highlights the importance of learner interactions for effective blended learning. Learners engage through human and content interactions, and the lower level blends (enabling and enhancing blends) clearly incorporate content interactions through the various online and face-to-face components. Although these blends are not void of human interactions, it is not clear to what extent human interactions are present, and how this influences learner engagement. The transforming blend contains human interaction in addition to content interaction, and is therefore expected to afford increased engagement. While Graham (2006) states that none of the types of blends are necessarily bad, but just have different foci, it would be of value to know whether certain types of blends are more effective than others because of the engagement and interaction they afford.
Comparing the enabling, enhancing, and transforming blends in BWL is beyond the scope of this research; however, this study aims to explore how BWL influences learner engagement and interaction in one type of blend, namely the enhancing blend.

This review of blended learning has so far addressed its definition, purpose, components, and types of blends, and is drawn largely from the educational context. The focus now shifts to blended learning for the purpose of workplace learning, and blended learning research specifically in the context of the workplace is considered.

**Blended Workplace Learning**

The bulk of blended learning literature has been concentrated in the educational context, while blended learning research in the corporate context is generally found in white papers and other non-academic sources (Drysdale, Graham, Spring, & Halverson, 2013). This is understandable, as teaching and learning is the primary business of the education sector; but for an organisation, the need for employee training and development is secondary, arising as an organisation grows and develops in response to business needs (Sloman, 2007). A thematic analysis of the most cited blended learning research identified that only 3.5% of the publications addressed blended learning for professional development or in-service training (Halverson, Graham, Spring, Drysdale, & Henrie, 2014). Nevertheless, recent blended learning research specific to the workplace has identified that, in order for blended learning to be effective, the link between learning and job performance should be tight (Adams, 2013), learning should be based on specific workplace challenges (Berg & Karlsen, 2012), and should be addressed to meet the target audience profile (Chandavimol, Natakutoong, & Tantrarungroj, 2013).
From a workplace learning perspective, Baldwin-Evans (2006) noted that blended learning needs to be learner-centred. Clark (2003) stresses the necessity to find optimal blends for individuals in such a way that the learning experiences are aligned with their organisation's aims. Because the learning requirements and preferences of each individual are different, organisations must use a blend to get the right learning content in the optimal format to the right individual at the right point in time (Singh, 2003; Singh & Reed, 2001). Blended learning addresses this by combining multiple delivery methods that complement each other. Blended learning makes use of the best methods available for a specific workplace objective (Hofmann & Miner, 2008). Organisations need a solid grasp of the advantages and disadvantages of different learning methods, understanding that a single method will probably not be the optimal solution (Hofmann & Miner, 2009). From a blended learning case study of managers in the public sector, Moe and Rye (2011, p. 177) conclude that “blended learning has to be approached in a relational way, where the strength and weakness of one component are manifest through its relation to other components.” Thus the purpose of BWL is not simply to have a combination of different learning resources and activities, but that the pedagogic strengths of different components of a blended delivery program together achieve a strategic learning goal for the employees and thus for the organisation.

It is important to note the use of the term blended ‘learning’, rather than ‘teaching’ or ‘training’, the distinction being that training implies that a facilitator (either remote or face-to-face) is leading the learner experience whereas with blended learning, the experiences are more learner directed, with the focus on the goal (learning) rather than the means (instruction) (Regan & Delaney, 2011). In an effort to make sense of blended learning in the workplace, Sloman (2007) emphasises that
the focus needs to shift from technology to learning. He says that the role of a
training professional has become one of “supporting, accelerating, and directing
learning interventions that meet organisational needs and are appropriate to the
learner and the context” (Sloman, 2007, p. 318). Hofmann and Miner (2009) also
agree that the best blended learning environment is based on trainee success rather
than on instructor control or available technology. Blended learning often occurs in
the workplace, and with the help of an active supervisor or manager can help shift
the responsibility for learning from an instructor to the employee (Rossett & Frazee,
2006).

Therefore, it is clear that for BWL to be successful, both the learner needs and
the business goals need to be taken into consideration. This is not surprising as the
main purpose of workplace learning is for workers to be better equipped to perform
effectively for the workplace to function successfully. Hence the goal of successful
BWL is two-fold: to have well-trained employees who promote business success for
the organisation. While the result of BWL for organisational success is beyond the
scope of this research, the impact of BWL on the learners is the focus of this study,
necessitating a pedagogic perspective of BWL. Specifically, the importance of
learner engagement and interaction in blended learning is considered next.

**Engagement and Interaction in Blended Learning**

One of the themes in blended learning literature from the educational context is
that it is not a concrete concept (Clark, 2003; Picciano, 2009). The vastness of
blended learning descriptions represents one of the biggest challenges to blended
learning research and application (Watson, 2008). This means there is little
consensus on the main constructs or variables to be investigated (Bliuc et al., 2007),
and most of the seminal blended learning literature is not empirical in nature but is
still focused on its definitions and models (Halverson et al., 2012). Halverson et al.
(2012) suggest that future blended learning research could look more specifically at
pedagogy and design, for example what blended learning strategies are more
effective for particular contexts. In light of the emphasis on blended learning
pedagogy (or blended learning andragogy, in this case), the importance of engaging
learners in a blended learning program is the focus of this section.

The key to blended learning is the integration of multiple delivery methods
(Regan & Delaney, 2011). Singh (2003) argues that a single method is not sufficient
to provide learner engagement, social contact, relevance, and context to facilitate
learning; but blended learning offers these choices. Vaughan (2010) found that the
blended learning redesign of a university course increased student engagement and
participation in the course.

Higher educational researchers Korr et al. (2012) conclude that best practice
blended learning may vary and require customisation based on the learner.
According to George-Walker and Keeffe (2010), successful learners are aware of
their learning and situational needs and select blended learning formats to fit their
changing needs. The same authors suggest that “it is not the role of the instructor to
prescribe optimal blends, but to provide the options for learners to engage, and thus
develop “reflective, self-directed, self-regulating, self-determined” learner skills” (p.
12), reflecting the adult and mature learning principles discussed earlier, where the
focus is on the learner rather than the instructor or trainer. George-Walker and
Keeffe (2010) stress that a learner's choice of engagement with a blended learning
course is influenced by individual needs and preferences, and therefore flexibility in
blended learning is necessary for continual engagement. However, a wide range of
options may lead to learners feeling overwhelmed or excluded, underlining the importance of support and facilitation (George-Walker & Keeffe, 2010).

Although the use of interactive technologies does not necessarily mean that interaction will occur in blended learning (Donnelly, 2010), research in the higher education context has found that the rich learning context of blended learning with its variety of tools and resources enhances and encourages interaction and engagement among learners (George-Walker & Keeffe, 2010; Korr et al., 2012; Means et al., 2013). In their meta-analysis, Means et al. (2013, p. 2) found that studies on blended learning involved “additional learning time, instructional resources, and course elements that encouraged interaction among learners”. They argue that “a major reason for using blended learning approaches is to increase the amount of time that students spend engaging with the instructional materials” (p. 36). Higher education researchers Babb, Stewart, and Johnson (2010) stress the importance for instructors to create learning activities that demand participation, engagement, and interaction. From a workplace learning perspective, Noe et al. (2010) assert that learner engagement is critical for learning effectiveness, and face-to-face and online methods are used to promote psychological engagement through active learner involvement and control, and social interaction.

An effective blend or blended learning program is one where learning is maximised. Chametzky (2014) claims that for learners in the workplace, learning is maximised when they are engaged through human and content interactions. As Stein and Graham (2014) state, learning activities that make use of the different types of interactions will be more engaging than those which focus predominantly on one type of interaction. Studies with university students have shown that face-to-face interaction is necessary for engagement (George-Walker & Keeffe, 2010), as is
learner interaction with the learning technology (Chen, Lambert, & Guidry, 2010; Hu & Kuh, 2001; Kuh & Hu, 2001; Laird, Shoup, & Kuh, 2005).

Blended learning can provide human interaction in both online and face-to-face environments (McDonald, 2013). Human interaction in a blended learning program may take the form of face-to-face interactions, online interactions, or a combination of both (Wegmann & Thompson, 2014), but there needs to be a balance between online and face-to-face human interactions, as well as a balance between interactions with instructors and other learners (McDonald, 2013). Human interaction has been shown to increase interest in course content, and proved critical in the understanding thereof; it also increased engagement with course content through reflection and dialogue about content with non-course-related people (McDonald, 2013). Online human interaction has also been shown to increase engagement with learning content through increased connection with other texts and readings (Wegmann & McCauley, 2007; Wegmann & McCauley, 2014).

Therefore, there would be a disadvantage in either giving up face-to-face contact entirely, or having only face-to-face sessions with no use of learning technology. This is not surprising as both face-to-face and online modes have their unique advantages as outlined by Graham (2006). The strengths of online methods are flexibility, participation, and depth of reflection, whereas the strengths of face-to-face modes are human connection and spontaneity (Graham, 2006). Garrison and Vaughan (2008, p. 5) also assert that face-to-face and online learning are “made better by the presence of the other”. The increased opportunities for engagement through interactions that blended learning affords thus explain its effectiveness, and warrants this study on learner engagement in BWL.
This section on blended learning first addressed blended learning in terms of its definition, purpose, components, and types of blends. Then blended learning research in workplace learning settings was analysed, and finally the andragogic concepts of learner engagement and interaction in blended learning from the educational arena were reviewed. Drawing from the literature reviewed in the previous sections on learning foundations, adult learning, workplace learning, and blended learning, the conceptual framework of the study is set forth next, concluding with the research questions.

**Conceptual Framework of the Study**

This literature review first introduced the internal and external process of learning, and pointed to the importance of engagement in order for learning to be meaningful. Learner engagement happens through three types of learner interactions, namely, learner-content interaction, learner-instructor interaction, and learner-learner interaction (Moore, 1989; Stein & Graham, 2014). The adult and mature learning principles further explained how and why adult learners engage in a learning experience. The workplace learning concepts, specifically co-participation (Billett, 2000, 2001a), also highlighted that engagement involves participation in workplace activities and learning programs that are relevant, applicable, and transferable. Blended learning and its components were then discussed, along with the types of blending that occur depending on what components are used, how they are combined, where they are used, and to what purpose. Using the physical components in identifying blend types, the blend used in this study involves workplace learning, and thus is an “expansive level” blend (Clark, 2003). It contains one online learning course and one face-to-face learning course and so is a “program level” blend (Graham, 2006). More significantly, Graham's (2006) categorisation model of
enabling, enhancing, and transforming blends is used to identify the blend used in this study because of its focus on pedagogy (andragogy, in this case) and dynamic interaction. While analysing all three types of blends (enabling, enhancing, and transforming) in his categorisation model would require researching a number of BWL programs and is therefore beyond the scope of this research, this study explores one type of blend (enhancing blend) in terms of its impact on learner engagement and interaction in BWL.

Previous research on BWL was analysed, as was the role of blended learning in learner engagement from educational research, concluding that in order for a BWL program to be effective, learner engagement through the three types of learner-interactions may be required. While the majority of blended learning research concerning engagement is focused in the higher education sector, workplace learning researchers also assert that learner engagement is critical for learning effectiveness (Noe et al., 2010). These authors state that a better understanding is needed on what learning methods promote engagement, and how they do so. In order to address this gap in BWL, the current study aims to explore the factors that influence learner engagement and interaction in BWL and to also examine the link between learner engagement and interaction. To tackle these issues, the first research question this study seeks to answer is “How does BWL facilitate learner engagement?” Since learner engagement occurs through learner-content interaction, learner-facilitator interaction, and learner-learner interaction, (Moore, 1989; Stein & Graham, 2014), it necessitates the second research question “How does BWL facilitate interaction?”

The rich context of blended learning offers opportunities for increased interaction and engagement, through its variety of tools and resources (George-Walker & Keeffe, 2010; Korr et al., 2012; Means et al., 2013). It is known that
engagement takes place through human and content interactions (Chen et al., 2010; George-Walker & Keeffe, 2010). However, it is not clear whether certain types of interactions in BWL are linked to increased engagement. In order to address this research gap, the third research question is considered: “What is the relationship between learner engagement and learner interaction in BWL?” It is expected that human interaction (learner-facilitator and learner-learner) is associated with higher engagement because of its link to increased learner-content interaction (McDonald, 2013; Wegmann & McCauley, 2007; Wegmann & McCauley, 2014), however this is yet to be explored in BWL.

Blended learning research needs to focus on psycho-social issues that make it distinct (Graham, 2013). While most research on blended learning models has focused on the physical structure of the blend, rather than the pedagogical aspects (Graham et al., 2013), this research on BWL focuses on the psycho-social and andragogical aspect of learner engagement through learner interaction. Blended learning research on learner engagement is also suggested by Drysdale et al. (2013) and Halverson et al. (2014). This study investigates a BWL program to explore the factors that influence learner engagement and interaction, and also examines the link between engagement and interaction in BWL. In order to address these research aims, the following three research questions will be considered, with a diagrammatic representation of the conceptual framework shown in Figure 2.1.

- RQ 1: How does BWL facilitate learner engagement?
- RQ 2: How does BWL facilitate learner interaction?
- RQ 3: What is the relationship between learner engagement and learner interaction in BWL?
Figure 2.1. Conceptual framework of current study on BWL.
Chapter 3: Methodology

Introduction

The literature reviewed in Chapter 2 provided an analysis of blended learning in the context of the workplace and adult workers as learners, with a focus on learner engagement through interaction. The overall aim of the study is to explore learner engagement and learner interaction in blended workplace learning (BWL).

This chapter describes the methodology used to conduct this study. It includes the rationale for using a qualitative research approach, and specifically, the case study design, to answer these questions. The chapter continues by describing the research participants, data collection and data analysis procedures, and addressing the quality of the research design and its limitations. Finally, ethical considerations for this research project are reviewed.

Research Approach

Qualitative research is a broad approach to studying a social phenomenon, and draws on multiple methods of systematic inquiry (Marshall & Rossman, 2011). This study takes a qualitative research approach to study the phenomenon of BWL, and uses two data collection methods. This study helps to explain observed regularities by discovering underlying mechanisms (Blaikie, 2010); learner engagement, learner interaction, and the relationships between them are explored in BWL. Moreover, a qualitative approach is used, where descriptions and interpretations of phenomena are offered, and where the data gathered are experiential rather than measurements (Stake, 2010). Noe et al. (2010, p. 299) asserts that “the potential richness of qualitative data may be particularly useful” in
exploring learner engagement in the workplace, which applies to this research on BWL.

The purpose of conducting exploratory research is “to develop propositions or hypotheses for further study” (Yin, 2003b, p. 6). A case study of a BWL program for employees in an organisation was conducted to undertake this exploration. The case study design is used to examine contemporary events, and is appropriate to use to answer “how” or “why” research questions (Yin, 2003b, 2009). Since BWL is a contemporary phenomenon in workplace learning, and the questions being researched relate to how BWL facilitates learner engagement and learner interaction, the case study design proved appropriate. Moreover, the case study design is used when “the phenomenon under study is not readily distinguishable from its context” (Yin, 2003a, p. 4). The literature review identified that learning and work cannot be separated in workplace learning, therefore BWL cannot be studied separated from its context of the workplace.

This research used a single-case study (Yin, 2003b), and the case or the unit of analysis is the BWL program undertaken by employees in an organisation. The organisation selected for the case study was a post-secondary institution offering BWL programs for professional development. The participating organisation was purposefully chosen because it was known to offer a BWL program and was seeking to review this program for future enhancements.

**BWL Program Description**

The BWL program chosen was one offered by the case organisation for its employees in direct supervisory roles who were required to conduct performance planning reviews (PPRs) and have performance coaching conversations. It included a PPR Online Module and a Performance Coaching Workshop. Supervising staff were
required to complete the PPR Online Module before they attended a one day Performance Coaching Workshop designed and facilitated by the organisation. The facilitators who were interviewed were part of the team that was involved in both the design and implementation of this BWL program, and were responsible for providing training for supervisors in performance coaching and in understanding the PPR process.

The BWL program was originally a two-day face-to-face workshop only. The online module was deliberately introduced in order to provide timely and necessary information without having to increase the face-to-face workshop time, and also for immediate and easy access for the staff, as explained by one of the facilitators of the BWL program. The amount of information that was needed to be covered in the workshop, as well as the logistical requirements for the facilitators and participants such as giving up work time to attend the program and booking available training rooms were elements that led to the decision to make the program a blended one. So the online module was added and the workshop time was reduced from two days to one day, essentially reshaping the learning program in terms of how the learning content was presented without removing any important content from the original workshop.

Another reason for changing the initial face-to-face staff learning program to a BWL program was convenience. The blended program through its online mode would give staff members immediate access to necessary information and knowledge, so they would have helpful resources and not have to wait till they were able to attend a workshop. Moreover, staff members required to do the program were able to access the online module and use its resources whenever they needed both during and after completing the BWL program. Therefore, through blending, the
process of providing staff with information and knowledge was made easier. The resulting BWL program consisted of an asynchronous virtual component (the online module), and a synchronous, live, real-time component (the workshop).

The online module was expected to take about 45 minutes to an hour to complete. It provided information on the PPR process and its underpinning philosophy. It used a learning management system with which the staff were already familiar. The information was generally presented in the form of text, which participants would read. At the end of each topic there was a short “check your understanding” quiz, and at the end of the module, there was a final quiz which participants had to pass in order to successfully complete the online module; these quizzes could be taken as many times as needed. The online module also contained video segments that learners could watch if they wanted to, as well as links to important documents and tip sheets for the PPR process. Learners had access to the online module even after they had completed it, so the information and resources in the online module were available for them to use at work. The online module did not have a discussion board or a human interaction component to it; only learner-content interaction was present.

The workshop provided practical information and skills relating to performance coaching conversations that were part of the PPR process. There were usually about 16-18 participants in each workshop, led by one of the facilitators on the team. There would be a core skill presented by the facilitator, and then a pair, table, or whole group activity or discussion around that learning topic. PowerPoint slides and video clips were also used as discussion starters, and each participant was given a workbook to take away with them. Over the course of the day, a number of activities were provided for learners to engage in; one of the facilitators explained
that a number of core skills were presented and each was followed by a practice activity. Thus the workshop was highly interactive, with both human and content interactions.

The purpose of the face-to-face part of the BWL program was to provide staff with an environment where they could not only learn techniques but also practise those skills required on their job. As clarified through the second facilitator interview, the workshop was designed for the staff members to go through the process and practise the skills required for the coaching conversations they carry out in their roles. The face-to-face workshop provided active learning opportunities.

The BWL program through its physical and virtual modes provided staff with information relevant to the PPR and performance coaching process as well as learning activities to practise the skills required. The online module was used to present large amounts of relevant and timely information relating to PPRs, while granting participants with easy access to this information on an ongoing basis. In addition, the workshop provided a learning environment for soft skills relating to performance coaching to be practised. The integration of the online module with the face-to-face workshop resulted in design of the BWL program. So although the online and face-to-face modes covered different aspects of the PPR and performance coaching process, together they made the BWL program more effective in providing the information and skills required for the staff. Thus the BWL program fits the description of an enhancing blend, which primarily focuses on increasing productivity, by creating improvements in the efficiency and/or effectiveness, using additional resources and supplementary materials (Graham 2006; Graham & Robison 2007).
Research Participants

The research participants included those employees in the organisation who had completed the BWL program as part of their professional training and development. The training professionals involved in the planning and delivery of the BWL program were also included as research participants. A purposeful or judgemental sampling technique (Malhotra, 2006; Palys, 2008; Zikmund, Babin, Carr, & Griffin, 2010) was used to select participants for the study. Purposive sampling is a “series of strategic choices about with whom, where, and how one does one’s research… the way that researchers sample must be tied to their objectives” (Palys, 2008, p. 698). The inclusion criteria for participants were that they were staff who had completed the BWL program ideally within the last twelve months, or facilitators who delivered the BWL program.

The number of participants involved in a qualitative study varies; there is no minimum number of responses required, as data collection is carried out until data saturation is reached; when the interviews do not yield substantially new or different data (Seale, 1999; Strauss & Corbin, 2008). In this study data saturation was considered to have been reached when there was a convergence of information from the interviewees with no new themes appearing from the interview responses. Dick (1990) suggests that ultimately the data determine the sample size. In this study, the human resource (HR) department of the organisation provided a list of staff members who had completed the BWL program within the last twelve months. The one-year threshold for past participants of the BWL program was decided upon to avoid potential recall issues during data collection. Although it would have been ideal to have interviewees who had completed the BWL program within the twelve months prior to data collection to avoid recall issues, in order to get an adequate number of
participants, there were some who had completed the BWL program prior to twelve months ago. However, these participants were questioned to check that they had reasonable recall of their experience in the BWL program.

Out of 64 staff invited to participate in the study, a total of 15 respondents agreed to be interviewed, but during the interviews it was identified that two of the participants had only completed the face-to-face part and not the online part of the program. The data from these participants were not used in the analysis, as they did not fit the criteria of having completed a “blended” program, thus a total of 13 participant interviews were included in the data analysis. In addition to the past participants, two facilitators of the BWL program also consented to participate in the “facilitator interviews”.

**Participant Demographics**

The training program was a requirement for all staff in supervisory roles. There were 13 participants in the study. The number of years in the organisation, length of time in the supervisory role, and the number of staff under supervision were deemed of relevance, and these questions were asked of the past participants of the BWL program. The number of years participants had been in the organisation varied from one year to eighteen years, their length time in a supervisory role ranged from three months to eight years, and the number of staff under direct supervision ranged from one to thirteen; these provided a wide spread of professional and supervisory experience among the interviewees. There was also a mix of those who did and did not have previous BWL experience among the interviewees; some had participated in blended staff development courses, while some had only participated in online staff development courses. Participants 5 and 6 were excluded from the analysis as they had only completed the face-to-face part of the BWL program, which was only found
out at the interview. Where available, relevant participant demographics are displayed in Table 3.1.
Table 3.1

*Learner/ Participant Demographics*

<table>
<thead>
<tr>
<th>Participant #</th>
<th># Years in organisation</th>
<th>Time in supervisory role</th>
<th># Staff supervised</th>
<th>Time since completing BWL</th>
<th>Previous BWL experience</th>
<th>Completed online mode in one sitting?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>12 months</td>
<td>N/A</td>
<td>9-11 months</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>5 months</td>
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<td>2 months</td>
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<td>No</td>
</tr>
<tr>
<td>3</td>
<td>2.5</td>
<td>6 months</td>
<td>1</td>
<td>7 months</td>
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<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>N/A</td>
<td>2</td>
<td>&gt;1 year</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>2 years</td>
<td>13</td>
<td>2-3 months</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>8</td>
<td>1.5</td>
<td>3 months</td>
<td>7</td>
<td>2-3 months</td>
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<td>No</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>6 months</td>
<td>7</td>
<td>2 months</td>
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<td>No</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>3 years</td>
<td>15</td>
<td>2-3 months</td>
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</tr>
<tr>
<td>11</td>
<td>17.5</td>
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<td>2</td>
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<td>12</td>
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<tr>
<td>14</td>
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<td>Yes</td>
</tr>
<tr>
<td>15</td>
<td>11</td>
<td>1yr</td>
<td>7</td>
<td>6-8 months</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

N/A = not answered

*Not in supervisory role at the time of interview*
The two BWL program facilitators who were interviewed held organisational development roles at their organisation, and were part of the team responsible for the design and delivery of the BWL program. Each had been in the organisation for around five to six years, and had facilitated a number of staff learning programs at the organisation.

**Data Collection**

The case study is a comprehensive research strategy (Yin, 2003b). A case study may use multiple sources of evidence and various data collection methods (Yin, 2003a). The data collection methods used in this case study included semi-structured in-depth interviews with facilitators and participants, and a review of the online module that was part of the BWL program. Marshall and Rossman (2011) maintain that the sequencing of different data collection methods is crucial to the design of the qualitative research approach. Therefore, the review of the online module was conducted prior to the facilitator and participant interviews in order to gain information about the BWL program. Direct observation of the online module participation was not feasible as each participant had completed the online module in their own time, whether at work or at home, and sometimes over multiple sittings. Direct observation of the workshop was also not possible as there were no workshops being conducted during the limited data collection period of seven weeks.

The online module review was conducted to gather information about the type of blend used in the program, the components used in the online module, as well as background information on the structure and purpose of the BWL program. The organisation granted access to the online module that the participants completed as the online part of the program. This online module was reviewed prior to the
participant interviews to gain knowledge of the online part of the BWL program, and was thus used to guide some of the interview questions.

Two facilitator interviews (see Appendix B for interview questions) were conducted to provide information to identify the type of blend used in the BWL program, as well as background information on the structure and purpose of the BWL program. One facilitator interview was conducted prior to the participant interviews to gather more information about the purpose and structure of the BWL program. The second facilitator interview was conducted around the middle of the participant interviews to gain some more clarity on the BWL program. Together, the online module review and the two facilitator interviews provided supporting data about the BWL program and also helped in understanding the data provided from the participant interviews.

Interviews

Interviews are useful for studying something that the researchers are “unable to observe themselves” (Stake, 2010, p. 95). Since it would not have been feasible to observe every training session in the BWL program, all the different interactions that took place, and every time an employee engaged or interacted behaviourally, cognitively, or emotionally with the learning materials, trainers, or colleagues, semi-structured, in-depth interviews were used to gather data about learner engagement and learner interaction in the BWL program.

The interviews were held in the organisation itself, at a pre-arranged time with each facilitator and past participant of the BWL program. Each interview contained key questions that defined the topic, and then probing questions were utilised as and when necessary (Dick, 1990). Marshall and Rossman (2011) argue that the richness of data depends heavily on these follow-up questions or ‘probes'.

The ability to establish rapport and trust with participants in a qualitative study is an important characteristic of a researcher in collecting data (Marshall & Rossman, 2011). As Marshall and Rossman (2011, p. 118) state, “closeness, engagement, and involvement can enhance the richness of the research”. This was done by restating the purpose of the study; the initial background questions also functioned to allow participants to talk about their role in the organisation and their experience with BWL programs.

Interviews with past participants of the BWL program (see Appendix C for interview questions) were conducted to supply information about how learners engaged and interacted. The interview questions first covered demographic and background information about the participants, such as their role in the organisation, and whether they had participated in other BWL programs. The bulk of the interview questions then focused on behavioural, cognitive, and emotional engagement, as well as learner interactions with the content, facilitator, and other learners. Table 3.2 provides examples from the interview questions of how instances of engagement and interaction were identified and measured. Where relevant, each question was asked for the online and face-to-face modes separately, in order to get rich data for both components of the BWL program.
Table 3.2

Key Constructs and Example Measures

<table>
<thead>
<tr>
<th>Construct</th>
<th>Examples of Questions/ Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural Engagement</td>
<td>How/ how well did you manage to complete the exercises/ activities in the online module/ workshop?</td>
</tr>
<tr>
<td></td>
<td>How much time did you spend on the online module; did you do it in one sitting?</td>
</tr>
<tr>
<td>Cognitive Engagement</td>
<td>Which exercises or activities from the online module/ workshop were most/ least stimulating for you?</td>
</tr>
<tr>
<td></td>
<td>Which cognitive processes (from a list of 6) did you use most or least during the online module/ workshop?</td>
</tr>
<tr>
<td>Emotional Engagement</td>
<td>What aspects of the online module/ workshop did you like/ not like? Why?</td>
</tr>
<tr>
<td></td>
<td>Which emotions (from a list of 10) did you experience during or after completing the online module/ workshop?</td>
</tr>
<tr>
<td>Learner-Content Interaction</td>
<td>What information or resources from the online module/ workshop did you use during or after completing the program?</td>
</tr>
<tr>
<td></td>
<td>Were there any exercises or activities in the online module/ workshop that you skipped? Why?</td>
</tr>
<tr>
<td>Learner-Facilitator Interaction</td>
<td>What kind of communication did you have with the program facilitator/ admin during or after completing the online module/ workshop?</td>
</tr>
<tr>
<td></td>
<td>Give examples of some of the individual/ group communication you had with the facilitator. (What were the topics, and who initiated the communication?)</td>
</tr>
<tr>
<td>Learner-Learner Interaction</td>
<td>What kind of communication did you have with the other participants during the workshop?</td>
</tr>
<tr>
<td></td>
<td>Give examples of some of the individual/ group communication you had with the other participants. (What were the topics, and who initiated the communication?)</td>
</tr>
</tbody>
</table>
Questions on behavioural engagement and learner-content interaction focused on the specific activities that learners undertook in the online and face-to-face components of the BWL program. Information on what types of behavioural engagement and learner-content interaction was to be expected in the activities of the BWL program was gained from the two facilitator interviews. In the interviews with past participants, learners were asked about these activities and how they went about completing them.

Questions to the facilitators on cognitive engagement identified the cognitive processes that were expected to be exhibited; the learners identified and described the mental processes that they undertook in the online and face-to-face parts of the program. These cognitive processes were provided in the form of a list (see Appendix D) that included “remember”, “understand”, “apply”, “analyse”, “evaluate”, and “create”, from Bloom’s Revised Taxonomy (Anderson & Bloom, 2001).

Questions relating to emotional engagement were asked of the facilitators; specifically how they expected or found participants to like or dislike aspects of the online and face-to-face elements of the BWL program. In the participant interviews, learners described their own emotional engagement in the online module and face-to-face workshop. Learners also identified the emotions they experienced from a list of emotions (see Appendix E) that included “enjoyment”, “hope”, “pride”, “anger”, “relief”, “anxiety”, “shame”, “hopelessness”, “boredom”, and “other”. This list was adapted from the Achievement Emotions Questionnaire (Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011) of class-related, learning-related, and test-related emotions. Questions on learner-facilitator and learner-learner interaction in the facilitator interviews identified that only the face-to-face workshop contained
interpersonal interaction, and the online module did not have this interaction. This was confirmed by the participant interviews, where learners described the type of communication they had with the facilitators and other learners during and after the BWL program.

**Pilot Test of Interview Questions**

Prior to data collection, a pilot study was conducted to test whether the interview questions yielded valid responses. Two pilot interviews were conducted with individuals not in the target audience but with some exposure to BWL. These individuals also had research knowledge and expertise to be able to give feedback on the interview process, and this helped to refine the interview questions. From feedback and reflection on these pilot interviews, changes were made: the number of participant interview questions was reduced, some questions on behavioural engagement were also reworded so they were easier to understand, and an additional question, “How many staff do you supervise?” was added to participant demographic questions.

Also, instead of having two questions (one relating to the online module, and one relating to the workshop) for each aspect, one question was asked, having made clear that the question was meant to be answered separately for the online module and the workshop. This was so that the interviewees could mentally organise their answers before responding, and the technique worked especially well for the facilitator interviews. In this case, “in the online module?” and “in the workshop?” were used as prompts.

In addition to the changes made to the interview questions based on the two pilot interviews, reflection from the first few participant interviews also shaped the flow of questions in the following interviews. For instance, instead of asking about
the online module and then workshop for each aspect, the order was reversed as and when necessary, so if the interviewee was already talking about the workshop, the next question would ask about another aspect about the workshop, and following that, the online module. Also, a probing question was added during the course of the participant interviews regarding interaction in the online part of the BWL program. The online module did not have an interactive component to it, where participants could communicate with the facilitator or others completing the module; thus a probe was added to get a sense of whether the participants found this aspect to be lacking. During the facilitator interviews, a similar probe was added that was not prepared in the interview questions; the facilitators were asked if they received any communication from participants while they were doing the online module, after they had clarified that the online module did not have an interpersonal interaction aspect within the module itself.

**Data Analysis**

Thematic analysis was used to identify, analyse, and report themes within the data (Braun & Clarke, 2006). Data analysis initially involved immersion in the data. Categorisation and coding of the data were organised using NVivo software. Initial coding was first carried out using a theoretical or deductive approach (Braun & Clarke, 2006), where the data from the participant interviews were coded according to the literature. This involved identification of the three types of learner engagement: behavioural, cognitive, and emotional; and the three types of learner interaction: learner-content, learner-facilitator, and learner-learner. The identification of these six categories of learner engagement and interaction was an important part of the data analysis to establish their presence or absence and how the BWL program impacted them.
Open coding and axial coding (Marshall & Rossman, 2011; Strauss & Corbin, 1998) were then conducted to reveal and categorise patterns in the data. Here, an inductive approach to thematic analysis was used, where pre-existing codes were not utilised (Braun & Clarke, 2006). Open coding was carried out by sentence, with precise codes relating to specific themes that emanated from the paragraph. For example “there are videos to watch. I don't think you had to watch them but you could; or there were links to more information or - and I think having that flexibility” was coded as flexibility. Open coding yielded a vast number of codes such as need to know and distractions. Next, axial coding (Strauss & Corbin, 1998) was carried out. The different codes from the open coding were grouped together into categories if they shared common themes (Saldana, 2011). From the open and axial coding, first-order concepts were derived.

The next stage of data analysis involved data reduction (Marshall & Rossman, 2011), which was utilised to reduce the large number of first order concepts into a smaller number of second-order themes, as shown in Table 3.3. This reduction brought the data to a point of saturation, where the data became theory, and no more new dimensions or properties emerged (Strauss & Corbin, 1998). The concepts and themes that emerged from the coding and reduction processes permeated the six categories of types of learner engagement and interaction initially identified in the data analysis.
Table 3.3

*Concepts and Themes from Data Analysis*

<table>
<thead>
<tr>
<th>First Order Concepts</th>
<th>Second Order Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal responsibility</td>
<td>Individual factors</td>
</tr>
<tr>
<td>Prior knowledge</td>
<td></td>
</tr>
<tr>
<td>Personal preferences</td>
<td></td>
</tr>
<tr>
<td>Personal circumstances</td>
<td></td>
</tr>
<tr>
<td>Role requirements</td>
<td>Workplace factors</td>
</tr>
<tr>
<td>Role relevance and usefulness</td>
<td></td>
</tr>
<tr>
<td>Transfer of learning</td>
<td></td>
</tr>
<tr>
<td>Self-evaluation of work practice</td>
<td></td>
</tr>
<tr>
<td>Content presentation</td>
<td>Program factors</td>
</tr>
<tr>
<td>Assessment relevance</td>
<td></td>
</tr>
<tr>
<td>Resources and support</td>
<td></td>
</tr>
<tr>
<td>Learning environment</td>
<td></td>
</tr>
</tbody>
</table>

The face-to-face and online modes were not coded separately in NVivo; data were coded from the BWL program as a whole, without separating the physical and virtual components. This separation was not deemed to be necessary, as the differences in learner engagement and interaction between the face-to-face and online modes were not the focus of the study as much as how the BWL program as a whole impacted learner engagement and interaction. However, due to the nature of the two modes, where human interaction was absent in the online mode but present in the face-to-face mode, the differences between these two components of the BWL program became evident through the data analysis, and are reflected in the discussion of the findings in *Chapter 4*. In addressing the research questions, the chapter has so far explained the research approach of this study and described the data collection
and data analysis methods used. The rigour of these methods used is analysed in the next section.

**Quality of Design**

The criteria for the trustworthiness of a qualitative research design need to be addressed in order to judge the soundness of the research (Marshall & Rossman, 2011). Shenton (2004) asserts that the quality and limitations of a qualitative design need to be addressed in terms of credibility, transferability, dependability, and confirmability, and he describes the terms as follows.

Credibility is similar to the internal validity of a quantitative design; whether a study “measures or tests what is actually intended” (Shenton, 2004, p. 64). In qualitative research, the quality of the study may be compromised if the interviewees do not understand or give information that relates to the research question. This was overcome by using the following methods suggested by Shenton (2004): using a well-established research method (case study design), using a wide range of participant interviewees to ensure triangulation, ensuring participants’ honesty by giving the opportunity to refuse or withdraw from the study with no harm or threat to them, frequent debrief with and scrutiny by experienced research team members, member checks by giving participants the opportunity to read their individual interview transcript and make changes, and a thick description of the BWL program. Also, having a structured interview process with specific key questions that capture the issue of focus in easy-to-understand terminology helped to ensure credibility.

The study’s credibility was also enhanced through a debrief session (Shenton, 2004) that the research team had with the facilitators who were interviewed. This debriefing was offered after an initial analysis of the data from the participant interviews; the facilitators were given a brief analysis of participants’ feedback about
the BWL program (see Appendix F for debrief presentation). The debrief also served as reciprocity action towards the organisation (Marshall & Rossman, 2011), by sharing important findings with the facilitators who were involved in the design and implementation of the BWL program.

Transferability in qualitative research is similar to the quantitative terms of external validity or generalisability, referring to whether the results of a study are applicable to other contexts and situations (Shenton, 2004). In this single case-study design, the results are specific to the context of one BWL program in one organisation. Therefore, background data and detailed information about the BWL program, as well as relevant information about the learners are provided in order to assess the relevance of findings to a different BWL context.

The issue of dependability is similar to reliability in quantitative studies, and is addressed by providing clear and detailed descriptions of the research process used to collect and analyse data, so the study can be replicated (Shenton, 2004). In this study, dependability is ensured by giving an in-depth description of the methodology so the study may be repeated. This is done by providing details of the research design and implementation, the data collection methods used, as well as the processes used in developing the interview questions.

The confirmability criterion is similar to objectivity in quantitative research and stresses that the findings of the study must aim to be free from researcher bias and perception (Shenton, 2004). Coding of the data for patterns and categories was checked by experienced researchers on the research team, and this helped limit biased perceptions of the findings. Following Shenton’s (2004) suggestion, confirmability in this study was also ensured by providing a detailed description of the methodology, to help determine how far the themes emerging from the data may
be accepted. Recognition of the shortcomings and limitations of the methodology used also adds to the confirmability of the study and these limitations are summarised in the next section.

**Limitations of Research Design**

The criteria of credibility, transferability, dependability, and confirmability, described by Shenton (2004) shed light on the potential limitations and boundaries of this research design, which were minimised by taking measures as described previously. One limitation of the case study design is not being able to statistically generalise the results of the study (Yin, 2009) to the rest of the population, which in this case is organisations using an enhancing blend for BWL. The single case study design, researching only one BWL program in one organisation in the education sector means it is not possible to generalise the findings to all BWL programs and contexts. The fact that the participants came from one organisation in one country also limits the generalisability of the results. Moreover, the learning content of the BWL program was specifically for those in supervisory roles, and related to performance reviews and coaching (although the interview participants had a wide range of supervisory experience, and came from various departments in the organisation). However, the richness of the data from this BWL case illustrates the factors influencing learner engagement and interaction that highlight the potential of BWL effectiveness for organisations.

The design of this study is also bound by its scope and purpose in examining BWL. Due to the scope, the influence that the various design elements of the BWL program had on learner engagement and interaction are not analysed, rather the BWL program as a whole is considered. The purpose of this study is to explore specifically the influences of learner engagement and learner interaction in BWL so that
hypotheses can be framed for future research. Single-case studies do not prove relationships but can suggest important clues to cause-and-effect relationships (Yin, 2003a). The investigation of one type of blend (enhancing blend) also proves a limitation of this study. Although this research yielded rich information about the influence of this type of blend on learner engagement and interaction in BWL, the other types of blends were not studied and analysed in the same way as it was beyond the scope of this research.

Another limitation of this study relates to the data collection through interviews which were conducted months after the interviewees had completed the BWL program. This delay could be the cause of some margin of error. Moreover, the reliance on self-reported data is also a limitation of this study, as it may not be cross-validated by other forms of measurement; however, it is used to provide rich data about respondents’ thinking, perceptions, and emotions through “a process that involves not only recall but weighting, inference, prediction, interpretation, and evaluation” (Podsakoff & Organ, 1986, pp. 532-533)

This chapter has thus far detailed the methodology used in this study and addressed how the important criteria for the trustworthiness of the study have been met. To this effect, the limitations to the study’s research design have also been summarised. Next, the research integrity and ethical conduct of the research project are considered.

**Ethical Considerations**

This research was conducted and its results reported in accordance with the ethics approval granted by the Queensland University of Technology (QUT) Human Ethics Committee, which ensures compliance with the requirements of the National

The dangers in social research are more psychological than physical, such as exposure, humiliation, embarrassment, and loss of respect, self-respect, or social standing (Stake 2010). Some of the important ethical considerations that need to be addressed are the risk of harm, autonomy and informed consent, privacy, confidentiality, and anonymity (Traianou & Hammersley, 2012). Risk of harm refers to the harmful consequences that could result from the actions of the researchers. A risk assessment done prior to the research revealed this study to be of low risk; the risk of harm from this study was minimal, and included the potential discomfort experienced by the participants during interviews and surveys, for example giving up some of their work time, or expressing opinions that may seem undesirable. These risks were minimised by establishing openness and trust with the interviewees, as discussed earlier, and assuring confidentiality of all responses.

The ethical principle of autonomy underpins the common requirement of social research to obtain informed consent from participants before the research is carried out, and that the participant should be able to withdraw from the research at any point (Traianou & Hammersley, 2012). This information was made known to the participants prior to any data collection, using the Participant Information Sheet and Consent Form (PICF, refer to Appendix A). Since participation was purely voluntary, and all participants were over 18 years of age, voluntary consent was gained from each participant. A PICF was provided for each individual participant, outlining privacy and confidentiality. The interviews were at no cost to the interviewees, apart from each participant giving an hour during their work day to take part in an individual interview. The individual participants and the participating
organisation were also given the incentive of having the results of the research made available to them.

Privacy in qualitative research is also a key consideration in the choice of research topics, contexts, participants, information and content, as well as how researchers handle the data they gather and how they report their findings (Traianou & Hammersley, 2012). The ethical principles of privacy, confidentiality, and anonymity refer to the non-disclosure of information, therefore creating a tension between keeping confidentiality through anonymity and giving an accurate and detailed account of the research findings. Respecting the privacy and anonymity of the participants, as well as their right to voluntarily participate in or leave the research, is an important ethical principle in research (Marshall & Rossman, 2011). Thus the organisation and the individual participants were assured of their privacy and confidentiality before data collection, and were provided the opportunity to withdraw from the research. Anonymity is a measure used to maintain privacy and keeping people from potential harm (Traianou & Hammersley, 2012). Anonymising data can be done by replacing actual names with invented ones or referring to people by the role they played; alternatively, numbers, letters, or initials may be used (Traianou & Hammersley, 2012). In this study, each facilitator and participant interviewee was assigned a number (e.g., F1, F2, P1, P2, P3… P15), and these numbers were used instead of names when an interviewee was quoted in the findings, in order to ensure confidentiality.

This methodology chapter began by giving a rational for a qualitative research approach, and specifically, the single-case study design. The BWL program that was used as the sample case was described in detail, as were the demographics of the interview participants. The data collection methods were then outlined,
followed by the data analysis procedures. The rigour and trustworthiness of the research design were then addressed, along with the design’s limitations. Finally, the ethical considerations relevant to this research project were reviewed.
Chapter 4: Findings

Chapter Overview

This chapter details the findings of the study based on the thematic data analysis. The findings in this chapter are listed in order of the three research questions: (1) How does BWL facilitate learner engagement? (2) How does BWL facilitate learner interaction? (3) What is the relationship between learner engagement and learner interaction in BWL? Learner engagement and learner interaction in an enhancing blend in BWL were found to be facilitated by a number of individual, workplace, and program related factors as shown in Figure 4.1.

Figure 4.1. Factors facilitating learner engagement and interaction in BWL.

The various factors depicted in the above figure found to facilitate learner engagement and interaction relate to the first two research questions of the study.
The same factors were found to influence both learner engagement and learner interaction; these findings addressing Research Questions 1 and 2 are described in detail separately for each research question. Then the findings concerning Research Question 3 are detailed, and the chapter ends with a summary of the key findings of this study.

**RQ1: How does BWL facilitate learner engagement?**

The BWL program provided learning encounters where learners engaged in three ways: behaviourally, cognitively, and emotionally (Fredricks et al., 2004; Gutierrez et al., 2010; Shuck & Wollard, 2010). Learners reported engaging in all three ways in the BWL program. Behavioural engagement involved physical involvement through reading, listening, taking notes, doing a quiz online and on paper, talking around the learning content, and participating in dynamic interactive activities. Cognitive engagement happened through reflecting on one's own and others' experiences, thinking about how to apply what was being learnt to their own roles, and evaluating one's own work practices. Learners also identified words from a list of cognitive processes in Bloom's Revised Taxonomy (Anderson & Bloom, 2001) that included “remember”, “understand”, “apply”, “analyse”, “evaluate”, and “create”. Emotional engagement in learning was seen in the ways that participants liked or disliked the learning experience, how they felt during a learning activity, how they felt about their performance in their role in regard to what they learnt, as well as how satisfied they felt about the program. Learners also identified the emotions they experienced from a list of emotions that included “enjoyment”, “hope”, “pride”, “anger”, “relief”, “anxiety”, “shame”, “hopelessness”, “boredom”, and “other”.
Behavioural, cognitive, and emotional engagement were generally not mutually exclusive; they were found to be inter-linked. Thus the three types of engagement are not always discussed separately in the findings, but are identified (as BE, CE, or EE) at the end of each quote, along with the source (participant number), as shown in the example below.

When you are presented with an example of something or a situation, how you would go about dealing with that situation. We did kind of have a little bit of personal reflection time but a lot of it was group activity. So I enjoyed that because - especially when - it's fine to have personal, reflective time, but that's difficult when you don't have the answers at your fingertips. (P 13) (BE, CE, EE)

Analysis of patterns and themes in the data showed that learner engagement in the BWL program was influenced by three groups of factors: individual factors, workplace factors, and program factors. Each of these groups comprised four factors and is introduced in the following sections. It is also important to note that the various factors were not found to be mutually exclusive; they informed and influenced one another, as evidenced by the quotes. The three groups of individual, workplace, and program factors will be discussed in the following sections which report on each of these factors.

**Individual Factors**

Individual factors in the data were identified as those personal attributes and differences that characterise adult learners. Learner engagement in the BWL program was found to be influenced by a number of learner factors namely personal responsibility, prior knowledge, personal preferences, and personal circumstances. Each of these is analysed in the sections below.
**Personal responsibility**

Learners were motivated to participate in the training program because of their personal responsibility for learning and development in their role. A large number of learners reported their sense of responsibility to complete the program. For example, one participant expressed, “because I was doing the role ... I thought ‘I had better go and do this’” (P8) (BE).

Personal responsibility for learning and development, while influencing the learners to take part in the BWL program, was also a motivating factor in their engagement in the learning process. Participant 2 noted: “I tried to understand the policy, when I did the online module. It was actually the motivation for me. I actually read the policy first and then do the module...” (BE, CE).

The individual's motivation to participate in the BWL program sometimes helped foster positive emotional engagement. Participant 2 described that “For me, the highlight of the training was really giving me an opportunity to go through all the policies/procedures... to go through all the details...I wanted to do it properly.” This positive emotional engagement in turn helped to motivate the learner to complete the face-to-face part of the program after the online module, as evidenced in the quote below.

It was part of my completion... Even though I was supervisor before, I thought it is an opportunity to re-visit and complement the knowledge... it's a positive feeling when it's finished. So I didn't mind continuing on and doing the face-to-face workshop. (P1) (BE, EE)

**Prior knowledge**

Learners engaged as much as they felt they needed to, based on what they already knew, and what they wanted to gain. Participant 2 explained it thus: “…like a
lot of the information I knew anyway, so what's the point… trying to do it?” On the other hand, participant 9 stated, “because I was so new to the process, I did go through everything in quite a bit of detail. I was hoping to get information that I needed to construct my PPRs.” (BE, CE)

This prior knowledge was used as a basis to filter information and engage with only what they felt was a necessity. The choice of engaging with or skipping over information was not available in the workshop; learners “didn't really have an option not to participate” (P9). Especially in the online module, learners engaged with information they thought they needed to know, and skipped through information they felt they had prior knowledge of, as evidenced by the quote below.

I tried to acquire the knowledge that was necessary; and then evaluate for the additional content… "If you want more information about X, click here," but usually I didn't want more information about X, so I didn't click on it. (P1)

(BE, CE)

**Personal preferences**

Learners were aware of their own learning preferences including how they liked to learn, and what worked well for them. They enjoyed and engaged comfortably with learning activities that suited the way they preferred to learn.

I also really prefer kind of watching videos and that sort of thing; and I actually prefer conversations, rather than reading. So it was good to have resources that kind of aligned with more the way I like to take in information, rather than just lots of reading and lots of links to further reading… I really need to talk things through to properly learn them (P3)

(BE, CE, EE)
Not only did learners engage well with learning activities that catered to their learning preferences, but those who were challenged to do activities out of their comfort zone also engaged well and felt good about it. Interviewees spoke of their engagement in the BWL program through participating in activities that were different to what they preferred, as reflected in the following quote.

…"pride" probably fits in; in the sense that I stepped up to the plate, when I had to do my bit, given that I am a very introverted person; and I popped my hand up and - yeah, I conquered that fear, so that was good. And then I would mix that with "relief", that I actually did do it. (P11) (BE, EE)

**Personal circumstances**

As a part of individual factors that influence learner engagement, personal circumstances such as learner's availability and use of time, distractions, and energy levels were found to influence how much or how well the learner engaged in learning. Time constraints were found to interfere with learner engagement. If learners deemed better use for their time, or if they had less time to allocate, then they did not engage as much. Disengagement because of time constraints was sometimes found to be in conjunction with what learners deemed to be prior knowledge.

No-one can have time to sit there and study, you know what I mean... never got time to read it in detail … when you are so busy, if it doesn't matter, you don't really want to spend too much time on it... So if I think it is just a waste of my time, like a lot of the information I knew anyway, so what's the point spending my time trying to do it... better to do some work. (P2) (BE, CE)
Energy levels and anxiety also played a role in the engagement of the learner in the activities. Fatigue or not being completely comfortable with a learning activity was reported to hinder learner engagement.

…for me, it was the beginning/end that I found most difficult but - and that certainly would be in the anxiety or being tired kind of thing... it was a day-long - most of the day workshop, as I recall. I found that pretty hard to do. (P3) (BE, EE)

Sometimes distractions hindered engagement in the learning activities. The distractions seemed more pronounced in individual learning activities in the online module than group learning activities in the workshop. An example of distraction in the BWL program is given by Participant 3: “…it's the problem with online learning, you have got a thousand screens. I will often have three screens; I will have my phone, iPad and I have got two screens. So I would have been distracted”. (BE, CE)

Distractions were not often spoken of in relation to the face-to-face workshop. One of the instances where distractions were reported was while the learners were “sitting and going through the workbook”, that “it was just the nature of what we were doing; it is easier to check email or get diverted by something”. (P10) (BE, CE).

Thus the data showed four different individual factors that influenced learner engagement in BWL. These individual factors were personal responsibility, prior knowledge, personal preferences, and personal circumstances. These factors were reported to enhance or lower the learner's engagement at a behavioural, cognitive, and/or emotional level, and the interviews provided evidence of this. Next, the workplace factors are considered.
**Workplace Factors**

Workplace factors are defined here as those aspects of the workplace that influence learner engagement. Because the individuals in the learning program were worker-learners, the nature of their learning was influenced by a number of work-related aspects. These workplace factors included role requirements, role relevance and usefulness, transfer of learning, and self-evaluation of work practice. Each of these factors is described in the following sections.

**Role requirements**

While individual learner responsibility played a role in learner engagement, the requirements and expectations of the learner's role at work were also motivating factors and thus also influenced the way they engaged in the BWL program. The expected requirements of the role were also found to be combined with the learner's sense of personal responsibility towards their learning and development.

To me, it was just to know what [the organisation] policies are and give me the chance to do more because it is compulsory that we have to do the online module before we go to training. I did it the day before I went. So, it is actually quite good because I did it thoroughly because I got the chance (P2) (BE, EE)

…understand what the guidelines and what the processes are and the way of doing the PPR; from a supervisor's point of view... that was also a requirement of the position, which I was also happy and interested to do anyways. (P14) (BE, CE, EE)

The BWL program was a required part of the learners' development in their role. However, the other daily work pressures influenced their engagement in the BWL program, where learners had to make a choice between doing their regular work tasks and engaging in the learning program.
I did it thoroughly because I got the chance - when you don't do the training, you kind of feel a bit guilty that you have got so much to do and you are sitting there, trying to read the policy. So it is a good opportunity for me to actually went in and read word by word, to see what's the actual policy. (P2) (BE)

Role relevance and usefulness

Participants focused more on material that they felt was relevant to their role at work. While engaging in the learning program, learners evaluated it in terms of how useful it was to their day-to-day work requirements. Where participants felt the information presented was too generic or did not apply specifically to their roles, they chose not to engage as much as they did with other relevant material.

So I might have accessed some as a personal interest or because it was more relevant to my work situation. But most of the material was not necessarily so. It was generic content, so I only focussed on the required material that was needed to meet the requirements for [the organisation]. (P1) (BE, CE)

When asked about what they did in the BWL program, interview participants easily recalled the learning activities from the learning program that related to their roles in the workplace. This demonstrated that the more memorable aspects of the learning experience were the activities learners perceived to be relevant or useful to their role at work and thus they found these most engaging. For example, Participant 4 stated “[the] process, what it's meant to achieve… when you are supposed to do a PPR; when is it meant to be reviewed; who signs off on it? You know, all the mechanics of it”. (CE). Another example is seen in the following quote.

…the other topics were different ways to discuss potential issues or situations one might encounter; so watched some videos and we had
discussions afterwards about… “How would you have dealt with it if it was you?” …some people asked, "What do I do in this particular situation?”...and there was a discussion afterwards how that could have been handled. (P1)

(BE, CE)

**Transfer of learning**

Engagement in the learning activities was seen not only by what learners recalled from the BWL program, but also by how they later applied and implemented what they learnt into their work practices. This ability to transfer the knowledge from the BWL program to the workplace setting shows the aspects from the learning program they engaged with at a deeper level, enough to not only remember, but also apply in the real world, as seen in the following statement: “I think it probably made me a little bit more creative in my thinking around what I wanted people to include in their PPR, rather than replicating their position description in dot points”. (P15) (BE, CE). Another example of transfer of learning is seen in the quote below.

I kind of took from the templates what I thought might be most appropriate way to approach each individual team member and then I did my own little plan of how we would kind of talk about things in the PPR meeting. (P13)

(BE, CE)

**Self-evaluation of work practice**

Participants engaged in the learning process by way of evaluating their own work practice. This included recognising what they already knew of what they had learnt and feeling positive about making improvements. As one participant put it, “it confirmed the kind of practices I was using and confirmed the kind of education/understanding that I have of PPR” (P1). Another example of this factor is quoted below.
…it was nice to say "most of the things that we already do already are actually in the right direction." It was good to have that re-assurance and also pick up a couple new tips along the way. (P10) (CE, EE)

In the process of engaging in the BWL program, participants also realised that they were not isolated in how they felt in their roles as other learners shared similar experiences during the face-to-face workshop. This reflected their emotional engagement in the learning activities.

There was often times when the facilitator would sort of be speaking about something during the PPR process and people could have an opportunity to input or give scenarios; obviously without giving things away, and ask for advice. ...It's good to hear from other people who might have had the same/shared experience. (P14) (BE, EE)

Thus the study found four workplace factors have an influential role on the way learners engaged in the BWL program. These workplace factors included role requirements, role relevance and usefulness, transfer of learning, and self-evaluation of work practice. These workplace factors recognise that learners in the BWL program are workers or employees in an organisation and so their learning engagement is often connected to their roles at work.

Program Factors

Learner Engagement in the BWL program was also found to be influenced by a number of factors related to the BWL program namely: learning content and process, assessment presence, resources and support, and learning environment. Each of these program factors is explained in the sections below.
Learning content and process

Learner engagement was influenced by aspects of the content and activities presented in the BWL program, such as their quality, quantity, variety, and flexibility. The amount of information given in the BWL program played an important role in how learners engaged. Again, this is especially noted in the online module, where learners either gave more focus and attention to a content-heavy topic, or tried to do it quickly with less engagement. Thus the heaviness or the tediousness of the content or topic area also influenced learner engagement, as evidenced in the quotes below.

Yes, I did (skip over or skim through), but then I didn't get the questions right. So then I had to go back and read it … it was fairly heavy and I was trying to do it quickly, which didn't work. (P7) (BE)

It is just a little tedious, doing all the bureaucracy of the process online…It is pretty heavy, in the sense it's a lot of process content; and then with the examination questions as well... Because it was all so very process orientated, it was a bit unengaging (laughs). It is not boring but it's one of those things that you really have to focus on. (P7) (BE, CE, EE)

Having a variety of well-paced learning activities kept learners engaged in the learning process by preventing them from getting bored. Having a “good dynamic mix of activities” was well liked by the learners (P3). The following quote demonstrates the importance of variety in the learning exercises.

This was a good balance between reading out of a workbook, filling in a survey, watching a video. It wasn't too many different things, that it was constantly chopping and changing; but it was enough that it kept it interesting and we weren't just sitting and listening to someone all day. (P10) (BE, CE, EE)
The flexibility afforded by the online part of the BWL program also allowed the learner to go back over material already covered to engage more, in order to get more information if needed, as illustrated by the following statement.

I think having that flexibility of - you know, there are videos to watch. I don't think you had to watch them but you could; or there were links to more information… because people taking that course are going to be coming from different prior experiences and levels of understanding of the process”.

(P4) (BE, CE)

Thus the self-paced nature of the online module also added to the flexibility of the learning process. As one participant noted, “it is a bit self-paced. If I needed to, I could have saved it at a certain point and come back… so I like that aspect” (P12) (BE, EE).

Although flexibility to engage with content and the ability to filter information in the online module was seen in a positive light by the learners, the nature of the face-to-face, where learners could not opt out of participation, was not seen as a negative quality; rather, learners found it to be a positive experience, as illustrated by the following statement.

The good thing was that it was split up in groups where it forced you to participate in the scenarios … in this scenario, where everybody is sitting and then you have the option, where if you are stuck, to have the conversation with everybody about how you might approach it, I think it was more engaging and it sort of forced people to participate but in a good way. I think people felt more comfortable doing so. (P9) (BE, CE, EE)
**Assessment presence**

Sometimes, learners' engagement was influenced by the necessity to pass a quiz or assessment. The presence or absence of an assessment type item played a role in their engagement in the learning process. While the online mode had formal assessment items, the face-to-face mode did not have this assessment element. The presence of assessment items meant learners would engage with a view to pass assessments, whereas the absence of assessment items meant that learners engaged without the focus being on passing a quiz or test.

These findings suggest that although the assessment item helped to gauge whether the learner has grasped the required information or knowledge, it was a more superficial level of engagement. In the online module, the requirement to pass the assessment made students engage further with content in order to pass the test, but the level of cognitive and emotional engagement was low, as it was just a task they needed to complete, evidenced by this statement: “…in the online module… I was just at that level of trying to take in information and probably recall it at the end, so that I could pass the test” (P3) (BE, CE).

In the workshop, however, which did not assess learning through a formal assessment, learners enjoyed the process and also recognised that the learning that took place had a more long-term relevance, as evidenced by the quote below. Therefore although the assessment increased behavioural engagement, its absence did not reduce engagement in the BWL program, rather there was richer engagement seen in its absence. The following quote also demonstrates this stronger engagement in terms of emotional engagement.

I think [the face-to-face workshop] was something that was enjoyable; in the sense that you learnt something without having a pressure to translate that
into success in assessment form or something like that; something that you acquired as part of your tool-kit of things that you can do in the work environment. So I liked that (P1) (CE, EE)

**Resources and support**

The availability and accessibility of content and support both during and after the BWL program were found to influence learner engagement. The resources and support available to the learners helped them further engage by being aware of it and accessing that information. These resources from both the online and face-to-face parts of the BWL program enabled the learners to refer back to the information when they needed to remember it, as exemplified by Participant 7: “This [workbook] is what they gave out at the workshop… I have referred to that a few times, just to remind me …of the different ways/styles and approaches … So this was really quite useful.” (BE, CE). Another example of the role of resources on support in facilitating learner engagement is seen in the following quote.

…they had quite a few useful templates and documents in [the online module], that you could refer to.... in general, I think it's quite useful information for thinking about how you approach your work and how you measure your workload and how you are performing. (P13)(BE, CE)

Learners also availed of the resource and support that they had in the facilitator, “expressing when they needed to know something… if anyone had any queries or anything, they would just participate and just ask the questions ” (P11). Support from fellow learners was also an important aspect of engagement. Learners felt that “it was good …to understand that others are going through the same thing” (P13). This interpersonal support that strengthened learner engagement is seen in greater detail in the next program-related factor.
**Learning environment**

The familiarity of the online environment made it conducive to learner engagement. As employees in the organisation, learners had used the organisation's online learning management system for other work-related learning programs and courses. Thus the online module was a familiar learning environment for the learners; this, and the fact that it was comprehensive, positively influenced their engagement.

I liked the fact that it was already structured in a way that allows me to go through the material, without having to go out and collect any information. So everything self-contained and comprehensive ... the assessment was included inside the module/learning, so both learning and assessment was integrated; so you didn't have to learn stuff and then move on to an assessment area. It was using standard technology, so it was very familiar environment. (P1) (BE, EE)

The characteristics of the facilitator in the face-to-face component of the BWL program were crucial in shaping the learning environment, which influenced learner engagement. Some of the facilitator characteristics included a sense of humour, encouraging the sharing of ideas, and being flexible. The characteristics of the facilitator that helped keep the learners engaged are exemplified by Participant 12: “[The facilitator] did a really good job in keeping it not boring; trying to keep people's energy levels up... she tried to make it fun.” (EE). Participant 15 described the facilitator as being “very pleasant, sense of humour. …she's got some good little tactics for keeping the thing interesting and keeping people engaged” (EE). Another example of the role of facilitator characteristics in the learning environment is evidenced in the quote below.
I think the facilitator did a really good job at putting everyone at ease. …it was very open and we were encouraged to contribute ideas. It was structured and I think we led into things in a good way, but at the same time the facilitator and the structure was flexible enough (P13) (BE EE)

The characteristics of the other learners in the learning environment were also found to influence learning environment. Some of these learner characteristics included a desire to learn and share their experiences, and valuing each other's experiences, as evidenced by the following quotes.

I thought that was quite useful and quite enjoyable to watch and just be part of it. …but also I felt quite confident to add my voice to the discussion because it seemed to be valued by her, and by the group; it was a nice group of people (P3) (BE, EE)

Even though I guess we had to be there as part of the process, it was information that everybody wanted to know and everybody wanted to participate in and practise. So even though it was, I suppose, a forced workshop, it didn't have the vibe that everybody felt like they had to be there … everybody was positive and willing to share their experiences and information. So that aspect of it was really good. (P9) (BE, EE)

Learners reported a safe and secure learning environment as a result of these characteristics of the facilitator and other learners in the face-to-face workshop. In turn, this respectful and supportive learning environment was found to foster engagement in the learning activities that took place.

…it was a very positive session and everyone was very supportive. If someone raised something that was a difficult situation they had experienced, it wasn't - you know, it was a supportive discussion, rather than a critical/negative kind of discussion... it wasn't like there was anyone in the
group who was being overly negative or critical or preventing us from kind
of moving ahead and kind of getting through things. (P13) (BE, EE)

Thus the four program-related factors that were found to influence learner engagement in BWL included learning content and process, assessment presence, resources and support, and learning environment. These factors were related to features of the BWL program that played a role in learner engagement.

In summary, the analysis showed that learner engagement in BWL is facilitated by a number of individual, workplace, and program related factors:

- Individual factors: the learner's personal responsibility, prior knowledge, personal preferences, and personal circumstances, all influence their engagement in BWL.

- Workplace factors: role requirements, role relevance and usefulness, transfer of learning, and the self-evaluation of work practice, together influence learner engagement in BWL.

- Program factors: learning content and process, assessment presence, resources and support, as well as the learning environment also influence learner engagement in BWL.

**RQ2: How does BWL facilitate learner interaction?**

The findings regarding learner interaction in the BWL program are detailed in this section. The BWL program provided learning encounters where engagement occurred through learner-content interaction, learner-facilitator interaction, and learner-learner interaction (Chametzky, 2014; Moore, 1989; Stein & Graham, 2014).

Like the three types of learner engagement, these three kinds of learner interactions were also found to be inter-related. Thus, they will not be discussed
separately, but are identified (as LCI, LFI, and LFI) in each quote, as in the examples below. The statement “you actually have to click through those slides and answer some questions” (P4) (LCI) is an example of interaction with the learning content only, as human interaction was not present in the online module. The quote below from Participant 1 gives an example of the three interactions in the face-to-face component of the BWL program.

So there was like a learning resource, be it a video or scenario or something like that; and then there was discussion or participation and interaction between the facilitator and the attendees of the workshop, the learners, around that learning resource. (P1) (LCI, LFI, LLI)

The online module provided only learner-content interaction, whereas the face-to-face mode provided for interpersonal interaction too. Therefore, engagement in the online module took place through learner-content interaction only, but engagement in the face-to-face occurred through interaction with the learning content, facilitator, and other learners. Learner-content interaction in the BWL program as a whole involved going through the reading, quizzes, and other material in the online, watching videos and listening to the facilitator presenting learning content, using or referring to the content and resources in one's role, saving and sharing resources with other staff, talking about and reflecting on the learning content, and doing activities around the learning content in the face-to-face. Interpersonal interaction (learner-facilitator and learner-learner) in the face-to-face workshop of the BWL program included listening to the facilitator, and having one-on-one and group conversations with the facilitator and/or other learners.

Similar to the analysis in the previous section relating to learner engagement, the factors that facilitated learner interaction in the BWL program could be
categorised into individual, workplace, and program related factors. The various individual, workplace, and program factors that were found to influence learner interaction are described in detail in the next section.

**Individual Factors**

Individual factors are defined here as those attributes or characteristics that are personally relevant to each individual learner. Learner interaction in the BWL program was found to be influenced by a number of individual factors namely: personal responsibility, prior knowledge, personal preferences, and personal circumstances. These factors are described in the following sections.

**Personal responsibility**

The learner's feeling of personal responsibility towards learning and development in their role was an aspect that was seen as their motivation for their interaction with the learning content. These adult learners took responsibility for their own learning, and this was seen in the way they interacted. They reported being self-directed and autonomous in their learning. Participant 1 recounted “Even though I was supervisor before, I thought it is an opportunity to re-visit and complement the knowledge.” (LCI). Participant 4 also verified “you have read the relevant stuff... It is something that you have got to do. You know, as individuals, we need to read it; we need to try and understand it.” (LCI). These statements show how learners sought to expand their knowledge and recognised that the onus was on them to learn and understand.

**Prior knowledge**

Learner interaction was influenced by the learners’ prior knowledge and their subjective need for information. Learners reported using a filtering process in their
interaction with learning content, especially in the online module. Thus learner-content interaction was influenced by what the learner identified as new information.

...people taking that course are going to be coming from different prior experiences and levels of understanding of the process. ... but having the availability of additional information/scenarios or whatever resources are available, I think that then allows participants to get the core message and delve deeper if they want. (P4) (LCI)

Learner interaction with the facilitator and other learners was also influenced by the need for more knowledge. Where learners did not already have the knowledge, and when they needed more information, they interacted further with the content and people to gain the knowledge they believed to be important to their learning, as demonstrated by the following quote.

...some people had questions, like clarifying some of the stuff from the policy/online module. And then some of the questions that came up also related to the actual PPR policy and module... So we did a little quiz, a two-page thing which was basically just checking that we understood some of the key policy that was in the online module. But we had a couple of questions about stuff...to check what the answers were (P13) (LCI, LFI).

**Personal preferences**

The individual learner's personal preferences in learning influenced the way they interacted with the content, facilitator, and other learners. Their self-awareness of their preferences and what worked well for them was also evidenced in the way they interacted with others in the BWL program. The interpersonal interactions in the workshop around the learning content as well as the content interactions in the online
module was seen to be influenced by the ways learners liked to learn, as illustrated by the following statements from two interviewees.

I'm not an extroverted person. I am probably quite introverted, although I am sociable... I participated more by asking questions, not by volunteering to be in one of the role-plays ... there was one point where we would kind of go with the role-play until someone got stuck and then the facilitator would call for suggestions. So I was happy to make a suggestion or to ask a question but not necessarily to jump up and sit in the seat, itself. (P13) (LFI, LLI).

I find the online very helpful because I like to have the documentation; I like to be able to save things, add notes to it, share it with other people... So I found the templates and suggested documents and whatever in the online section to be very helpful, because that's the kind of person I am (P15) (LCI).

**Personal circumstances**

As a part of individual factors that influence learner interaction, personal circumstances such as distractions and discomfort were identified; these were seen to lower interaction even if the other three individual factors (personal responsibility, prior knowledge, and personal preferences) were facilitating learner interaction. These circumstances were found to influence how much or how well the learner interacted with the content or people in the BWL program.

Distractions to learners’ interaction with learning content are seen during individual work, when there is no interpersonal interaction. Interpersonal interactions relating to the learning content seem to reduce distractions. However, unsurprisingly, interpersonal interactions unrelated to the learning content, are in themselves a distraction. The example below stresses the distractions caused by non-course related interaction, and their role on learner interaction with the learning content.
I tried to do it in the morning, at work; and then I tried it at lunchtime. The next time I tried on a Thursday afternoon, when everyone was leaving; so then I could sit down and focus on it without any distraction and I got through. (P7)(LCI)

The discomfort of the learners in the activities of the BWL program was also found to constrain interaction. However learners seemed to understand the importance of participating in the activities and to overcome their discomfort during the course of the workshop, as seen by the quotes below.

…nobody likes doing those kinds of things but I think she did it really well… it was quite enjoyable, actually; because we kept switching partners all the time. So it was very fast-moving… people don't like participating in that way. But when you are teaching those type of skills, there's no point being there unless you actually practise it. (P8) (LFI, LLI)

You found people going, "Oh, I don't really know," and wouldn't actually participate. But in this scenario …you have the option, where if you are stuck, to have the conversation with everybody about how you might approach it, I think it was more engaging and it sort of forced people to participate but in a good way. (P9) (LCI, LLI)

Thus the findings show that, as with learner engagement, learner interaction is also influenced by the four individual factors. These factors point to the learner needs and motivations that play a role in how learners interacted in the BWL program, and also encompass the similarities and differences between the presence and absence of interpersonal interaction in the BWL program. The next section considers the workplace-related factors that were found to influence learner interaction.
**Workplace Factors**

Workplace factors were defined as those aspects of the organisation, job, or role that influence learner interactions. Because the individuals in the program were workplace learners, the way they interacted in the learning process was influenced by a number of work-related aspects. These workplace factors include role requirements, role relevance and usefulness, transfer of learning, and self-evaluation of work practice. Each of these factors is explained in the sections below.

**Role requirements**

Completing the BWL program as part of a requirement of the role played a part in the way the learner interacted with the content being presented. Because of the requirement of the learner's role to do the BWL program, it was often perceived as compliance training. Therefore, as evidenced in the following interviewee statements, interaction with the learning content was sometimes seen as a “tick-and-flick activity”, especially in the online module, which did not cater for interpersonal interactions.

…the information that I read in the online module wasn't going to help me construct my PPRs or what was in it. Like I said, it felt like more like a "ticking a box", you should read this, with regards to the PPR process. (P9) (LCI).

[The online module] was just part of a list of things that I had to do when I started; and it was just something that I had to tick off the box and I did at work, during my lunchtime or something. (P12) (LCI)

Although participants had to attend the face-to-face session of the BWL program as a requirement of their role, it was not seen as a compliance activity, like the online module was perceived: “…the online modules it's almost like compliance training; whereas the workshop was a genuine interaction with people, where the
person who was running the workshop was right there and was responding in real-time.” (P3) (LFI, LCI). Rather, learners recognised that even though they were required to attend the workshop, they found it to be a good interactive learning experience.

So even though it was, I suppose, a forced workshop, it didn't have the vibe that everybody felt like they had to be there. Like, it had a really good vibe and everybody was positive and willing to share their experiences and information. So that aspect of it was really good. (P9)(LCI, LLI)

**Role relevance and usefulness**

Role-relevance was a factor that permeated the interactions that the learner had with the content, facilitator, and other learners. Interview participants recalled specific instances of the interactions they had, and the common factor was that the information gained from these interactions was immediately relevant to their roles. The quotes below show how the practical use of the knowledge for their job was a key aspect that influenced how learners interacted with the learning content in the online module and through discussions around the learning content in the workshop.

I was interested in seeing some specific examples about how you might go about answering certain questions or approaching a certain issue. So where there were documents that looked like they would be relevant, I would go straight to them ... if there was something that ...might be more relevant for one of the meetings that I was going to have, then I would have a look at that in more detail. (P13) (LCI).

I mentioned that I had a challenging staff that I worked with and I kind of offered them as case studies for the group, to talk about how we might approach that. And they gave some good advice and information back. (P7) (LCI, LFI, LLI).
Transfer of learning

The level of interaction with the learning content in the BWL program also related to the ability to transfer the knowledge and incorporate it at a later stage to learners' work practices. The transfer of learning or information was twofold: knowledge and experience from the workplace was used and shared in the BWL program, and learning and information was also transferred from the learning environment to the workplace, where it was implemented. The interactions with the other learners around the learning content highlighted the way learners contributed information through their workplace experiences, and the quote below highlights this aspect.

I think because of the actual practice with other managers from other areas, it was helpful not only to be able to do it but also to see how they handled situations. So, yeah, when I did a role-play with one of the managers... he, himself, gave me tips of how he has dealt with people based on the specific scenario we had. It was really good to learn from others that way; you know, they have actually done it. (P12) (LCI, LLI)

Through interaction with the content and other learners in the BWL program, learners were able to implement the learning into their work practice, or at least think about transferring the learning to their actual role. The examples below show that information or resources from the program is transferred to the learner's work practice through interpersonal and content interactions.

I haven't done any PPRs since the workshop... But there have been things in the more informal coaching that I do in my role, just in way of eliciting information or demonstrating that "this is a supportive environment, but I still need you to do XYZ," so that's been helpful. It is probably only been once or twice, but it's been there. (P10) (LCI)
…the one thing that I did find interesting was that I had always assumed, you know, that you might - that you have an office and that you have your PPR meeting in an office. But there were a couple of interesting things in there, in terms of putting people at ease, about how you don't necessarily need to do a meeting in an office. You can go out to coffee. So that was something that I had never actually considered before. (P13) (LLI)

The transfer of learning to the workplace setting depended on the accessibility, availability, and use of the learning resources. This is an instance where the connection between factors is evident: the workplace factor 'transfer of learning' is linked to the program factor Resources and support, which is addressed later, under the program factors. A connection is also seen between transfer of learning and the previous workplace factor Role relevance and usefulness, where the likelihood of learners referring to the learning content in their work practice depended on how useful they found the material. The data analysis found the nature of the transfer of learning to be more information and content based, as evidenced by the following example using content interaction.

This [workbook] is what they gave out at the workshop and it's all about performance coaching; which I have referred to that a few times, just to remind me about … the different ways/styles and approaches that you can do … So this was really quite useful. (P7)(LCI)

Transferring content was also found to be achieved by learners sharing their knowledge and learning resources with their colleagues and staff in the workplace. Thus, learner interactions themselves were found to be transferred to the workplace, where interaction with the learning content was linked to interpersonal workplace interactions. Here again, the transfer of learning is seen only through the knowledge
or information being shared, which is a type of content interaction. Although interpersonal interaction is seen, it is not with the facilitator or other learners in the BWL program, rather, it is interaction with work colleagues.

So there's actually a lot of really good tip sheets and it explains for your direct report, what a PPR is about. I always embed those in the calendar request and I find that is really helpful; as well as the links for them to go and do their module, from that side of thing. (P14) (LCI)

After I had done the online session and because of the timing, and I couldn't wait until I had done the workshop, I ran a little session for my team. So I shared all those resources in the group, before going to the individual sessions with each staff member. So discussed that as a group, looked at those resources, filed them in a folder, accessible by the division. (P15) (LCI)

**Self-evaluation of work practice**

Participants in the BWL program went through a process of evaluating their own work practices as well as recognising what they had learnt, via human and content interaction in the learning process. The interactions here include both content and human interactions in the BWL program.

[From the online module] I could get a … kind of re-assurance that what I thought I knew was probably what I needed to do… Anything where I could test my own knowledge, the quiz aspect of it, I found that very stimulating because then I felt like I was evaluating or assessing what I knew or what I didn't know. (P3) (LCI)

…gave me the confidence in the supervisor role and just sort of being aware of strategies...it is really about empowering the participants and
informing/empowering, giving us an opportunity to either relate to the
content or ask questions (P4) (LCI, LFI, LLI)

The interpersonal interactions that took place in the learning process also
helped learners realise that they were not isolated. As one participant noted,
“listening to the others that participated and their issues; and were very similar to my
issues, so I didn't feel alone.” (P11) (LLI). Through these interactions learners also
were able to evaluate their own work practices by sharing and reflecting on their own
and others’ experiences, as seen in the following quote.

…often you can feel a bit isolated as a supervisor and at times, "Oh, am I
making the right decision or doing the right thing here?" It's good to hear
from other people who might have had the same/ shared experience. (P14)
(LLI, LLI).

Although these interactions in the face-to-face workshop were not divergent
from discussions around the learning content, it was the interpersonal interaction that
was reported to facilitate these reflections. Learner-content interaction in the online
module was not reported to provide these feelings of non-isolation or self-evaluation
through shared experiences, however, as exemplified earlier from the online module,
content interaction alone did help learners evaluate and assess their own knowledge.

Thus the data from the interviews showed evidence that the four workplace
factors that influenced learner engagement also influenced learner interaction. Just as
the learners' roles at work played a part in how they engaged in the BWL program,
they also influenced their interactions. The significance of interpersonal interaction
in these workplace-related factors was also witnessed in these findings. Next, the
influence of the program factors on learner-interactions is reported.
Program Factors

In addition to individual and workplace factors, learner interaction was also found to be influenced by a number of factors related to the BWL program. These program factors include learning content and process, assessment presence, resources and support, and learning environment. Each of these program factors is analysed in the following sections.

Learning content and process

The way the learners interacted with the learning content related to how the material was presented in the BWL program. The type of interactions depended on the type of learning exercises. In the online module, learners were required to progress through the topics and learning exercises contained within the module, and this involved learner-content interaction. As one participant described, “[the online module] was already structured in a way that allows me to go through the material, without having to go out and collect any information. So everything [was] self-contained and comprehensive.” (P1) (LCI).

In the face-to-face workshop, the facilitator chose the content to be presented, the resources, and the learning activities. Presentation of the learning content at times included interaction between the facilitator and the learners about the learning content. The example below shows how learner-content interaction and interpersonal interaction was influenced by the way learning content was presented in the BWL program.

So there was like a learning resource, be it a video or scenario or something like that; and then there was discussion or participation and interaction between the facilitator and the attendees of the workshop, the learners, around that learning resource. (P1) (LCI, LFI, LLI)
The amount of information and the way it was presented also influenced how learners interacted with the content in the BWL program. The online module was “very text-based” (P8) and reading seemed to be the main interaction with the content in the online module, while the face-to-face workshop allowed for a lot of discussion of learning content. One participant expressed the interaction with the online module in this way: “it was fairly heavy and I was trying to do it quickly, which didn't work” (P7), while another felt that “reading through the information and all of that, it was fine. It was easy to read and constructed in an easy to get through [manner]” (P9). The interaction in the face-to-face session was different as the facilitators helped in “facilitating your own conversation” (P15), and “there was lots of good discussion and dialogue going on” (P7) between the learners and the facilitator around the learning content. Thus, interpersonal interactions enabled learning content to also be “generated by the participants” (P15).

The variety and flexibility of learning activities were found to influence learner interactions. Learners interacted through a variety of learning activities in the face-to-face session, “…there was group work at the table, pair work, the [group activity]; and then having the conversation as a full group with the facilitator as well.” (P9) (LCI, LFI, LLI). The online module also offered the flexibility of optional content with which the learner could choose to interact, as evidenced by the following quote.

I think having that flexibility of - you know, there are videos to watch. I don't think you had to watch them but you could; or there were links to more information or - and I think having that flexibility... If it wasn't optional, some of these additional bits, it would get boring/tedious (P4) (LCI)
Assessment presence

Interaction with the learning content was also influenced by the presence or absence of an assessment item. Where an assessment item was present, learners interacted with the content in a way that was necessary to pass the quiz or test: “I skipped straight to the final quiz ... and it passed, so I didn't feel the need to go and revise the content.” (P10) (LCI). However, that pressure was not felt in their interaction with learning content when there was no assessment apart from the self-evaluation discussed previously

[In the face-to-face workshop]… you learnt something without having a pressure to translate that into success in assessment form or something like that; something that you acquired as part of your tool-kit of things that you can do in the work environment. (P1) (LCI)

Resources and support

The availability and accessibility of resources and support that the BWL program provided for use both during and after the learning program further influenced content and interpersonal interactions. Regarding the information in the online module, one participant stated, “remembering is important, but really that [is] why you have the online module, so if you forget, you know you can go back there and remember it.” (P13) (LCI).

The resources and support not only included information and content, but also support from the facilitator and other learners in the face-to-face session. Thus this factor is linked to another program factor, the Learning environment, which is discussed next. The following quote is an example of resources and support influencing learner interaction in the BWL program.
Some of the exercises and practices that we did in the face-to-face part of the workshop were... done in quite a supportive way; because everyone was doing it. It was a funny little thing that we were doing, so it was done really well to support people through that... it was helpful to have the book to take away, so I guess you can use that as your own self-refresher. (P10) (LCI, LLI)

A theme that arose where interpersonal interaction was present was the common bond the learners shared and the awareness that there was support available. This support that was offered in the BWL program also continued as part of the learners' workplace interactions. One participant recounted, “She did send out some documents that we talked about during the session, so she emailed that out to people. She obviously offered us, yeah, if anyone had any further questions, to get in touch with her.” (P13) (LFI, LCI). Another participant quoted, “The facilitator, I followed up about some of the more difficult people that I have to work with. So that was quite good. That was email.” (P7) (LFI). Thus, through interaction with the facilitator, learners had continued support even after they completed the BWL program.

**Learning environment**

The characteristics of the learning environment were found to play an important role in learner interaction. One of the characteristics was the presence or absence of human interactions in the learning environment. Learner interaction with the facilitator and other learners was expected and occurred only in the face-to-face part of the BWL program, whereas, in the online part, learning took place without these interpersonal interactions. The presence of interpersonal interaction around the learning content was a key characteristic of the learning environment in the face-to-face workshop, where “everyone offered really good discussions and offered
information to all the discussion that we had… the group and the facilitator was very good. There was lots of good discussion and dialogue going on.” (P7) (LFI, LLI). However, the online module, as one interviewee stated, “was very independent learning. Just simply go in and, you know, do it; work through it and then finish. So, no, I had no reason to contact anybody.” (P8) (LCI). Thus the absence of human interaction meant that learners experienced individual interaction with the online learning content. Nevertheless, as seen earlier, learners later had interpersonal interactions in the workplace by discussing the learning content from the online module.

While most of the participants did not mind the lack of human interaction in the online module, the interpersonal aspect was missed by some: “I would prefer that the online module is actually a workshop, so that I can talk to somebody if I have questions.” (P2) (LCI).

The value of interpersonal interaction in a learning environment is thus seen to transform the learning encounter from a task to be completed to a shared learning experience. The quote below shows that the absence of learner-facilitator or learner-learner interaction in the online module made it more a learning task rather than an interactive and participatory learning environment.

[The lack of human interaction in the online module] didn't bother me. I have done online modules in the past, where it pops up and asks you things and it is annoying. It's like, "Yeah, yeah, I am just trying to finish this." The online module was more like a task to be completed as opposed to the workshop which was something to participate in. (P10) (LCI)

Other important features of the learning environment that influenced learner interaction were the facilitator’s characteristics and the learners’ characteristics. The
characteristics of the facilitator were found to have an important role to play in fostering interaction in the learning environment. Fellow learner characteristics also aided in making the learning environment positive and supportive of interpersonal interaction. The learning environment in the workshop was said to be “a very positive session and everyone was very supportive” (P13). Some participants described the learners as “nice”, “pleasant”, “keen”, and “positive” and the environment in the workshop as “open”, “comfortable”, and “relaxed” (P11). One participant said the environment was “collegial and respectful” (P4) and another stated that “it had a really good vibe and everybody was positive and willing to share their experiences and information” (P9). The role that the characteristics of the facilitator and learners played in establishing a safe learning environment is also illustrated by the following quote.

[The facilitator was] very skilled at facilitating the class to respond to each other, more so than positioning herself as an authority. So if someone directed a question straight to her, she would answer it. I do remember asking her a question at one point and she clarified it really well... I felt quite confident to add my voice to the discussion because it seemed to be valued by her, and by the group; it was a nice group of people (P3) (LFI, LLI)

In summary, the analysis indicates that learner interaction in BWL is facilitated by a number of individual, workplace, and program related factors:

- Individual factors: personal responsibility, prior knowledge, personal preferences, and personal circumstances they may have to face, all influence interaction in BWL.

- Workplace factors: role requirements, role relevance and usefulness, transfer of learning, and the self-evaluation of work practice, together
influence learner interaction in the BWL program, which also carries on into workplace interactions.

- Program factors: learning content and process, assessment presence, resources and support, as well as the learning environment also influence learner interaction in BWL.

**RQ3: What is the relationship between learner engagement and learner interaction in BWL?**

This section addresses the third research question regarding the link between learner engagement and learner interaction in BWL. As reported thus far, learners engaged behaviourally, cognitively, and emotionally and interacted with the content, facilitator, and other learners in the BWL program; and their engagement and interaction in the BWL program were influenced by individual, workplace, and program related factors, each factor comprising a number of aspects.

Although the difference between the online and face-to-face modes were not the focus of the study, and the two modes were not analysed separately, the differences became evident because of the human interaction aspect and the extent to which participants drew these comparisons whilst reflecting on their experiences. In order to study the influence of learner interaction on learner engagement in the BWL program, the differences between the online and face-to-face modes in terms of interaction and engagement are discussed, because, as noted earlier, engagement in the online component took place through learner-content interaction only, while in the face-to-face component, engagement occurred through learner-content, learner-facilitator, and learner-learner interaction.
Influence of Interaction on Behavioural Engagement

In the online module of the BWL program, where there were no interpersonal interactions, learners interacted purely with the online content, which some of them chose to print out to be able to become more involved in the learning process. The online learning content was considered “really interactive and easy to use” (P14). Thus behavioural engagement was seen through learner-content interaction.

However, behavioural engagement through learner-content interaction in the online module was limited to reading, watching videos, and doing quizzes, and sometimes, note-taking. Learners had only to use the mouse and keyboard, and writing tools if they interacted with printed out content. There were no learning activities. Learners may have thought about how to apply some of the information, but practising and applying the knowledge with other learners within the context of the online component was not a requirement. Some learners, however, chose to use the information they gained in the online module to share with colleagues and also used the online resources in their role: “After I had done the online session… I ran a little session for my team. So I shared all those resources in the group.” (P15). Another example is given below.

I did read through them and then jot down some notes about - you know, with the individual in mind, who I was going to be meeting with… I did my own little plan of how we would kind of talk about things in the PPR meeting. (P13)

In the face-to-face session however, all three forms of learner interaction were present: learner-content, learner-facilitator, and learner-learner interaction. In fact, learners interacted with the learning content through interactions with the facilitator and other learners; thus the three types of learner interaction often took
place simultaneously. Behavioural engagement involved not just listening to the facilitator, watching videos, and taking notes, but also physically doing activities and role plays, and having discussions together with the facilitator and other learners. The combination of learner-content, learner-facilitator, and learner-learner interaction provided a wide range of behavioural engagement. Discussions and activities with the facilitator and other learners around the learning content made for a greater variety of behavioural engagement than the more passive acts of reading, listening to, or watching learning content being presented. The differences in behavioural engagement between the online module and face-to-face workshop are evidenced by the following quotes. Participant 12 explained that “the online module provided a lot of information, the workshop gave us hands-on practice”. Participant 1 described “we had to do some role-playing and we had to go through a scenario and we were asked, as a group, to come up with ways to address that scenario and being actively involved”. Participant 8, also similarly narrated: “There was plenty of activity. So we weren't just sitting and watching or listening; we were getting up and practising some of the skills which I think is really important.”

Thus the BWL program as a whole offered the opportunity for behavioural engagement of learners, individually and as a group, through learner-content, learner-facilitator, and learner-learner interaction. However, when interpersonal interaction was present, it helped learners to engage in a wider range of learning behaviours.

**Influence of Interaction on Cognitive Engagement**

In order to describe their cognitive engagement, learners were asked to identify words from a list of cognitive processes (see Appendix D) taken from Bloom’s Revised Taxonomy (Anderson & Bloom, 2001), that included “remember”, “understand”, “apply”, “analyse”, “evaluate”, and “create”, with “remember” being
the lowest and “create” being the highest cognitive process. Table 4.1 and Table 4.2 give a summary of the cognitive processes that learners reported to have used in the BWL program. The online module and face-to-face workshop have been considered separately here to show the differences in cognitive processes between the presence and absence of interpersonal interaction in the BWL program. The “X”s in the boxes show the particular cognitive processes that each individual participant identified.
Table 4.1

*Cognitive Engagement in the Absence of Interpersonal Interaction (Online Module)*

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Table 4.2

*Cognitive Engagement in the Presence of Interpersonal Interaction (Face-to-Face Workshop)*

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<td><strong>Apply</strong></td>
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<td><strong>Evaluate</strong></td>
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As seen from Tables 4.1 and 4.2, there are distinct differences in cognitive engagement in the two modes of the BWL program. Cognitive engagement through learner-content interaction in the online module mainly required remembering and understanding what was being read. Learners did think about how they could use the information in their role, and how they could create better work-related documentation. So while learners reported to have reached the higher levels of cognitive processes on Bloom's Revised Taxonomy (Anderson & Bloom 2001) mainly through the transfer of knowledge to their work practice, cognitive engagement in the online mode generally involved the lower level of “understanding” through their interaction with the online learning content, as exemplified by the quote below.

The fact that it was primarily information-based. You know, I would have skimmed it; I would hopefully remember. The facts that were in there, the process that it was demonstrating and suggesting that we have to go through; and the way it was presented, it would have supported my understanding… definitely anything up this [higher] end of the taxonomy, it didn't go there (P8)

The combination of learner-content interaction with learner-facilitator, and learner-learner interaction in the face-to-face mode provided learners an opportunity to cognitively engage at higher levels of Bloom's Revised Taxonomy (Anderson & Bloom 2001). Learners not only thought about how to apply the information, but also practised the learning content in role-plays and activities. As one participant explained, “it certainly did apply most of the concepts; which means we got up and we got to practise things and talk about them with one another. We did little activities” (P8). Discussions with the facilitator and other learners around the
learning content also gave a deeper level of analysis than is possible from simply reading, listening to, or watching learning content that is presented. One participant reflected that “particularly in the practical exercises, applying the content that's been delivered and practising it... there was certainly opportunity to ‘apply’ it and maybe ‘evaluate’ a little what you were doing then there, at the time.” (P10). Another example of the interactive learning activities enhancing higher order thinking processes is given by Participant 15: “We ‘applied’ different learnings through that into those scenarios. I think we did a little bit of the ‘analyse’ and ‘evaluate’, but that was more in those discussions. It was more... like a reflective kind of practice of that. (P15).

Overall, the BWL program as a whole gave learners the opportunity to cognitively engage at both the higher and lower levels of Bloom's Revised Taxonomy (Anderson & Bloom, 2001) in individual and group learning through learner-content, learner-facilitator, and learner-learner interaction. As seen from Tables 4.9 and 4.10, fewer participants reported using higher order processes in the online module where interpersonal interaction was absent, than in the face-to-face workshop where interpersonal interaction was present; and when they did report it, it was more in terms of “thinking about” (P13) or “considering” (P15) how they would use the learning content for certain work situations or to construct required documents. Thus the applying, analysing, evaluating, or creating took place as a mental preparation rather than as a practice during interactive learning activities; but these processes were carried out later in their roles. This is not surprising considering the previously mentioned workplace factors, especially Transfer of learning, that were found to influence learner engagement and interaction in the study. Where interpersonal interaction was present, such as in the face-to-face workshop,
participants reported performing “more of the higher order things and less of the lower order things” (P13) on Bloom's Revised Taxonomy (Anderson & Bloom, 2001). Interpersonal interaction was also found to have an impact on emotional engagement, as detailed in the next section.

Influence of Interaction on Emotional Engagement

Learners were asked to identify the emotions they experienced in the BWL program from a list of emotions (see Appendix E) that included “enjoyment”, “hope”, “pride”, “anger”, “relief”, “anxiety”, “shame”, “hopelessness”, “boredom”, and “other”. Many learners described both the online and face-to-face components of the BWL program as a “positive” experience for them. A summary of the emotions that participants named from the list given to them is given in Table 4.3 and Table 4.4 below. The online module and the workshop have again been tabulated separately to highlight the difference in emotional engagement between the presence and absence of interpersonal interaction in the BWL program. The “X”s indicate where a particular participant identified a particular emotion.
Table 4.3
*Emotional Engagement in the Absence of Interpersonal Interaction (Online Module)*

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Table 4.4

*Emotional Engagement in the Presence of Interpersonal Interaction (Face-to-Face Workshop)*

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Chapter 4: Findings
The magnitude of positive emotion was seen to be much stronger in the face-to-face mode which contained interpersonal interaction, than in the online mode. One of the participants noted it thus:

I walked away [from the face-to-face session] with a sense of being positive within myself, that I had learnt different - different scenarios, how I could handle a situation better. Yeah, it was quite rewarding… It was just very enjoyable… I was invigorated the whole time. It stimulated me, so it was good. I was so glad that I went. (P11)

While learners often mentioned or described “enjoyment” as their experience in the face-to-face part of the program, the online module that lacked human interaction didn’t necessarily offer much emotional engagement One participant stated, “I didn't have any necessarily positive or negative feelings about it (online module)... it's a positive feeling when it's finished.” (P1). Another recounted, “[I] don't really remember having very strong emotions in relation to it (online module). It was just something that I had to do. It didn't torture me and it didn't give me a feeling of joy.” (P3).

Of the negative emotions that learners experienced in the BWL program, a sense of dissatisfaction, helplessness, or frustration were the most reported from both the online and the face-to-face components. This was due to unmet expectations of the learners, and was unrelated to the presence or absence of interpersonal interaction, as seen in the example quotes below.

I felt a bit "anger" as well because I still can't find an answer for me. For example, like, I still feel that I don't know what to do, "Where do I start?" I just feel like I don't know where to start. I don't know if it is anger; it is
more anxious. You are trying to find an answer and you have finished the module, "What do I do now?" (P2)

I think the hardest thing in the end is that there's not like an easy structure for doing the PPR process. Like, they are not outlining for you on how your PPRs should look or the formatting or anything… how detailed you need to be in the PPR and what [the organisation] really wants in there, it's kind of vague. You are kind of left to your own devices with that … I think most people went to the workshop with the expectation that that would be an element of it...To me, that was definitely an element missing from the workshop. (P11)

In the online module, the heaviness of the content and the tediousness of interacting with it through reading was evident, while in the face-to-face, participants were potentially faced with initial discomfort of interactive activities and fatigue from the long hours of the workshop. As evidenced by the following examples, the required solitary interaction with the content in the online module, and the expected participation in the interactive activities in the face-to-face workshop influenced learners' emotional engagement.

It is just a little tedious, doing all the bureaucracy of the process online ... It is pretty heavy, in the sense it's a lot of process content; and then with the examination questions as well … it was fairly heavy and I was trying to do it quickly, which didn't work.(P7)

…nobody likes doing those kinds of things but I think she did it really well... and it was quite enjoyable, actually... it was very fast-moving. People don't necessarily like... participating in that way. But when you are teaching those type of skills, there's no point being there unless you actually practise it. So, yes, it's important to do that, I think. (P8)
Although the discomfort of interactive activities may have been experienced by learners in the face-to-face component, the interactions did not leave the learners in a negative state, rather, they seemed to enjoy the face-to-face more than the online. Noteworthy of mention is that when participants mentioned “relief” during or after the highly interactive face-to-face workshop, their relief wasn’t related to feeling glad that it was finally over, rather, it was a sense of reassurance of the knowledge and skills they already possessed or had learnt in the workshop. This relief was in line with the other emotions of affirmation/confirmation participants reported to have experienced.

As the following statements show, the presence of and interaction with the facilitator and other learners also fostered a positive and supportive learning environment, where learners interacted with the content through discussions and activities. The facilitator played a key role in creating such a learning environment. One participant recounted how “the facilitator was very good as well and the atmosphere in the room was very positive; we had lots of good discussions going on”. (P7). Another recalled, “everyone seemed to enjoy it. There were lots of good discussions and she drew on lots of experiences from the participants. I thought that was really, really good.” (P8). Yet another quoted:

I thought that was quite useful and quite enjoyable to watch and just be part of it. I was quite comfortable in my role as a participant but also I felt quite confident to add my voice to the discussion because it seemed to be valued by her, and by the group; it was a nice group of people (P3)

The BWL program as a whole fostered the emotional engagement of the learners. Learners were found to have engaged emotionally through learner-content interaction, but more strongly when this was combined with learner-facilitator
interaction and learner-learner interaction. As one participant described, “[in the online module] you don't get the interaction, compared to the face-to-face. You don't get the discussions/group discussions. It is very, I guess, cold” (P11). Through these findings it is evident that strong positive emotional engagement in the BWL program was made possible largely due to human interaction in the face-to-face part of the program.

In summary, although the physical and virtual modes of the BWL program were not analysed separately, their differences became evident when the human interaction aspect was considered. The two modes complemented each other one with their differences, the online mode providing detailed information, and the face-to-face mode providing interactive learning opportunities. Through a consideration of their differences, learner interaction was found to influence learner engagement in BWL in the following ways:

- Learner-content, learner-facilitator, and learner-learner interaction were all useful for behavioural engagement to occur in BWL, although where interpersonal interactions with the facilitator and other learners were present, a greater range of behavioural engagement was possible.

- Learner-content, learner-facilitator, and learner-learner interaction all allowed for cognitive engagement to take place in BWL, but when interpersonal interactions with the facilitator and other learners were present, higher levels of cognitive engagement on Bloom's Revised Taxonomy were reported to have been reached more frequently during the learning process.
Learner-content interaction alone affects emotional engagement in minimal way, but a combination of content interaction with interpersonal interaction had a strong positive influence on emotional engagement.

Summary of Findings

In summary, the data collected about engagement and interaction in an enhancing type BWL program were analysed, and the findings from the data analysis addressed the following three research questions:

- RQ 1: How does BWL facilitate learner engagement?
- RQ 2: How does BWL facilitate learner interaction?
- RQ 3: What is the relationship between learner engagement and learner interaction in BWL?

The data showed that learner engagement and learner interaction in an enhancing blend in BWL were both influenced by three groups of factors: individual, workplace, and program related factors. Each group consisted of four factors that played a role in how learners engaged and interacted in BWL. Individual factors influencing both engagement and interaction in BWL were: personal responsibility, prior knowledge, personal preferences, and personal circumstances. These individual factors emphasised the specific needs and motivations of learners that affected their engagement and interaction. Workplace factors influencing both engagement and interaction in BWL were: role requirements, role relevance, transfer of learning, and self-evaluation of work-practice. These workplace factors highlighted the fact that the learners were workers and employees of an organisation, and their engagement and interaction in BWL were related to their roles at work. Program factors influencing both engagement and interaction in BWL were: learning content and
process, assessment presence, resources and support, and learning environment. These program factors brought out the important role of the BWL program itself in helping or hindering learners to engage and interact in the learning program. Together, the individual, workplace, and program factors constitute a large group of aspects that act to promote or reduce learner engagement and interaction in BWL.

In addition to these individual, workplace, and program factors, the role of human interaction was also evidenced in the data analysis. When content interaction was combined with human interaction, a wider range of behavioural engagement was possible, higher levels of cognitive engagement on Bloom's Taxonomy were reported to have been reached more frequently, and much stronger positive emotional engagement was evidenced. Thus, although the study did not set out to analyse the differences between the face-to-face and online modes of the BWL program, it was found that the face-to-face mode, which allowed for human interaction was more engaging and interactive than the online mode which lacked a human interaction aspect. Human interaction was also found to decrease the possible negative influence of some of the individual, workplace, and program related factors, while enhancing their positive influence. The contributions and implications of the findings from this study are discussed in the next chapter.
Chapter 5: Discussion and Conclusion

Chapter Overview

This chapter provides a discussion and interpretation of the findings in relation to questions presented in Chapter 2, and in particular, their contribution to knowledge, implications for practice, methodological limitations, and future research suggestions. Firstly, the research questions are reviewed. This is followed by a discussion of how the current study relates to existing literature in BWL and contributes to current knowledge, especially in terms of learner engagement and interaction. Then, the implications of the study’s findings for practice are considered. Finally, suggestions for future research are offered, prior to a brief conclusion to the chapter and the thesis.

Review of Research Questions

Key literature regarding learner engagement and interaction, adult learning, workplace learning, and blended learning was reviewed, and a need was identified for research in blended learning to focus on the psycho-social and andragogical aspects rather than the physical aspects of the blend (Graham, 2013; Graham et al., 2013). This suggested scrutinising constructs such as learning effectiveness of a blend rather than, say, the structure and components of a blend.

It is known that engagement is important for learning to be meaningful (Gutierrez et al., 2010; Wlodkowski, 2010), and that learner engagement happens through learner interaction (Chametzky, 2014; Moore, 1989; Stein & Graham, 2014). The three types of learner engagement are behavioural engagement, cognitive engagement, and emotional engagement (Gutierrez et al., 2010). The three types of
learner interaction are learner-content interaction, learner-facilitator interaction, and learner-learner interaction (Moore, 1989; Stein & Graham, 2014). Thus the overall aim of this research was to explore the factors that influence learner engagement and interaction in BWL and to examine the link between learner engagement and interaction, and the three research questions presented were:

- RQ1: How does BWL facilitate learner engagement?
- RQ2: How does BWL facilitate learner interaction?
- RQ3: What is the relationship between learner engagement and learner interaction in BWL?

These research questions were addressed in Chapter 4, where the findings of the study were presented. This chapter relates the study’s findings to existing literature on BWL. The contributions of these findings to current knowledge on BWL, and specifically learner engagement and interaction in BWL, are discussed next.

**Contribution to Knowledge**

There are several contributions that this study makes to knowledge of BWL; firstly, it takes a psycho-social and andragogic perspective towards analysing the phenomenon of blended learning in the workplace. The study was necessitated by the call for blended learning to be adapted for adult learners (Korr et al., 2012), the need for blended learning research to focus on psycho-social and pedagogical (or andragogical) aspects rather than the physical structure of the blend (Graham et al., 2013), as well as the nascent state of blended research especially in the workplace context. This study explored BWL from a psycho-social and andragogic perspective,
focusing specifically on learner engagement and learner interaction relating to adult learners in a workplace.

Secondly, this study extends previous blended learning research on engagement and interaction from the educational arena to the workplace arena in terms of the factors that influence learner engagement and interaction. George-Walker and Keeffe (2010, p. 9) found that certain aspects such as “individual learning and situational needs and preferences, personal commitments, educational value, convenience and flexibility, and the social opportunities, variety and flexibility” influenced university students' engagement in blended learning. The current study revealed similar individual and program factors but importantly also shed light on certain workplace factors that played a role in engagement and interaction in BWL. The similarities found between the workplace learners and previous studies of university learners show that the factors relating to engagement and interaction in blended learning in the university context are valuable towards the knowledge and practice of BWL. The difference between in-service learners and university students may be understood in light of the psychological differences as well as the differences in the function and purpose of the two learning contexts. Although andragogy applies to both types of learners, workplace learners are likely to have a self-concept of being more responsible for and self-directing in their learning as described by Knowles et al. (2005). The function and purpose of the workplace where learning and professional development arises as a secondary business need (Sloman, 2007) further explains the differences through workplace the factors that influence learning engagement and interaction in BWL.

Thirdly, the current study highlights the important role of human interaction in blended learning for workplace learners, as has been found in blended learning
research with students in university settings. Studies undertaken with university students have shown that human interaction has a positive effect on learning performance, performance satisfaction, student engagement, active learning, learning climate, and higher order thinking, (Akyol & Garrison, 2011; Babb et al., 2010; Blasco-Arcas et al., 2013; Matthews, Andrews, & Adams, 2011; McDonald, 2013; Wu et al., 2010). This study extends this knowledge to the workplace, indicating that when human interaction (learner-facilitator and learner-learner interaction) is combined with content interaction, engagement occurs on a higher level than where there is no human interaction in the learning process.

The various individual, workplace, and program factors impacting learner interaction and engagement that were identified in the findings are discussed in the following sections. The role of human interaction (learner interaction with facilitators and other learners in BWL) is also discussed as an important factor that influences learner engagement in BWL.

**Factors Influencing Engagement and Interaction in BWL**

The findings showed that individual, workplace, and program related factors influenced both learner engagement and learner interaction in the BWL program. Given that engagement happens through interaction (Moore, 1989; Stein & Graham, 2014), it was not surprising that the factors that influenced learner engagement were the same ones that played a role in influencing learner interaction. Thus BWL facilitated learner engagement and interaction through individual, workplace, and program factors.

These three groups of factors found to influence engagement and interaction in the BWL program were also in line with the principles of adult/ mature learning and workplace learning, thus providing an andragogical basis to understanding BWL.
The individual factors are confirmed by the adult or mature learning concepts, the workplace factors point to the nature of workplace learning, while the program factors highlight the function of a blend. Each of these areas will be discussed in turn.

**Individual factors – adult/mature learning**

The individual factors found to influence learner engagement and interaction in BWL relate to the andragogical and mature learning aspects analysed in the literature review. These individual factors included personal responsibility, prior knowledge, personal preferences, and personal circumstances.

The influence of these individual factors on learner engagement and interaction adds to the knowledge of BWL from previous blended learning research in educational and workplace settings. George-Walker and Keeffe (2010) found that student engagement in a university blended program was both a choice and a responsibility. The current study found *personal responsibility* to be an influencing factor for adult learners in workplace learning; learners took responsibility for their learning and development in the BWL program. In contrast, a study by Vaughan (2010) of an undergraduate university blended learning program found that the faculty perceived students to be resistant to taking greater responsibility for their learning. This difference in findings regarding personal responsibility between the university students and the learners in the current study points to the principles of adult or mature learning in BWL, with mature learners having a higher sense of responsibility. University students may be considered adults legally by age, or socially by performing certain roles. Psychologically, adulthood means that individuals have a self-concept that they are responsible for their own decisions and their own lives, and are capable of being self-directed (Knowles et al., 2005); thus it
could be that the learners in this study were more used to taking responsibility for their own learning than the university students in Vaughan's (2010) study. The difference in personal responsibility could also be explained by learners in BWL having a more life-centred orientation to learning (Knowles et al., 2005) than university students, as they did not exhibit a resistance to taking responsibility for their learning; on the contrary, they realised it to be an important part of their learning and development.

*Prior knowledge* was another individual factor that was found to influence learner engagement and interaction in this study on BWL. Learners' prior knowledge influenced their decision on how much or little to engage and interact with a particular learning topic. Where learners deemed they did not have the knowledge, they engaged further with the topic/content. Where they deemed they already possessed the knowledge, they did not go further with the topic/content. The impact of prior knowledge and experience on learning has been long researched and theorised (Jonassen & Grabowski, 1993; Knowles et al., 2005). Knowles et al. (2005) maintain that the selection of information to process “depends in part on what information is already stored in long-term memory from prior learning and experience” (p. 192). Thus prior knowledge dictates the need for learning, as George-Walker and Keeffe (2010) also found; that individual learning needs influenced student engagement in a blended learning university program. This study highlights that prior knowledge plays a similar role in BWL through its influence on engagement and interaction.

*Personal preferences* relate to the way learners have learnt in the past and how they engage and interact in current learning experiences for future application. These indicated how learners liked or preferred to engage and interact in the learning
process. Personal preferences had the potential to both promote and hinder engagement and interaction, and played a role in defining the ways learners engaged and interacted in learning activities. For example, those learners who considered themselves comfortable in social learning situations took up active roles in role plays, doing most of the talking and acting, while those who considered themselves to be more reflective learners tended to listen, watch, and give suggestions, and acknowledged that they left the active roles to other learners. The influence of personal preferences on learning in general, and workplace learning in specific, has also been richly documented and theorised (Hayes & Allinson, 1996; Jonassen & Grabowski, 1993; Kolb, 1984; Rangel et al., 2015). George-Walker and Keeffe (2010) also found that individual preferences influenced student engagement in a university blended learning program. Similar to these previous findings, the current study confirms that personal learning preferences also influence engagement and interaction when the learning setting is a BWL program.

The current study found that Personal circumstances such as energy levels and fatigue, distractions, and discomfort in a new learning environment influenced learner engagement and interaction in BWL. These personal circumstances contribute to a lack of motivation, which, as Witte, Witte, and Saltiel (2009) maintain, acts as a psychological barrier to learning. Other experts on learning also assert that learning motivation may be hindered by internal pressures or barriers (Knowles et al., 2005; Tough, 1979), such as the circumstances identified in this study. Thus these personal circumstances are confirmed by existing literature as factors that, while not necessarily relevant only to adult or mature learners, do influence their engagement and interaction in BWL.
The individual factors found in this study to influence engagement and interaction in the learning process reflect the andragogical tenets that adult learners are self-directed and autonomous (Pratt, 1998). The andragogical model by Knowles et al. (2005) helps to explain the individual factors found in this study, through its six principles of the learners’ self-concept, the role of the learners’ experiences, readiness to learn, orientation to learning, motivation, and the need to know. The characteristics of learner maturity, namely content base, motivation, responsibility, and learning skills (Delahaye & Smith, 1998), also provide an explanation for the individual factors affecting engagement and interaction, as do four of the mature learner principles presented by the same authors: learner responsibility, learning for life applications, learning by reflection on experience, and learning by experimenting. The fifth mature learner principle, “support and respect for fellow learners” is also evident, but is reflected in a later section discussing the program factors.

Because the andragogical model explains how adult learners learn and the mature learner principles explain how and why they choose to engage in learning, these two models shed light onto the individual factors influencing how these learners engage and interact in BWL. These individual factors relating to adult/mature learning principles may potentially impact learner engagement and interaction in any adult learning program for workplace learning. However, while a solely face-to-face or solely e-learning program could have addressed the adult/mature learning aspects, using a combination of physical and virtual learning modes offers multiple avenues to promote learner engagement and interaction. Thus the BWL program catered for individual differences in the adult learners by aiming to provide the right learning content in the optimal format to the right individual at
the right point in time (Singh, 2003; Singh & Reed, 2001). In addition to the individual factors, the findings of the workplace and program related factors that influenced engagement and interaction in the study are also discussed. The workplace factors are discussed next, followed by the program factors.

**Workplace factors - workplace learning**

The workplace-related factors that were found to influence engagement and interaction in BWL point to aspects of workplace learning theory in action. The influence of these workplace factors that are identified in the findings of this study add to existing knowledge in BWL, and include role requirements, role relevance, transference of learning, and self-evaluation of work practice.

**Role requirements** played both a positive and negative role in learner engagement and interaction. Learner engagement and interaction in the BWL program was influenced by the necessity for learners to complete the BWL program as part of their role, in addition to their regular responsibilities and tasks. Thus the competing work processes and learning-related role requirements potentially had both favourable and adverse effects on learner engagement and interaction. The BWL program offered by the organisation was a necessity for learners to complete as part of their role, and learner engagement and interaction were found to be influenced by these role requirements. This is similar to Billett's (2000, 2001a, 2001b, 2002c) concept of co-participation between the workplace and the learners in the workplace; the workplace affords learning opportunities in which learners choose to engage. The BWL program was required of the learners who participated in it, and this impacted their engagement and interaction in it.

**Role relevance** promoted learner engagement and interaction, particularly when learners deemed the content and activities to be useful to their role. The
perceived relevance and usefulness of the information and knowledge presented in the BWL program influenced engagement and interaction. These workplace factors of role requirements and role relevance are also verified by recent research which asserts that in order for BWL to be effective, the link between learning and job performance should be tight (Adams, 2013), learning should be based on specific workplace challenges (Berg & Karlsen, 2012), and should be addressed to meet the target audience profile (Chandavimol et al., 2013). While these previous findings point to effective learning, this study focuses the importance of role requirements and role relevance on engagement and interaction, which are essential prerequisites for effective learning.

Transfer of learning was a promoter of learner engagement and interaction, where learners engaged and interacted with content in the workplace, outside the physical and online learning environment. The concept of co-participation (Billett, 2000, 2001a) also supports the Transfer of learning factor, with the workplace serving as an avenue for learners to engage and interact with the learning content through interpersonal interactions at work, outside of the formal learning program. The finding that learners engaged and interacted with the learning content, not only in the BWL program but also in the workplace with their colleagues who were not part of the BWL program, is strongly supported by McDonald's (2013) finding in a university setting; that human interaction can increase interest in and is critical to the understanding of course content, and also increased engagement with course content through reflection and dialogue about content with non-course related people, who, in this study, were work colleagues. Thus the relationship between the learner, learning, and the workplace seen in this study is an important aspect of workplace learning.
Self-evaluation of work practice also promoted learner engagement and interaction as learners used the learning content to judge their own performance at work. The influence of role requirements, role relevance, and self-evaluation of work-practice on engagement and interaction supports Noe, Tews, and Dachner's (2010) argument that Kahn's (1990) psychological engagement theory is important in learning contexts and therefore may be used to understand learner engagement in the workplace. Kahn's (1990) engagement theory maintains that adults who find meaningfulness, safety, and availability engage themselves cognitively, emotionally, and behaviourally in the workplace. Role requirements, Role relevance, and Self-evaluation of work-practice align with the meaningfulness condition of engagement. The meaningfulness condition is reflected in the three workplace factors of Role requirements, Role relevance and usefulness, and Self-evaluation of work practice, which reveal that learners who engaged in BWL recognised the necessity of learning, its relevance and usefulness to their work, and a means to judge or improve their own performance. The safety and availability conditions of Kahn's (1990) engagement theory relate to the program factors as does the “support and respect for fellow learners” principle of mature learning; these are considered in the discussion of the program factors.

Just as the discussion on individual factors showed they could be present in any adult-learning program, the workplace factors discussed above may also potentially be applied to any workplace learning program, where workplace learning concepts are seen in practice. However, the distinguishing feature of the workplace learning program investigated in this study is that it used a blended learning strategy that focused not just on increased access, convenience, and productivity through its online mode, but also on dynamic and interactive learning through its face-to-face...
mode (Graham, 2006; Graham & Robison, 2007). The findings relating specifically to the blended aspect of the BWL program are considered in more detail in the discussion of the program factors that were found in this study.

**Program factors - blended learning**

Learner engagement and interaction in BWL were influenced by a number of program-related factors. The influence of these BWL program-related factors found in this study, whilst supporting existing knowledge from blended learning research conducted in educational and workplace settings, also highlighted other elements, as will be further discussed. These program factors include learning content and process, assessment presence, resources and support, and learning environment.

*Learning content and process* acted as both promoter and inhibitor of learner engagement and interaction depending on whether learners found it interactive, easy to navigate, interesting, or too heavy or tedious. The analysis of results showed that the presentation of learning content in the online and face-to-face modes, in particular its variety, flexibility, and quantity, played an important role in engagement and interaction. Thus the findings of this study are similar to those in university settings around the world (George-Walker & Keeffe, 2010; Korr et al., 2012; Yuen et al., 2009), but the current study extends the influence of this factor to a BWL program.

This study on BWL found that the presence or absence of a formal assessment item influenced engagement and interaction. Learners either sufficiently focused and remembered content in order to pass a quiz, or engaged at a deeper cognitive level without the pressure of a test. Assessments are important for successful blended learning (Baldwin-Evans, 2006; McGee & Reis, 2012) and diversity of assessments is important for student satisfaction (Sun, Tsai, Finger,
Thus the *Assessment presence* factor in the current study was affirmed, but also differed in the sense that learners in the BWL program not only recognised the need to pass the formal assessment items, but also appreciated the fact that they could learn, role-play, and apply the learning content without the pressure of having all learning content assessed in a formal way.

The availability and accessibility of *Resources and support* was also found to influence learner engagement and interaction, especially outside the physical and online learning environments, where learners could engage and interact with learning content and colleagues after the learning program. The role of accessibility and availability of resources and support for engagement in blended learning has been shown to apply in university settings (Chen et al., 2010; George-Walker & Keeffe, 2010; Lim et al., 2007; So & Brush, 2008). The current research not only confirms the need for resources and support to be accessible to the learners in and after the program, but also highlights their use in the workplace, thus extending engagement and interaction from learning to work.

As a final program factor, this study also found that a positive *Learning environment*, influenced by the characteristics of the facilitator and other learners, was a strong promoter of engagement and interaction, as learners felt safe to share their views. The value of human interaction (learner-facilitator and learner-learner) in fostering a positive blended learning environment has been documented in university settings across the world (Adam & Nel, 2009; Babb et al., 2010; Ginns & Ellis, 2007; Hamilton & Tee, 2010; Lim et al., 2007; Matthews et al., 2011; Miyazoe & Anderson, 2010; Shea & Bidjerano, 2009; So & Brush, 2008; Wall & Ahmed, 2008; Wu et al., 2010; Yuen et al., 2009). Thus, the current study confirms that facilitator
and learner characteristics and a positive learning environment are also important in workplace learning settings such as BWL.

**The Role of Human Interaction in BWL**

The presence of human interaction in BWL is an important feature in categorising blends based on their andragogic attributes. Due to its focus on pedagogy (andragogy, in this case), Graham's (2006) categorisation of blends into enabling, enhancing, and transforming blends, was used in this study to identify the type of blend used in the case BWL program. Enabling blends have the lowest focus on andragogy, with their key purpose being access and convenience, while transforming blends have the highest focus on andragogy through dynamic interaction (Graham, 2006). The BWL program investigated in this study consisted of an enhancing blend with a focus on increased productivity for the facilitators and learners. Dynamic interaction and active learning were afforded through face-to-face human interactions, live, physical activities and discussions, rather than through the technology-mediated components. So although the BWL program consisted of an enabling blend with a primary focus on productivity rather than andragogy, through the human interaction in its face-to-face mode, the BWL program provided a dynamic learning experience for the learners.

The findings of the study showed that when human interaction was combined with content interaction, there was a wider range of behavioural engagement, a higher level of cognitive engagement, and stronger emotional engagement during learning, than when human interaction was absent. Thus the absence of dynamic interaction in the online mode hints that the online was not as effective in promoting engagement as face-to-face was, especially in light of McDonald's (2013) assertion.
that there needs to be a balance between human interactions in the online and face-to-face modes.

Nevertheless, as the findings suggested, learners appreciated the flexibility and accessibility of information and resources to which the online module provided access, and it was also a familiar learning environment even though the content may not have been presented in the most visually engaging way. Thus the flexibility of the online mode, as well as the human connection and spontaneity of the face-to-face mode were found to be the strengths of the two modes, as supported by Graham (2006). However, participation and depth of reflection, which Graham (2006) asserts to be strengths of the online mode, were more consistent in the face-to-face because of the presence of human interaction in the face-to-face and an absence of this interaction in the online mode. This balance of strengths of the face-to-face and online is in accordance with what Moe and Rye (2011) conclude from a blended learning case study of managers, that “blended learning has to be approached in a relational way, where the strength and weakness of one component are manifest through its relation to other components” (p. 177). Utilising the benefits while avoiding the weaknesses of the physical and virtual learning modes is a challenge of blended learning (Graham, 2006). From the findings of this study on BWL, it could be said that human interaction is the key to maximise the strengths and minimise the weaknesses of the online and face-to-face modes of BWL, as the negative aspects of the different factors influencing learner engagement and interaction were minimised in the presence of human interaction. In the BWL program analysed in this study, engagement and interaction in the face-to-face mode were high, however, they could have been enhanced in the online mode by adding a human interaction element such as an online discussion board.
The role of human interaction in fostering a positive learning environment in BWL is supported by theory from blended learning literature in the educational arena, extending findings from the educational context to learners in the workplace. The four fundamental characteristics of effective learning environments presented by Roschelle et al. (2000), namely active engagement; participation in groups; frequent interaction and feedback; and connections to real world contexts, are used by Graham and Robison (2007) to identify improvements in blended learning pedagogy (or andragogy, in this case). Of these characteristics, all four were found in the face-to-face mode, whereas the second and third characteristics were not incorporated into the online mode. These two andragogical characteristics lacking in the online module (participation in groups, and frequent interaction and feedback) further highlight the need for human interaction, whether physical or virtual. Thus, from these characteristics and the results of the current study, an increase in learner engagement could be expected if the online module of the BWL program also included virtual human interaction.

Finally, the finding that human interaction, which was present in the face-to-face component but absent in the online component, was related to stronger emotional engagement, may be explained by McDonald's (2013) observation that human interaction can increase interest in and engagement with course content through reflection and dialogue about content with non-course related people. These content-related conversations with “non-course related people” was seen when learners shared learning content and resources with their work colleagues who did not participate in the BWL program. Thus, although learners did not have human interaction facilitators or other learners in completing the online module, the interaction with non-course related people served as the human interaction element to
increase interest and engagement with the learning content. The strong positive emotions such as “enjoyment” that respondents reported when they had human interaction in the BWL program is also reflective of the concept of “flow” described by Csikszentmihalyi (1996), where respondents describe their experiences as challenging, enjoyable, and rewarding.

Collectively, the findings of the study contribute to current understanding of the important andragogic aspects of engagement and interaction in BWL. Next, the practical implications of these findings are discussed.

**Implications for Practice**

This exploratory study, with its richness of data, has several implications for BWL program designers, program facilitators, and also employees undertaking BWL programs, as it highlights the importance of considering the different factors that may enhance or inhibit learner engagement and interaction. This study puts the focus on the learner, and what influences their engagement and interaction in BWL. For example, the findings imply that when learners have interaction with each other and the facilitators, they are likely to be more engaged. When they find the content and resources relevant not just to the learning program, but also to their roles at work, they have a reason to engage.

Through a focus on learner engagement and interaction, this research brings trainers and facilitators of BWL programs an awareness that the strength of the program content or design alone may not be sufficient to maximise engagement, as individual and workplace factors also come into play. Acknowledging the myriad influences on learner engagement and interaction is crucial for BWL facilitators. Also, fostering a supportive learning environment, whether online or face-to-face, along with facilitating relevant conversations with learners is key to helping them
optimise their engagement and interaction and get the most out of their BWL experience. If facilitators make themselves available in a support role, and are prepared to help not just in the program, but also after it has concluded, they will foster strong interaction and engagement for learners in the program. One way to offer this ongoing support is for facilitators to offer support groups after learners have completed the BWL program in order to debrief on the success of the transfer of learning into the learners' roles at work; in effect building a community of practice (Lave & Wenger, 1991).

This research informs BWL program designers, that in addition to the BWL program itself, individual and workplace factors also play a role and thus need to be addressed in order to have optimised engagement in the learning program. For example, designing the BWL program so that learning resources are available to the learners to use at work after the program has been completed, would help learners engage and interact with those resources as they deem them relevant not just to the learning, but also to their work. The intent and design of a BWL program should be relevance, applicability, and transferability through interactive learning activities, rather than merely presentation of information. The findings from the study also imply that interpersonal interactions need to be catered for when designing BWL programs for organisations; a learning program that is designed to allow sufficient interactions between the facilitators and learners in both its online and face-to-face modes, is one in which engagement would be maximised. The consistency of the findings of the current study with existing blended learning literature from the educational sector is also a signpost for BWL designers to consider, as aspects of blended learning for higher education may also be relevant to workplace learning.
As blended learning continues to gain more popularity because of its strengths and benefits in combining face-to-face and online learning modes, this research also shows the necessity for BWL designers and facilitators to continue to take into account the importance of human interactions to enhance engagement and interaction in BWL. Organisations that use mostly enabling or enhancing blends for increased access, convenience, or productivity may find that increasing the focus on engagement and interaction inherently changes the nature of the blend they use into transforming blends, which have a high focus on andragogy and thus transform learning experiences through active learning opportunities with dynamic interaction. Thus, taking an andragogical perspective in designing BWL programs through a focus on increased engagement and interaction could significantly enhance learning effectiveness.

**Suggestions for Future Research**

The limitations of the design of this study as detailed in Chapter 3, create an opportunity for further research to delve deeper into the issues relating to effective BWL. In light of these limitations, future research could explore the other types of blends in BWL in different organisations and with different BWL programs. Multiple-case study designs could be used to compare how enabling, enhancing, and transforming blends differ in providing engagement and interaction for learners. Theory and practice could be enhanced by addressing questions like: Do higher level blends (such as transforming blends) facilitate higher engagement and interaction? Does a focus on these andragogical aspects inherently change the nature of the blend? Are certain types of blends more effective for certain workplace learning situations or content areas? Moreover, because the influence of the physical and virtual components on learner engagement and interaction in BWL was beyond the
scope of this study, further research could investigate this issue: How do the various
design elements facilitate learner engagement and interaction in BWL?

From a performance or business outcomes perspective, future research could
investigate whether the type of blend, and the amount and quality of human
interaction in the face-to-face and online modes have an impact on the return on
investment (ROI), although from a research methodology perspective this
comparison between the individual level learning and departmental/ organisational
level returns may be harder to ascertain. Another worthwhile relationship to explore
that was beyond the scope of this study, is the link between learner engagement in
BWL and work/employee engagement. The findings about the influence of
workplace factors in the current research highlight the link between learner
engagement and interaction in BWL and work practice; thus, future research could
study the relationship between learner engagement and work/employee engagement
to shed more light on BWL. Research into the above mentioned aspects would
provide a wider range of explorations that could lead to testable hypotheses, and
enhance knowledge on BWL.

Conclusion

This exploratory study on BWL has drawn from adult learning, workplace
learning, and blended learning literature. It has explored BWL from an andragogical
perspective, focusing on engagement and interaction rather than other aspects such as
learner satisfaction or business outcomes. The findings from this study, that various
individual, workplace, and program related factors influence engagement and
interaction in BWL, have built upon current research in BWL, and have implications
for future research and practice. These findings also emphasise the role that human
interaction plays in enhancing engagement in BWL. Human interaction elements can
be achieved in BWL by having virtual interaction opportunities such as discussion boards, or sharing knowledge from BWL with workplace colleagues face-to-face or via electronic communication. Knowing and controlling these influences on learner engagement and interaction is crucial to improving the effectiveness of a BWL program for learners in the workplace and for organisations. Moreover, the importance of face-to-face human interaction in BWL is what makes the learning experience not only effective, but also memorable. Considering these aspects in the design and facilitation of BWL programs is fundamental to improved individual performance and potentially, improved organisational level ROI, and thus, is important for organisations to address in order to wisely invest in employee learning and development.
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Appendices

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Appendix A

Participant Information and Consent Form

PARTICIPANT INFORMATION FOR QUT

RESEARCH PROJECT

– Interview –

Learner Engagement and Interaction in Blended Workplace Learning

QUT Ethics Approval Number 1500000247

RESEARCH TEAM

Principal Researcher: Suniti Hewett, Master's Student, QUT

Dr Karen Becker, Associate Professor; Dr Adelle Bish, Senior Lecturer

Associate Researcher: Lecturer

School of Management, QUT Business School, Queensland University of Technology (QUT)

DESCRIPTION

This project is being undertaken as part of a research Master's study for Suniti Hewett.

The purpose of the project is to investigate the influence of blended learning on learner engagement and interaction. A blended learning program that utilises face-to-face and computer-mediated learning modes will be analysed.

You are invited to participate in this project because you undertook the 'Performance Coaching for Professional and Academic PPR Supervisors' training program within the last
12 months, or have been a facilitator of the program. We would like to hear about your experience in the training program, and request your kind assistance in this study.

**PARTICIPATION**

Your participation will involve an audio recorded interview in a private office at [your organisation] and will take approximately 1 hour of your time. The interview will include questions such as “What activities in the training program did you participate in?” and “What kind of interactions did you have with your colleagues in the training program?”

Your participation in this project is entirely voluntary and you will not be required to answer any questions should you for any reason feel uncomfortable doing so. If you do agree to participate, you can withdraw from the project without comment or penalty up to 4 weeks after the interview, and any information obtained from you will be destroyed and not used in the research. After this point, your data will have been analysed and included in the aggregated results of the study. Your decision to participate will in no way impact upon your current or future relationship with [your organisation].

**EXPECTED BENEFITS**

It is expected that this project may not benefit you directly, but [your organisation] will receive a summary of the findings which will help them improve their future training programs.

**RISKS**

There are no risks beyond normal day-to-day living associated with your participation in this project.
PRIVACY AND CONFIDENTIALITY

All comments and responses will be treated confidentially unless required by law.

The interviews will be audio recorded and then transcribed. Due to the nature of the information received in the interview, it is not possible to participate in the project without being audio recorded. The audio recording will be accessed only by the research team and the transcribers who are bound by a confidentiality agreement. The audio recording will not be used for any other purpose and will be deleted at the end of the project.

Transcripts of the audio recording will only be accessed by the research team and individual names will not be stored with the interview transcripts for reasons of confidentiality. If you wish to read the transcript for verification purposes prior to final inclusion, please indicate this on the attached consent form.

Findings from this research may be published in academic and industry publications but at no time will individuals be identified, and the level of information provided about participants will not allow for identification. Non-identifiable data collected in this project may be used in future projects or stored on an open access database for secondary analysis.

The HR department of [your organisation] will be provided the summarised initial findings of the study around August 2015, and then a final summary of the results around July 2016, at the submission of my thesis. The final results will also be made available to you around July 2016, if you indicate your interest on the attached consent form.

CONSENT TO PARTICIPATE
We would ask you to sign a written consent form (attached) to confirm your agreement to participate.

**QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT**

If you have any questions or require further information please contact one of the research team members below.

Suniti Hewett  
Master's Student  
Phone: 07 3138 2743  
Email: suniti.hewett@hdr.qut.edu.au

Karen Becker  
Associate Professor  
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**CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT**

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Thank you for helping with this research project. Please keep this sheet for your information.*
CONSENT FORM FOR QUT RESEARCH PROJECT

– Interview –

Learner Engagement and Interaction in Blended Workplace Learning

QUT Ethics Approval Number 1500000247

RESEARCH TEAM CONTACTS

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STATEMENT OF CONSENT

By signing below, you are indicating that you:

• Have read and understood the information document regarding this project.

• Have had any questions answered to your satisfaction.

• Understand that if you have any additional questions you can contact the research team.

• Understand that you are free to withdraw within 4 weeks without comment or penalty.

• Understand that you can contact the Research Ethics Unit on 07 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project.

• Understand that the project will include an audio recording.
• Understand that non-identifiable data collected in this project may be used in future projects.

• Agree to participate in the project.

Please indicate:

☐ Yes  ☐ No  I wish to read a copy of the transcript from my interview for verification purposes prior to final inclusion.

☐ Yes  ☐ No  I wish to receive a Plain English version of the findings at the conclusion of the project.

Name

________________________________________________________________________

Signature

________________________________________________________________________

Date

________________________________________________________________________

Please return this sheet to the investigator.
Appendix B

Interview Questions for BWL Facilitators

Note: I will refer to you as the facilitator, and those who undertook the PPR program as “participants”.

This is interview with Facilitator #

Introduction
Thank you for taking the time to participate in this interview about your experience as a facilitator in the PPR Online and Performance Coaching Program. The reason I've chosen this program is because it's a blended program – it combines online and face-to-face components. Firstly, would you tell me a little about yourself?

- How long have you been in [the organisation]?
- What is your role?
- How long have you been in your current role at [the organisation]?
- What has been your role in the PPR Online and Performance Coaching Program?
- What was your role in the online module?
- What was your role in the workshop?
- When was the most recent PPR program / workshop that you were involved in?
- How many other blended training programs have you been involved in as a facilitator?

General Questions
Intro: The next few questions are about the PPR Online and Performance Coaching Program; some questions relate to the program as a whole, and some relate to the online module and the workshop separately.
Q1. Would you tell me briefly about what you feel was the highlight of program for you – what worked best?

Q2. What was the most challenging aspect of the program?

**Blend-Related Questions**

Q3. What were the reasons for having the online module and the workshop? (What purpose did each serve?) *(Prompts: access, convenience, productivity, active learning)*

Q4. In the online module and workshop, what role did technology play (What was the purpose of using technology?) *(Prompts: access, convenience, productivity, active learning)*

Q5. In the online module and the workshop, how was technology used to promote intellectual activity?

**Engagement & Interaction Questions**

**Behavioural Engagement & Learner-content Interaction**

Q6. What's the best way for a participant to complete the online module – how long, what period of time?

Q7. What were the different exercises that the participants were required to do in the online module? Were any of these optional? (Eg videos)

*Prompts:*

- Reading materials (with links to other documents)
- Video/audio
- Short quizzes (multiple choice?)
- Final quiz (m/c?)
- Support service (face-to-face, phone, email, web)
Q8. In the online module what exercises would the participants find easy to do, and what would prove more challenging? Why?

Q9. In the online module, what resources or content did you expect to be used the most by the participants? Why? Which would be least used?

Q10. Are any of these resources or content expected to be used outside their role of supervisor?

11. What were the different exercises or activities that the participants were required to do in the workshop? Were any of these optional?

Prompts:

- Watch & listen to presentation
- Audio/video
- Worksheets/handouts
- Report/document writing
- Group discussions
- Practice/role playing
- Question or support time
- Other support service (face-to-face, phone, email, web)
- Assessments or evaluation of learning
- Attending other presentations/sessions/workshops

Q12. In the workshop, what exercises or activities would the participants find easy to participate in, and what would be more challenging to do? Why?

Q13. In the workshop, what resources or content did you expect to be used the most by the participants? Why? Which would be least used?
Q14. Are any of these resources or content expected to be used outside their role of supervisor?

**Cognitive Engagement**

Q15. In the online module, what content or exercises did you expect to be the most and least intellectually stimulating/engaging for the participants? Why? (What was it that would/wouldn't make it intellectually engaging?)

Q16. In the workshop, what content or exercises did you expect to be the most and least intellectually stimulating/engaging for the participants? Why? (What was it that would/wouldn't make it intellectually engaging?)

Q17. Which of these processes were expected to be carried out in the online module? (show List #1) How/In what exercises? *(Prompt: Most & Least)*

Q18. Which of these processes were expected to be carried out in the workshop? (show List #1) How/In what exercises? *(Prompt: Most & Least)*

**Emotional Engagement**

**Intro:** I've asked about the content, exercises, and the mentally engaging aspects of the PPR program, but I'm also interested to know about the expected participant feelings associated with the program.

Q19. What aspects of the online module did you expect the participants would like/enjoy and dislike/not enjoy? Why?

Q20. What aspects of the workshop did you expect the participants would like/enjoy and dislike/not enjoy? Why?
Q21. Were there any other hopes or concerns you had about how the participants might feel about the overall program?

Learner-facilitator Interaction
Q22. What kind of communication and interaction did you have with the participants when they undertook the online module? (See prompts)

Q23. What kind of communication and interaction did you have with the participants in/regarding the workshop? (See prompts)

Prompts:
- How (F2F, email, phone, text, office communicator, notes)
- Within/ outside of training session (during breaks)
- Highlights of individual & group communication with facilitator
- What was the ratio of online:F2F communication between you and the participants?
- What sort of communication did the participants initiate with you (what topics, questions related to content material/ admin/ assessment/ evaluation/ practical application/ purpose of communication)
- What sort of communication did you initiate with the participants (esp in session, or group email)? What topics? What purpose did these serve?
- Did you feel there was not enough communication between you and the participants? Why/ why not?
- What techniques or resources were used to enhance/promote interaction and communication between you and the participants?
**Learner-learner Interaction**

Q24. What (if any) kind of communication and interaction did you (expect or find) the participants to have with each other during their undertaking of the online module? How/ When/ Where/ Why? *(See prompts)*

Q25. What (if any) kind of communication and interaction did you (expect or find) the participants to have with each other during/ regarding the workshop? How/ When/ Where/ Why? *(See prompts)*

**Prompts:**

- How (F2F, email, phone, text, office communicator, notes)
- Within/ outside of training session
- Highlights of small group activities/ whole class activities
- What activities did you find most effective in promoting interaction among the learners?
- What topics, questions related to content material/ admin/ assessment/ evaluation/ practical application/ purpose of their communication with each other?
- Were there particular colleagues the participants interacted with more with, than others? Why? *(common job roles/ interests/ backgrounds and values, etc?)*
- Do you feel they had too much or too little communication with their colleagues in the online module/ workshop? Why/ why not?
- What could be done better? How would a more optimal level of communication between them help?
Final Question
That is all the questions I have for you, but before we finish, is there anything else you would like to add about your experience as a facilitator of the training program?
Appendix C

Interview Questions for BWL Participants

This is interview with Participant #

Introduction
Thank you for taking the time to participate in this interview about your experience in the PPR Online and Performance Coaching Program. The reason I've chosen this program is because it's a blended program – it combines online and F2F components. Before I get into the main questions, would you tell me a little about yourself?

- How long have you been in [the organisation]?
- What is your role?
- How long have you been in your current role at [the organisation]?
- When did you complete the PPR Online and Performance Coaching Program? (online module & workshop)
- Why did you do the PPR Online and Performance Coaching Program?
- How many other blended training programs have you participated in?

General Questions
Intro: The next few questions are about the PPR Online and Performance Coaching Program; some questions relate to the program as a whole, and some relate to the online module and the workshop separately.

Q1. Could you tell me briefly about the highlight of the program for you – what did you like most?

Q2. What was the most challenging aspect of the program for you?
Engagement & Interaction Questions

Behavioural Engagement & Learner-content Interaction

Q3. Could you give some examples from the program as a whole, of resources or content that you referred to more often than others? (Prompt: What aspects from were most useful to you & why?)

Q4. Could you give some examples of information or resources from the program overall, that you used in performing your role as supervisor?

Q5. Could you give some examples of information or resources from the program overall, that you used outside your role as supervisor, if any?

Q6. Did you complete the online module in one sitting? If so, how much time would you have spent on it? [If not => How much time would you have spent on it at each sitting? And over what period of time did you complete it (one month or more)?]

Q7. In the online module, you were required to read material, check your knowledge by short quizzes, and then take a final quiz, watch videos. How well did you manage doing and completing these exercises? (Prompt: Did you skip through / not do some? Why/why not?)

Q8. In the workshop, you were required to listen to presentations, watch videos, complete some worksheets individually, have group discussions, ... How well did you manage doing and completing these exercises and activities? (Prompts: Did you skip through / not do some? Why/why not?)

Cognitive Engagement

Q9. What expectations did you have of the online module and how did/didn't it meet your expectations? (Prompt: Did you expect it to be useful or beneficial? How/Why)
Q10. What expectations did you have of the workshop and how did/didn't it meet your expectations?

Q11. From the online module, could you give some examples of specific content or exercises that kept you intellectually stimulated and engaged; and those that didn't?

Q12. From the workshop, could you give some examples of specific content or exercises that kept you intellectually stimulated and engaged; and those that didn't?

Q13. These are some mental processes that may be used in a learning experience (show List #1). Which of these processes did you use in the online module, and could you give examples of the times you used them? (Prompt: Most & Least)

Q14. Which of these processes did you use in the workshop, and could you give some examples of the times you used them? (Prompt: Most & Least)

**Emotional Engagement**

*Intro:* I've asked you about what you did in the PPR program, and about the mentally engagement aspects, and I'm also interested to know about your feelings regarding the PPR program.

Q15. Regarding the online module, could you give some examples of aspects that you really liked/enjoyed, and disliked/ didn't enjoy?

Q16. Regarding the workshop, could you give some examples of aspects that you really liked/enjoyed, and disliked/ didn't enjoy?

Q17. These are some of the emotions that people may have during a learning experience (show List #2). Could you recall some of the times when you may have felt any of these or other emotions while you undertook the online module?
Q18. Could you recall some of the times when you may have felt any of these or other emotions during the workshop?

Learner-facilitator Interaction
Q19. What kind of communication and interaction did you have with your facilitators/other administrative personnel when you undertook the online module and the workshop? (See Prompts)

- What form (F2F, email, phone, text, office communicator, notes)
- Within/ outside of training session
- Ratio of online:F2F communication
- Highlights of individual & group communication with facilitator
- What sort of communication (for what purpose) did you initiate with the facilitator (what topics, questions related to content material/ admin/ assessment/ evaluation/ practical application?)
- Facilitator initiated communication (esp in session, or group email)? What topics / purpose?
- Do you feel you had too much or too little communication with the facilitator?

Learner-learner Interaction
Q20. What kind of communication and interaction did you have with your colleagues in the training program when you undertook the online module and the workshop?

(See Prompts)

- How (F2F, email, phone, text, office communicator, notes)
- Within/ outside of training session
- Highlights of small group activities/ whole class activities
• Individual work vs group work – different kind of communication? How so?
• What kind of communication (what purpose) did you initiate? (what topics, questions related to content material/ admin/ assessment/ evaluation/ practical application)?
• What kind of communication did they initiate/ what purpose?
• Particular colleagues you interacted with more? Why? (common job roles/ interests/ backgrounds and values, etc?)
• Do you feel you had too much or too little communication with other participants? Why/ why not? What could be done differently? How would a more optimal level of communication between you and other trainees help you?

**Final Question**
What would make the online module more engaging for you?

That is all the questions I have for you, but before we finish, is there anything else you would like to add about your experience in training program? Or anything other stories/ examples you'd like to share from your experience in the training program?
Appendix D

List #1

- **Remember**
  (Retrieving relevant knowledge from long-term memory)
  Eg: Recognising, Recalling

- **Understand**
  (Constructing meaning from instructional messages)
  Eg: Interpreting, Exemplifying, Classifying, Summarising, Inferring, Comparing, Explaining

- **Apply**
  (Carrying out or using a procedure in a given situation)
  Eg: Executing, Implementing

- **Analyse**
  (Breaking material into parts and determining how the parts relate to one another and the overall structure or purpose)
  Eg: Differentiating, Organising, Attributing

- **Evaluate**
  (Making judgements based on criteria and standards)
  Eg: Checking, Critiquing

- **Create**
  (Putting elements together to form a coherent and functional pattern and structure)
  Eg: Generating, Planning, Producing
Appendix E

List #2

1. Enjoyment
2. Hope
3. Pride
4. Anger
5. Relief
6. Anxiety
7. Shame
8. Hopelessness
9. Boredom
10. Other
Appendix F

Debrief Presentation Slides for BWL Program Facilitators

PPR Online Module and Performance Coaching Program

Feedback from Participants

Suniti Hewett
(Masters Student)

13th July 2015

Highlights of PPR Online Module (1)

Relevance to role
- Opportunity to go through policies and procedures
- Reassurance that they were doing it right, based on the info in the online module
- Bigger picture of the PPR process – why done
- Both parties involved in PPR process
Highlights of PPR Online Module (2)

**Content**
- Informative, Self-contained, comprehensive
- Options available if they wanted to delve deeper into topics, or just core material.
- Tip sheets, Templates
- Review/ quiz questions

Highlights of PPR Online Module (3)

**Design**
- Easy to navigate/use, easy to read; interactive; good presentation
- Using standard technology, familiar environment.
- Online access; didn't require special accommodations or commitments, other A/V equipment; time flexibility
- Assessment was included in the module itself, didn't need to go to separate assessment area
- Generally did not feel the lack of interaction
What would make the online module more engaging/ valuable to your role?(1)

Content – role relevance
- Examples of PPR/ case studies
- Contextual information to explain why a certain way/order of process is better than another
- Customised/ need-based information

What would make the online module more engaging/ valuable to your role?(2)

Content – design/ structure
- “What's coming up next?” & “What's after the online module?”
- Main points simplified and concise, with option for delving deeper
- FAQs or “what people found useful” for different topics/ stages of PPR
What would make the online module more engaging/valuable to your role?

3 Interactivity
- Social interaction, having someone there if questions arise (but some liked the absence of it)
- Content interactivity

What would make the online module more engaging/valuable to your role?

4 Ease of printing
- Filtered reading by relevance
- Something to take to F2F as a link between PPR online and Performance Coaching
Highlights of Performance Coaching Workshop (1)

Facilitation

- Really good facilitation, very well done - well organised and well delivered
- Presenter was enthusiastic, knowledgeable, approachable; skilled; good story teller and actor.

Highlights of Performance Coaching Workshop (2)

Interaction

- Did not expect the workshop to be so “fun”, enjoyable; engaging, positive environment
- Well-paced and varied activities, with flexibility
- Networking; getting to know staff from other parts of the university
- Hearing different perspectives from diverse range of people
Highlights of Performance Coaching Workshop (3)

Interaction
- Happy to watch or hear from other people; not facing issues alone
- Feeling safe and comfortable to share
- Group/table activities: (Most remembered activities: bus with cards, fish-bowl, role playing)

Highlights of Performance Coaching Workshop (4)

Relevance to Role
- Sense of bigger picture and underpinning philosophy
- Broad enough to be applicable to all supervisory roles.
- Good revision of communication skills
Highlights of Performance Coaching Workshop (5)

Relevance to Role

- Scenarios, example behaviours, group discussions
- Trying out the coaching techniques/models learnt; practising the language to be used
- Positive feelings: Opportunity to expand options available, acquiring tool-kit

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Highlights of Performance Coaching Workshop (6)

Relevance to Role

- Identifying PAC behaviours; using enabling questions
- Reassurance of coaching skills being used as supervisor
- Empowering on the recipient end of PPR.
- Having the workbook to take away.

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What would make the workshop more relevant/valuable to your role? (1)

**PPR-related**
- Discuss PPR process and clarify doubts from online module
- PPR application opportunities, how to put together an actual PPR
- How to do performance management if required

What would make the workshop more relevant/valuable to your role? (2)

**Coaching-related**
- Division/faculty specific training; professional/academic staff; different levels of management/experience
- How to have coaching conversations with those who do not directly report for PPRs
- Offering the perspective of the person being coached/managed
- Addressing cross cultural and age differences
What would make the workshop more relevant/valuable to your role? (3)

**About the information given**

- Index in workbook
- Info from online module and workshop consolidated in one place/online
- Have something from online module to bring to the workshop to link the two together
- Include both PPR training as well as coaching training
- Having more expert/facilitator input

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What would make the workshop more relevant/valuable to your role? (4)

**Before and After**

- Info about the workshop, to know what to expect, and to feel prepared
- Briefing/refresher a few months later to check implementation
- Shorter workshops/two workshops...
How the program provided an effective blended learning experience

- Individual learning vs sharing learning experiences
- Theoretical aspects vs Practising workplace scenarios
- PPR process vs relational aspects of good practice
- Focused cognitive learning of concepts and principles vs dynamic interactive learning
- Engaging cognitively, behaviourally, and emotionally in learning
- Comfortable and challenging in providing different learning opportunities

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