



**AN INTERVENTION USING DIGITAL SOCIAL MEDIA TO SUPPORT
ACADEMIC WRITING OF UNIVERSITY STUDENTS: A CASE STUDY**

A Thesis submitted by

Lalanthi C Seneviratne, B.A., M.A.

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Abstract

Many university students, both native and non-native speakers of English, seek ongoing discipline-based academic writing support. However, this type of support within the university sector has yet to be broadly implemented due to cost and practical concerns. Developing an individual's academic writing ability impacts on their overall academic performance. The effects of using digital social media as a platform in providing academic writing support for university students was investigated within this research. The research also intended to investigate university students' perceived academic writing self-efficacy beliefs in this context. It is believed that self-efficacy functions as a significant predictor of academic writing performance. This study included three main phases—pre-intervention, intervention and post-intervention—with 25 university students from a regional Australian university. A case study method was incorporated that accompanied quantitative and qualitative methods within an overall qualitative design. Self-efficacy questionnaires, interviews and field notes were used to collect data in this study. The intervention phase provided the participants with academic writing support by the researcher via digital social media for four weeks. The analysed data of this case study showed improvement in the participants' academic writing self-efficacy beliefs after the academic writing support they gained during the intervention phase. The reason for this improvement can be found in the use of a digital social media platform that enabled the provision of discipline-based academic writing support when the participants needed it most. The results suggest that digital social media may be a beneficial platform for providing ongoing discipline-based academic writing support for university students.

Keywords: academic writing support, digital social media, self-efficacy beliefs, university students

Certification of Thesis

This thesis is entirely the work of Lalanthi Chulika Seneviratne except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Student and supervisors signatures of endorsement are held at USQ.

Associate Professor Henriette van Rensburg

Principal Supervisor

Associate Professor Warren Midgley

Associate Supervisor

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Chapter 1 Introduction

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Figure 1.1. Structure of Chapter one

1.1 Chapter Introduction

Every language provides people with the basis for their thinking and communicating that is essential for their societal engagement. English, in particular, is considered a global language, and a lingua franca: a common language. This enables people from diverse backgrounds and ethnicities to communicate on an equitable basis (Seidlhofer, 2013). Nowadays, educational practices and media of instruction used in universities are impacted by the level of English of students and staff (Qi, 2009). This highlights that proficiency in English communication, including both written and spoken discourse, can add value to students' overall academic performance (Qi,

2009). English academic writing has become a necessary tool and an essential requirement for international communication within university studies (Tran, 2014). The need for academic writing in a global context demonstrates the impact of the growing dominance of English (Coles, 2008). Sawir (2005) mentions the importance of committing significant resources that could address problems related to language difficulties faced by students in Australian universities.

This case study investigates university students' perceptions of academic writing support within a regional Australian university. It has been developed through an intervention process that provides academic writing support via digital social media. The research is underpinned by the belief that ongoing discipline-based support in academic writing via digital social media would ensure a flexible and personalised learning environment for university students. Quitadamo and Kurtz (2007) identified that improving an individual's ability in academic writing enables that person to develop his/her critical thinking skills, as well as their analysing and inferencing ability. These skills enhance overall academic performance.

According to Thota and Negreiros (2015), harnessing the transformative potential of digital social media would mitigate against some of the challenges that exist in implementing this support within higher education institutions. The variety of academic writing and related teaching methods can be discussed in a broader context (Turner, 2012), involving organisational policies, practices and the global status of English according to geographical differences.

This study proposes to explore the possibilities of improving university students' academic writing in English by developing their self-efficacy through the use of digital social media. The setting is aligned with academic contexts across core subjects at Australian universities, and facilitated through collaboration and peer support via digital social media.

1.2 Background to the Study

Academic writing is becoming more vital in university education because of the demands placed upon students to perform cognitively complex tasks (Marinkovich, Velásquez, Córdova, & Cid, 2016). These tasks include understanding complex

concepts, taking action, and engaging in learning patterns. These stretch their thinking and learning to greater heights. Son and Park's (2014) report, *The importance of improving standard academic writing skills of university students in terms of successful completion of their studies in Australian universities*, supports the fact that competency in academic writing impacts on overall academic performance.

The importance of academic writing for university students in pursuing their studies is highly regarded. However, Coffin, Curry, Goodman, Hewings, Lillis and Swann (2003) argue that it is often an invisible dimension of the curriculum. "The rules or conventions governing what counts as academic writing are often assumed to be part of the 'common sense' knowledge students have, and are thus not explicitly taught within disciplinary courses" (Coffin et al., 2005, p. 3).

Street and Lea (2000) too reveal the fact that some lecturers continue to believe that academic discourse is a homogeneous, easily identifiable phenomenon which can be taught unproblematically by English for Academic Purposes (EAP) support units. However, students have complained that the information they received about the expectation of 'good writing' was not consistent as the explanations varied across the teachers (Street & Lea, 2000). This made them change their writing style from assignment to assignment to suit the perceptions of the marker or lecturer. The acquisition of academic writing is viewed by some students as a game with a confusing set of rules, as most of the rules are not made explicit to the learners (Harwood & Hadley, 2004).

University students face a dilemma in accessing academic writing support. They are disadvantaged because the majority of the Australian universities have not made an adequate effort to mitigate this problem (Baik, & Greig, 2009). In addition, the existing English academic writing programmes offered by Australian universities do not always meet diverse learning needs, nor do they provide continual support throughout the duration of a program of study. Most of the English academic writing support programmes conducted by Australian universities focus on students from non-native English speaking backgrounds. For example, the pre-sessional English programmes offered by the University of Southern Queensland (USQ) in Australia are English Language Intensive Courses for Overseas Students (ELICOS) and EAP

that only target students from non-English speaking backgrounds with the focus of gaining entry into a USQ degree (“English for academic purposes”, n.d.). These programmes aim to bridge the gap between students’ learning environments. They also enable students to adapt to a new academic context, while providing them with necessary entry requirements related to International English Language Testing System (IELTS) band scores for university degrees.

Son and Park (2014) mention that the participants considered the EAP programme as a good preparation to improve their academic writing and reading, but that they needed more support from teachers. In addition, some of the participants in the same cohort highlighted the importance of discipline-based academic writing support, which is different from pre-sessional and intensive support. Pre-sessional courses in EAP provide an opportunity for students to develop their academic writing skills prior to commencing courses in a university. Some of these pre-sessional courses vary in length while some are conducted in an intensive mode.

Many researchers express their dissatisfaction over prevailing language tests that measure students’ level of English competency (Barthel, 2007; Elder, 2003; Read & Hayes, 2003). They argue that even though these results enable the students to meet the minimum language entry requirements, they do not guarantee that these students are ready for studies in which the medium of instruction is English. Barthel (2015) views this as a common issue for both native and non-native speakers of English. Walsh (2010) emphasises the need for reforms in pedagogy in this context, to be aligned with developing educational technology.

Sawir (2005) suggests that providing sufficient comprehensive language assistance at Australian universities is a better solution to this problem. Limited staffing has been a concern at Australian universities when dealing with this problem, despite the language support units that have been established and functioned for a long period of time (Sawir, 2005).

Therefore, providing adequate academic writing support at Australian universities depends on the efficacy of the intensive and short-term English language support programmes being offered. The majority of English programmes mainly focus on matching university entry requirements rather than improving the students’ overall English knowledge. The students therefore do not seem to be benefitted to the extent

that they achieve the level of academic writing that is expected in their forthcoming courses and assignments (Ransom, 2009). The lack of continual reinforcement and support in discipline-based academic writing in these English courses has been identified as another limitation. These concerns highlight the importance of making significant and necessary changes to provide effective academic writing support at Australian universities.

It is important to implement ongoing discipline-based academic writing support to Australian university students. However, challenges faced by universities have delayed these implementations. Coffin et al. (2003) for example have mentioned some practical issues that have impeded Australian universities in pursuing this task. These include: increasing student numbers and diversity of the student population, complex patterns of participation in higher education, curriculum changes, diverse modes of curriculum delivery, and changing contexts for teaching and learning. The growth of student participation and accessibility of higher education in Australia has impacted on the entry rates and increasing student diversity in universities (Gasior, 2013).

In terms of providing academic writing guidance to university students, it would be more effective if universities could deliver a form of a personalised learning. Since monitoring of students' progress is part of this method, it is considered a critical factor to enhance their self-efficacy (Bandura, 1986). Dede (2013) identifies the importance awarded to integrating information technology in designing curriculum delivery by most universities at present. This shows a shift from conventional face-to-face teaching and learning modes to web-based, virtual, a-synchronous learning environments. However, it is debatable as to how effective these web-based teaching methods can be in providing academic writing support.

Dede (2013) mentions the possibility of transforming higher education in leveraging models based on emerging technologies, which would make learning more efficient and enhance student support, all at a lower cost for a broader range of learners. The developments in technology and knowledge about expertise, learning, and assessment have the potential to reshape higher education. Dede (2013) describes learning in a networked world as connected learning. This also has the potential to

stimulate young students towards pursuing academic achievement, which in turn has a direct impact on their self-efficacy.

Despite all of the above suggested solutions towards providing ongoing continual academic writing support to university students, previously discussed problems remain. This may be due to an increase in university student diversity, which includes students with differing academic capacities and cultural backgrounds. The expansion in these numbers may also have created resourcing issues in relation to both academic staff and learning resources. The increase in student numbers has not been coordinated with a comparable increment in resources. Larger class sizes have led to fewer opportunities for small group teaching, which has deprived lecturers of adequate time to comment on students' written work (Friedrich, 2013). When providing academic writing support, it would be more effective if they could consider creating a personalised learning context.

University students' engagement may also be affected by their sense of being adult learners. They encounter multiple barriers when they have to attend additional academic writing support programmes. Cross (1992), in his seminal work, has classified these barriers as institutional, situational and dispositional. They comprise lack of time for balancing career and family demands, finances, transportation, confidence or interest, lack of information about opportunities to learn, and scheduling problems (Phipps, Prieto, & Ndinguri, 2013).

This study sets out to investigate how adoption and inclusion of digital social media, as a platform in delivering academic writing support to these diverse Australian university students, could affect their perceived academic writing self-efficacy. This is important as developing an individual's self-efficacy in a particular domain, influences his/her motivation, and cognition (Lent, Brown, & Hacket, 2002). The study also investigates the possibility to mitigate the basic challenges and issues that are still impeding and limiting change.

1.3 Research Problem

Every Australian university emphasises the importance of demonstrating standard academic writing skills across university students in their graduate attributes (Velliaris, & Breen, 2016). This ensures attainment of high literacy standards required at a tertiary level of study and is also designed to facilitate gainful employment by aspiring graduates. Academic writing support programmes within the Australian university sector have yet to be broadly implemented due to cost and practical concerns. There are many factors that contribute towards the failure of implementing academic writing support programmes. Policy-driven institutional support and funding have been considered as essential enabling factors (Ashton-Hay & Roberts, 2012; Baik & Greig, 2009; Evans, Tindale, Cable & Hamil Mead, 2009; Frohman, 2012). These would provide the needed resources that align with the specific needs of Australian university students to improve their academic writing skills. Overall, this is irrespective of them being either native or non-native speakers of English. These researchers also assert the importance of implementing ongoing, discipline-based academic writing support in this context.

The above situation may have prompted the International Education Association of Australia (IEAA) to host a National Symposium (“Five years on: English language competence of international students”, 2013). This was aimed at investigating good practice principles to address student language needs within the concept of English as an Additional Language (EAL), showing the importance of catering for student language needs during their university education. However, Hyland and Hamp-Lyons (2002) have questioned whether the skills taught in EAL adjunct programmes enable these students to transfer them to other learning contexts.

Zhu (2004) highlights the importance of providing discipline-based academic writing teaching across and within disciplines. The Australian Universities Quality Agency (AUQA) (2009) recommends that it is best for EAL students to receive academic writing support from their own faculties as this could be more context-embedded and discipline-specific. Clughen and Connell (2012) and Thies (2012) state inverse opinions about the above proposition. Some of their arguments revolve around time constraints, an already overcrowded curriculum, a lack of expertise in teaching EAL

writing skills, and more vitally, the conviction that showing dialect abilities is not a necessary piece of a scholarly part which is fundamentally to instruct content.

The importance of providing necessary academic writing support to all university students is supported by recent research (Zhao, 2017). The striking difference between spoken language and academic writing is due to academic writing being cognitively more demanding. For this reason, Zhao (2017) has revealed that both native and non-native English speaking novice writers need to be given discipline-based academic writing support that includes targeted instructions.

The challenges faced by university students constitute another problem that is taken into consideration in this study. Wu, Garza, and Guzman (2015) have emphasised the challenges university students may face in adjusting to studying at tertiary level basically due to them being adult learners, which include academic issues, social isolation and cultural adjustments. The complexity of these challenges around personal and contextual factors (Pascarella & Terenzini, 2005) could affect attrition of these students (Simpson, 2004). A framework designed by Lawrence (2002, 2005) for successful transition to university includes competency in academic literacy as one of the three major factors important for the success of first year undergraduate students' studies. Clegg, Bradley and Smith (2006) highlight the help-seeking behaviours of these university students. Taylor (2008) accepts the fact that universities address these issues in various ways, but most commonly through orientation programmes. McGowan (2005) highlights the importance of implementing academic writing support in an incremental and explicit manner across a course of study rather than just in the initial year. Universities should therefore consider the specific needs of the learners, prior to implementing academic writing support programmes. This also suggests that if universities focus on improving these learners' academic writing self-efficacy, rather than improving the related skills in isolation, it would be more beneficial. Once these learners are highly self-efficacious in a domain there is a strong possibility for them to achieve well (Bandura, 1986).

All of the above highlights the importance of ongoing, discipline-based, academic writing support to university students. However, implementation of such academic writing support programmes have not yet been demonstrated to be effective. Thus, this research seeks to explore practical strategies that may provide university

students with ongoing, discipline-based academic writing support during their course of tertiary study.

1.4 Purpose of the Research

The purpose of this study is to investigate the perceived academic writing self-efficacy of Australian university students after gaining academic writing support via digital social media. It also seeks to find out whether this support could address the problems related to the USQ context as mentioned in the previous sections. This case study provides academic writing support to 25 university students during its intervention phase. Both native and non-native speakers of English were given an opportunity to solve their issues related to academic writing through this process.

The study investigates the efficacy of using digital social media as a platform to provide ongoing discipline-based academic writing support for university students—both native and non-native speakers of English—as a possible solution to the previously mentioned problems. It also checked whether there was an improvement in these students' perceived academic writing self-efficacy beliefs through two stages of self-efficacy ratings. Identifying the correlation between their self-efficacy ratings, and potential reasons for those ratings, was also part of the process. The intention was to mitigate the repercussions of lack of inputs by providing adequate academic writing support that was expected to improve self-efficacy of these university students.

1.5 Research Gap

Globally, as well as in Australia, much research has occurred around English academic writing. The majority of this research has had a focus on international students whose first language is not English. However, it is suggested that a majority of university students need guidance in this context regardless of their first language. Overall, these students value this support when it is genre- and discipline-specific.

Turner (2012) states that more emphasis has been given to consider perceptions regarding what measures should be taken to improve writing among international students than native speakers of English, despite the support all these students seek in improving their academic writing competency. In addition, some of the prevalent academic writing support programmes are not continuous, nor do they provide specific genre-based support. Lawrence (2002, 2005, 2006) has done extensive research on assisting university students to develop their academic writing as it is considered one of the critical transition capabilities in their first year. Still, this does not necessarily highlight the importance of guiding these students continuously.

Even the Australian Government Department of Education has encountered the challenge of developing curricula that involve effective and suitable assessment practices that measure students' English language proficiency throughout the course of study (Arkoudis, Baik, Bexley, & Doughney, 2014). According to the regulatory requirements of Australian *Tertiary Education Quality Standards Agency Act (TEQSA Act)* ("TEQSA Act", 2011) and the Australian Qualification Framework (AQF) (2013), most university attributes specify the need for effective communication in oral and written English language. However, this does not focus on assessing students' academic writing proficiency in particular, even though the need for this has been emphasised by many leading academics and researchers. There is lack of evidence of explicit planning of measures taken by universities to enable students to gain ongoing academic writing support.

Lea (2008) shows an explicit relationship between academic writing and learning in their course designs but argues that the higher education sector has largely neglected this. Street's (1984) seminal work suggested that this was the prevailing situation within the higher education sector, due to the assumptions of an autonomous model of literacy. It reflects the idea that if university students can think well, they can write well, and vice-versa.

There is large amount of research on education technology (Richey, Silber & Ely, 2010; Stepanova, 2011), however, there is little discussion as to how digital social media can provide discipline-based, ongoing academic writing support to university students.

Self-efficacy is a very important concept in learning and it leads to better performance as well (Bandura, 1997). However, researchers have paid little attention to ways that could improve learners' academic writing self-efficacy rather than the actual performance.

Therefore, this study attempts to address this gap through a case study. The intention is to identify how effectively digital and social media can be integrated into promoting continuous academic writing support to Australian university students that can also impact on their self-efficacy.

1.6 Research Questions

Given that a majority of university students seek academic writing support (Baik, & Greig, 2009), it is important to suggest possible, effective and practical ways that they could be provided with this support. The main research question of this study is: *What are the academic writing self-efficacy beliefs of university students in terms of gaining academic writing support via digital social media?*

In order to address this main research question, sub-research questions are posed during the pre-and post-intervention phases of this study. These sub research questions are referred to as RQs in this study. They are:

- 1 What are the perceptions of university students' self-efficacy in terms of their ability in academic writing and the reasons for such perceptions?
- 2 What level of exposure to digital social media do university students report?
- 3 What are the advantages and disadvantages of using digital social media in gaining academic writing support?
- 4 What connections can be drawn between academic writing support provided through digital social media and university students' academic writing self-efficacy?

1.7 Research Approach

This research project focused on a case study approach as this emphasises detailed contextual analysis of a limited number of participants (Yin, 2009). The participants

of this case study are 25 university students from USQ, a regional Australian university situated in South East Queensland. This study is based on three stages as illustrated in Figure 1.2: (1) Pre-intervention stage, (2) Intervention stage, and (3) Post-intervention stage. The data were gathered in all three stages, however, the main intention of the intervention phase was to provide academic writing support to university students/participants.

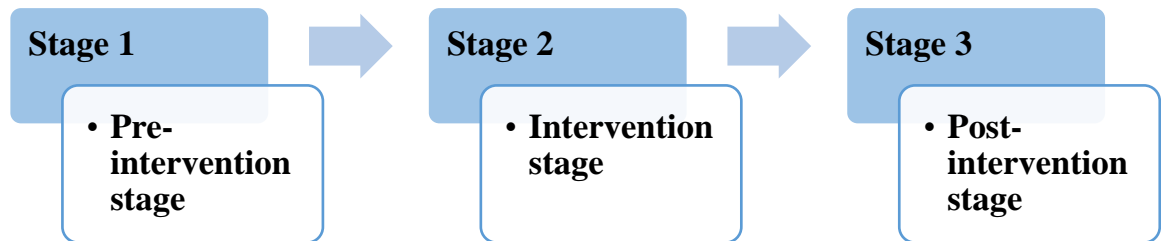


Figure 1.2. Three main stages of this study

This case study applied a mixed methods approach (Creswell, 2013) including quantitative and qualitative data collection. The quantitative component includes data collected from self-efficacy questionnaires while the qualitative component includes interview data and field notes. The data from self-efficacy questionnaires and interviews were gathered during the pre-intervention stage and post-intervention stage of the study. The participants' views and opinions about the intervention stage of the study were recorded as field notes during the academic writing support session. These field notes included their views on academic writing support provided within this study and about the impact of digital social media on their self-efficacy in academic writing. These notes contributed towards strengthening the qualitative analysis. The remainder of the quantitative and qualitative data gathered in three different stages of the study contributed towards addressing all the sub research questions. Both quantitative and qualitative data of this study were analysed using sequential explanatory mixed methods (Wu, 2011), as discussed in 3.2.3, to address the main research question of the study. The qualitative data were analysed thematically through coding of the interview transcripts and the quantitative data were analysed statistically.

The conceptual framework of the study is elaborated on in section 2.5 of this thesis. It consists of the Self-Regulated Strategy Development Framework (SRSD) (Harris, Santangelo & Graham, 2008) and the Technology Acceptance Model (TAM), which

is from a seminal work by Davis, Bagozzi and Warshaw (1989). Insights of both of these frameworks were useful, mainly during the intervention phase of this study, in terms of providing a theoretical base to academic writing support. The SRSD theory is used in alignment with the academic writing support component of this study while the TAM supports the integration of the digital social media section.

1.8 Significance of the Study

The results of this research study will be significant for the development of English academic writing of university students, particularly in the Australian context. They will further assist stakeholders and educators in the higher education sector to propose appropriate decisions around integrating new technological tools into course instructions and content delivery. The study will address issues that may impede implementation of learning support programmes through the use of digital social media, which will in turn improve students' self-efficacy. Other benefits include a direct contribution towards helping individual participants with their academic writing, promoting self-efficacy and personalised learning. It will also enable these university students to improve their critical thinking. Overall, this investigation of students' perceptions of using digital social media for academic writing support could make a beneficial contribution to the growth and development of learning environments in universities.

1.9 Organisation of the Thesis

Chapter One of this thesis has contextualised the research and has outlined the background of the research, the research problem and the purpose of the research, research questions, research approach, research gap and the significance of the study.

Chapter Two reviews the literature related to three main aspects of this research: academic writing, digital social media, and self-efficacy. It then describes the conceptual framework that has been used in this research and how this aligns with the development of this study.

Chapter Three includes the methods and design of the case study. This chapter further explains the importance of adopting a mixed-methods approach in this research and the process used in collecting data and analysing them across the three phases of this study.

Chapter Four presents findings from questionnaires, interviews and field notes during all three stages of this study. Firstly, it reports quantitative and qualitative data separately. Then, this is analysed using a mixed methods approach. Overall this analysis enables the researcher to ascertain if there is any relationship between participants' academic writing self-efficacy beliefs and the use of digital social media within this intervention process.

Chapter Five includes a discussion of the main issues emerging from the findings. This discussion is supported with quantitative and qualitative results, both in isolation as well as through a mixed methods approach.

Chapter Six provides a brief summary, as well as implications, strengths and limitations of this study. This also includes recommendations for future research, and for practitioners and policy makers, in terms of implementing academic writing support for university students. References and Appendices follow Chapter Six.

1.10 Chapter Summary

Chapter one has provided a statement of the research problem and a background to the context of the problem. The research questions, approach, and significance of the study were then explicitly stated. The organisation of the thesis was subsequently detailed. Chapter Two of this thesis includes the literature relevant to academic writing, digital social media, and self-efficacy, as well as details about the conceptual framework of this study.

Chapter 2 Literature Review

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Figure 2.1. Structure of Chapter two

2.1 Introduction

Chapter Two of this thesis reviews the literature pertinent to the study and its conceptual framework. The literature presented in this chapter links with the main purpose of the study: investigating the relationships between academic writing support provided to university students via digital social media and their perceived academic writing self-efficacy beliefs. This also includes information related to the gaps in the literature.

Hart's (1998) seminal work on literature reviews shows different reasons for reviewing literature, which include:

distinguishing what has been done from what needs to be done, discovering important variables relevant to the topic, synthesizing and gaining a new perspective, identifying relationships between ideas and practices, establishing the context of the topic or problem, rationalizing the significance of the problem, enhancing and acquiring the subject vocabulary, understanding the structure of the subject, relating ideas and theory to application, identifying the main methodologies and research techniques that have been used, and placing the research in a historical context to show familiarity with state-of-the-art developments (p. 27).

The three main concepts that will be discussed in this chapter are academic writing, digital social media and self-efficacy (Figure 2.2). All these three key areas are interdependent in addressing the main research question of the study, even though they are discussed as discrete units.

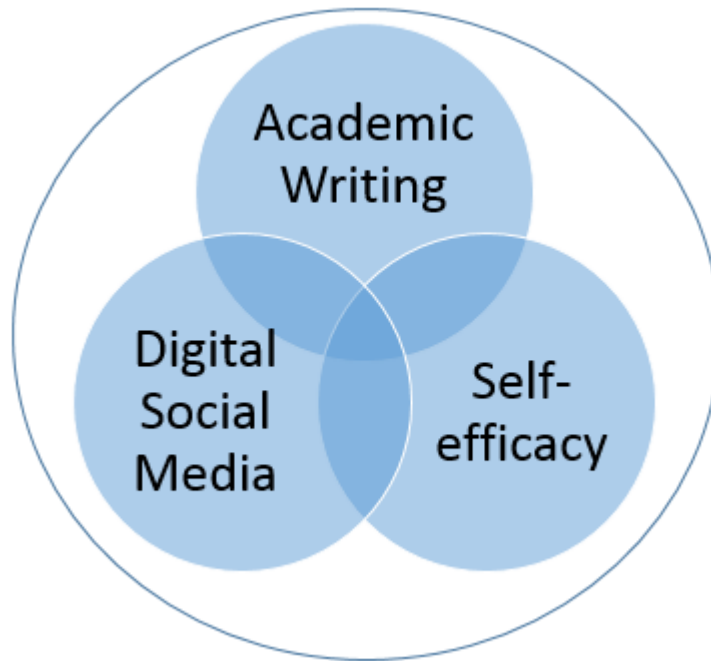


Figure 2.2 Elements of the literature review

2.2 Academic Writing

2.2	Academic Writing	
	2.2.1	Academic writing: Definition and its background
	2.2.2	Academic writing key concepts
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2.2.5.1	Support sought and challenges faced by university students	

This section begins with a definition of academic writing and its background. Then a discussion on key concepts and theories related to academic writing is outlined. The information related to its role in education and academic writing support in Australian universities is also presented. Overall, this section provides evidence related to the gaps in the literature this study aims to address. It identifies the importance of implementing ongoing, discipline-based, academic writing support programmes for students in Australian universities that focus on both native and non-native speakers of English.

2.2.1 Academic writing: Definition and its background

The purpose of academic writing as with other kinds of writing, is to communicate. Academic writing refers to a particular style of expression that researchers use to define the intellectual boundaries of their disciplines and their areas of expertise (Hartley, 2008). There is no single definition for academic writing. Jones' (2011) five basic methods to expand a definition are incorporated in this section in support of defining academic writing: (1) comparing it to something else, (2) telling what it is not, (3) describing it in detail, (4) classifying it by explaining the different kinds, and (5) using exemplification. This section defines academic writing according to the above five areas.

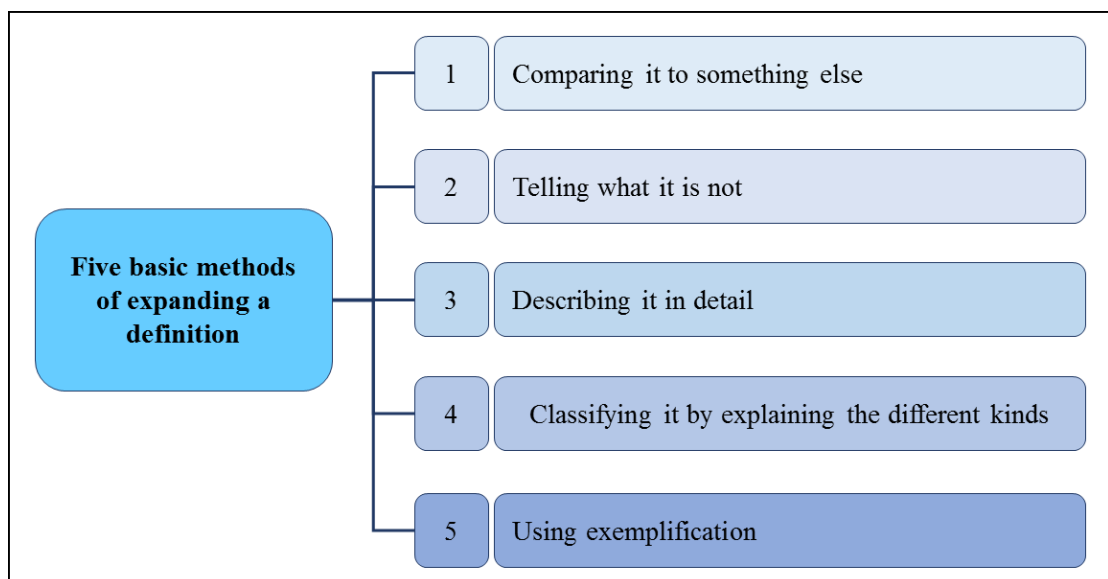


Figure 2.3 Five basic methods of expanding a definition

(1) Comparing it to something else:

The definition of academic writing can be supported by comparing it with a description of non-academic writing. Non-academic writing is considered as personal, emotional, impressionistic, or subjective in nature. In contrast, academic writing is expected to be precise, semi-formal, impersonal, and objective (Elmahdi, 2016). It also encompasses many other characteristics and conventions that are discussed in the remainder of this section of the literature review.

(2) Telling what it is not

The purpose of academic writing is not to entertain its audience or to persuade the reader, but to inform the reader of non-biased facts that are supported with evident claims (Labaree, 2009).

(3) Describing it in detail

Academic writing in particular is produced in circumstances where language is carefully planned and edited, detailed and specific, and produced in a concise format (Staples, Egbert, Biber, & Gray, 2016). Graham and Harris (2005) state that effective planning, composing, evaluating, and revising needs to be involved in writing to align with standards of academic writing. Labaree (2009) insists on a formal tone, and a clear focus on the research problem as other important factors that need to be present in performing academic writing. This is imperative to convey meaning about complex ideas or concepts for a group of scholarly experts. Wright (2008) states that advanced academic writing is widely recognised as an elaborated form of discourse that is grammatically complex.

A detailed discussion on academic writing is presented in section 2.2.2.

(4) Classifying it by explaining the different kinds

Academic writing can be classified in accordance with different disciplines, with specific genres occurring in each. Giltrow (2002), in her seminal work, notes that discipline-based writing is not a singular or inflexible model, but rather an inclusive and multivocal approach that emphasises countless ways of writing. Hyland (2004) shows the importance of linking disciplines with genres. He defines genre as “a robust pedagogical approach perfectly suited to the teaching of academic writing in

many contexts as it serves a key instructional purpose: that of illuminating the constraints of social contexts on language use” (p. 543). Genre-based pedagogies offer students, “explicit and systematic explanations of the ways language functions in social contexts” (Hyland, 2007, p. 18).

(5) Using exemplification

Academic writing includes various types of expository and argumentative scholarly articles, used by university students and researchers, to demonstrate a collection of data about a particular subject (Elmahdi, 2016). The main purpose of expository writing is to inform and explain or describe a topic, assuming that the reader has no prior knowledge of the topic (Jones, 2011). Argumentative writing, by contrast, is meant to persuade the reader to accept the writer’s opinion.

Some examples of academic writing are books and book reports, translations, essays, research papers, research articles, conference papers, academic journals, and dissertations and theses. Non-academic writing examples, by contrast, address a general audience through personal opinions, letters to editors, memos, magazines, fictions or non-fictions, writing for newspapers, and information on digital media.

The above summary of distinctive features that are recognised in academic writing together forms a definition for academic writing, and provides a basic understanding of the expectations of this particular genre of writing.

2.2.2 Academic writing and its key concepts

Academic writing demonstrates an individual’s knowledge and proficiency that encompasses certain disciplinary skills of thinking, interpreting, and presenting (Lowe & Zemliansky, 2011). Geisler (2013) explains this as a cultural movement of professionalism. Academic writing also includes the capacity to adapt smoothly to the cultural, linguistic and social milieux of academic departments and institutions (Gijbels, Donche, Richardson & Vermunt, 2013; Lee, Therriault, & Linderholm, 2012).

The key concepts of academic writing provide guidance to perform standard academic writing. Some of these include: complexity, formality, precision, objectivity, accuracy, and responsibility (Gillett, & Weetman, 2013).

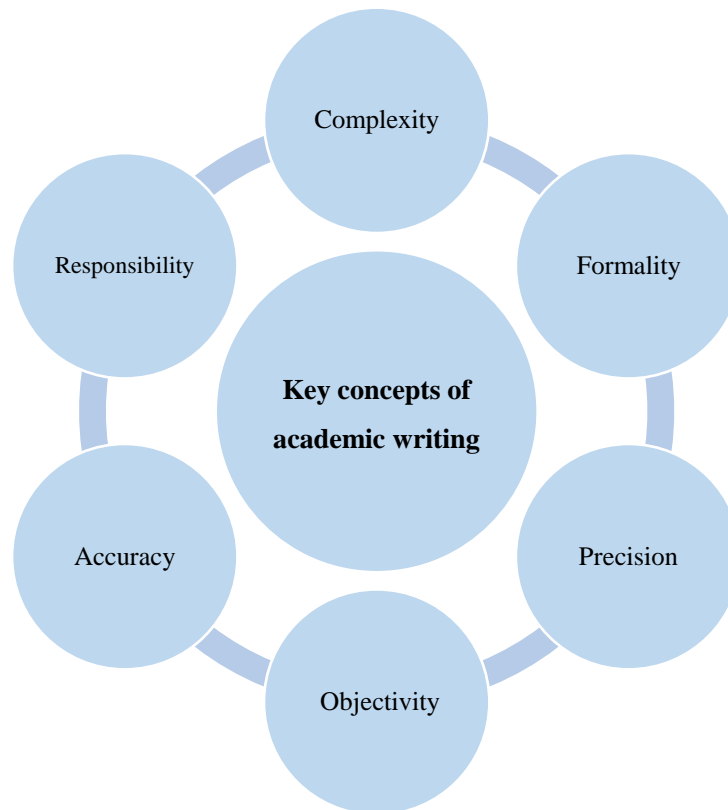


Figure 2.4 Key concepts of academic writing (Gillett, & Weetman, 2013).

Complexity

Carter and McCarthy (2006) envision the elaboration and grammatical complexity as a prominent factor in academic writing. A greater use of subordinate clauses in writing has been one of the main contributory factors towards this complexity (Hughes, 2010). Important differences in academic writing occur when the use of complexity features varies across parameters such as academic discipline and specific registers/genres of academic writing (Biber, 2006; Biber & Gray, 2013, 2016; Egbert, 2015; Gray, 2015). Many researchers have claimed that students find academic writing challenging on a lexico-grammatical level (Biber, Gray, & Staples, 2016). Complexity in academic writing also refers to describing complex ideas clearly. This relates to higher-order thinking skills that include cognitive processes employed to comprehend, solve problems, and express concepts (Labaree, 2009).

Formality

Formality refers to the choice of words. Colloquialism and implied meanings need to be avoided in academic writing. The use of concrete words is emphasised in this context, without confusing the reader. Explaining what is meant by specific technical

terms and terminology within a discipline in simple form is important in maintaining formality in academic writing (Gillet & Weetman, 2013).

Precision

Precision in academic writing refers to maintaining a high sense of objectivity and clarity within academic writing, through critical thinking and evaluation (Azindoo, 2014). This can be achieved by selecting relevant content and context in addition to grammatical accuracy.

Objectivity

Objectivity insists on the importance of evidence-based arguments in academic writing that make it more objective rather than subjective or personal (Nygaard, 2015). This means the opinions presented need to be underpinned by the existing knowledge or literature in a discipline. The strength of the argument is determined by the quality of the incorporated evidence.

Responsibility

Responsibility is an essential feature in academic writing as this refers to the writer being responsible for the claims made by providing relevant evidence and justification (Nygaard, 2015). Citing sources and including them in a list of references is the main part of this, which is considered as a way of acknowledging the source of any ideas, research findings, and data. It is also helpful as a defence against allegations of plagiarism.

Many researchers have found that these factors influence standard academic writing and therefore, students should be trained to link these features within their writing. Irvin (2010) states that an individual's success with academic writing depends on his/her understanding of what is done while writing and how the writing task is approached.

Overall, the structure of academic writing needs to be formal and should be organised logically to maintain an effective flow of ideas cohesively. The arguments presented within writing need to be supported with credible sources and they need to be cited appropriately. University students thus need to pay attention to these factors

when performing academic writing even though there is hardly any research that specifies the extent to which these factors need to be adhered to.

2.2.3 Academic writing teaching methods

The importance of standard academic writing has been identified globally. The theories and methods that underpin teaching and supporting academic writing have been introduced by researchers from the past. These theories and methods can help teachers to teach and facilitate the majority of students who seek support to develop necessary skills to effectively communicate in written format, which in turn will enable them to become successful upon graduation. This section discusses theories and methods related to the teaching of academic writing and academic writing support.

English academic writing is an important skill to be mastered by all the people who engage in academic and research field (Yeh, 2010). The growing research in this field highlights its importance mainly in university education (Tardy, 2012). The importance of writing is highlighted as an essential component in both developing and demonstrating critical-thinking skills. Canagarajah (2015) and Guerin and Pickard (2012) discuss the importance of guiding learners to develop their authorial voice in academic writing through facilitating, assisting, and helping. It is also believed that this can be taught and learned like other text qualities (Canagarajah, 2015). It is important to convince students about the issues related to academic writing, prior to helping them with the actual writing. This needs to be initiated by subject lecturers and writing specialists. To implement this, the following stages could be helpful: taking a stance, developing an argument, addressing a specific audience, and choosing the appropriate writing style.

A range of approaches to teaching writing has developed in different geographical contexts for different historical and socio-political reasons. The Academic Literacies model that was initiated in the UK emphasises practice rather than text (Lillis & Scott, 2007). However, Wingate and Tribble (2012) insist on the importance of the role of text in writing instruction. “In Australia, pedagogical models designed to foster students’ awareness of academic conventions and practices have emerged from the study of disciplinary genres and the field of systemic functional linguistics”

(Martin & Veal, 1998 as cited in Coffin et al., 2003, pp. 5-6). Likewise, there have been various academic writing teaching methods, which have led to paradigm shifts in this context. Among them, three major approaches have been the product-based approach, process-based approach and genre-based approach.

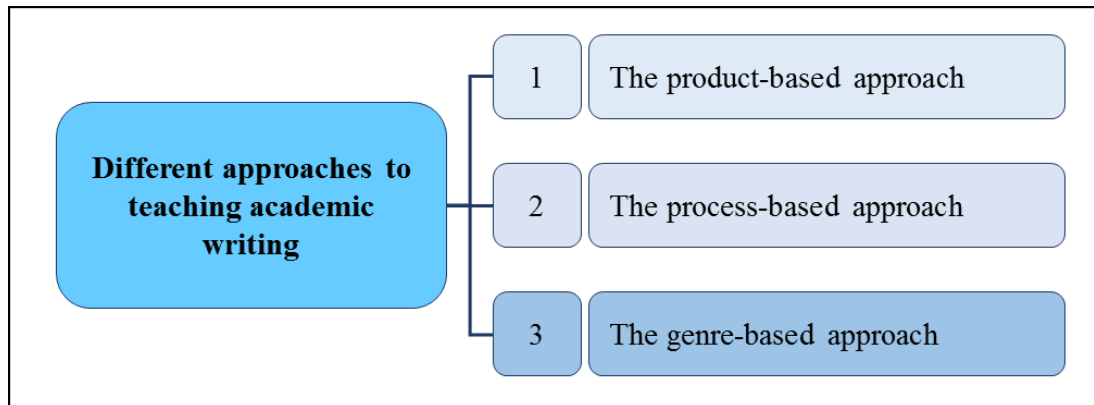


Figure 2.5 Different approaches to teaching academic writing

The product-based approach

The product-based approach is also known as text approach, one of the earliest approaches used to teach writing. This approach was used to highlight form and syntax in relation to English academic writing. However, the relevant pedagogy is underpinned by rhetorical drills (Silva, 1990). Barnett (1992) describes the limitations of this approach. Among them, teachers correcting everything has been identified as a feature that hinders students to absorb and incorporate. Semke (1984) proposes that rather than commenting on what needs to be corrected, teachers could develop students' writing fluency and language proficiency. Hedge (1994) has suggested that integrating principles of a process-based approach could mitigate the flaws of a product-based approach.

Despite the flaws of the product-based approach, Saeidi and Sahebkhari (2011) envision modelling as a beneficial method and an effective teaching tool to be used in teaching writing in the future. Murray (1980), however, states that this may inhibit learners' creativity as they are being exposed to the same form of writing. A genre-based writing approach can be considered as a solution for this.

The process-based approach

The process-based approach focuses on writers and their writing process (Sakoda, 2007). This was initiated in the 1960s and 1970s and parts of it are still visible even at present (Coffin et al., 2003). The underlying principles of this approach may have impacted on this: understanding the nature of writing and the way writing is taught (Hyland, 2003). The approach consists of several stages. Williams (2005) outlines the four stages as: (1) getting started, (2) creating the first drafts, (3) revising, and (4) editing.

The first stage (getting started) enables the students to prepare themselves for effective writing (Sakoda, 2007). This includes practices such as brainstorming, sharing information, discussing the topics, and thinking of logical sentences in class. During the second stage of this process, the students are encouraged to select appropriate content that will be included in their writing. This stage also encourages the students to consider who their audience could be prior to commencing writing. Then the first draft is written. The students are given guidance to revise their first draft during the third stage of this process. Teachers are responsible for providing adequate feedback to students to improve the content and ways of reformulating if necessary. Techniques of revisions, such as self-monitoring, exchanging work for peer review, conferencing with the teacher, proofreading exercises, and reformulation procedures, can be introduced during this stage. The last stage is the editing stage and the students make necessary changes to their writing in alignment with the feedback they receive during the revision stage (Sakoda, 2007).

Researchers argue that, despite the similarities and differences in both product- and process-based approaches, the underpinning principles of these two approaches can be integrated (Sakoda, 2007; Tangpermpoon, 2008). This type of integration can partly eliminate the flaws of both approaches, enabling the learners to transfer skills they have gained from each approach. Incorporating genre-based approach, on the other hand, addresses another deficit identified in the process-based approach: providing students with a lack of opportunities to incorporate other social constructions while establishing relationships (Hyland, 2002).

The genre-based approach

Hyland (2003) states that “genre refers to abstract, socially recognised way of using language” (p. 21). Genres also provide ways for responding to recurring communicative situations (Paltridge, 2001). They provide a frame for learners to interpret particular communicative events. These types of knowledge and skills are beneficial for learners to communicate successfully in particular discourse communities. The Australian School of Genre, in alignment with genre theory, argues that students will learn to write after either listening to and/or reading authentic samples of the target text type or genre. This method will allow the students to identify how the purpose of the text is conveyed through the overall organisation and features of the language. Since this is a holistic approach, it helps students to see how grammar and vocabulary are interconnected and related to the genre.

The main aim of a genre-based approach is to use text analysis (Wingate, 2012). This enables the students to understand and control the conventions and discourses of their discipline. Despite the fact that analysis of discipline-specific texts is the best starting point for teaching and learning academic writing (Wingate, 2012), Benesch (2009) emphasises the importance of considering the socio-political contexts of writing and exploration of teachers’ and students’ social identities.

The genre-based approach has been recognised as an effective method of teaching writing to university students including both native and non-native speakers of English (Bawarshi & Reiff, 2010; Bruce, 2008; Rose & Martin, 2012). The students will be exposed to exemplars in their field enabling them to recognise the recurrent elements of writing within a particular genre. Grav and Cayley (2015) highlight the importance of this approach as it can benefit both native and non-native speakers of English in their academic writing. The implementation of this approach in the teaching of academic writing has been supported by researchers in teaching scientific writing for both native and non-native speakers of English (Dudley-Evans, 1995; Jacoby, Leech & Holten, 1995).

Badger and White (2000), state that both product and process-based approaches emphasise writing as mostly linguistic; however, the genre approach places greater emphasis on the social context in which writing is produced. The importance of

providing students with explicit and systematic explanations of the ways in which language functions is another major emphasis of the genre approach (Hyland, 2003). However, this is debated in current practice. Malakul and Bowering (2006) assert that the genre-based approach is “a worthy extension” (p. 328) to other academic writing areas. Despite the positive side of the genre-based approach, Tangpermpoon (2008) doubts if the learners will gain adequate knowledge about the appropriate language and/or vocabulary in academic writing, mainly because the genre-based approach ignores standard writing abilities (Badger & White, 2000).

Even though there are many recommendations for the genre-based approach as the best method to teach and learn academic writing, Wingate (2012) states that “it seems unlikely that there can be a one-size-fits-all model for writing instruction, given the diversity of higher education institutions” (p. 27). There is widespread consensus that writing pedagogy cannot be underpinned by a single theoretical framework. Therefore, many researchers suggest a mainstream pedagogy to suit the given context. This may consist of a package of different academic writing teaching and learning approaches and methods (Tangpermpoon, 2008; Wingate, 2012). This allows freedom for the teachers to either select one particular approach to suit a specific context or integrate traits of them to suit the context and learner needs. Canagarajah (2013) does not recommend adopting and implementing theories and pedagogies that are formulated by experts blindly when providing academic writing support. It is rather advisable to critically inquire about the needs and challenges of the students prior to implementation of these methods or pedagogies.

2.2.4 Academic writing’s role in society

The development of academic writing skills in English has recently become a global priority. The importance of competency in academic writing has become the key to success in many fields in contemporary society. It is not only important in the scholarly community, with respect to manufacturing, storing and dissemination of knowledge, but also in the field of Industry and Commerce. Thus, academic writing has been identified as a cultural practice the importance of which is recognised in a multitude of areas (Geisler, 2013). This is explicitly supported by many researchers as they state that academic writing is one of the most important skills to have in

order to obtain a job (Graham & Hebert, 2011; Rosenberg, Heimler, & Morote, 2012), irrespective of the job being skilled or unskilled (Rosenberg et al., 2012). It is agreed that developing competency in written communication skills is very important for both students and professionals (Russ, 2009), because an individual's communication competence is impacted by his/her professional ability and performance (Russ, 2009). As a consequence, there is a growing call for the inclusion of opportunities for both first and second language writers to develop their ability in academic writing (Biber, Gray, & Poonpon, 2011; Crossley, Weston, McLain Sullivan, & McNamara, 2011; Ravid & Berman, 2010).

2.2.4.1 Academic writing's role in university education

Academic writing plays a major role in university education, both in course retention and consequently in student knowledge. It is an essential component of a university education (Azindoo, 2013). Crawford and Candlin (2013) state that university education requires students to demonstrate a higher level of academic writing ability. Graham and Perin (2007) note that this is not an option for university students, but has become a necessity. Copland and Garton (2014) argue that the dynamic nature of university education has been a problem in the development of academic writing. However, academic writing is regarded as the essence of education due to its ability to express the students' understanding of the language used and their ability to communicate in a particular area of a discipline (Copland & Garton, 2014). It is also important to enhance students' overall learning development as well as to assess their ability in relation to course comprehension (Copland & Garton, 2014).

Academic writing is becoming more important in university education because of the demands it places on the students to perform cognitively complex actions (Azindoo, 2013). These involve understanding complex concepts, taking action, and engaging in learning patterns (Compton, & Pearson, 2016). These actions enable learners to stretch their thinking and learning abilities to greater heights. Son and Park (2014) report the importance of improving standard academic writing skills of university students in terms of successful completion of their studies in Australian universities.

The majority of students and lecturers, have identified academic writing as one of the students' biggest problems in continuing and completing their university studies (Graham & Perin, 2007). However, success in academic writing depends upon how

well a person understands what he/she is doing when writing, as well as how the writing task is approached (Lowe & Zemliansky, 2011). The statistics of the National Commission on Writing (2003), show that 90% of professionals indicate competency in writing as a necessary skill for jobs. Arum, Roksa, and Cho (2011) find correlations between the level of writing assignments and learning. In other words, their frequency of writing assignments correlates with higher rates of learning.

2.2.5 Academic writing support in Australian universities

Providing study support in general presents challenges for any educational organisation, as it impacts in different ways on the student and staff population of the institution. Wagner (1995) describes study support as supporting the educational process, while Stewart and Suldo (2011) believe that it enhances academic outcomes. Brasely (2008) sees it as a response to skill deficits, while Haggis (2006) highlights the difficulties associated with conceptualising models of study support and inconsistency of applied definitions.

The need for academic writing support is highlighted due to the great significance placed on academic writing (Baik & Greig, 2009). Waye (2010) highlights the importance of implementing academic writing support for university students to facilitate their development in a particular genre of writing. The possible support, such as feedback given on students' assignments, and an awareness of different ways of thinking can enhance their learning. Canagrajah (2013) states that the academic writing support rendered should be based on theoretical developments in multiple disciplines. This also needs to include reformulated, established professional constructs to enhance personalised learning.

Baik and Greig (2009) suggest that providing academic writing support to students can assist them in their academic advancement. This can be achieved by leveraging multiple practical approaches that could enhance students' quality of writing. Selection of suitable and effective pedagogies and approaches is the main responsibility of the tutors in this context. They need to demonstrate a better understanding of effective ways in which they could provide writing support to groups of linguistically diverse graduate learners (Grav & Cayley, 2015).

Nowadays, within Australian universities, providing support to develop university students' academic writing skills through assignments and feedback design has become very important. However, Garbus (2005) highlight the limitations of writing centres at universities with for example little assistance provided to graduate students. Nevertheless, it is clear that implementation of academic writing support programmes across universities is beneficial for students' overall academic performance. Furthermore, De Chazal (2014) highlights the importance of ongoing, discipline-based academic writing support, rather than more generalised support.

2.2.5.1 Support sought and challenges faced by university students

The majority of the university students seek support to develop their ability in academic writing. Grav and Cayley (2015) state that both native and non-native speakers of English have similar needs in terms of seeking academic writing support. However, the main difference between these two cohorts lies in the obstacles they face in terms of benefitting from genre-based instruction. Accordingly, “non-native English speaking students must learn to identify themselves as needing writing support that transcends linguistic matters, while native English speaking students must learn to identify themselves as needing writing support despite their linguistic competence” (Grav & Cayley, 2015, p. 69). However, “focusing on the needs of L2 writers may cause educators to overlook the *shared* needs of all graduate students, regardless of linguistic ability” (Grav & Cayley, 2015, p. 70).

Grav and Cayley (2015) identify one main difference between the specific areas of support sought by L1 and L2 learners at university level. They mention that L1 students are in need of writing support as a form of professional development, despite their linguistic competence, while L2 learners seek support in higher-order, discourse-level writing instructions. However, it is recommended that using a shared instructional approach to teach higher-order writing skills would be more beneficial than dictating entirely separate instructional approaches for both these cohorts (Grav & Cayley, 2015). For example, even L1 writers must develop the use of phrasal complexity styles found in specialist academic writing (Staples, Egbert, Biber, & Gray, 2016).

Another major issue university students encounter in terms of academic writing is their lack of understanding of applying writing-related instructions they have

received from their previous learning experiences. Since previous academic writing instruction is likely to have focused on specific academic contexts, students find it difficult to apply those skills in new contexts (Anson, 2008; Matoti & Shumba, 2011). This higher level of English refers to functioning at a higher level of Bloom's taxonomy of educational objectives (1956), such as analysis, synthesis, and evaluation.

Cumming (2006) identifies some of the needs of university students with regards to improving their ability in academic writing:

“(a) language that includes vocabulary and grammar of English, ranging from clauses to morphemes or punctuation, (b) rhetoric or genres including conventional discourse or text structures and elements of them, (c) composing process that includes planning, drafting, editing, and revising a text, (d) ideas and knowledge that is based on concepts and information for written texts, (e) affective states that deal with learners' emotional dispositions concerning writing, (f) learning and transfer that emphasises the process of transforming knowledge and skills, and (g) identity and self-awareness which highlights awareness of one's self, self-image, or self-concept related to social functions of writing” (p. 30).

Cumming (2006) also identifies that these students were of assistance seeking behaviour, as an effective remedy to overcome their above needs. A number of other researchers also confirm the need for academic writing assistance to university students (Basturkmen, East & Bitchener, 2014; Cotterall, 2011).

Overall, the gap found in this literature was two-fold. First, it needs to be highlighted that both native and non-native speakers of English seek academic writing support to complete their university education. However, the majority of researchers have placed more emphasis on discussing this need in relation to non-native speakers of English. Second, a lack of ongoing, discipline-based academic writing support programmes in universities has been identified. Despite many researchers' perceptions about the need for this type of programme in universities, widespread implementation is yet to take place.

2.3 Digital Social Media

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		2.3.4.1	Digital social media's role in tertiary education
	2.3.4.2	Digital social media's role in academic writing support	

This section of the literature review discusses digital social media related information.

2.3.1 Digital social media: Definition and its background

Globally, there has been explosive growth in the number and use of digital social media in the past decade. This is a 21st century term that is used to broadly define a variety of networked tools or technologies (Dabbagh & Reo, 2010a). These are used for several purposes such as for communication, collaboration, and creative expression. Digital social media can be better explained when the term is split into digital and social media separately. However, social media are embedded within digital media, without which social media cannot operate. Web 2.0 has several definitions. These two terms—Web 2.0 and digital social media—are often used interchangeable (Dabbagh & Reo, 2010a).

Guffey and Loewy (2008) define digital social media as any media that are encoded in a machine-readable format, which can be created, viewed, distributed, modified and preserved on computers. Computer programmes and software; digital video; web pages and websites, including social media; data and databases; digital audio, such as mp3; and e-books are all examples of digital media (Guffey & Loewy, 2008). In addition, social media are defined as computer-mediated tools which allow people to create, share or exchange information, ideas, and pictures/videos in virtual communities and networks (Kaplan & Haenlein, 2010) while promoting social interaction among users (Ferdinand, 2013).

Different types of digital social media serve different specific purposes apart from their commonality of sharing information. Dabbagh and Reo (2010a) state that tools such as Delicious, WordPress, and Twitter enable online/social bookmarking, blogging, and microblogging. Software such as PBworks creates collaborative workspaces. Flickr and YouTube are known as media sharing tools and they enable social tagging (Dabbagh & Reo, 2010a). Facebook and LinkedIn are social networking sites, while web-based office tools such as Google Apps enable document and calendar sharing and editing (Asio & Khorasani, 2015; Dabbagh & Reo, 2010a;). Among all these tools, Facebook, Twitter, YouTube, Skype, LinkedIn, Blogs and Wikis are considered as some of the most common digital social media integrated Internet tools (Ferdinand, 2013).

2.3.2 Digital social media related learning theories

Learning theories are conceptual frameworks describing how information is absorbed, processed, and retained during learning. Cognitive, emotional, and environmental influences, as well as prior experience, provide understanding of knowledge and skills retained (Illeris, 2004; Ormrod, 2012). Behaviourism, cognitivism and constructivism can be seen as the main traditional theories of learning (Turner & Jones, 2010).

A number of theories are proposed to explain the relationship with digital social media. Connectivism has been developed by many educational theorists as a new learning theory which aligns with the digital age (Turner & Jones, 2010). The underlying principles of this theory show how learning can be affected through a social network using digital age media platforms (Siemens, 2006). Social constructivist theory too allows for computer-supported collaborative learning, giving students opportunities to practice 21st century skills in communication, knowledge sharing, and critical thinking via relevant available technologies (Palincsar, 1998). Social learning theory further insists on cognitive processes associated with learning that take place in a social network (Bandura & Walters, 1963). Social Network Theory focuses on interactions among individuals within social networks of varying complexity (Kadushin, 2004). Johansson (2004) discusses

the concept of the Medici Effect, according to which most innovative ideas occur when people from different disciplines and cultures meet.

Social media can be useful as a tool that has a direct impact on organisational quality and productivity. According to Robinson (2012), innovation can be defined as an idea, concept or object that is perceived as new by observers. The theory of diffusion of innovation (Rogers, 1995) stresses that the most important element for evaluating innovations can be found in the novelty of its given concept or idea. Furthermore, Csikszentmihalyi (1996) reiterates the significance of social development theory, which stresses the importance of new thoughts in an individual's mind. This is also said to lead towards creativity through the interaction between individuals' thoughts and a socio-cultural context. More specifically, social media are hypothesised to act as a mediating variable for the relationships between group inputs and processes of innovation. DeAndrea, Ellison, LaRose, Steinfield, and Fiore (2012) highlight that theory on self-beliefs is important in explaining how social media can affect students' perceptions of college life and, in turn, their adjustment to college.

According to the concepts of social cognitive theory, an individual's self-beliefs can be affected by their internal cognition and by environmental factors (Bandura, 1989). Thus, DeAndrea et al. (2012) identify social beliefs as central determinants of human affect and behaviour. This in turn is believed to relate to individuals' greater self-efficacy as they set higher goals, having greater motivation to achieve goals, and coping better with stress (Bandura, 1989).

2.3.3 Digital social media and their affordances

The rapid development of technological infrastructures in the context of digital social networks have enabled students to adopt them for different purposes including learning. According to Asio and Khorasani (2015), the millennials or Generation Y, tend to be constantly preoccupied with digital social media. Understanding how digital social media can be used as an advantage for social learning has become a crucial skill that needs to be developed by teachers.

Rosen and Nelson (2008) state two unique features of Web 2.0 tools: user-initiated publishing of information, and social sharing ability with privacy controls. This

second feature allows users to choose specific people or groups with whom the information is shared. This selection ranges from one-to-one to small, controlled groups, to large-scale public sharing and social networking options. This social sharing ability of Web 2.0 tools enables the possibility of the development of an Internet-based community around specific topics, publicly sharing, discussing, and collaborating on content, including text, pictures, movies, or other media (Rosen & Nelson, 2008).

Singh, Gulati, and Gulati (2011) envision Web 2.0 as a platform, an expression of collective intelligence, a participative architecture, and a decentralised system. Since Web 2.0 offers the ability to perform applications online, it operates as a platform from any location. According to Singh et al. (2011), Web 2.0 allows users to edit and publish content that is linked by, and to, other users. This creates an interlinked network. These researchers (Singh et al., 2011) also mention Web 2.0 as a participative architecture, because the web does not depend on large organisations to have content, but on the user collective. Finally, it is stated that Web 2.0 is considered a decentralised system that makes room for the majority of users who use very specific services and websites (Singh et al., 2011).

Apart from the above affordances of digital social media, they also provide a virtual platform potentially stimulating students to exchange their information and share their views (Asio & Khorasani, 2015). This has the potential to influence perceptions and spark debate and discussions among individuals with diverse backgrounds, culture, expertise, and viewpoints. Some other affordances of new digital social media include: the mass dissemination of messages, the reduction of the constraints of geographical dispersion, and the facilitation of the recordability of communication (Bargh & McKenna, 2004).

The educational potential of various Web 2.0 tools has gained attention from educators globally because of the affordances of communicating, expressing ideas, and collaborating between students and teachers (Frazier & Sadera, 2013; Kale, 2014). Moreover, Li, Helou and Gillet (2012) affirm that the affordances of digital social media include the encouragement of creating, editing, and sharing content. Su and Beaumont (2010) describe that social networking tools have the ability to encourage active collaborative learning and confidence, as well as informative versus subjective self and peer assessment. These are performed by instant feedback

and indirect learning through observing others' contributions, which in turn helps to track student learning. Digital social media platforms also create informal and relaxing learning environments (Dalton, 2009). Martindale and Dowdy (2010) state that digital social media platform can be regarded as virtual forms of physical interfaces.

2.3.4 Digital social media's role in education

The distinct role of modern Information and Communication Technologies (ICT) and digital social media tools and networks is highlighted by Stepanova (2011). According to Richey, Silber, and Ely (2008), educational technology supports study in accordance with ethical practice when facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. This is a practice that refers to any form of teaching and learning with the use of any kind of technology (Robinson, Molenda, & Rezabek, 2008), and it refers to a range of tools—such as media, machines and networking hardware—that need to be linked appropriately for effective application.

2.3.4.1 Digital social media's role in tertiary education

At the beginning of the 2000s, universities were interested in adopting technology for educational purposes (Brakels et al., 2002). According to Rogers (2000) there are three levels of technology adoption in higher education settings: (1) personal productivity aids—such as spreadsheets that aid professors to achieve tasks faster and more effectively, (2) enrichment add-ins, such as e-mail and web pages to improve classroom presentations and allow students to submit their assignments, and (3) paradigm shift, which is the highest level of technology adoption. This relates to effective multimedia educational technology use in e-learning. E-learning is the use of electronic media, educational technology and ICT in education. E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and it includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local

intranet/extranet and web-based learning. In addition, information and communication systems— free-standing or based on either local networks or the Internet in networked learning—underlie many e-learning processes (Tavangarian, Leybold, Nolting, & Roser, 2004).

Many recent researchers have demonstrated the potential of digital social technologies or Web 2.0 tools for creating collaborative, volatile and challenging learning environments using enrichment add-ins. Higher levels of interaction have also been identified through digital social media than through face to face interaction (Ferdinand, 2013). This is considered an important feature, enabling modern technology to be integrated into teaching and learning in higher education settings (Fisher, Worley, & Fernandez, 2012), mainly due to digital social media's ability to provide flexible learning environments. A majority of scholars claims that the advancement from Web 1.0 to Web 2.0 has contributed towards transforming the Internet from a read only—Web 1.0—environment to a read-write platform for end users (Rosen & Nelson, 2008). This transition has enabled Web 2.0 to focus on both presentation and participation rather than only presentation as in Web 1.0.

A study related to undergraduate students and their use of information technology has revealed that there was a steady increase in their use of social media from 2007 to 2010 (Smith & Caruso, 2010). This study also reported their involvement with digital social media such as wikis, video sharing websites, web-based calendars, blogs, micro blogs and social bookmarking tools. Smith and Caruso (2010) mention that younger students' use of social media is also increasing. The invention of Web 2.0 tools has enabled both teachers and students to transform their teaching and learning styles. Some of Web 2.0's affordances— such as the ability to participate in knowledge creation and interactively build distributed communities, or networks of learning (Kitsantas, 2013; Rosen & Nelson, 2008)-have enabled the higher education sector to integrate digital social media to enhance their teaching learning processes.

Universities incorporate digital social media to transform the ways students communicate, collaborate, and create. Tess (2013) explains the use of social media and its influence in society, as well as their potential use as effective tools for educational purposes. Furthermore, many researchers have affirmed the importance of investigating the potential role of digital social media as learning platforms (Tess, 2013; Veletsianos & Navarrete, 2012).

Educators are encouraged to transform their teaching and learning via digital social media because these sites enable all engaged parties/individuals not only to provide information but also allow for creation, cooperation in activities, and receiving feedback (Mazman & Usluel, 2010). Mazman and Usluel (2010) state that social networking sites are used by highly heterogeneous people—with different ages, education levels, gender, social status, language and culture—in their daily lives.

Recent studies reveal the potential of Web 2.0 applications to further improve learning and increase the sharing of information between learners and teachers (Ferdig, 2007; Maloney, 2007). The majority of studies have dealt with the delivery of core subjects in higher education institutions. Pradia (2016) emphasises the importance of students' everyday use of Web 2.0 technologies and their learning with Web 2.0, both inside and outside the classroom. Petek, Kadi-Maglagli, and Noica (2012) specifically mention their importance in the higher education sector in the form of an emerging role in transforming the learning environment. They further state that its potential is evident due to the students' readiness to embrace this technology for use inside and outside of formal learning environments. Conversely, Burton, Summers, Lawrence, Noble, and Gibbings (2015) have raised an issue related to the technological experiences of university students, stating that it is a myth to presume that they are digital natives.

It is always advantageous to incorporate Web 2.0 technologies in the higher education sector for teaching and learning as they provide hybrid learning spaces that allow learners to have more choices on how to, and where to, spend their learning time, for example in online settings, public spaces, or at home (Greenhow, Robelia, & Hughes, 2009). Web 2.0 also affects constructs of learning and instructions. Campión, Nalda, and Rivilla (2012) state the importance of crafting new learning environments that will enable students to remain receptive. This will enable educators to meet the expectations of current students in terms of access to organised education systems that are linked with technology (Wilson, 2010).

With the high acceptance of current students' use of technology, higher education institutions are compelled to incorporate Web 2.0 tools into teaching and learning. An and Williams (2010) believe that this will enable college students to become creators of knowledge and create content instead of just listening to lectures. This will also encourage them to take responsibility for their learning. Anderson (2008)

mentions that some studies focus on the use of specific digital social media, for example Blogger and Facebook, to aid students' assignments, or webinars (web-based seminars) to discuss and share intriguing teaching material. However, Brady, Holcomb, and Smith (2010) claim that there is scarce research detailing the educational benefits associated with the use of social networking sites.

Despite all the advantages of digital social media that have been identified by researchers and educators in the field of teaching and learning, the higher education sector is still primarily relying on traditional platforms such as course and learning management systems (CMS/LMS). These CMS/LMSs do not capitalise on the pedagogical affordances of social media that would allow students to manage and maintain a learning space that facilitates their own learning activities and connections with peers and social networks across time and place (McLoughlin & Lee, 2010; Selwyn, 2007).

The ability to use different technical affordances of these media in response to the needs of activities and learners is equally important in this context (Kuswara, 2015). Although a hands-off approach from the academic can lead towards creating accidental success, a well-designed and purposely enacted intervention would lead to better learning outcomes (Kuswara, 2015).

Contrary to commonly held perceptions that academics have little influence on the way students use technology in their learning, the study indicated that there is a significant role that academics can take, in particular, when influencing perceptions of affordances and scaffolding the experience with technology during the design and teaching stages of a unit. Academics' traditional role, such as nurturing a conducive environment for positive group work dynamics also contributed to this extended role. Although a hands-off approach from the academic can lead towards creating accidental success, a well-designed and purposely enacted interventions would lead to better learning outcomes. (Kuswara, 2015, para.6)

2.3.4.2 Digital social media's role in academic writing support

Overall, the benefits of digital social media such as fostering individual and group creativity through idea sharing and connecting with other individuals with common

interests can be useful in promoting academic writing support to university students (O'Keeffe & Clarke-Pearson, 2011). With the advancement of computer and information technology, computer based language learning has come to be regarded as one of the effective instructional tools for language teaching (Sun, 2010).

The ability to develop personal e-portfolios using blogs, such as WordPress in social media (Rosen & Nelson, 2008) is another effective way that can be incorporated in to academic writing support in higher education sector. Rankin (2009) states that this type of student engagement can stimulate participation through micro-blogging platforms such as Twitter, while Hazari, North, and Moreland (2009) believe that it can also encourage collaboration. Digital social media platforms can be effectively incorporated to provide academic writing support for university students as these platforms create personal and social learning spaces that support learning (Dabbagh & Reo, 2010b). Since experts from different fields can be given access to engage in a specific social media group, this will allow the members to synthesise their shared knowledge (Asio & Khorasani, 2015). However, Asio and Khorasani (2015) also mention that the positive effect that has on collective innovation depends on the extent of social media connectedness.

The capacity of digital social media to provide environments for the participants to aggregate information, share achievements, participate in collective knowledge generation and develop their own understanding or interpretations (Dabbagh & Kitsantas, 2009) can be highly useful as a platform for providing academic writing support to university students. The efficacy of using digital social media in providing academic writing support to university students can be considered the basis of Asio and Khorasani's (2015) statement that specifies multiple features—social media facilitates learning, more specifically personalised learning in an informal setting as the direction of discourse rests entirely on the users of the social network—of digital social media. Cross (2007) mentions that topics for discussions can vary according to participants' needs, which are stimulated by their general interests that can then be reflected through the individuals' posts in social media. Asio and Khorasani (2015) state the importance of the role of a facilitator in similar online learning environments to succinctly guide discussions, thereby enabling the participants to generate usable ideas and sorting through accessible data for useful threads of information.

Overall, there is a large body of research that highlights the importance of integrating educational technology into university education. However, more in-depth research on effective ways to integrate digital social media to enhance academic writing support to university students would be beneficial.

2.4 Self-efficacy

2.4	Self-efficacy	
	2.4.1	Self-efficacy: Definition and its background
	2.4.2	Self-efficacy: Key features
	2.4.3	Factors that affect self-efficacy
	2.4.4	Self-efficacy and academic writing
	2.4.5	Self-efficacy and digital social media

This section reviews literature related to self-efficacy. The definition and background of self-efficacy is discussed first. Second the key features of self-efficacy are explained. The factors that affect self-efficacy are discussed next. Finally, information on the relationship between self-efficacy and academic writing as well as online mediated learning is presented.

2.4.1 Self-efficacy: Definition and its background

The following discussion includes several definitions of self-efficacy. Bandura (1997) initially introduced self-efficacy beliefs focusing on studies on depression (Davis & Yates, 1982), and assertiveness (Lee, 1984). This research demonstrated the relationship between self-efficacy and behaviour modification (Schunk, 1989). However, later on the need for studies on self-efficacy constructs in the field of

education received growing attention. Several researchers (Bouffard-Bouchard, 1990; Bouffard-Bouchard, Parent, & Larivee, 1991; Lent et al., 2002) have suggested that self-efficacy influences motivation and cognition by means of affecting students' task interest, task persistence, the goals they set, the choices they make and their use of cognitive, meta-cognitive and self-regulatory strategies.

There is a close relationship between the constructs of self-efficacy and social cognitive theory. Bandura (1986) believes in human functioning that involves personal, behavioural, and environmental influences, also known as triadic reciprocity. Thus, social cognitive theory is underpinned by personal variables such as cognition and affect, behaviours, and environmental variables that interact and influence one another (Bandura, 1986). According to this theory human agency reflects the notion of empowerment through goal-directed actions, and self-efficacy plays an integral part empowerment (Cattaneo & Chapman, 2010).

According to Norton (2013), self-efficacy is an individual's belief and ability to perform in a certain situation, or how effective they feel in being able to accomplish a certain situation. Albert Bandura, a well-known psychologist from Stanford University, defined self-efficacy as a person's perceived ability to learn or do things at a certain level (Wentzel, Wigfield, & Miele, 2009). Wilson (2012) elaborates on self-efficacy—relating to one of Bandura's statements—as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Bandura (1994) has further emphasised that “self-efficacy beliefs determine how people feel, think, motivate themselves and behave” (p. 71).

Self-efficacy for a task can be held over a long period of time, yet it can just as easily change overnight with a determination that one is going to achieve, or the realisation that one is not going to achieve, a particular goal (Wilson, 2012). Wilson (2012) has also elaborated that this will change, either positively or negatively, as people become more involved with a particular undertaking. Due to the nature of the undertaking, either because it is so different from what has been a way of life for so long, or because it follows immediately after lack of success or completion at secondary school, personal feelings of self-efficacy will play a significant role (Wilson, 2012).

The definition of self-efficacy can also be based on Bandura's (1986) social cognitive theory definition. Accordingly, self-efficacy is defined as "people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances" (p. 391). Self-efficacy beliefs determine how people feel, think, motivate themselves and behave (Bandura, 1997). They constitute the key factor of personal agency that is instrumental in the goals individuals pursue and the control individuals have over their environment.

Apart from self-efficacy, some researchers mention that one's confidence is a necessary attribute to achieve success. However, Bandura (1997) argues that it is not only confidence that one must possess, but also perceived self-efficacy. This is mainly due to the fact that perceived self-efficacy pertains to the beliefs of a person's agentic capabilities that will lead to the realisation of designated levels of achievement. Therefore, the strength of these beliefs and certainty of the level of capability are the two primary aspects of self-efficacy beliefs.

However, some people still believe that confidence is a necessary attribute to achieve success. Honeck (2013) believes that perceived self-efficacy pertains to an individual's beliefs about his or her agentic capabilities that will lead to the realisation of designated levels of achievement. The strength of these beliefs and certainty of the level of capability are the two primary aspects of self-efficacy beliefs. By contrast, confidence is bound to strength of belief as well, even if it does not always lead to success.

2.4.2 Self-efficacy: Key features

Several researchers (Jinks & Morgan, 1999; Pajares & Miller, 1994; Zimmerman, 1995) mention five key features of self-efficacy: (1) self-efficacy is an assessment of competence to perform a task, not a judgment of personal qualities; (2) Self-efficacy is domain-specific; (3) Self-efficacy is context-dependent; (4) Self-efficacy is measured before the task is performed; and (5) Self-efficacy measurement does not depend on normative data.

Firstly, self-efficacy is considered as “an assessment of competence to perform a task, not a judgment of personal qualities. Individuals are asked to judge how well they can perform given tasks, but they are not asked about their personality traits, physical features or how a task makes them feel or think” (Webb-Williams, 2007, para. 2).

Secondly, Webb-William (2007) argues that self-efficacy is domain specific. Therefore, a person who is highly self-efficacious in a specific domain could be less self-efficacious in a different context.

Thirdly, self-efficacy is considered as context-dependent. “The execution of a task can be influenced by things such as competition, physiological state and environment. As such, efficacy beliefs are influenced by the surrounding circumstances” (Webb-William, 2007, para. 2). It is also believed that there is possibility for students to change their level of self-efficacy depending on their learning environment. This could either be a competitive learning environment or co-operative.

Fourthly, Web-Williams (2007) discusses the importance of measuring one’s self-efficacy prior to performing a task to reflect an individual’s perception of capability in light of the task demands rather than how one feels having completed the activity.

Fifthly, Web-Williams (2007) emphasises that self-efficacy measurement does not depend on normative data. This refers to data from a reference population that establishes a baseline for a score or measurement and against which the score or measurement can be compared (Campbell, 2013).

2.4.3 Factors that affect self-efficacy

Bandura (1997) identifies four factors that affect an individual's belief in his/her capability to act: (1) Experience/enactive attainment, (2) Modelling/vicarious experience, (3) Social persuasion, and (4) Physiological factors.

As the first factor, Palmer (2006) states that experiences are the most important factor that determines a student's self-efficacy because they provide authentic successes in dealing with a particular situation. They also provide students with authentic evidence about their capability to succeed at a task (Palmer, 2006).

Students interpret the results of their activities and these interpretations are used to develop their capability to perform in the subsequent tasks/activities which in turn help to develop their self-efficacy. Bandura (1997) states that, in general, successes build a strong sense of self-efficacy within individuals, while failures contribute towards lower self-efficacy. This is why Bandura (1997) has insisted on experience as an important requirement in overcoming obstacles and difficult situations through maintained effort and persistence, as self-efficacy cannot be created by easy success.

According to Bandura (1997), the second factor—modelling—refers to creating self-efficacy through observational experiences provided by social models. This vicarious experience is related to students obtaining information about their own capabilities by observing others, especially peers who offer suitable possibilities for comparison (Schunk, 1987). This process can affect the students' self-efficacy positively as well as negatively. However, Schunk (1989) mentions the possibility for these students to overcome their failures through observational experiences that help them to improve their self-efficacy. This is less effective in comparison to the experience people gain directly. However, Bandura (1997) argues that modelling can be particularly useful for students who are unsure of themselves in a particular domain of study.

As the third factor, Bandura (1997) mentions that social persuasion can generally create direct encouragement or discouragement from another person. It should also be noted that it is easier for a person to become low in terms of self-efficacy due to discouragement than gaining high self-efficacy through encouragement. This therefore provides students with opportunities to receive information that affirms and persuades them to perform a task related to a specific domain (Schunk, 1989). This

then makes it easier for students to manage their self-efficacy, especially under difficult circumstances.

Similarly, persuasive communication and evaluative feedback are also mentioned as highly effective facets of this factor. Therefore, facilitators should be aware of providing knowledgeable, reliable and realistic information as feedback for the students to get maximum benefits (Bong & Skaalvik, 2003). Schunk (1991) mentions about the importance of providing students with positive persuasive feedback as it heightens their self-efficacy.

Bandura (2006) explains how key psychological actions such as motivation, well-being, and sense of accomplishment can stem from self-efficacy. He mentions the importance of self-regulation and self-awareness as two key attributes which are responsible for forming those psychological actions.

2.4.4 Self-efficacy and academic writing

Perceived writing self-efficacy beliefs are defined as students' judgements of their writing capabilities and skills needed to perform various writing tasks (Pajares & Johnson, 1994). This is related to Bandura's (1986) definition of perceived self-efficacy beliefs "...people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances" (p. 391).

To possess a high level of writing self-efficacy, a person must believe that she or he possesses the ability and knowledge to deliver effective writing. The beliefs about writing processes and competency are instrumental for writing success (Bandura, 1997; Hidi & Boscolo, 2006; Pajares, 2003). Pajares and Valiante (2006) mention that "academic accomplishments can often be better predicted by students' self-efficacy beliefs than by their previous attainments, knowledge, or skills" (p. 159). Therefore, the writer with high writing self-efficacy is more likely to do what is necessary to properly perform the writing task and is likely to push to overcome challenges.

Writing self-efficacy can influence writing ability as well as diminish writing apprehension (Martinez, Kock, & Cass, 2011; Matoti & Shumba, 2011; Pajares, 2007). In terms of developing university students' academic writing self-efficacy, it is equally important for facilitators to pay attention to students' habits of writing

apprehension as it interferes with students' practising writing (Faris & Lynch, 1999; Matoti & Shumba, 2011). Paying more attention to reduce students' writing apprehension is important as many students become convinced that they cannot write and have nothing to say (Matoti & Shumba, 2011).

It is stated that self-efficacy in academic writing is an internalised construct that can be learned and developed over time through a synthesis of consistent self-evaluation, coaching and repeated practice (Schmidt & Alexander, 2012). These stages will enable a student to broaden the performance of evaluation that will instil more positive beliefs about their future writing, which then leads to overall academic performance.

Helping writers to develop their academic writing self-efficacy means providing actual writing experience, models for study and comparison, feedback from a variety of sources, and mitigation of mental and physical stress (Bandura, 1997; Pajares, 2003). This process begins with offering writers many varied opportunities to write so that they can develop their skills and strategies. This writing should also be meaningful and purposeful within a specific context. Writers must also be exposed to the work of other writers in this same context, and this writing must include comparable peers engaged in the process of developing a piece from conception to a polished final draft. Writers value feedback that is authentic and meaningful from multiple sources at various stages of the work. This type of feedback provides rich guidance and they sometimes consider it as an appraisal. Finally, writers must be made to feel ready—physically, mentally, and emotionally—to write. All of these stages combine to increase writing self-efficacy as well as mitigate the emotional and physical reactions to writing apprehension (Bandura, 1997).

Cleary and Zimmerman (2004) highlight the connection between academic achievement and self-regulation by stating that increased self-efficacy can be experienced only when students are geared towards self-regulated learning.

Another two important correlates of self-efficacy are: willingness to engage in domain-related activities, and persistence when confronted with difficulties or distractions. Bong (2006) argues that higher self-efficacy levels relate to various outcomes including setting higher goals, using more effective learning strategies, and having lower anxiety. It is found that students' self-efficacy in academic writing

related tasks becomes more critical as they perceive them as demanding, while they consider their motivation levels in this domain as less than ideal (Bruning, Dempsey, Kauffman, McKim, & Zumbrunn, 2013).

It should also be noted that even though self-efficacy influences one's performance, the change in performance may be delayed or affected by other internal construct variables—motivation, emotional disposition, life stress—that may cancel out the self-efficacy effect (Schmidt & Alexander, 2012).

2.4.5 Self-efficacy and digital social media

This section includes a discussion about Internet self-efficacy and social media self-efficacy. Self-efficacy in digital social media is discussed under the broad term Internet self-efficacy. Gangadharbatla (2008) defines Internet self-efficacy as confidence in one's ability to successfully understand, navigate, and evaluate content online through usage and adoption of web technologies such as social networking sites (SNS), in which digital social media are embedded. "Therefore, when considering behaviour and behavioural intentions, such as likelihood of adopting SNS, the impact of Internet self-efficacy should be more prominent" (Gangadharbatla, 2008, p. 7). However, Bunz, Curry, and Voon (2007) argue that a person's self-efficacy with the Internet per se may differ from his/her self-efficacy with digital social media.

Bandura (1997) discusses social media self-efficacy by conceptualizing the theory of self-efficacy in the context of social media. This highlights people's beliefs about their capabilities that are needed to perform desired functions in a digital social media environment.

The main four sources of information used when making self-efficacy judgements are: enactive mastery experience, vicarious experience, social persuasion, and physiological and emotional state (Bandura, 1997). The first three sources demonstrate effective linking with social media self-efficacy. In line with enactive mastery experience, a person's prior experience with tasks related to digital social media should contribute to his/her social media self-efficacy. Vicarious experience of a person impacts on his/her performance. This is affected by observations made via digital social media. Exposure to content in social media such as blog entries,

comments or videos should contribute to a person's level of social media self-efficacy. The positive feedback a person receives via digital social media contributes towards social persuasion and this encourages his/her self-efficacy perceptions (Bandura, 1997).

Overall, the literature shows extensive research that has been undertaken in the context of self-efficacy. However, there is a lack of attention paid to developing university students' academic writing self-efficacy. There is also little research that shows how a learner's overall academic performance can be affected by their higher self-efficacy in academic writing. Moreover, it is worth considering the positive effects that can be instilled within university students by combining all three areas: academic writing, digital social media and self-efficacy.

2.5 Research Conceptual Framework

A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to an idea or thought (Mehta, 2013). This embodies the specific direction by which the research will have to be undertaken. According to Regoniel (n.d.), a conceptual framework describes the relationship between specific variables identified in the study. It outlines the input, process and output of the whole investigation. The conceptual framework for this study was developed by the researcher, based on a combination of the two main domains that are determined to impact on the university students' perceived academic writing self-efficacy. This was created by exploring the existing research in two domains: academic writing support and digital social media, in order to identify if the combination of these variables will have a positive impact on university students' perceived academic writing self-efficacy.

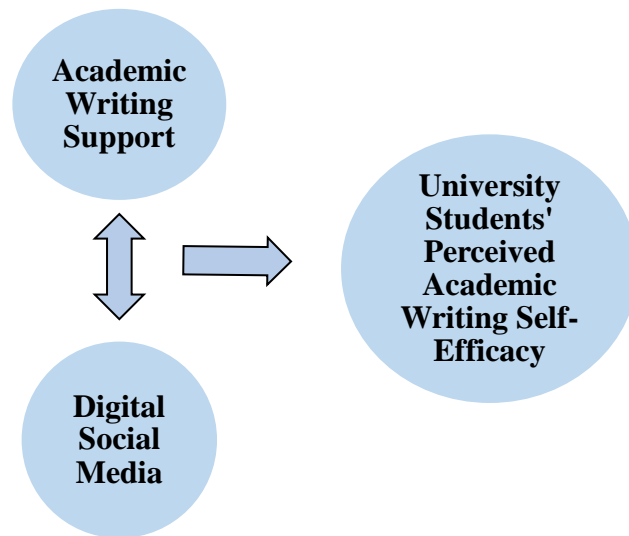


Figure 2.6 The relationship between the main three areas of the study

The first theory that is used in alignment with academic writing support was Self-Regulated Strategy Development Theory (SRSD) that was introduced by Harris, Graham, Mason, and Friedlender in 2008. The second theory that supports the integration of the digital social media component of this study is the Technology Acceptance Model (TAM) (Davis, Bagozzi & Warshaw, 1989).

Figure 2.7 presents a visual representation of the relationship between the chosen two theories related to university students' perceived academic writing self-efficacy.

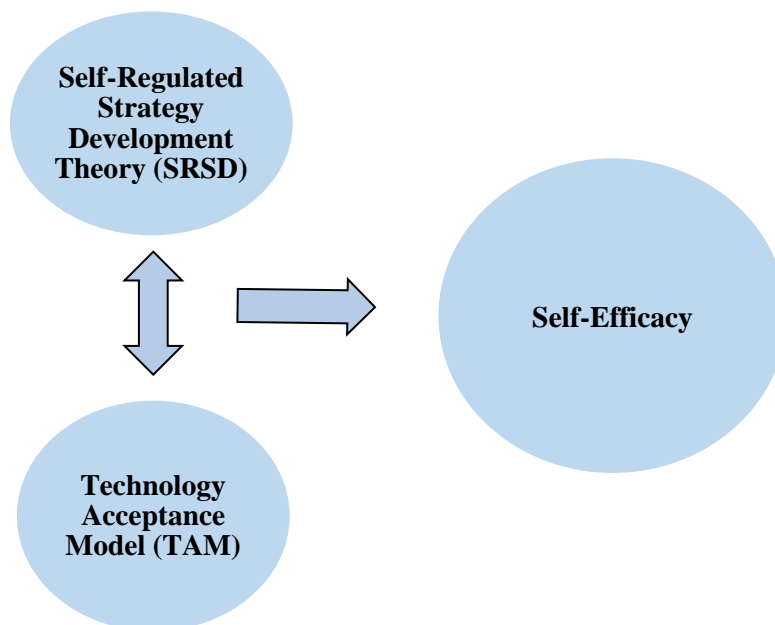


Figure 2.7 A developed conceptual framework for academic writing support using the existing literature

Figure 2.7 shows the combination of the two theories: SRSD and TAM. This fits with the intervention phase of this study as the main intention of this phase is to provide university students with academic writing support via digital social media. The concepts contained in the circles in the developed framework underpin this study and indicate the overall structure and relationships within and between.

Overview of Self-Regulated Strategy Development Theory (SRSD) and Technology Acceptance Model (TAM)

There is a relationship between the developed conceptual framework that consists of the two theories: SRSD and TAM, and the research approach.

Self-Regulated Strategy Development Theory (SRSD)

Self-Regulated Strategy Development Theory (SRSD) is used in this study as it is considered as a well-established, thoroughly validated instructional model that can be used to teach a variety of writing strategies (Harris et al., 2008). Zimmerman and Risemberg (1997) explain how expert writers even find it difficult to plan, compose, evaluate, and revise their compositions effectively. Thus, Harris et al. (2008) have mentioned that it is not surprising that many students struggle with the writing process. Even though they have specifically considered facilitating writing of elementary, middle and high school students, through the suggested strategies of this framework, the researcher of this study managed to adapt it to enhance perceived academic writing self-efficacy of university students. This was made possible as SRSD is considered to be a flexible instructional model that enables teachers to use research-validated practices to improve students' performance in all academic areas, including writing. The SRSD framework further supports students to explicitly learn strategies that involve planning, drafting, and revising that are used by highly skilled writers (Santangelo, Harris & Graham, 2007). SRSD theory also supports students of varying ages and ability levels, to consistently increase content knowledge, writing quality, strategic behaviour, self-regulation skills, self-efficacy, and motivation (Santangelo et al., 2007).

This SRSD framework is basically divided into three goals and six stages. The three goals are:

- Developing mastery over the process of planning, drafting, revising, and editing written compositions
- Increasing the ability to self-regulate and monitor themselves as they write
- Promoting positive attitudes and beliefs about writing and their self-efficacy as writers (Santangelo et al., 2007).

The three goals of this theory also demonstrate explicit linking with the purpose of this study, while informing the pedagogy that is used during the academic literacy support intervention phase. This provides a general representation of relationships between components in a given phenomenon and according to this study it is based on the ability of students' academic writing (Regoniel, n.d.). This made it possible for the researcher to discuss the findings of the study while aligning with SRSD theory.

The six stages of this SRSD framework are:

- 1 Develop background knowledge
- 2 Discuss it
- 3 Model it
- 4 Memorise it
- 5 Support, and
- 6 Independent performance (Harris et al., 2008).

These six stages inform how the above expectations mentioned under the three goals can be achieved. Figure 2.8 shows the relationship between the three goals and six stages of SRSD theory.

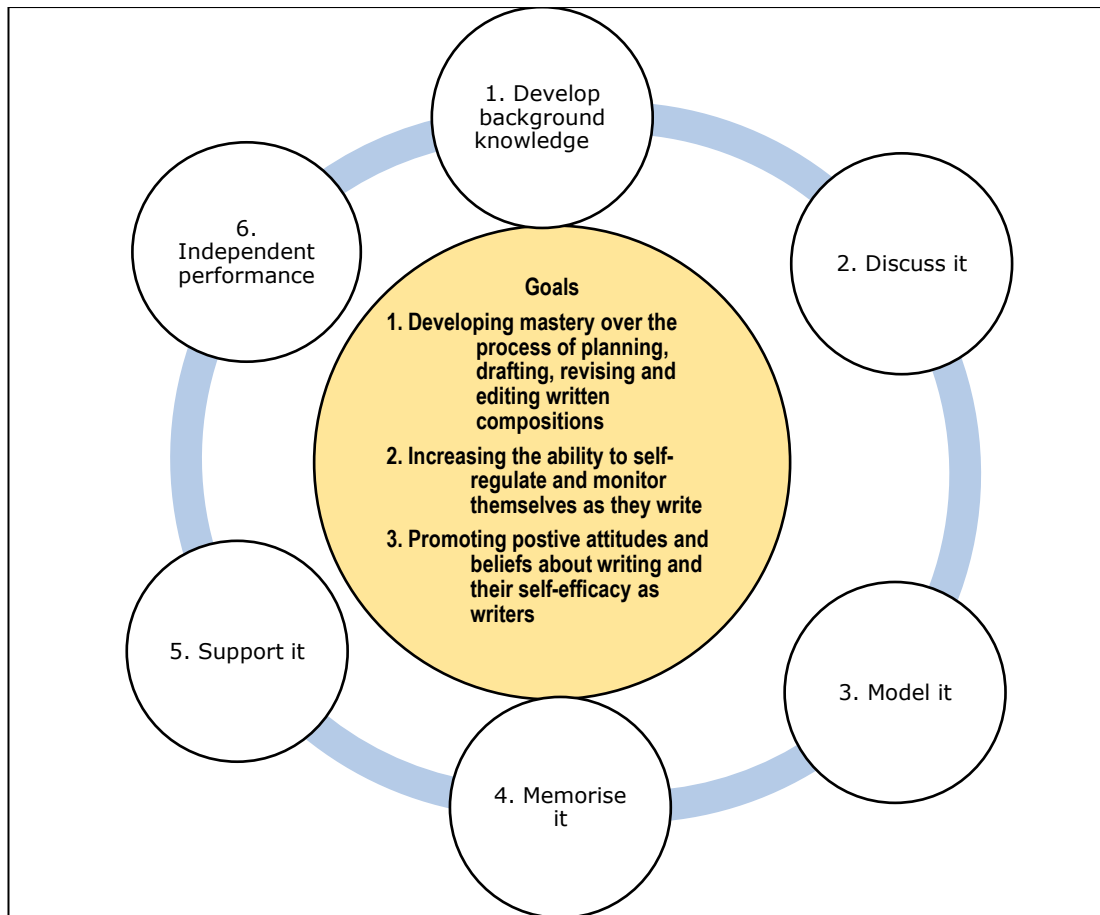


Figure 2.8 Six stages of Self-Regulated Strategy Development Theory (SRSD) (Harris et al., 2008).

Harris et al. (2008) delineate the expectations of the main six stages of SRSD theory and the following section elaborates these.

Stage one- Develop background knowledge

This stage is considered as the introductory stage that will be used to ensure that the students will successfully understand, learn, and apply the strategy. This is the stage in which teachers should identify the needs of the students. It will also allow teachers to make necessary decisions that could support students to achieve the required standards in academic writing.

Stage two- Discuss it

The purpose of this second stage is to ensure that the students are motivated and willing to learn the new strategy. This is based on their current writing performance and their perceptions of the writing process. This information becomes the foundation for discussing the purpose and potential benefit of the new strategy.

Stage three- Model it

In ‘Model it’, students are shown how to use the new strategy. Modelling is most effective when teachers use a “think-aloud” process that highlights the “why” and “how” of each strategy step, and show how to use positive self-statements to maintain motivation and address attributions. This gives students an opportunity to discuss the benefits and challenges of a specific strategy and to think of ways they can be modified to make the strategies more appropriate or effective. This stage will also help students to maintain a positive attitude and persistence throughout the writing process. Finally, the concept of goal setting will be introduced to students where they can set individual targets based on their baseline performance.

Stage four- Memorise it

This stage allows the students to become familiar with the steps in a strategy that enables them to use what they learn automatically later on.

Stage five- Support it

The ‘Support it’ stage enables students to gradually assume responsibility for using the new strategy. This process is most effective when teachers scaffold instructions, use cooperative peer groups, provide constructive feedback, and offer positive reinforcement (Dickson, Collins, Simmons, & Kameenui, 1998). However, the amount of time it takes the students to demonstrate the mastery of a strategy will vary as is the nature of the acquisition of any skill. According to Graham and Harris (2005), it is believed that if the SRSD model is used with appropriate strategies, the majority of the students will be successful in applying a strategy after two to four collaborative, scaffolded experiences.

Stage six- Independent performance

The final stage of this framework aligns with the goals of this study. This ensures that students use a strategy consistently over time, in multiple settings, and with a variety of tasks. Students are encouraged to recognise how the strategy supports them to improve their writing, enabling them in the process to find ways to modify it to suit their own needs.

The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is the second model that is combined with Self-Regulated Strategy Development Theory (SRSD) in the conceptual framework of the study. The main concepts of TAM are summarised in Figure 2.9.

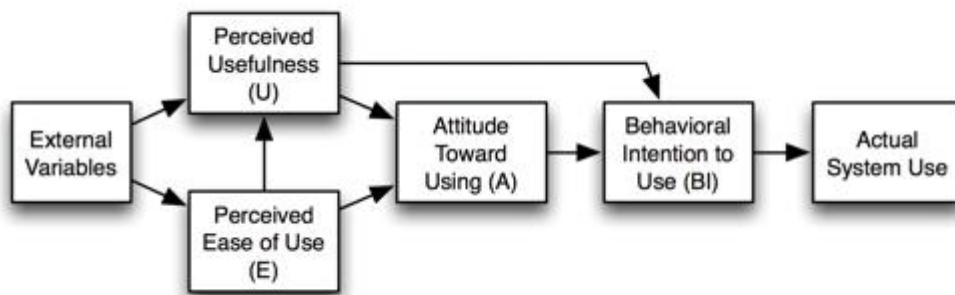


Figure 2.9 Technology Acceptance Model (TAM) (Davis, 1998)

The technology acceptance model (TAM) is an information systems theory that models how users come to accept and use technology. Davis (1989), in his seminal work, highlights a number of factors that influences the users’ decisions when they are presented with a new technology. These factors are illustrated in Figure 2.9. The two most noted factors among them are: (1) perceived usefulness and (2) perceived ease-of-use. Davis (1989) defines perceived usefulness as “the degree to which a person believes that using a particular system would enhance his or her job performance” (p. 320) and perceived ease of use as “the degree to which a person believes that using a particular system would be free of effort” (p. 320). The users of a new technology are informed about how and when they will use it in this model.

Vankatesh and Davis (2000) extended the original TAM to explain perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes. This has enabled researchers to explore the effects of external factors such as perceived self-efficacy, facilitating conditions, and system quality on a user’s attitude, behavioural intention and actual use of technology (Fathema, Ross & Witte, 2014; Fathema, Shannon & Ross, 2015).

The combination of SRSD theory and TAM provides a suitable and effective conceptual framework for this study. Figure 2.10 visualises the relationship between the three main concepts - (1) academic writing, (2) digital social media, and (3) self-efficacy - of the study and the underpinning theories of the conceptual framework.

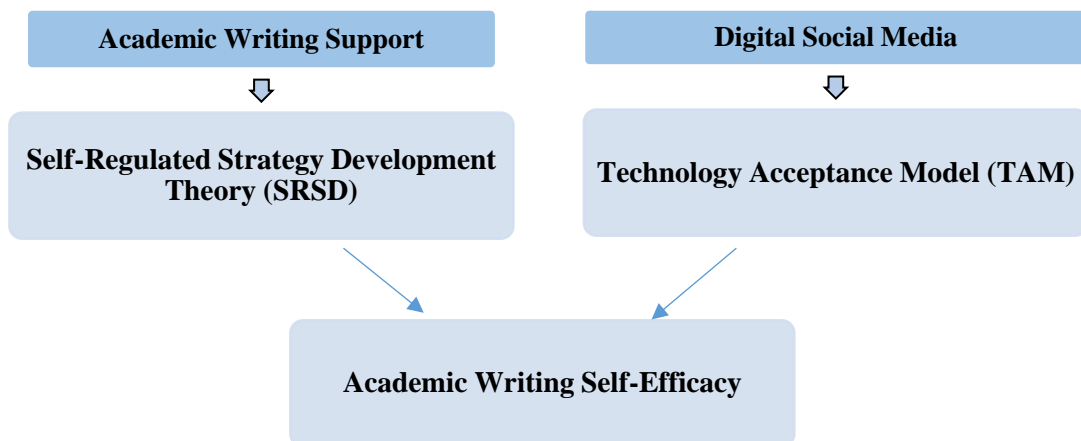


Figure 2.10 Relationship between the three main concepts of the study and the conceptual framework

2.6 Chapter Summary

The first part of Chapter Two explored a review of the literature, which demonstrated the main three components of this study: academic writing, digital social media, and self-efficacy. The discussion on all three areas was related to the context of university students and their education.

Then the conceptual framework that underpinned this case study was discussed. Two separate models were combined when forming the theoretical framework, to align with the main purpose of this study. These two models were Self-Regulated Strategy Development Theory (SRSD) and the Technology Acceptance Model (TAM).

Chapter Three discusses the selection of mixed methods as the research methodology, which is informed by the underlying principles of the theoretical

framework of this case study. This also includes information related to the research design and its procedures.

Chapter 3 Methodology

3.1	Introduction
3.2	Link between the research design and the conceptual framework
3.3	Research Methodology
	3.3.1 Philosophical worldview
	3.3.2 Case study
	3.3.3 Sequential explanatory mixed methods
	3.3.4 Research design
3.4	Research Procedure
	3.4.1 Participant selection
	3.4.2 Data collection instruments and process
	3.4.3 Data analysis procedure
	3.4.4 Ethical consideration of the study
	3.4.5 Privacy and confidentiality of participants
3.5	Chapter summary

Figure 3.1. Structure of Chapter three

3.1 Introduction

The purpose of this chapter is to provide an overview of the adoption of the methodology used in this case study. First, it includes the purpose of the study and research questions. Second, it discusses the relationship between the research design and the conceptual framework of the study. Then it outlines the research methodology and research procedure of this study.

The main purpose of this study is to uncover university students' perceived academic writing self-efficacy beliefs in terms of the academic writing support given via digital social media. Thus, the main research question of this study is: *What are the academic writing self-efficacy beliefs of university students in terms of gaining academic writing support via digital social media?*

There are sub research questions that are used to gather information to address the main research question. The sub research questions (RQs) presented in Chapter One are illustrated in Figure 3.2. This is intended to show the exact stage of the study in terms of addressing each of these questions at a pre- or post- intervention stage. The use of multi-level numbered RQs in this section is important in making the research design and analysis clear.

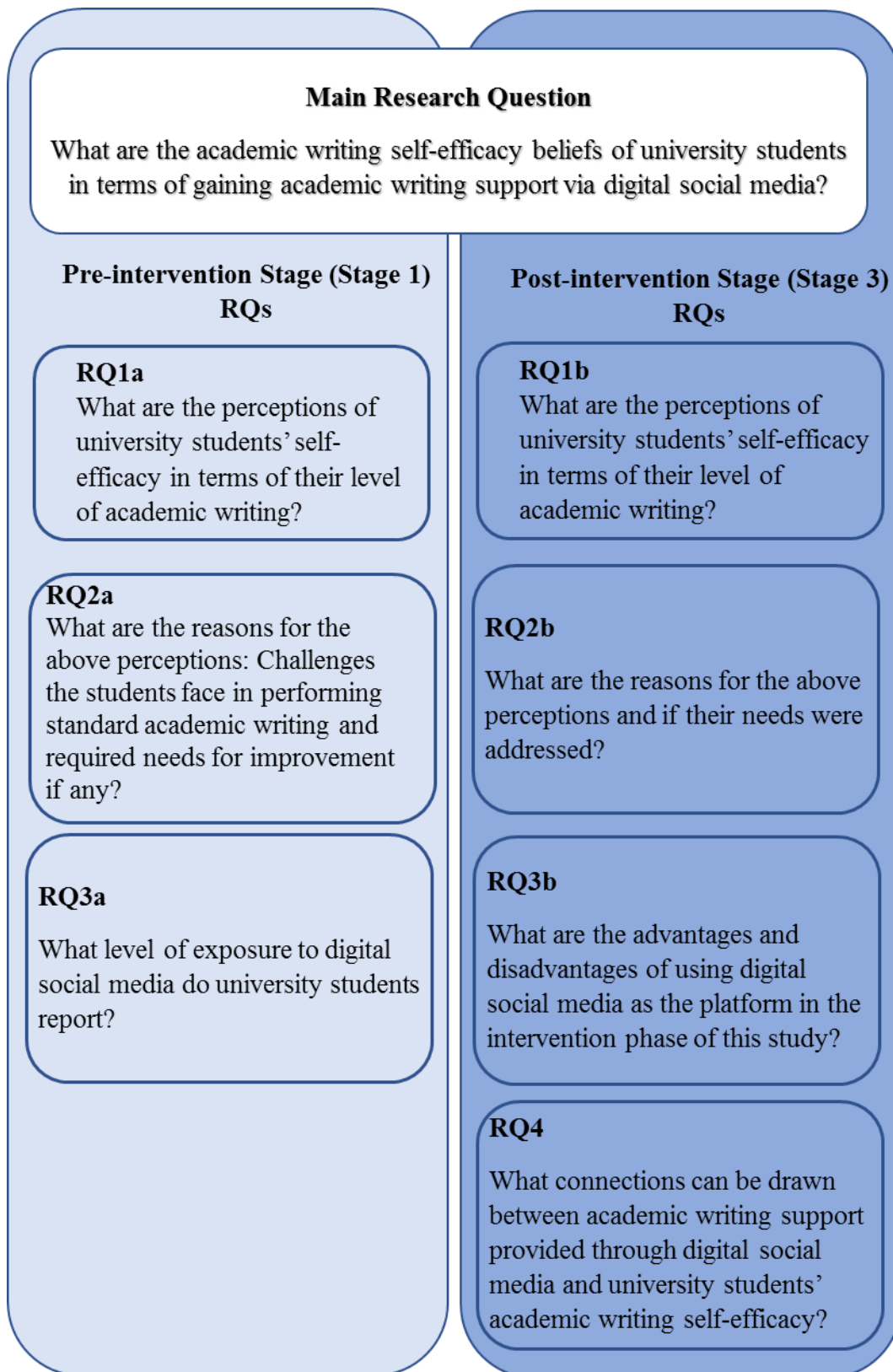


Figure 3.2 Sub Research Questions (RQs) posed in this study

3.2 Link between the research design and the conceptual framework

The relationship between the research design and the conceptual framework of this study is considered to be important, mainly because it will ensure that the collection of data supports the research findings to contribute to existing knowledge in the field. Therefore, the affordances of Self-Regulated Strategy Development Theory (SRSD) (Harris et al., 2008) and the Technology Acceptance Model (TAM) (Davis, Bagozzi & Warshaw, 1989) are determined in terms of how they assist in analysing how university students' perceived academic writing self-efficacy beliefs are affected.

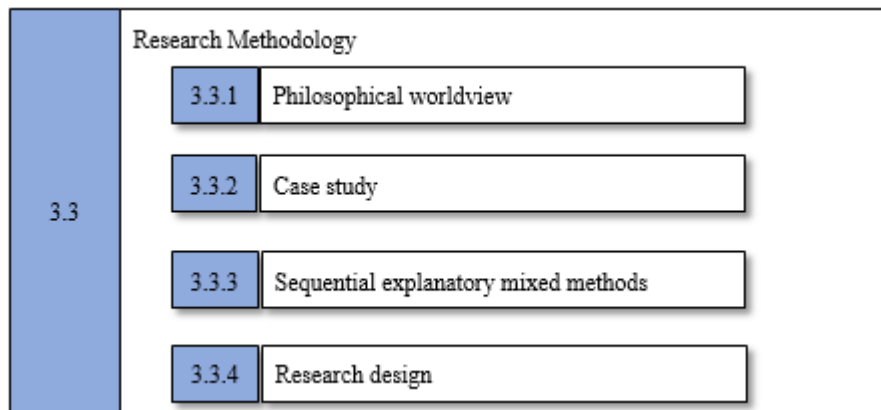
Santangelo et al. (2008) have documented evidence that support SRSD leading to significant and meaningful improvements in writing knowledge, writing quality, writing approach, self-regulation skills, and motivation. These affordances of SRSD directly align with the purpose of this study as it intends to uncover the perceptions of university students' perceived academic writing self-efficacy. This is based on the provisions of academic writing support via digital social media during the intervention phase of this study. The involvement of digital social media at this stage of the study shows the relevance of the TAM model, which allows the researcher to identify the perceived usefulness of digital social media and its ease of use in this context.

Furthermore, the effectiveness of the instructional approach to teaching has been considered as another feature of SRSD theory, in terms of how it guides students towards brainstorming and organising ideas, generating substantive content, and editing and revising their work (Harris et al., 2008). More importantly, the implementation of SRSD theory in teaching writing has been successful in inducing improvements in students' writing when maintained over time and generalised across settings, genres, people, and media (Graham & Harris, 2005). Since this shows an explicit relationship with media, it relates to the Technology Acceptance Model (TAM) as well.

Santangelo et al. (2008) state the importance of examining why writing has become a difficult task for the majority of students in order to fully understand the necessity and rationale underlying the use and benefit of SRSD theory. This study

acknowledges this issue through the pre-intervention stage interviews, which allowed the researcher to gather data that was relevant to students' perceptions about the areas of difficulty in performing standard academic writing.

3.3 Research methodology



3.3.1 Philosophical worldview

It is important to identify a suitable philosophical worldview before designing and conducting a research study to ascertain whether it needs a quantitative, qualitative or mixed methods approach. Philosophical worldviews are the foundation of research. Creswell (as cited in Guba 1990, p. 17) simplifies the term “worldview” by explaining its meaning as “a basic set of beliefs that guide action”. These worldviews have been condensed into four broad categories such as post-positivism, constructivism, advocacy and participatory, and pragmatism. This particular study is based on a pragmatic worldview due to the alignment of its features to a broader context, but mainly due to a pragmatic worldview allowing for both quantitative and qualitative assumptions (Creswell, 2013). Other than that, the common philosophical elements of pragmatism are: (1) consequences of actions, (2) problem centred, (3) pluralistic, and (4) real-world practice oriented (Creswell, 2013). “Consequences of actions” shows an explicit link to the research gap of this study, as there is lack of educational research in the area of providing academic writing support in Australian universities to both native and non-native speakers of English.

Table 3.1 illustrates the elements of pragmatism as the Philosophical Worldview that this study is underpinned by.

Table 3.1 Features of pragmatism as the worldview element of this study

Worldview Element	Pragmatism
Ontology (What is the nature of reality?)	Singular and multiple realities (e.g., researchers test hypotheses and provide multiple perspectives)
Epistemology (What is the relationship between the researcher and that being researched?)	Practicality (e.g., researchers collect data by “what works” to address research question)
Axiology (What is the role of values?)	Multiple stances (e.g., researchers include both biased and unbiased perspectives)
Methodology (What is the process of research?)	Combining (e.g., researchers collect both quantitative and qualitative data and mix them)
Rhetoric (What is the language of research?)	Formal or informal (e.g., researchers may employ both formal and informal styles of writing)

The ontology of pragmatism includes multiple realities that can be identified. This shows effective linking with the participants’ multiple perspectives on the level of academic writing support they gain from universities, while highlighting the challenges and needs they have in relation to this particular context. The researcher is also concerned about the epistemology of pragmatism when collecting data while maintaining close rapport with the participants throughout the study, especially during the intervention phase. The academic writing support these participants receive during this stage will have an impact on the post-intervention stage interview questions that will also assist in addressing the fourth research question: *What connections can be drawn between academic writing support provided through digital social media and university students’ academic writing self-efficacy?*

This will once again have a direct impact on the main research question as well. The researcher had the flexibility to include questions in between the semi-structured interviews. This allowed the researcher to gather more in-depth data within the scope of study as per the

freedom provided through the axiology of pragmatism. According to the methodology related to this philosophical worldview, the researcher could incorporate a mixed methods approach that included self-efficacy questionnaires and interviews. This gave a balanced perspective of the participants' views about their perceived academic writing self-efficacy.

3.3.2 Case study

The research uses a case study approach (Yin, 2009) accompanying quantitative and qualitative methods within an overall qualitative design. This research methodology has been defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, where the boundaries between phenomenon and context are not clearly evident (Yin, 2009). The strength of case study methodology depends on interpretation of what the participants say about their reality. The context of this case study comprises the self-efficacy beliefs of university students in a regional Australian university in terms of their ability to perform standard academic writing.

A case study method can include a range of data gathering methods (Yin, 2009). Stake (2000) and Flyvbjerg (2006) concede that a case study should not essentially be qualitative. Therefore, this study incorporated mixed methods, including both quantitative and qualitative methods. Pluye and Hong (2014) propose four definitions for a mixed methods approach:

Mixed methods research is a research approach in which a researcher or team of researchers integrates (a) qualitative and quantitative research questions, (b) qualitative research methods and quantitative research designs, (c) techniques for collecting and analysing qualitative and quantitative data, and (d) qualitative findings and quantitative results (p. 30).

This study used mixed methods for collecting and analysing qualitative and quantitative data. The use of mixed methods in data collection of this study is evident through research instruments such as self-efficacy questionnaires, interviews and field notes. The data analysis process of this study too is underpinned by mixed methods. The quantitative and qualitative data are combined to validate the results and to assist in drawing conclusions of this research.

Triangulation of data is used in case study methodology to give validity to the study (Yin, 2009). This occurs through cross verification from two or more sources, which in particular refers to the application and combination of several research methods in the study of a same phenomenon (Bogdan & Biklen, 2006). This will also lead to reduced bias in research and to

increasing the rate of certainty of the research findings while investigating the issue from different positions and then converging the results (Creswell & Poth, 2017).

According to Yin (2009), there are five components of effective case study research design: (1) research questions, (2) propositions or purpose of study, (3) unit analysis, (4) logic that links data to propositions, and (5) criteria for interpreting findings. This case study research has been designed in alignment with the above five components.

Farmer, Robinson, Elliot and Eyles (2006) summarise the importance of employing triangulation in a research as it allows the researcher to: (1) obtain a variety of information on the same issue; (2) use the strength of each method to overcome the deficiencies of the other; (3) achieve a higher degree of validity and reliability; and (4) overcome the deficiencies of single-method studies. Even though Abercrombie, Nicolas, Hill, Stephen, and Turner (1984) criticised case studies for their inability to generalise on the basis of an individual case, Lincoln and Guba (2000) argue that this depends on the inquirer's ability to see transferability between similar cases.

Quantitative methodology is based on the connection between empirical observation and mathematical expression of quantitative relationships (Given, 2008). By contrast, qualitative research is employed in many different academic disciplines as a method of inquiry (Denzin & Lincoln, 2005) because it supports an in-depth understanding of human behaviours and the reasons that govern them while investigating the *why* and *how* of decision making (Shirish, 2013).

The quantitative data in this study was used to explain the participants' perceived academic writing self-efficacy beliefs during its pre- and post-intervention stages. The qualitative data set was given priority in describing the participants' experiences in relation to gaining academic writing support and their level of exposure to digital social media in the pre-intervention stage. Interviews were also administered, during the post-intervention stage, to gather the participants' views on the advantages and disadvantages of using digital social media as the platform in the intervention phase to provide academic writing support, and its impact on their perceived academic writing self-efficacy, if any.

Finally, combining quantitative and qualitative results enabled the researcher to address the fourth research question of this study. This was intended to identify the connections between academic writing support provided through digital social media and university students'

perceived academic writing self-efficacy. Bryman (2006, 2015) states that some research questions can be answered only by combining the two approaches within one study. Likewise, the main research question of this study could only be addressed through a combination of quantitative and qualitative data from all stages of this study.

Overall, a case study approach was considered to be the most appropriate approach to employ within this study due to its interpretive position and the nature of the research questions. This enabled the researcher to collect data, analyse information, and report results in a systematic way. A mixed methods approach allowed the researcher to make the research claims stronger through quantitative and qualitative results (Biesta, 2010; Gorard & Taylor, 2004). This may in turn persuade and convince policy-makers in the higher education sector towards implementing similar academic literacy support programmes to the ones described in this study.

3.3.3 Sequential explanatory mixed methods

The meaning of mixed methods research does not simply depend on two separate components as quantitative and qualitative (Wu, 2011); rather, the studies and their findings should follow a logic of integration (Creswell & Tashakkori, 2007). There are different ways of mixing quantitative and qualitative methods in a research project (Creswell, 2013; Pluye & Hong, 2014), leading to different ways of solving problems by producing findings from each data set that complement each other.

Sequential explanatory mixed methods underpinned the research design of this study. The quantitative data collection phase preceded the qualitative data collection and analysis phase. This allowed the data from the initial stage to inform the subsequent phase (Onwuegbuzie & Combs, 2011). Following this process has enabled the researcher to explore if the perceived academic writing self-efficacy beliefs of university students can be increased through provision of academic writing support provided via digital social media.

The researcher collected and analysed quantitative data first and then qualitative data in two consecutive phases within this study, underpinned by the use of sequential explanatory mixed methods (Ivankova, Creswell, & Stick, 2006). Analysis of quantitative data in self-efficacy questionnaires informed the interviews in pre- and post-intervention stages. Since the qualitative phase built on the first quantitative phase, it enabled the researcher to gain a general understanding of the research problem (Creswell, 2008). Likewise, the researcher was

enabled to explore the reasons for these students' self-efficacy ratings through semi-structured interviews during the pre- and post-intervention stages of this study. Once quantitative and qualitative data of both stages was collected, the next step of this explanatory sequential mixed method was to combine both of these data sets of a single stage or from different stages and to integrate them (Ivankova, et al., 2006). This last step of this method enabled the researcher to address the main research question of this study.

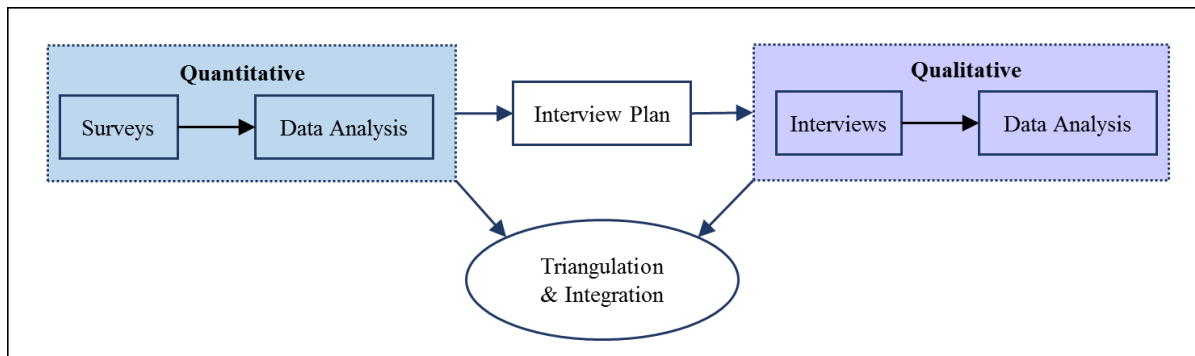


Figure 3.3 Sequential explanatory mixed methods (Wu, 2011).

This sequential explanatory mixed methods was applied twice in this study: (1) during the pre-intervention stage and (2) during the post-intervention stage. Since this sequential explanatory mixed methods was employed in two different stages it was considered as iterative.

3.3.4 Research design

Research design refers to the plan or proposal to conduct research, which involves the intersection of a philosophy, strategies of inquiry, and specific methods (Creswell, 2008). The research design of this study is shown in Figure 3.4. This includes the different methods that were used to collect data during the three main stages of the study and the importance of the data towards addressing the sub research questions (RQs) and the main research question.

Literature Review	➔	Academic writing	➔	Identify the research gap		
		Digital social media		Research model		
		Self-efficacy				
		Conceptual framework				
Methodology	➔	Stage 1 Pre-intervention stage	1a Self-efficacy questionnaire	➔	Research Question (RQ) 1a	
			1b Interview		RQ2a RQ3a	
		Stage 2 Intervention stage	Implementation of the conceptual framework.		➔	Provide academic writing support using digital social media.
		Stage 3 Post-intervention stage	3a Self-efficacy questionnaire	➔	RQ1b	
			3b Interviews		RQ2b RQ3b	
Analysis	➔	<u>Quantitative data analysis</u> Analysing self-efficacy questionnaires.		➔	Students' perceived academic writing self-efficacy beliefs during pre-and post-intervention stages.	
		<u>Qualitative data analysis</u> Analysing interview transcripts			➔	Students' overall idea about gaining academic writing support via digital social media.
		<u>Mixed analysis</u> combining quantitative and qualitative data		➔	Addressing RQ4 & the main research question. Validate findings in drawing conclusions	
Thesis writing	➔	Discussion Conclusion	➔	Collating results of the above stages.		

Figure 3.4 Research design of this study

The case study was comprised of three stages:

1. Stage 1 - Pre-intervention stage
2. Stage 2 - Intervention stage
3. Stage 3 – Post-intervention stage

Stage 1: Pre-intervention stage

Stage 1 was the initial stage of this study. The main purpose of this pre-intervention stage was to collect data that was needed to address the research questions and to organise the academic writing support process. The two instruments that were used to collect data during this stage were: self-efficacy questionnaire and interviews. These two data sets were gathered sequentially. Table 3.2 summarises the process of this stage.

Table 3.2 Actions completed in Stage 1 (Pre-intervention stage).

Action Number	Description of actions
1.	Pre-intervention stage, self-efficacy questionnaires were sent to participants via email and the researcher received the filled-out forms.
2.	The quantitative data was analysed.
3.	Results were incorporated to add necessary follow-up questions to the interview questionnaires.
4.	One-on-one, face-to-face interviews (Pre-intervention) were administered and recorded.
5.	Pre-intervention interview data were transcribed and analysed.

Firstly, the participants were sent the self-efficacy questionnaire (Appendix F) via email, and they returned their completed questionnaires to the researcher. The initial quantitative analysis took place at this stage prior to the interviews. The findings from this quantitative strand were used in developing interviews through adding follow-up questions to make them more in-depth (Tashakkori & Teddlie, 2008). Tashakkori and Teddlie (2008, p. 101) describe this meta inference as “an overall conclusion, explanation or understanding developed through and integration of the inferences obtained from the qualitative and quantitative strands of a mixed method study”.

The pre-intervention stage interviews were then administered. The interview is often viewed as a conversation between the interviewer and interviewee, in which the interviewer asks questions and the interviewee responds accordingly (Esterberg, 2002). Merriam (2009) further identifies active listening and non-judgmental behaviour as two common practices that should be prioritised when interviewing for case study research.

The questions that were asked from the participants at this stage appear in the Stage 1 section of Appendix G. These questions were divided into six types: (1) experience/behaviour, (2) opinion/belief, (3) feeling, (4) knowledge, (5) sensory, and (6) background/demographic (Merriam, 2009). The data relevant to perceptions of the participants was based on academic writing, digital social media and self-efficacy.

The interviews were audio-recorded and transcribed (Creswell, 2013). The researcher then coded the data for emergent themes. These qualitative findings provided more insight about the provision of academic writing support to these participants.

Stage 2: Intervention stage

The main intention of this particular stage was to provide academic writing support to participants who sought support in this context. This stage was underpinned by the conceptual framework of the case study as elaborated in Chapter Two, section 2.5 of this thesis. Two main frameworks that comprise this framework are: Self-Regulated Strategy Development Theory (SRSD) and Technology Acceptance Model (TAM).

Characteristics such as enthusiasm, active involvement and collaboration, individualised, criterion-based instruction, authentic writing tasks, supportive environment, constructive feedback, and predictability informed the support sessions (Graham & Harris, 2005). The involvement of a digital social media platform was a way of providing a supportive environment to the participants of this study. The specific digital tools, including digital social media that were employed within this programme were Facebook, Zoom, Blog, and email. The online environment is said to be supportive, pleasant and non-threatening, which was expected to help participants to develop their passion for writing.

Overall, the academic writing support programme ran for 4-6 weeks. The main conversations were through a Facebook closed group in which the participants could communicate with the facilitator and peers. Other than that, Zoom, Blogs and email were also used for communication. The facilitator was engaged in this process with flexible work hours to

ensure that the participants' requirements were met, such as gaining rapid feedback to their questions. However, this depended on the nature of the question they pose. Even if it was a question that needed an elaborated answer, the facilitator made sure that this was communicated to the participant as soon as possible. In addition the participant was provided with other relevant activities or readings that could address their query to some extent.

The process of this academic writing support session was led by the best practice model (McWilliam & Allan, 2014) as illustrated in Figure 3.5. However, the facilitator was compelled to replace some of the elements in this model due to practicality issues. The main replacement was the role of the subject lecturer as it was impractical to employ a subject lecturer for this session throughout. Therefore, the facilitator made adjustments to align with the focus of the original model.

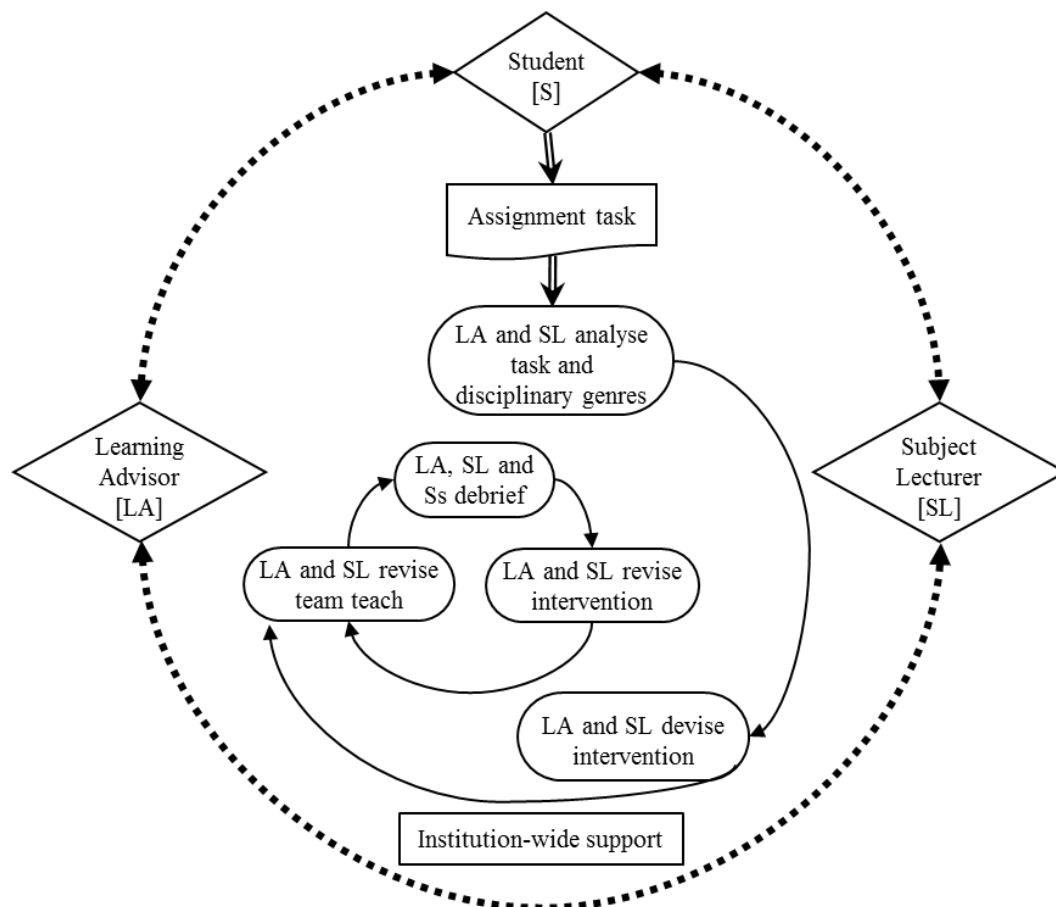


Figure 3.5 Best Practice Model (McWilliam & Allan, 2014)

First, the participants were informed about the process and they were invited to come up with any of their assignment tasks, along with the marking rubrics, where they found difficult to address the given questions. Some participants posted assignment questions openly in the

closed Facebook group, while others sent them directly to the facilitator, either as a private message through Facebook or through email, possibly because they initially did not want their identity to be exposed. The assignment questions that were forwarded privately to the facilitator were discussed as sample questions. However, later on in the process all the participants felt more confident to share their questions openly among the group.

Once the facilitator received an assignment task, it was then analysed prior to discussing it with the participants. As per the best practice model (McWilliam & Allan, 2014), this step needs to be executed with the help of a subject lecturer. However, the facilitator used the marking rubrics instead, to analyse the given tasks. At times, the facilitator requested additional material from the participants such as their course material prescribed by their subject lecturers. All these resources supported the facilitator to gain a clear, precise idea about each of the assignment tasks and it also enabled the facilitator to draw up a clear structure that provided guidance to the participants when writing the whole assignment.

Then the facilitator arranged a Zoom meeting to discuss each of these assignment questions with the whole group, taking one assignment question at a time. This platform was very effective in discussing assignment questions as the facilitator or any other member in the group had the ability to share their screen during the discussion. Another advantage of Zoom was its ability to record these sessions. These recordings were then shared via Blog posts among the participants for their future reference. The participants who were unable to attend the discussion sessions benefitted significantly from these recordings. Even when none of the participants were able to attend Zoom meetings, the facilitator did a video recording explaining the assignment task briefly and providing guidance as to what steps they needed to follow next.

Next, the facilitator devised the intervention stage with the use of stages in the SRSD model, keeping in mind that the original best practice model (McWilliam & Allan, 2014) shows collective involvement of both learning advisor and subject lecturer in organising this intervention stage.

According to the first stage of the SRSD model, participants were given the opportunity to express their views on background knowledge related to one assignment task. Then the facilitator initiated a discussion that illustrated different ways a learner could structure the particular assignment question while paying attention to its key words. Then they were given some time to express their own ideas and draw up a structure to suit the task being discussed.

They posted each of their structures as a Blog post. The facilitator then intervened to comment on each of the structures. Generally, the positive comments were published with the Blog post, while the areas that needed further improvement were addressed through private Facebook messages to each participant.

The facilitator also shared some links that could benefit the participants in their particular context. This informed all participants about ways of finding credible, relevant and current sources. This strategy was aimed at developing their contextual knowledge as well as their ability to write. It also benefitted the facilitator, as she got the opportunity to identify more current resources in particular fields. This stage of the best practice model is named as “LA and SL revise team teach”.

Once all these assignment tasks were discussed the participants started writing their actual assignment and sent it to the facilitator via email. The facilitator went through the task and provided them with standard feedback on how their academic writing could be adjusted whenever needed. This also guided them to check whether they had met the expectations of the marking rubric.

The participants’ behaviour and the questions they posed during this session enabled the facilitator to get an idea about their perceptions of this particular support session. This was considered as participants’ feedback, which replaced the involvement of subject lecturers as per the last two stages of the best practice model in Figure 3.5. The facilitator considered which ideas needed to be used when revising the next support sessions to meet the participants’ requirements.

The facilitator also paid attention to specific needs of individual participants, apart from addressing assignment tasks, as some of them did not have specific tasks, for example PhD students. These needs were identified through the ratings of the first stage of self-efficacy questionnaires and interviews. The Blog was an effective platform in addressing these needs as this allowed for general advice that did not target any participant specifically, which ensured their privacy. The facilitator posted short Blog posts that included information and guidance in areas in which support was sought the most. However, there were links that led to more in-depth information for whoever wanted it. These Blog posts included written posts as well as videos to motivate them to learn and this method also enabled participants with different learning styles. In addition, the participants were given the chance to upload their own videos that included their reflections or perceptions about academic writing or other

resources they found useful in developing their academic writing. These needed to be followed up with a short description that indicated how the participants could benefit from them.

Facilitator's role

The researcher's role was transformed into the role of facilitator during this stage of the study. The researcher's qualifications and experience in the field of education within the higher education sector were beneficial in providing academic writing support during this support session.

The researcher considered maintaining reliability and trustworthiness throughout the study in all stages: planning, implementation and analysis. This section discusses the considerations included to ensure the trustworthiness of data collection that was administered during the intervention stage of this study. The facilitator's role was also administered in alignment with these considerations and to ensure guarding against subjectivity when taking field notes.

Even though there were variations between the participants' ages, demographics, levels of study and levels of academic performance, the facilitator was aware of all these when providing academic writing support to these participants. Reasonable adjustments were made whenever a need arose during the support programme. This ensured that participants were not being offended or humiliated at any circumstance either by the facilitator or by their peers. Even though the participants had already had initial contacts with the facilitator prior to this stage, a prepared introductory monologue was presented via Zoom to all participants, depending on their availability, as the initial step of this process. This included information about the background of the facilitator as well as about the support programme. Describing the experience and educational background of the facilitator enabled the participants to develop confidence about the facilitator's ability in this context. This also included information related to the expected conduct in this support programme and the rules that needed to be followed by all participants ensuring confidentiality and rights of each participant. The facilitator discussed the process of this programme and the extent of the support given through these sessions. This focused on minimising potential conflicts that could have arisen during the session, by not giving high expectations that could lead to disappointment and anxiety of these participants. For example, the facilitator was explicit about the limits of the support given on the actual assignments.

During this monologue the facilitator informed the participants about the freedom they had to raise questions related to academic writing at any point. This allowed the participants to be more comfortable to engage in open conversations via digital social media, which then allowed them to converse more freely. This also enabled them to have a positive rapport with the facilitator. This then ensured that the researcher could collect more authentic data in relation to the participants' perceptions of the provided academic writing support session and the integration of digital social media.

Another concern that was relevant to trustworthiness was the size of the group of participants. Even though there were 25 participants, there was no conflict among group members. This was made possible by: (1) the participants being connected virtually; (2) their peer conversations being open to all the members mostly via a Facebook closed group, which included the facilitator; (3) the facilitator being constantly vigilant about the participants' online behaviour during these sessions; and (4) the participants being allowed to post their queries in the Facebook closed group or as a private message to the facilitator at their own convenience. These adjustments enabled all participants to gain equal attention as no one was queued. The facilitator however ensured giving them rapid feedback as much as possible.

To avoid subjectivity of the data collected during the intervention stage, the facilitator kept a daily record in the form of field notes. This was updated at the end of every day of the support session. During this process the facilitator was conscious of minimising her own bias. The data collected were compared with the other participants' ideas to ensure their reliability.

There were numerous strategies employed by the facilitator in providing individualised academic writing support to the participants in this study. The strategies incorporated within this study required the participants to possess or acquire: (a) purposeful behaviour including a conscious decision about a plan of action, (b) procedural knowledge required to implement the plan, and (c) willingness, effort, and persistence to achieve the desired goal (Graham & Harris, 2005).

The participants were given support in the following areas in accordance with the SRSD model (Graham & Harris, 2005):

1. Help to simplify and organise the myriad of complex tasks.
2. Help to define a course of action for successfully completing the whole writing assignment or part of it.
3. Encouragement to plan, draft, edit, revise, and publish their written work.
4. Help to gain knowledge about writing genres and process.

The facilitator’s role was influenced by the conditions illustrated in Figure 3.6, which shows some of the actions of the facilitator when providing academic writing support during this stage. These are recommended to create an enjoyable and inspiring environment (Graham & Harris, 1997).

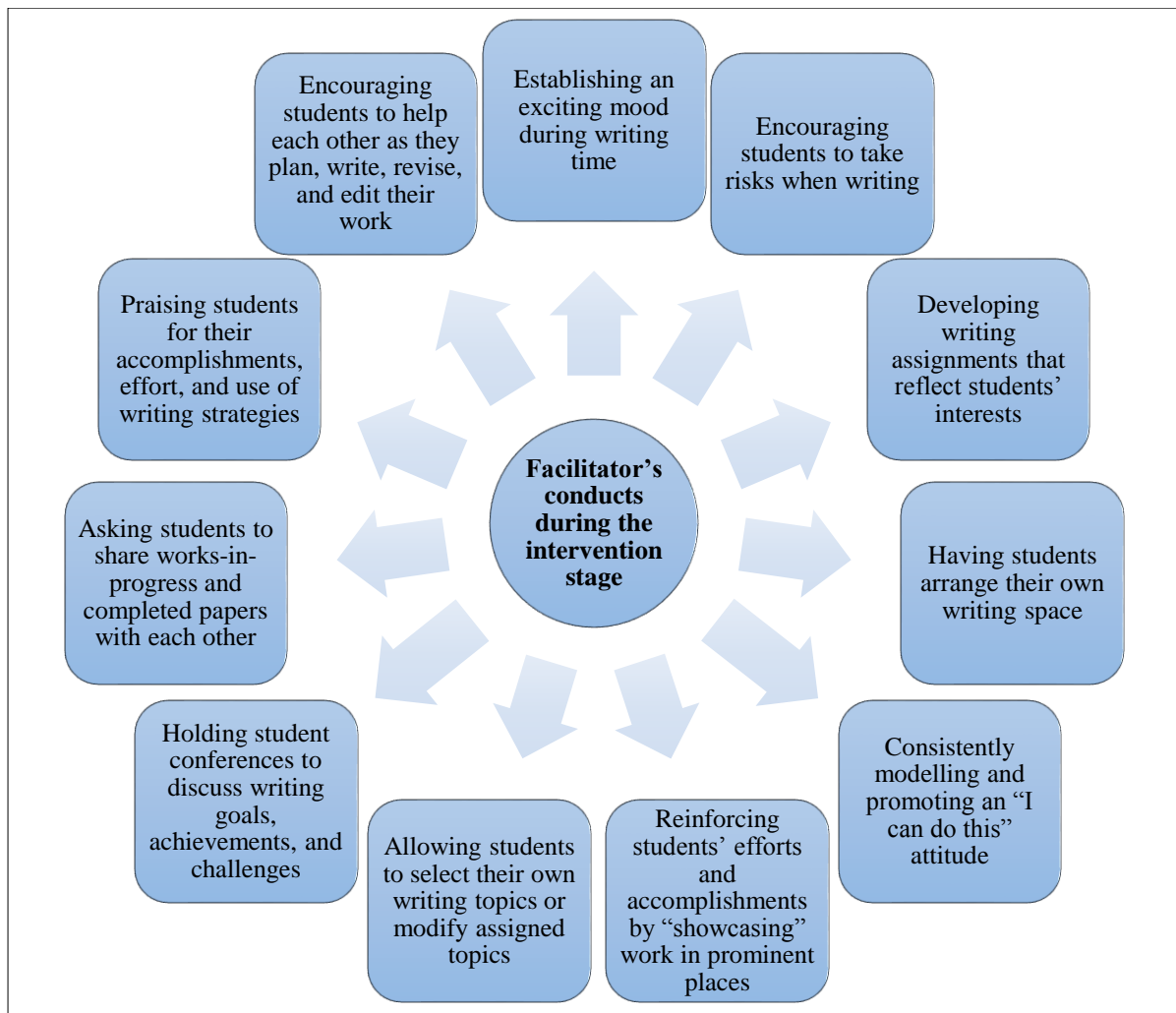


Figure 3.6 Facilitator’s conducts during the intervention stage

Providing constructive and frequent feedback, including information related to the participants’ writing, was considered within this intervention. This is an important characteristic of SRSD theory. The facilitator also provided timely feedback to the participants through digital social media and this links with TAM.

The researcher/ facilitator noted participants’ perceptions of the academic writing support they gained during the session in the form of field notes.

Stage 3: Post-intervention stage

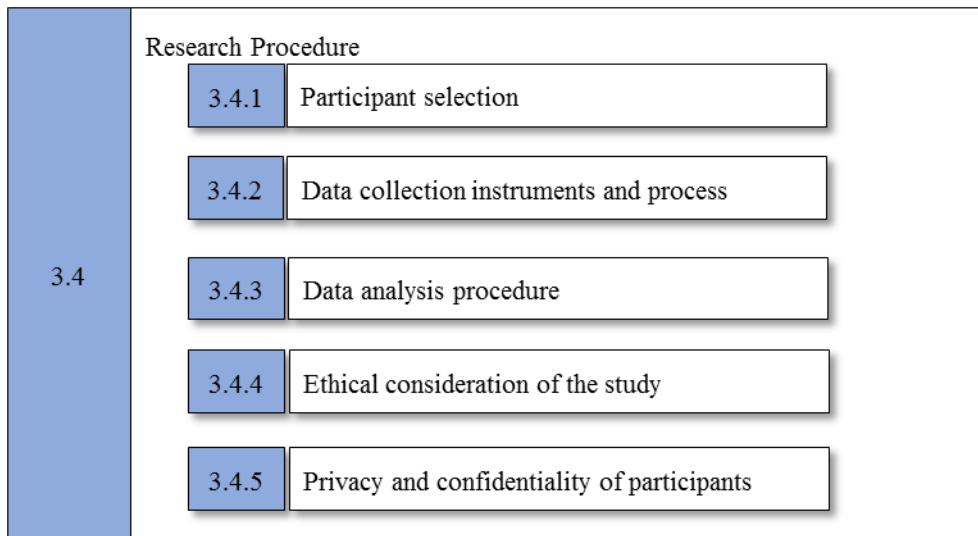
Stage 3 was the final stage of this study and was administered after the intervention stage in which academic writing support was provided to the participants. The main purpose of this post-intervention stage was to identify the participants’ perceptions about the academic writing support they gained via digital social media. The data collected during this stage was incorporated in addressing the research questions of the study. The two data collection instruments that were used in this stage were: self-efficacy questionnaire and interviews. These two data sets were gathered sequentially. Table 3.3 summarises the process of this stage.

Table 3.3 Actions completed in Stage 3 (Post-intervention stage).

Action Number	Description of actions
1.	Post-intervention stage self-efficacy questionnaires were sent to participants via email and the researcher received the filled-out forms.
2.	The quantitative data was analysed for the second time.
3.	These results were incorporated to add necessary follow-up questions to post-intervention stage interview questionnaires.
4.	One-on-one, face-to-face interviews (Post-intervention) were administered and recorded.
5.	Post-intervention interview data were transcribed and analysed.

The process during this stage was similar to Stage 1: Pre-intervention stage except for the changes in the questions that were used during this stage. The same Appendix G questionnaire was referred to but the exact set of questions is in the Stage 2 section.

3.4 Research Procedure



The research procedure of this study included information related to sample selection, data collection instruments and process, data analysis procedure, and ethical considerations including privacy and confidentiality of participants.

3.4.1 Participant selection

This section discusses information related to the particular research site and participant selection. The study was conducted in a regional Australian university, the University of Southern Queensland (USQ), which is located in South-East Queensland, Australia.

The participants for this study were recruited from across faculties and colleges of USQ. USQ's Academic Division consists of two faculties and three colleges (Blessinger & Bliss, 2016) as in Appendix H. Participants were selected through convenience sampling.

Convenience sampling is a non-probability sampling technique that is used by researchers to choose a sample of subjects/units from a population. Convenience sampling is also known as Haphazard sampling or Accidental Sampling (Etikan, Musa, & Alkassim, 2016). This is a type of non-probability or non-random sampling where members of the target population meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or willingness to participate (Dörnyei, 2007). Since a convenience sample consists of people who are easy to reach, the researcher of this study found the sampling method appropriate in this context.

Initially, there were 29 participants who indicated an interest in academic writing support while continuing their studies. However, four of them dropped out due to personal reasons. One of them dropped out of the course, two of them shifted their courses towards a larger emphasis on mathematics, which did not involve much academic writing in their assignments, while another had to enrol at another university. This study population then consisted of 25 university students, including both domestic and international students, from various disciplines from the above mentioned faculties and colleges. They were at various stages of their studies, ranging from pre-undergraduate to postgraduate. The population of this study included full-time, part-time, and online students.

3.4.2 Data collection instruments and process

This section outlines the different data collection instruments as illustrated in Figure 3.7. These instruments were used to collect quantitative and qualitative data that were relevant in addressing each of the research questions, as mentioned in Figure 3.2. They were employed at different stages of this study, as in Figure 3.8, depending on the convenience and suitability of each instrument and the importance of data towards addressing the sub research questions of this study.

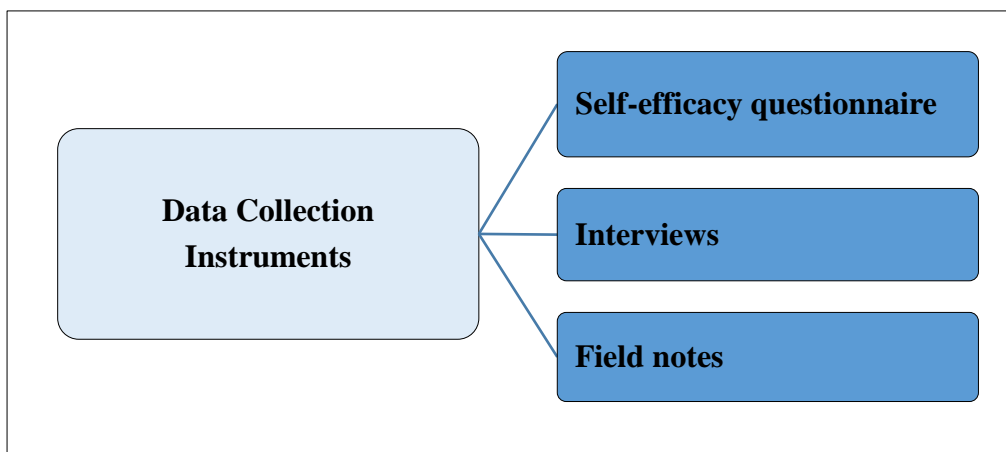


Figure 3.7 Data collection instruments

3.4.2.1 Data collection instruments

The two main data collection instruments administered in this study were a self-efficacy questionnaire (Appendix F) and interviews (Appendix G). The researcher also took field notes as another instrument, which included participants' views that were revealed during the intervention phase of this study.

Self-efficacy questionnaire

This section elaborates on the self-efficacy questionnaire and when and why it is administered. Perceived self-efficacy is concerned with people's beliefs in their capabilities to produce given attainments (Bandura, 1997). People differ in the areas in which they cultivate their efficacy and in the levels to which they develop it within given pursuits. The self-efficacy belief system is not a global trait but a differentiated set of beliefs linked to distinct realms of functioning (Bandura, 2006). However, Bandura (2006) states that there is no all-purpose measure of perceived self-efficacy, but that it tends to have a *one measure fits all* approach. This then leads to limited explanatory and predictive value depending on the context in which it is used. This did not affect this particular study as the researcher incorporated a validated self-efficacy questionnaire that had already been used by Pajares, Hartley and Valiante (2001) and Yavuz-Erkan (2004).

The self-efficacy questionnaire (Appendix F) was used in the pre- and post-intervention stages of this study. The main purpose of this questionnaire was to gather data from university students about their self-efficacy beliefs when performing standard academic writing. This included 20 items related to academic writing skills with a scale from 0-100.

The data gathered from the first round of self-efficacy questionnaires (pre-intervention stage) was useful in four ways:

- 1 To find the answers for Research Question (RQ)1a: *What are the perceptions of university students' self-efficacy in terms of their level of academic writing?*
- 2 To modify pre-intervention stage interview questions, enabling the participants to elaborate on the reasons for their self-efficacy ratings in their level of academic writing. This informed answers to RQ2a and RQ3a: *What are the reasons for the above perceptions: Challenges they face in performing standard academic writing and required needs for improvement if any?* and *What level of exposure to digital social media do university students report?*
- 3 To organise the intervention phase (Stage 3) of the study to meet the academic writing needs of the participants.
- 4 To collate with the post-intervention stage self-efficacy questionnaire results when addressing RQ4 and the main research question: *What connections can be drawn between academic writing support provided through digital social media and university students' academic writing self-efficacy?* and *What are the academic writing self-*

efficacy beliefs of university students in terms of gaining academic writing support via digital social media?

The data gathered from the post-intervention self-efficacy questionnaire was useful in three ways:

1. To answer Research Question 1b: *What are the perceptions of university students' self-efficacy in terms of their level of academic writing?*
2. To modify post-intervention stage interview questions, enabling the participants to elaborate on the reasons for their academic writing self-efficacy rating. This also informed answers to RQ2b and RQ3b: *What are the reasons for the above perceptions and if their needs were addressed?* and *What are the advantages and disadvantages of using digital social media as the platform in the intervention phase of this study?*
3. To collate pre-intervention self-efficacy questionnaire results when addressing RQ4 and the main research question of this study.

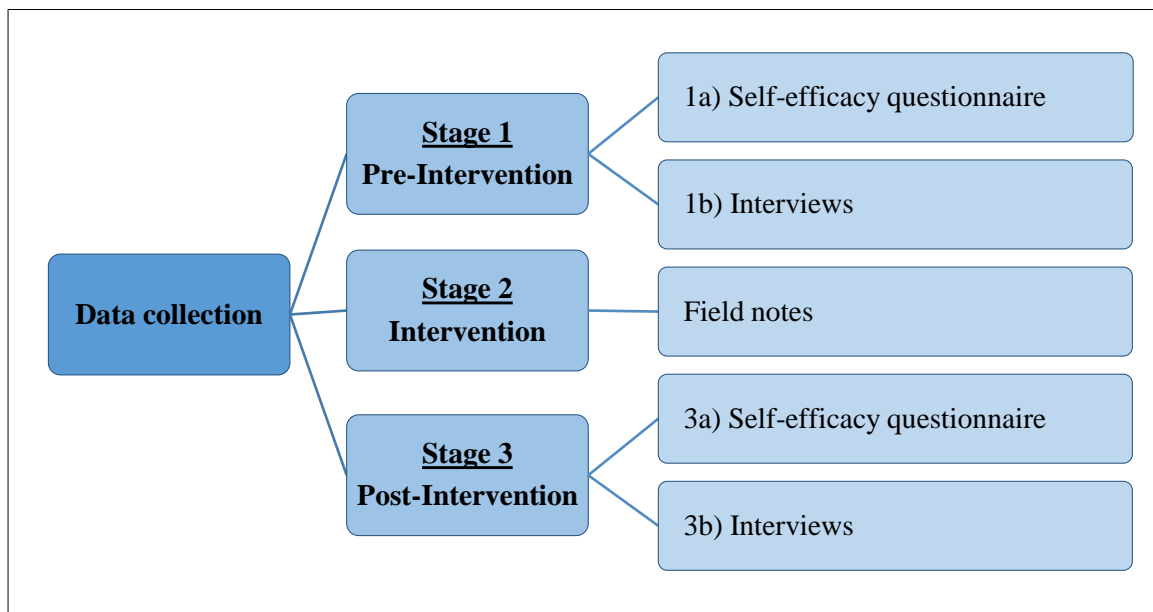


Figure 3.8 Data collection instruments used in different stages of this study

Interviews

This section includes details related to the interviews, and when and why they were employed within this study. The interview is one of the most widely used strategies for data collection in qualitative research. There are many types of interviews such as unstructured, semi-structured and structured interviews (Creswell, 2009). However, semi-structured interviews

are considered to be the best compromise in a case study approach. For example, Yin (2009) highlights the importance of their ability to examine a case in-depth within its real-life context. They often involve the use of open-ended questions in conjunction with clarifying and follow-up questions to probe more deeply into the understanding of the participants (Creswell, 2009). This method also enables “the participants [to] best voice their experiences unconstrained by any perspectives of the researcher or past findings” (Creswell, 2009, p. 225). The interview questions (Appendix G) for both stages - pre- and post-intervention - were designed in alignment with the above considerations. All participants were interviewed using the same interview questions in both stages. The interviews were recorded for the purpose of transcription.

Both pre- and post-intervention interview questions were developed with a focus on addressing the main research question and the sub research questions of this study. These interview questions were based on the participants’ immediate experience and activities related to academic writing and their use of digital social media. Since the questions were mostly open-ended, the researcher had the opportunity to include any further questions in the interview. This allowed the researcher to collect data regarding the participants’ views related to their ratings in the self-efficacy questionnaires. Participants were prompted for further elaborations through questions. First, participants were invited to comment on what they interpreted as a significant experience in particular contexts of this study. Then, they described the actual events and/or situations that triggered these experiences. Overall, during the interviews the researcher focused on the university students’ perceptions of the use of digital social media in gaining academic writing support, and the impact on their self-efficacy in writing as a whole.

The data gathered from pre-intervention stage interviews were useful in five ways:

1. To find answers for RQ2a: *What are the reasons for the above perceptions: Challenges they face in performing standard academic writing and required needs for improvement if any?*
2. To find answers for RQ3a: *What level of exposure to digital social media do university students report?*
3. To combine with pre-intervention stage self-efficacy questionnaire results to see if there was any correlation.
4. To organise the academic writing support intervention phase.

5. To compare them with post-intervention stage interview results in order to address RQ2b (*What are the reasons for the above perceptions and if their needs were addressed?*), RQ 4 (*What connections can be drawn between academic writing support provided through digital social media and university students' academic writing self-efficacy*) and the main research question (*What are the academic writing self-efficacy beliefs of university students in terms of gaining academic writing support via digital social media?*).

The data gathered from the post-intervention stage interviews were useful in four ways:

1. To find answers for RQ2b (*What are the reasons for the above perceptions- as per self-efficacy ratings, and if their needs were addressed?*).
2. To find answers for RQ3b (*What are the advantages and disadvantages of using digital social media as the platform in the intervention phase of this study?*).
3. To combine with the post-intervention stage self-efficacy questionnaire results to see if there was any correlation between them and the post-intervention interview data.
4. To combine this data with overall quantitative and qualitative data to address RQ4 and the main research question of this study in the analysis process.

Field notes

This section defines field notes, and when and why they were used in this case study. Field notes refer to qualitative notes recorded by a researcher in the course of a research project (Taylor, Bogdan & DeVault, 2015). They can be collected during, or after, an observation session of a specific phenomenon. These notes are intended to be read as evidence to produce meaning and an understanding of the culture, social situation, or phenomenon being studied (Schwandt, 2015). Field notes are of two types: descriptive and reflective (Emerson, Fretz, & Shaw, 2011).

This study recorded some descriptive information such as actions, behaviours and conversations of the participants, which were experienced by the researcher/ facilitator during the intervention phase of this study. The researcher was aware of complying with the key characteristics of the field notes such as being accurate, organised, and descriptive. Focusing on the research problem, as well as the insights and thoughts of the participants, were other key factors that were considered within this session (Labaree, 2009).

These field notes facilitated the development of data collection techniques and observation skills. This enabled the researcher to understand how the theoretical framework of this case study applied to the participants' real world issues as they related to gaining academic writing support (Labaree, 2009). The researcher noted the participants' behaviour and their opinions about the intervention stage.

The field notes involved participants' perceptions in relation to gaining academic writing support and the involvement of digital social media as the platform of delivery. These were underpinned by the key characteristics of the integrated theoretical framework, which was a combination of the Self-Regulated Strategy Development (SRSD) model and the Technology Acceptance Model (TAM). The data gathered as field notes could also be related to Chickering and Gamson (1987), *Principles for Good Practice in Undergraduate Education*.

The researcher had the opportunity to observe the perceptions of the participants' in relation to the delivery of academic writing support on the basis of the stages of the SRSD model. The participants expressed their attitudes about the integration of the six stages of SRSD model when providing academic writing support during the online intervention stage: (1) Develop background knowledge, (2) Discuss it, (3) Model it, (4) Memorise it, (5) Support, and (6) Independent performance.

Thus, it was made possible for the researcher to observe the participants' reactions and opinions about developing their background knowledge prior to executing the actual task. This also enabled the researcher to take written notes about the participants' views about the remaining stages of the SRSD model when performing standard academic writing.

During the intervention stage of this study, the participants expressed their perceptions about the integration of digital social media. These were revealed through their discussions with the researcher as well as through peer discussions. The researcher also noted the participants' behaviours that showed their involvement and contribution, while engaging in activities related to academic writing on digital social media. Their opinions were based on the perceived usefulness of digital social media in receiving academic writing support that led to a flexible learning environment, and the ease-of-use of these media. These aligned with the underlying principles of TAM.

Chickering and Gamson's (1987) seven principles were also incorporated by the researcher when taking field notes during the intervention stage. These were useful in gathering data

related to participants' overall perceptions of the academic writing support session. The seven principles were: (1) Encouraging contacts between students and faculty, (2) Developing reciprocity and cooperation among students, (3) Using active learning techniques, (4) Giving prompt feedback, (5) Emphasising time on task, (6) Communicating high expectations, and (7) Respecting diverse talents and ways of learning.

The participants also shared their views about the intervention stage with the researcher and their peers while engaging in the intervention stage. This allowed the researcher to take notes about these views that were based on the above principles.

The data gathered from field notes were useful in three ways:

1. To generate reflective information that included the students' own thoughts, ideas, and concerns that had direct relevance to the main idea of this study.
2. To address RQ2b (*What are the reasons for the above perceptions and if their needs were addressed?*) and RQ3b (*What are the advantages and disadvantages of using digital social media as the platform in the intervention phase of this study?*).
3. When analysing data towards addressing RQ4 and the main research question.

All the evidence gathered through the field notes was useful in analysing data and drawing conclusions from this case study.

3.4.2.2 Data collection process

Data collection occurred in three different stages: Stage 1, Stage 2, and Stage 3: pre-intervention stage, intervention stage, and post-intervention stage respectively.

The first stage of data collection took place during the pre-intervention stage of this study and involved self-efficacy questionnaires (1a) and interviews (1b).

The second stage of the study involved the intervention phase that provided academic writing support to the participants. This phase was underpinned by the participants' views expressed through the first stage of self-efficacy questionnaires and interviews. The researcher provided academic writing support to participants during this stage as a facilitator. The participants' perceptions of this support were recorded as field notes during this stage.

The final stage of data collection of this study was the post-intervention stage and it took place after the intervention phase. The second stage of self-efficacy questionnaires (3a) and

interviews (3b) was administered at this stage to collect data that was useful to address the research questions of this study.

3.4.3 Data analysis procedure

The analysis proceeded through three stages: (1) quantitative data analysis (2) qualitative data analysis, and (3) mixed analysis. Initially, analysing quantitative and qualitative data in isolation occurred during the pre- and post-intervention stages. Then they were combined together in order to draw conclusions from this study. Figure 3.9 shows a descriptive overview of the overall analysis planning.

Quantitative data analysis procedure

The four steps in quantitative data analysis are: (a) prepare and organise the data for analysis; (b) analyse the data to explore and describe it; (c) analyse the data to answer research questions; and (d) represent and summarise the data in tables, figures, and a results section (Creswell, 2009).

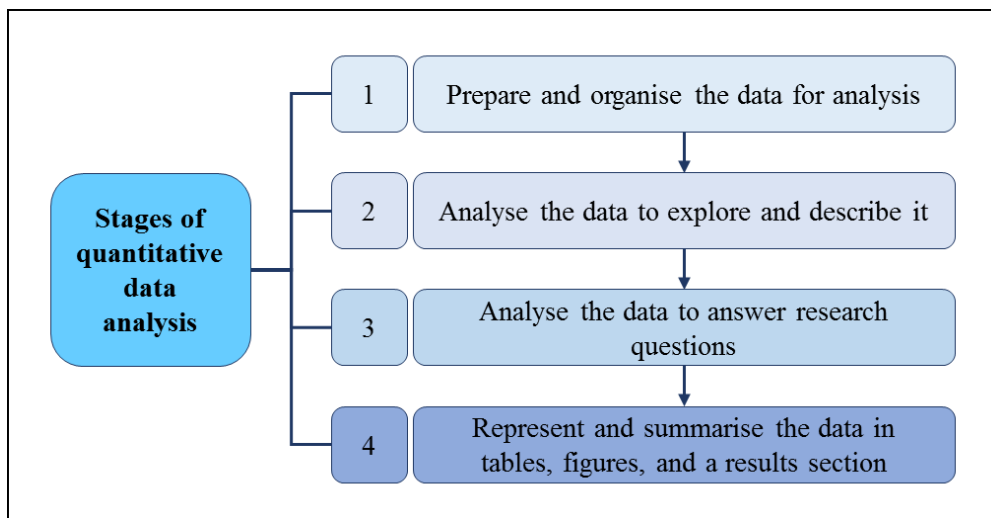


Figure 3.9 Stages of quantitative data analysis

The self-efficacy questionnaire data from each stage was entered into two separate Excel sheets as pre- and post-intervention quantitative data sets. These results were entered against designated codes for participants by assigning numerical values that could be processed by computers.

The second step was followed by sequentially analysing the data gathered from self-efficacy questionnaires during pre- and post-intervention stages of this study. This was helpful in

determining if there was a significant difference between the participants' academic writing self-efficacy.

The analysed quantitative data from pre- and post-intervention stages of this study were used in drawing connections between academic writing support provided through digital social media and university students' academic writing self-efficacy.

In alignment with the final step, the self-efficacy questionnaire data of both stages were calculated 'item-wise' and 'participant-wise' (These terms are explained in Figure 3.) separately; then their T values were calculated prior to combining the overall results of this study.

Qualitative data analysis procedure

One of the most common forms of qualitative research analysis is thematic analysis (Guest, MacQueen, & Namey, 2012). In this study, it involved identifying, analysing, and reporting patterns/themes within qualitative data (Braun & Clarke, 2006). There were six different phases in performing a thematic analysis: familiarisation with the data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report (Braun & Clarke, 2006).

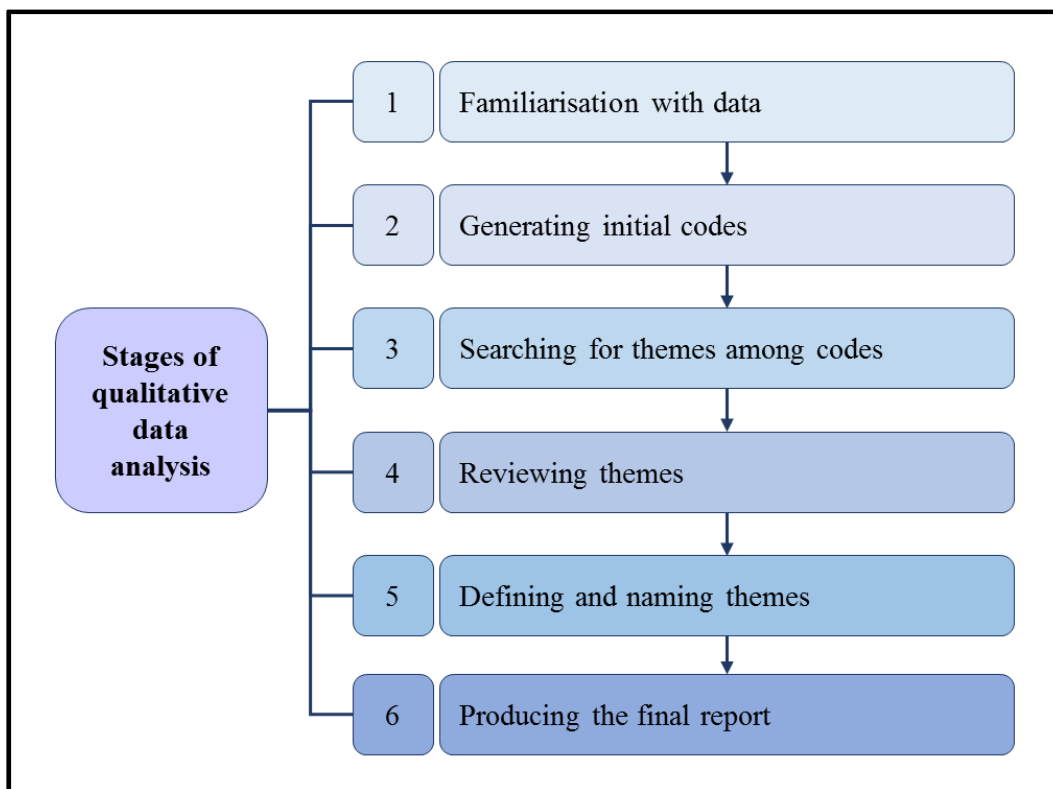


Figure 3.10 Stages of qualitative data analysis

The initial phase of the thematic analysis involved the researcher becoming familiarised with the data, which commenced with the transcription of interviews. Both pre- and post-intervention interviews were transcribed by the researcher and stored in an independent location.

The second phase involved generating initial codes that led towards preparing an initial list of items, which belonged to a reoccurring pattern (Braun & Clarke, 2006). This was an initial step of organising and categorising meaningful parts of the data, as related to the research questions in particular. The researcher highlighted the significant statements, sentences, or quotes, which included perceptions of the participants in the areas of academic writing, digital social media, and self-efficacy, and which were contained within the interviews and field notes. These sections were then categorised under relevant sub research questions.

Searching for themes is the third phase of thematic analysis (Braun & Clarke, 2006). At this stage the researcher considers the codes that have already been identified in the earlier stage and then combine them to form over-arching themes in the data. Thematic analysis, in general, is based on themes that emerge from data such as: repeating ideas, terms and metaphors, shifts in the topic, and similarities and differences of participants' linguistic expression (Braun & Clarke, 2006). The data were then clustered into themes (Creswell, 2009). Themes that were identified in this study related to the research question. These were broadly related to main three areas: academic writing, digital social media, and self-efficacy.

The fourth phase of this thematic analysis process entails reviewing themes. This requires researcher/s to find out the necessity for reworking initial themes (Braun & Clarke, 2006). The researcher can either expand or condense the prevailing themes. In this case, at the end of the reviewing process, the researcher was able to finalise the themes that best suited the purpose of this study. The researcher also paid attention to removing overlapping ideas or repetitive statements.

The fifth phase of this process allows the researcher/s to define and name themes. The purpose of the study was taken into consideration when defining the themes that were identified through this process. Each theme was then explained by the researcher.

During the sixth phase of this thematic analysis process, the researcher needs to produce a report that includes all the qualitative data under the identified themes (Braun & Clarke,

2006). The goal of this phase is to provide a thematic analysis of the collected data that will help the reader to understand the overall research.

Mixed-analysis procedure

Mixed analysis is a term used for analysing data in mixed methods research (Onwuegbuzie & Combs, 2011). This type of analysis involves one or both data types: quantitative and/or qualitative data. This study included both quantitative and qualitative data sets. This analysis can occur either concurrently in no chronological order, or sequentially in two phases.

Combining quantitative and qualitative data of all stages through such mixed analysis enabled the researcher to increase the understanding of the correlations between the participants' academic writing self-efficacy and the role of digital social media. Onwuegbuzie and Combs (2011) state that, "in mixed analysis either the qualitative or quantitative strands might be given priority or approximately equal priority as a result of a prior decision or decisions that emerge during the course of study" (p. 3). This research placed more emphasis on its qualitative component throughout.

The rationale behind incorporating the mixed analysis section was to analyse both quantitative and qualitative data collected within this study in order to present interpretations of how the integration of digital social media within academic writing support had affected the perceptions of university students' self-efficacy in writing. Overall, performing mixed analysis in this research enabled the researcher to yield rich findings that could contribute to this field of study in numerous ways.

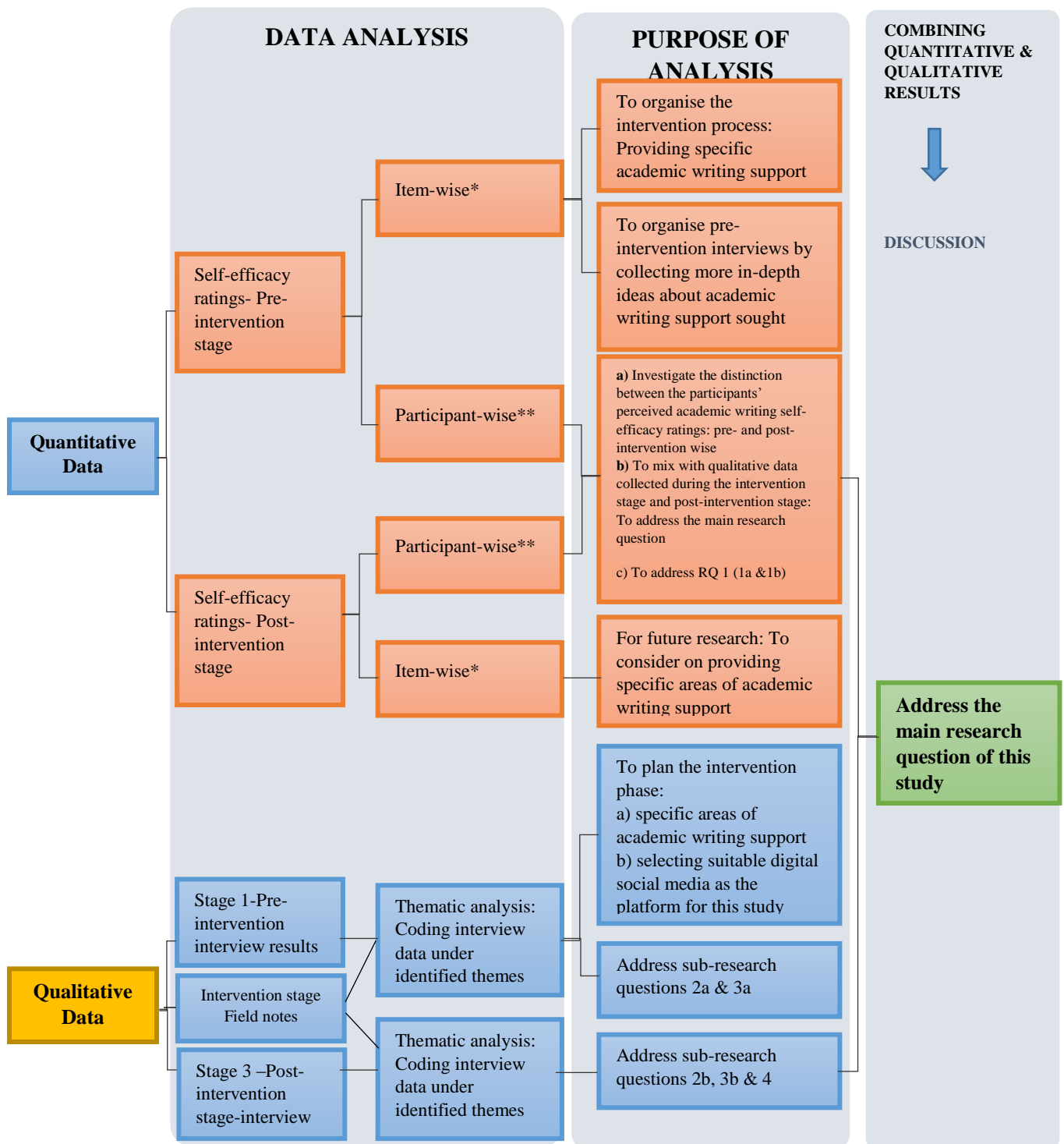


Figure 3.11 Data analysis plan

*Item-wise- The participants’ ratings on each item in the self-efficacy questionnaire

**Participant-wise- The total for all 20 items in the self-efficacy questionnaire as per each participant’s rating

3.4.4 Ethical considerations of the study

The actual process of recruitment started only when the ethics approval was gained from the University of Southern Queensland (USQ) Human Research Ethics Committee. Ethical consent procedures were followed as per USQ Human Ethics Research Committee (HREC) requirements throughout the process of this study. Ethical clearance for this study included clearly informing the participants that they had the right to withdraw from this programme at any stage without penalty (National Health and Medical Research Council [NHMRC], 1999). At-risk participants were not recruited.

Documents including a human ethics application, participant information sheets for both interviews (Appendix C) and surveys, including a consent form (Appendix D) for the interviews, as well as a sample questionnaire for the interviews (Appendix G) were submitted to the Committee of Human Research Ethics at USQ for approval. There was no need to have a consent form for the survey questionnaire as it constituted tacit consent. The participant information sheet was prepared in accordance with the National Statement on Ethical Conduct in Research Involving Humans (NHMRC, 1999). This is an important part of recruiting research participants, which ensures that the potential participants have sufficient information to make an informed decision about whether to take part in a specific research or not. This further ensured that the students would participate without pressure as they gained adequate information which was needed to give informed consent. Consequently, all these documents were approved by the USQ research committee as per approval number H15REA249.

Prior to the interviews, the participants were sent the participant information sheets and the consent forms via email. The researcher needed to have the signed consent form from the participants prior to gathering qualitative data from them. All the digital data were secured on a password protected computer device that was only being used by the researcher and the paper-based data, including all the confidential information such as signed in-person consent forms with contact information and transcripts, were kept in a locked cabinet in the researcher's office. This ensured alignment with the HREC data storage policies (NHMRC, 2007). All the data were reported in aggregate. As per American Psychological Association (2010), "the data

collected from this investigation will be kept for a period of five years, to allow for data verification and confirmation of results and analysis (p.12). After five years, all the data and analysis, including digital data and paper, will be destroyed.

3.4.5 Privacy and confidentiality of participants

Privacy for research participants is a concept in research ethics which states that a person in human subject research has a right to privacy when participating in research. The data went through a process that de-identified the participants' privacy. De-identification involved removing or altering information that identified an individual or was reasonably likely to do so. Generally, de-identification includes two steps: (1) removing personal identifiers, such as an individual's name address, date of birth or other identifying information; and (2) removing or altering other information that may allow an individual to be identified, for example, because of a rare characteristic of the individual, or a combination of unique or remarkable characteristics that enable identification (Cavoukian & Emam, 2011). In this study, research participants' confidentiality was protected by concealing their identity and changing their names. Study codes such as PT1, PT2 were used to denote Participant 1 (PT1) and Participant 2 (PT2), instead of real names in this thesis, and this will also be the case in any ensuing publications to protect the confidentiality of the participants. Additionally, the research participants were assured that their responses would be kept confidential, and no one would have access to it.

3.5 Chapter Summary

This Chapter has delineated the basis for adopting a case study approach and a mixed-methods approach in addressing the research questions outlined in this study. This section has justified the link between the research design and the conceptual framework of this study. The philosophical worldview, case study and mixed methods, as well as the research design were explained. Participant selection, data collection instruments and process, data analysis procedure, and ethical consideration were also outlined. Overall, this chapter has described the approach that was employed to investigate the efficacy of providing academic writing support

via digital social media and how this impacted on university students' perceived academic writing self-efficacy. Chapter Four describes the results of the study.

Chapter 4 Findings and Data Analysis

4.1	Introduction								
4.2	Description of participants								
	<table border="1"><tr><td>4.2.1</td><td>Demographic background</td></tr><tr><td>4.2.2</td><td>Educational background</td></tr></table>	4.2.1	Demographic background	4.2.2	Educational background				
4.2.1	Demographic background								
4.2.2	Educational background								
4.3	Representation of quantitative and qualitative findings								
4.4	Quantitative findings								
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4.5.1.2	Findings from the intervention stage								
4.5.1.3	Findings from post-intervention stage								
4.6	Chapter Summary								

Figure 4.1. Structure of Chapter four

4.1 Introduction

The purpose of this chapter is to report the findings of this study. These findings involve the correlation between university students' perceived academic writing self-efficacy, and academic writing support provided via digital social media. There were 25 participants in this study and they were from the University of Southern Queensland (USQ), Australia. They were enrolled in different courses in different faculties and colleges of USQ. The analysis of the results focused on addressing the research questions of this case study.

This chapter begins with a brief description of the participants' demographic and educational background. The results gathered at each stage - pre-intervention, intervention and post-intervention stage of the study - are presented as quantitative and qualitative data separately. First, the quantitative data gathered through the self-efficacy questionnaires are discussed, followed by the qualitative results of this case study. Overall, the qualitative data were gathered mainly through interviews. However, the field notes that were collected by the researcher during the intervention stage of the study were also useful in drawing conclusions. This discussion is then followed by an analysis that addresses the research questions of this case study.

4.2 Description of participants

4.2	Description of participants	
	4.2.1	Demographic background
	4.2.2	Educational background

The following section includes information related to the participants of this case study, which illustrates their socio-demographic and educational background.

4.2.1 Demographic background

Overall, 25 university students were recruited as participants for this case study and they all indicated that they needed academic writing support. The participants' socio-demographic background is demonstrated in Table 4.1. They are categorised in terms of gender, age, country of origin, first language spoken, and marital status. These participants were enrolled in courses at the University of Southern Queensland (USQ), Australia. They were aged between 18- 50 years.

Table 4.1 Socio-demographic background of the participants

Gender n=25		Male (n=9)	Female (n= 16)
Age group			
18-25 yrs			2
26-30 yrs		3	4
31- 40 yrs		4	6
40 -50 yrs		2	4
Country of origin First language			
Australia	English	1 (PT7)	4 (PT8, 13, 17, 19)
Bangladesh	Bengali	2 (PT15, 24)	
China	Mandarin		1 (PT22)
France	French		1 (PT10)
India	Hindi	1 (PT11)	2 (PT12, 25)
Iraq	Arabic	2 (PT1, 16)	1 (PT20)
Philippines	Filipino		2 (PT4, 21)
Saudi Arabia	Arabic	1 (PT23)	1 (PT5)
South Korea	Korean		1 (PT9)
Sri Lanka	Sinhalese	1 (PT18)	3 (PT2, 3, 14)
Sudan	Arabic	1 (PT6)	

The participants of this case study shared a diverse demographic background. There was a mixture of native and non-native English speaking male and female participants in this cohort.

4.2.2 Educational background

All the participants in this case study were university students who were enrolled at University of Southern Queensland (USQ), Australia. However, there were

differences among them based on their previous educational qualifications, and their current enrolment levels and areas of study.

Table 4.2 Educational background of the participants

Previous educational qualifications			
			n=25
Grade 12			17
Bachelor's level qualification			4
Masters level qualification			4
Current enrolments			
	Courses	Faculty/College	n=25
Pre-undergraduate courses	TPP & EAP	OAC	5
Undergraduate courses/Bachelor Degrees	Education & Business	BELA	7
	Nursing & Engineering	HES	6
Postgraduate courses	MBA & Master's in Education	BELA	3
PhD	Education	BELA	1
	Business	BELA	1
	Engineering	HES	2

TPP- Tertiary Preparatory Programme

EAP- English for Academic Purposes

MBA- Masters of Business Administration

BELA- Faculty of Business, Education, Law and Arts, USQ

HES- Faculty of Health Engineering and Science, USQ

OAC- Open Access College, USQ

4.3 Representation of quantitative and qualitative findings

The findings of this study are presented as quantitative and qualitative results separately.

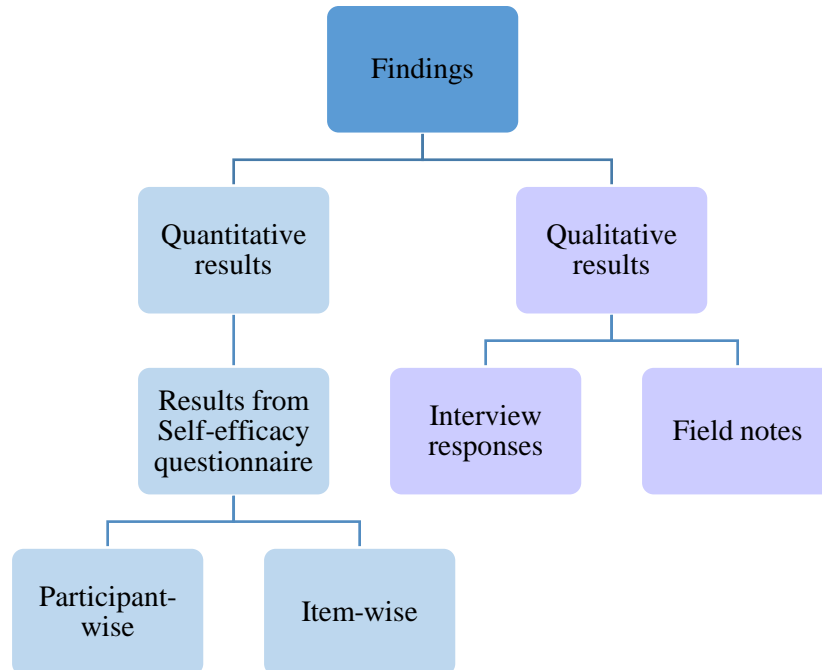


Figure 4.2 Representation of quantitative and qualitative results

4.4 Quantitative findings

4.4	Quantitative findings	
	4.4.1	Findings from self-efficacy questionnaires
		4.4.1.1
4.4.1.2	Item-wise self-efficacy ratings	

The following section discusses the quantitative findings and their analysis in alignment with the research questions of this case study. The findings from the self-efficacy questionnaires are included in this discussion. They were gathered during the pre- and post-intervention stages of this study.

4.4.1 Findings from self-efficacy questionnaire

The self-efficacy questionnaire (Appendix F) was incorporated to collect quantitative data for this study. The same questionnaire was distributed to participants during pre- and post-intervention stages of this case study. The results that were gathered through this questionnaire depicted the perceived academic writing self-efficacy of these participants.

The main purpose of gathering data using the same questionnaire at two different stages was to assess whether or not these participants' perceived academic writing self-efficacy had been affected by the intervention. The voting scale was *0 = Cannot do at all, 10-90 = Moderately can do (in an increasing level), and 100 = Completely certain can do*. The ratings for each of these items were between 0-100 and depicted their self-efficacy beliefs in several components that are needed to perform standard academic writing.

These items in the self-efficacy questionnaire included both lower and higher order concerns of essay development. The ratings represented the participants' self-efficacy beliefs in the content, followed by organisation and structure, to lower order concerns of grammar and mechanics of the writing process. The participants responded to these items depending on their perceptions of what they 'could do' ('can do') rather than assumptions about what they 'would do' ('will do').

The researcher collected these survey sheets while numbering them according to the relevant participant. Since these were single-item response scales, the ratings from both stages were entered into an Excel spreadsheet. The participants' academic writing self-efficacy ratings were included in two separate columns corresponding with the pre- and post-intervention stages. Table 4.3 shows the averages of participants' self-efficacy and their differences.

Then, an in-depth analysis was conducted through the calculation of the scores. The averages of these ratings were incorporated in the analysis. The distinction between the two stages of participants' overall self-efficacy ratings was useful to identify the impact of the intervention stage on their academic writing self-efficacy. The self-efficacy ratings were subsequently combined with the qualitative findings to identify if there was correlation between them. The self-efficacy ratings were analysed as

participant-wise and item-wise. Participant-wise self-efficacy ratings dealt with the participants' overall academic writing self-efficacy levels. Conversely, item-wise self-efficacy ratings demonstrated the participants' level of self-efficacy beliefs in performing tasks as per each item presented in the self-efficacy questionnaire (Appendix F).

Participant-wise self-efficacy ratings

Participant-wise results were calculated by adding all 20 ratings that each participant had awarded to each item. Then the averages for each of their total ratings were calculated and presented separately as pre- and post-intervention stage respectively.

Table 4.3 Averages of self-efficacy questionnaire ratings /Participant-wise

Participant number (PT)	Pre-intervention Stage %	Post-intervention Stage %	Difference between pre- and post-intervention stage average ratings
10	61	64.25	3.25
19	59	62.5	3.5
9	59.5	63.5	4
18	66	70	4
21	63.5	68.5	5
17	55	60.5	5.5
22	53	59	6
23	60.5	67	6.5
11	61	67.75	6.75
15	51.5	59.25	7.75
20	47.5	55.75	8.25
5	58	67.75	9.75
6	54.73	64.5	9.76
3	54.5	64.75	10.25
24	48	58.25	10.25
12	51	62	11
25	49.5	60.5	11
1	51	62.5	11.5
4	58.75	70.75	12
2	47	59.5	12.5
16	49	62.5	13.5
13	47	64	15
14	46.5	61.75	15.25

7	49.5	67.5	18
8	50.5	69.75	19.25
Total	1352.48	1594	239.51
Average	54.0992	63.76	9.5804

Overall, the total average difference of these participants' academic writing self-efficacy beliefs showed a value of 9.58%. This shows an overall improvement of these participants' perceived academic writing self-efficacy after the academic writing support they received during the intervention stage of the study.

All the participants declared some improvement in their perceived academic writing self-efficacy after the support they gained through the intervention phase of this study even though these differences were within a significant range. PT8 showed the highest improvement in his perceived academic writing self-efficacy after the intervention stage, while PT10 showed the lowest improvement, having a difference of 3.25% in her efficacy ratings.

Table 0.4 Highest and lowest self-efficacy ratings

Pre-intervention stage self-efficacy rating		
Highest average	PT18	66%
Lowest average	PT14	46.5%
Post-intervention stage self-efficacy results		
Highest average	PT4	70.75%
Lowest average	PT20	55.75%

According to the pre-intervention stage self-efficacy ratings, PT14 had the lowest self-efficacy rating at 46.5%, while she showed an improvement of 15.25% in her academic writing self-efficacy after gaining academic writing support. However, PT18 showed only a 4% improvement in his academic writing self-efficacy, despite being the highest self-efficacious participant of the cohort in this case study during the pre-intervention stage.

The post-intervention self-efficacy ratings report PT4 as the participant with the highest self-efficacy in this context. However, the improvement between her self-efficacy ratings in two relevant stages was only 12%. Even though PT20 showed the

lowest self-efficacy ratings in the post-intervention stage, her improvement in self-efficacy was 8.25%.

T-Test results

Next, the differences in self-efficacy ratings between the pre- and post-intervention stages of this study were analysed with a t-test to identify if there was any statistically significant difference in the participants’ self-efficacy beliefs due to the academic writing support received during the intervention stage of this case study. Overall, the results from the t-test assessment revealed that there was a significant difference between the self-efficacy measures of the participants in two different stages. The *p* value of the averages was 1.68×10^{-10} , which is less than 0.05.

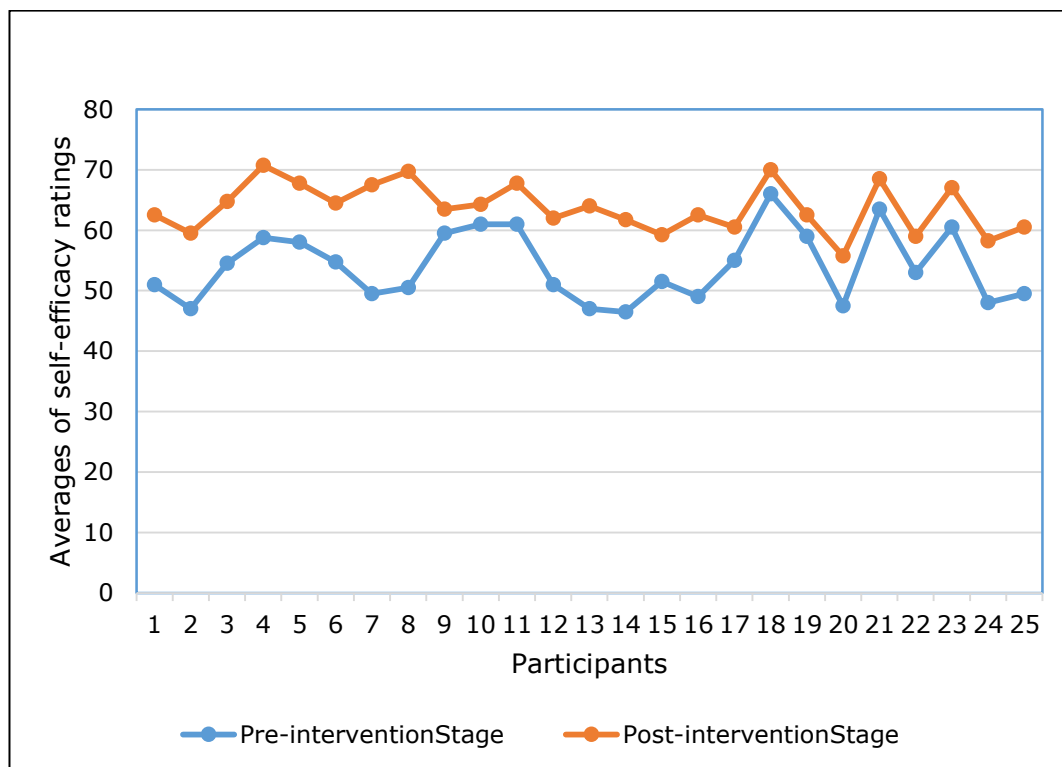


Figure 4.3 Comparison of participants’ perceived academic writing self-efficacy

Overall, the average of the whole group of participants’ academic writing self-efficacy ratings during the pre-intervention stage of this case study was 54.09%. Half of the participants showed a self-efficacy rating of less than the total average, ranging from 46.5% - 53%, while the remainder of the participants’ self-efficacy rating average was between 54.5% and 66%. This shows how the participants of this

case study felt about the importance of academic writing support in pursuing their higher education. PT7, PT8 and PT13, as some of the native speakers of English in this study, showed an academic writing self-efficacy rating of 49.5%, 50.5% and 47% respectively. These ratings were below the overall average of 54.09%. This shows that even these native English speaking participants valued this academic writing support. This is similar to other non-native English speaking participants of this study who showed a lack of self-efficacy in academic writing. PT1, PT3 and PT5s' self-efficacy ratings pivoted around the overall average in this list. This may be because these postgraduate students had already fulfilled a higher level of English entry requirement than undergraduates and pre-undergraduates.

Within the first stage of quantitative data collection, the highest self-efficacious participant was PT18 with a rating of 66 %, and he was from a non-native English speaking background. This may be due to him being in the final year of his first degree and he had been doing assignments for a long time. PT1's perceptions about the support received through EAP courses could also be mentioned in line with the previous rating. By contrast, PT2, as another participant from a non-native English speaking background, stated that she found the work she had to do at the degree level more difficult. This might be due to her level of prior exposure in her native country prior to her arrival in Australia.

While the majority of the participants expressed positive attitudes about the support they received during the intervention stage, PT10's perception was not highly positive as the difference within her ratings was the lowest at 3.25%. The reason for this was that, "*I was not being furnished with vast amount of information, rather the appropriate material was selected to resolve my issues at each stage.*" Her minimal involvement during the intervention process may be one of the reasons for this. PT4 showed a 70.75% self-efficacy rating during the post-intervention stage despite being a non-native English speaker. She might have had the highest self-efficacy rating for this stage mainly because it was her last semester of her undergraduate course. During the intervention phase she was dealing with the last few written assignments for which she had not been able to get good grades. These grades could have impacted on her higher self-efficacy rating.

PT14's perceived self-efficacy rating was the lowest in the first stage at 46.5%, and she reported she had been influenced by her first language to a higher degree. She believed that it would take a considerable period of time to adapt herself to learn and apply the specific grammatical rules of English appropriately. However, she was given support, especially in building her confidence, during the intervention process and this made her rate her self-efficacy as 61.75% in the second stage of this study.

Item-wise self-efficacy ratings

The item-wise quantitative analysis of this study was based on the participants' self-efficacy ratings for each item, as presented in Table 4.5. This includes the average ratings against each item of the self-efficacy questionnaire. This revealed the students' perceptions of their writing self-efficacy in terms of the various areas that constitute a standard piece of academic writing. Only the data from the pre-intervention stage were analysed at this point as they were needed to inform the intervention stage of this study, as well as for the mixed analysis process, as discussed in Chapter Five of this thesis. However, the item-wise self-efficacy ratings gathered in the post-intervention stage of this study will be useful in future research. These could give an indication of the specific areas that need to be emphasised when implementing future academic writing support programmes for university students.

The areas of support that were sought by the participants to improve their academic writing were identified by the researcher prior to initiating the academic writing support intervention stage, in the form of the results in Table 4.5. The averages were filtered from the lowest to the highest. This enabled the researcher to identify which areas should be given more emphasis while providing academic writing support to the participants during the intervention stage.

Table 4.5 The average distribution of participants' perceived academic writing self-efficacy/Item wise

Item number	Overall average of participants' self-efficacy rating - %	Self-efficacy
20) I can complete an assignment/ a writing task without difficulty by the due date.	37.50	Self-efficacy Low level
16) I can analyse and synthesise the facts effectively.	43.92	
17) I can edit my essays.	46.78	
19) I can write a well-organised and sequenced assignment/ essay with a good introduction, body and conclusion.	47.50	
18) I can do referencing accurately.	48.92	
10) I can use a wide range of vocabulary in essays.	49.28	
8) I can use prepositions correctly.	52.14	Self-efficacy Moderate level
9) I can use conjunctions, transitions correctly to maintain cohesion within an essay.	52.14	
11) I can use synonyms instead of repeating the same words over and over again.	52.14	
14) I can write paragraphs with details that support the ideas in the topic sentences or main ideas.	52.85	
15) I can write a proper introduction and a conclusion.	52.85	
2) I can write an essay fluently.	53.57	
4) I can punctuate an essay correctly.	54.28	Self-efficacy Higher level
13) I can write a strong paragraph that has a good topic sentence and a main idea.	55.00	
5) I can use all parts of speech in an essay correctly.	55.71	
1) I can write a paragraph fluently.	56.42	
12) I can easily generate ideas to write about.	57.85	
3) I can spell all words in an essay correctly.	61.53	
7) I can use singular and plural forms correctly.	70.71	
6) I can write simple sentences with correct grammar.	73.57	

The majority of the participants demonstrated their high self-efficacy in relation to item number 6 of the self-efficacy questionnaire: *'I can write simple sentences with correct grammar'* through an average rating of 73.57%. Conversely, the participants showed their lowest self-efficacy in submitting an assignment on time. Their average rating under item number 20: *'I can complete an assignment/ a writing task without difficulty by the due date'* was 37.5%. This suggests the key difficulty these adult learners faced was time management. 52.14% represented the majority of the participants' similar perceptions on items eight, nine and eleven: (8) *'I can use prepositions correctly'*, (9) *'I can use conjunctions, transitions correctly to maintain cohesion within an essay'*, and (11) *'I can use synonyms instead of repeating the same words over and over again'*. The average of the overall range of ratings was 55.53%. These ratings were helpful for the researcher to identify specific areas of support the participants needed. Accordingly, these areas were separated as per Table 4.6.

Table 4.6 Areas of high, moderate and low self-efficacy levels of participants

High self-efficacy	Moderate self-efficacy	Low self-efficacy
Writing simple sentences with correct grammar	Ability to use prepositions, conjunctions and maintain cohesion	Ability to complete an assignment/ a writing task without difficulty by the due date
Accuracy in singular and plural forms	Ability to use synonyms instead of repeating the same words over and over again	Ability to analyse and synthesise the facts effectively
Ability to spell correctly.	Ability to write paragraphs with details that support the ideas in the topic sentences or main ideas	Ability to edit essays
Ability to generate ideas to write	Ability to write a proper introduction and a conclusion	Ability to write a well-organised and sequenced assignment/ essay with a good introduction, body and conclusion
Writing a paragraph fluently	Ability to punctuate an essay correctly	Ability to do referencing accurately
Ability to use all parts of speech in an essay correctly	Ability to write an essay fluently	Ability to use wide range of vocabulary in essays
Ability to write a strong paragraph that has a good topic sentence and a main idea		

The majority of the participants of this study's cohort indicated a higher self-efficacy in their ability in academic writing in the following items: 6, 7, 3, 12, 1, 5, and 13 (Appendix F). Despite these participants' considerations about their lack of ability in time management, most participants perceived that they lacked more self-efficacy in items 20, 16, 17, 19, 18 and 10. These refer to the following areas of writing: (16) '*I can analyse and synthesise the facts effectively*', (17) '*I can edit my essay*', (18) '*I can do referencing accurately*', and (10) '*I can use a wide range of vocabulary*'. Item number seven - the competency in *using singular and plural forms correctly* - had been rated as 70.71% overall, which shows that they were highly self-efficacious in this as 70.71% was the second highest rating of all 20 items.

When considering the postgraduate participants' academic writing self-efficacy beliefs, PT1, a PhD student from a non-native English speaking background, showed a lower self-efficacy rating in the following eight items: 4, 5, 10, 11, 12, 16, 17 and 20. However, items 5 and 12 (*Using all parts of speech and generating ideas easily*) were categorised as having high levels of self-efficacy by the majority of the participants, while items 4 and 11 (*Punctuate correctly and using synonyms appropriately*) were at a moderate level. PT1 rated 30% in items 4, 12 and 20 and these were the areas in which the lowest levels of self-efficacy. PT3, another postgraduate participant, reported a lower rating in her *ability in referencing*, which was uncommon amongst the other postgraduate participants. Apart from the common lower ratings, she had a particularly low level of self-efficacy in *overall structuring of an assignment* and in *constructing an effective introduction and conclusion*.

In terms of identifying these participants' self-efficacy in paragraphing, three main items in the self-efficacy questionnaire were taken into consideration, namely 1, 13 and 14:

(1) I can write a paragraph fluently

(13) I can write a strong paragraph that has a good topic sentence or main idea and

(14) I can write paragraphs with details that support the ideas in the topic sentences or main ideas.

All these three areas are important in constituting an effective paragraph. Surprisingly, these participants' ratings for item 1: "I can write a paragraph fluently" in both stages were higher: Stage 1 was 56.42% and Stage 2 was 67.85%. These averages fall above the median in both stages (Stage 1: 55.53% and Stage 2: 66.07%). However, they clearly expressed a lack of self-efficacy in paragraph writing in Stage 1 through a below the median rating for items 13 and 14 respectively: 55% and 52.85%. However, there was an improvement in their self-efficacy in both the above items, as they rated 63.21% and 63.21% after they had gained the support in the intervention phase of this study.

Overall, there was a 48.92% rating for referencing in Stage 1, 6.61% less than the median. This was marked as the fifth lowest ability among the 20 items in the self-efficacy questionnaire. However, there was a contrast in the participants' perceived self-efficacy in relation to referencing and this was quite visible among postgraduates and pre- and undergraduates. The two PhD participants, PT1 and PT5 demonstrated a higher self-efficacy rating in their referencing ability, rating 70% and 60% respectively. The other postgraduate students, including PT3, had a lower rating for this item and it can be assumed that the PhD students in this case study believe they were more competent in referencing than the Masters level students. PT6, a pre-undergraduate student, rated his self-efficacy in this area as 0%, which is quite significant for a pre-undergraduate student who is preparing to study a degree as an undergraduate. By contrast, PT9, an undergraduate, had 70% as her self-efficacy rating for referencing during the pre-intervention stage, which was similar to a PhD student's capability. The pre-intervention stage interview data revealed that this was due to her prior learning undertaken in her home country. She had completed two bachelor's degrees in her home country prior to initiating her current degree in Australia.

The two stages of overall quantitative findings of this study demonstrated a significant improvement in the participants' academic writing self-efficacy beliefs. The pre-intervention stage item-wise self-efficacy ratings showed specific areas of support that were sought by these participants.

4.5 Qualitative findings

4.5	Qualitative findings		
	4.5.1	Findings from the interviews and field notes	
		4.5.1.1	Findings from pre-intervention stage
		4.5.1.2	Findings from the intervention stage
4.5.1.3	Findings from post-intervention stage		

This section includes information related to the qualitative results of this case study. These involve results from interview data that were gathered during the pre- and post- intervention stages of the study. The field notes have also contributed towards the qualitative results of this study. They were taken by the researcher/ facilitator during the intervention stage. The notes include the participants' opinions about the academic writing support provided within this study and how it affected their academic writing self-efficacy.

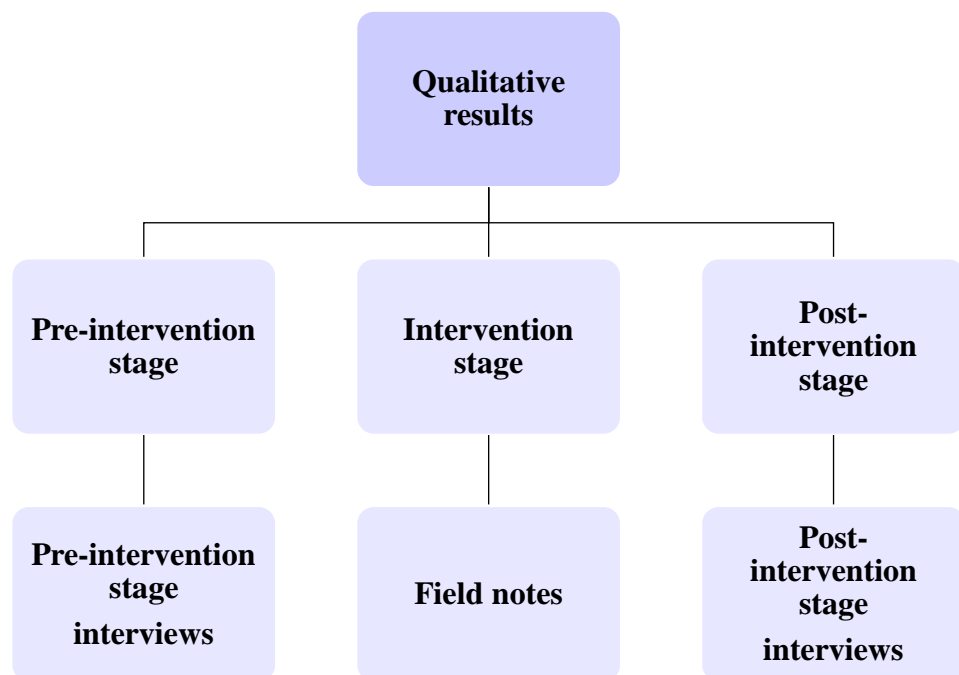


Figure 4.4 The instruments used to collect qualitative results

4.5.1 Findings from the interviews and field notes

The interview questionnaire, attached as Appendix G, was incorporated during both stages of the interviews. These interviews were semi-structured, face-to-face, and one-on-one. The questionnaire separately represents the questions that were posed in two different stages. The questions were structured to enable the researcher to gather information related to the participants' demographics and address the research questions of this case study.

4.5.1.1 Findings from pre-intervention stage interviews

The interviews held during the pre-intervention stage allowed the researcher to gather information to address RQ2a, and RQ3a initially, as in Figure 3.2: RQ2a *What are the reasons for the above perceptions: Challenges they face in performing standard academic writing and required needs for improvement if any?* and RQ3a *What level of exposure to digital social media do university students report?*

The following section includes a discussion of results that were gathered through interviews held during the pre-intervention stage of this study. These results are discussed under a number of categories as illustrated in Figure 4.5.

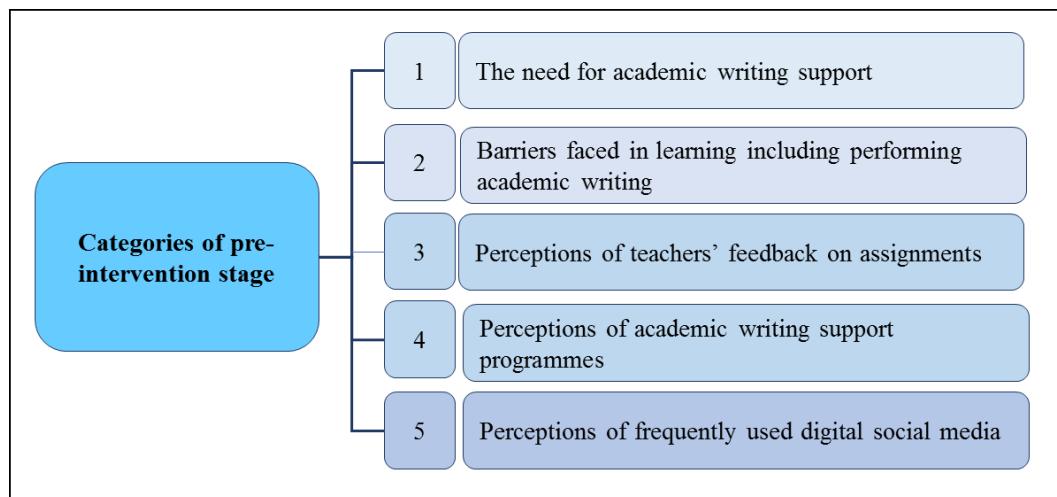


Figure 4.5 Categories of pre-intervention stage interview results

(1) The need for academic writing support

The results related to the participants' perceptions about the need for academic writing support are included in this section. They are presented under different categories, which involves the participants' views about their overall need for academic writing support. A detailed elaboration of specific areas of support in academic writing is also presented within this section.

All participants within this case study agreed that they were in need of academic writing support to continue with their university studies successfully, regardless of their first language. It was evident that the majority of these participants were apprehensive about academic writing, and PT22 stated that "*I hate writing, I do not understand how to write, I am not good at writing, I can't do this....*" There were differences in terms of the specific support they needed in academic writing. This was made clear through their response in the self-efficacy questionnaire, as they had lower self-efficacy ratings for some of the items.

The responses for the first stage of the interview questions enabled the researcher to identify which particular areas of support in academic writing were sought by the participants. Almost all the participants wanted support in overall academic writing, including grammar and structuring. Apart from these two common areas, some of the participants had specific concerns in particular areas of academic writing, which they had encountered since they had started their university studies.

The postgraduate students' perceptions, in relation to their needs for academic writing support, were different from other participants' needs to some extent. The quality and extent of supervisory support these postgraduate students gained was one major concern in relation to developing their academic writing. There was a clear distinction between the responses of postgraduate participants and the other participants in terms of the support they needed to improve their academic writing competency, despite a few similarities overall.

The postgraduate students in this case study responded with similar needs in the areas of academic writing. The four PhD students - PT1, PT5, PT15, and PT16 - believed that their study was more self-regulated, and that they had to incorporate a lot of higher order skills in writing from the beginning of their studies. They further revealed the importance of improving their ability in presenting information and

ideas logically, while communicating them effectively within their disciplinary conventions. PT1 stated that he had already completed his candidature, but with great effort. This was not due to the difficulty he had with content knowledge, but because of his lack of ability in organising each section of the proposal in accordance with standards of academic writing. PT5, who was still at the initial stage of her PhD, found it difficult to prepare the proposal that needed to be presented in order to get her candidature as the initial step of her PhD. She mentioned her lack of knowledge in structuring: *“When I started writing the proposal, my supervisor just had few brief meetings and he expects me to complete the proposal on the basis of those instructions. This is so frustrating.”* These issues were echoed by the other two PhD students: PT15 and PT16. PT15 stated that *“Whenever I hand over a draft to one of my supervisors she says that she can’t understand what I have written and what I want to stress in my writing. However, she does not give me proper guidance as to how I can correct them or rewrite.”* He further mentioned that this had demotivated him. Overall, they needed to develop their academic writing, including extended writing.

PT3 was enrolled in an MBA course and her main concern was overall assignment writing and report writing, basically because her final evaluations were based on two major summative assignments. She was keen to gain support in all possible skills in academic writing from the university, which was needed to complete assignments and report writing. PT24 was the other participant who was enrolled in an MBA course. He too expressed the issues he encountered in writing the reports as assignments. He mentioned that the feedback he received emphasised a lack of analysis over being descriptive. He stated that, *“Even though I received the feedback, I had no clue how I am going to correct this.”* Apart from these specific needs highlighted by the postgraduate students, they also shared similar needs as the other participants, which are discussed in the next section.

Despite the resources that provided general support to improve students’ ability in academic writing, PT1, PT5, and PT16 mentioned that they expected support from their supervisors. They mentioned that this was the only direct contact and support they had, being PhD students. However, they were not satisfied with the support they received from their supervisors in academic writing, as the emphasis was on content. PT1 clearly stated that *“he expect that I finish my EAP and therefore I am*

competent". This denotes the erroneous assumption made by the supervisor about his student's level of academic writing ability. The difficulty in meeting them on a regular basis was another issue the postgraduate students in this case study raised. This was mainly due to the busy schedules of the supervisors. They stated that if they could have regular meetings with the supervisors, they would be able to receive regular feedback on their writing. This would have been possible if they had more time in direct contact with the supervisor. This would in turn enable them to maintain a more effective balance between improving their content knowledge and their academic writing.

The main concerns around pre- and undergraduate participants' academic writing support needs were also identified in this study. Five participants mentioned that they needed to develop their ability to write good quality sentences. Improving skills related to essay writing was the main concern of PT4, even though she was in her third year of university study. During the previous years of her programme she had dealt more with mathematics subjects with which she had been comfortable. However, this year, since she had to complete assignments which were to be structured as essays, she had been very worried and she mentioned that "*I am suck in it*" and "*Now I hate it*".

PT10, PT25, PT22 and PT14 mentioned their perceptions in a similar manner as PT4, as they too had felt like withdrawing from their courses mainly because of a lack of ability in performing standard academic writing. Even PT14 had been affected by this issue despite her being a postgraduate student. She mentioned that the process of negotiating meaning in different contexts of academic disciplines had been an enormous challenge for her, which had resulted in confusion and anxiety. Five participants had similar concerns in terms of the specific areas that they sought academic writing support in. This was based on their need to improve their ability in presenting information and ideas logically in order to communicate effectively.

PT17 and PT19 valued support in the effective structuring of an academic essay, including correct structuring of an introduction. They also wanted to learn ways of writing an effective thesis statement that supported the whole essay. The majority of the participants valued academic writing support within their disciplinary contexts.

PT13's main concern was with formulating and developing an argument in lengthy documents or assignments. She stated that *"Even though the marking rubric has allocated marks for developing an argument, I really don't understand what this means. I tend to just include relevant points from the modules but this seems not right with the markers for sure."* Support in essay structuring was sought by eleven participants who were undergraduates and pre-undergraduates. This also involved ways of understanding and interpreting questions. PT25 stated: *"I was lost when I was first being asked to write an essay on my own. The lecturers were saying about finding key words and structuring prior to starting writing the essay. But this was something new to me."*

Five other participants of this case study sought support in academic writing, which was related to plagiarism and basic referencing. The participants were a bit confused when they had to use both Harvard referencing style as well as APA in different assignments. PT17 being a nursing student mentioned that *"In one assignment the instructions ask us to use APA referencing and the very next assignment wants us to use Harvard. This is very difficult for me as I get confused with two different rules."*

PT14 and several other postgraduate students were also concerned about improving their ability in accurate referencing, proof reading and editing. PT12 and three other participants needed support to select relevant credible sources. PT12 mentioned *"Every time I include a website the lecturer use to tell that it is not credible. But how I am going to find credible sources was never clear to me."* They also wanted to be clear about how they could avoid plagiarism in their writing. They stated that they were not aware of ways of paraphrasing.

There were many participants who did not realise the need for referencing. This was reflected through opinions of several participants. PT19 specifically mentioned her confusion when her teachers asked her to include relevant references in her essays. In her words: *"I feel most of the information I have included was known by me, so why do I need to cite them always"*. After the intervention stage of this study these participants stated that they had learnt the importance of acknowledging the facts they include in their writing through referencing.

(2) Barriers faced in learning and performing academic writing

The barriers that were faced by these participants can be categorised as academic and non-academic because some of the factors they mentioned evolved due to their lack of competency in academic related issues, while the others emerged due to them being adult learners.

The majority of the participants within this cohort were adult learners who had left school a few years earlier. They found making the transition to university study a challenging experience. Among the barriers faced by the participants within this study, some of them were related to their personal life. As PT2, a mother of two children, mentioned: *“too many barriers as I am a housewife, I have a husband and two kids to look after.”* However, she also mentioned that, *“Attending lectures regularly is not a big problem because my kids are going to school and I am not doing a job currently.”* This shows how she found it difficult to manage time to engage in her studies apart from the direct contact hours of lectures. Another major issue this participant had was: *“I cannot manage time to meet deadlines most of the time.”* The majority of the female participants with children had the same issues in balancing study with other household work.

There were some participants whose problems were directly based on language difficulties. PT1 mentioned *“...difficulty in structure and grammar...”* as the main barrier. Similarly, PT3 stated: *“Honestly, ESL, it was the first barrier and I did not get good support from USQ how to write a report. Since Masters is more research based rather than bachelors. But tried to get support from the learning centre but they were very busy at that time. USQ lack that kind of support. Have spoken to my friends and colleagues as well to find about the support which is given in improving so no proper support in academic writing is a barrier. How students struggle I experience being working in ICT support. First assignment alone and realised that I need a support. Tried to find a way – communicated with forums, study desk forums it is online more now, future trend for education.”*

PT4 too had barriers related to lack of study support and she mentioned: *“Dreaded doing overall, collecting data, how you organise and putting them together. Support needed overall, mainly because I am a part time student.”* She further stated that she was worried about completing the assignments but not about the examinations.

Unlike PT2, six participants found it difficult to manage time to attend lectures, even though they were more comfortable with face to face communication. Their lack of motivation towards learning was another barrier that was mainly due to their inability to balance work and study life. PT14 stated for example that *“Since I work night time I get tired and have a child and husband to look after as well...”*

PT5, PT6, PT9, PT22 and PT16 realised that being non-native speakers of English had been one of the main barriers in learning. PT6 further stated that, *“Academic writing is different from the language used generally or spoken”*. PT9 noted that the *“...big problem is I cannot express my opinion and thinking, I has my huge knowledge and opinion just inside my head. But I cannot express in writing.”* Even the domestic participants emphasised difficulty in academic writing as one of the main barriers in fulfilling their studies. PT7 stated for example that, *“My English skills is Cs and pass. So in saying that – had to get the proof reading done and grammar, unlike speaking the grammar in writing. Lay out – once the layout of an assignment is done it helped me a lot more easier to continue with it. Then word choices. Dictionary of words not high flown enough and had to find more educated / small words and wanted to use bigger words. Set it out / broken down...”* PT8 too, being a domestic student, had similar perceptions of the barriers she faced as an adult learner. She said she was *“much more of a verbal processor, so find it really easy to talk, discuss and present ideas but find it really difficult to put those ideas on paper. I am fine with research and that kind of area as it is actually putting ideas down in to organisation/ layout. But even if I do that my writing is not that standard/ could be tighter.”*

However, PT13, another domestic student in this study cohort, had different perceptions of the barriers to learning: *“...poor marker expectations and lack of time for extra skill development other than attending lectures.”* PT12 explained the challenges as follows: *“...composing the first major university essay and the report was a complex process due to being out of learning for a long time. And it was a challenge for me to attend classes with younger students...”*

(3) Perceptions of teachers' feedback on assignments

Undergraduate and pre-undergraduate students revealed their dissatisfaction with the false assumptions that had been made by the lecturers in terms of assessing students' assignments. Twelve participants of this case study mentioned how some students are being awarded higher grades on the assumption that their work was genuine, when this was not actually true. They further stated that these assignments were efforts of other people who had earned Master's degrees in that field. These incidents of alleged misconduct have impacted on most of these students' motivation in completing their own assignments.

PT7 complained that even though the teachers would teach students a certain amount and ask them to do the rest on their own, only a small percentage of students would follow the exact guidelines. He argued that a *"lot of kids are not going and learning on their own, they rather seek support from others or may copy and cheat. So in the end when you are going to compete, you are going to compete with other people's work not of your standard which could be an 'A'. But we struggle and do from scratch and sometimes if it goes wrong the teachers say, oh these kids have done better, and they also have a comparison and obviously we get a lower grade."* This was a common comment from the other undergraduate participants in terms of their genuine attempts at their assignments.

The majority of participants had their own views on the ways in which teachers were marking their assignments and on the feedback they had been given. Overall, their concerns revolved around the marking system, which varied from marker to marker. They stated that there was a discrepancy between the components of a standard rubric and the feedback given to the students. The participants believed that they needed to be advised on the areas that were clearly included in the rubric. PT8 said: *"Different lecturers have different rules, changing things to suit their tastes. This makes the student not only think about how to put the content and how to write but also need to think about them as the audience, specifically what they want that the other lecturers might not want."* This was again highlighted as they commented on the discrepancy between the perceptions of markers and the lecturers. These students stated that they wrote the assignments in accordance with the lecturer's advice and

the given marking rubric for the course. However, there was a possibility for the markers to have their own way in marking the assignments. They sometimes tended not to follow the guidance given by the lecturer to the students.

PT7 and PT20 were keen on the feedback given to them on each assignment. However, they complained about the lack of uniformity across the marks given to each of their cohorts as these did not seem to be just. As PT7 mentioned: *“The teacher feedback on assignment is a hit and miss. Policies are there but each teacher has their own. Teacher might say something but it might not exactly we being students expect.”* They also complained that the markers did not follow the rubrics clearly.

(4) Perceptions of academic writing support programmes

The PhD students in this study cohort had participated in an alternative English language proficiency course named USQ English for Academic Purposes (EAP) that fulfils the English Language Proficiency Requirements for university entry. By contrast, even though PT3 had adequate evidence to prove her English language knowledge as a prerequisite for her enrolment in an MBA course at USQ, she later felt the need to improve her competency in academic writing when she had to submit reports and other written assignments. However, she said that she could not afford to pay for an additional course since her course fee for the MBA was expensive. Despite the cost, she admitted that it would definitely be a future investment even though she could not afford it.

The majority of the participants who were enrolled in the EAP course revealed the value of the experience they gained from this programme. They reported high self-efficacy with their level of academic writing during the EAP course, in comparison to their current self-efficacy in academic writing. PT1 was very clear about: *“My English was better when I was doing EAP I and EAP II”*. Both PT1 and PT5 said that they received High Distinctions for both courses, qualifying them to study in a Doctoral program at USQ. They were quite satisfied with the nature of academic writing support they had received through the EAP course at USQ, and they mentioned the *“everyday”* support and the opportunity they had had in contacting their teacher *“everyday”*, even within the particular period of the course. The

emphasis on the word “*everyday*” demonstrated how they valued continual support in academic writing.

Despite the advantages of EAP courses, PT9, PT13, PT20 and four others mentioned that they had not found any academic writing support within the university that was continual and concurrent with their studies. PT1 stated that he was very worried and depressed about his lack of ability in academic writing, unlike the period when he was taking the EAP courses, “...*but now I just sit in my office and do research by myself, very sorrow*”. While both of these participants were positive about the knowledge they had gained from the EAP course, both of them believed that it supported English writing in isolation. As PT5 stated: “*English is just English*”, meaning that the support given had not been adequate when it came to engaging in their own course work later. This shows how the majority of the participants in this case study valued discipline-based academic writing support.

The participants’ overall perceptions of pre-sessional support was elaborated on as “*more general but not course specific*”. They further discussed other relevant sources of support in academic writing they had come across within the university. Some of the pre-sessional academic writing support sessions were meant to be workshops and presentations on publishing papers but PT5 stated that they were not beneficial to improve English language because most of the attendees were native speakers of English. He further stated about the attendees: “... *they do not want to learn more about English at that point.*” However, the perceptions of native speakers of English within this study contradicted this idea, as they really valued academic writing support in their university study. PT12 mentioned another support workshop related to English language development, which she did not specify clearly but she mentioned that unfortunately, “...*it does not allow the students who have already done EAP I and II to attend*”. At the same time, seven participants suggested that if the university library and/or the Learning Centre provided guidance in academic writing for free, it would have been beneficial in improving their academic writing competency.

Apart from the academic writing support experience PT7 had had at USQ, he revealed his experience with another university as well: “... *but at the other university, yes, came around one, but they were more concern about the money we*

as students paid, and as long as we have paid our fees that's it as they did not care whether we learnt or not". He further noted that even that course was a one off and not continual. Some of the other participants had followed one of the pre-sessional support programmes at USQ on academic writing and they expressed positive ideas about their experience. By contrast, PT2 commented that the EAP course she followed was difficult for her while at the same time indicating its usefulness: *"Actually the course, EAP was somewhat supportive because without that I would not have been able to do this."* She further stated that at times she had felt that university study was better in comparison to EAP for several reasons. *"It was very hard more than university study, in my country academic writing is not much emphasised or not at all, because we did those studies in our mother tongue."* She was not satisfied with the duration of that course as she found it difficult to grasp what had been taught within that short period. Thus, she mentioned that, *"The pre-sessional support was for 10 weeks and not enough time. In between four subjects and too many assignments. Couldn't concentrate well because of too many assignments. Not fully."*

PT4's experience on pre-sessional support in academic writing was a bit different from others as she did not undertake EAP. Instead she mentioned other support she had received, which she considered to be pre-sessional support in academic writing. She did not mention particular names of these programmes, but rather discussed some of the facts connected to these programmes: *"Bit by bit with pre-sessional support, but earlier had few of the support sessions in various places but couldn't completed any of them as I was a part time student most of the time. Full time only from last year, so lack of concentrating in studies but now ok. There was a support programme from the uni but it was more like you can read and can attend whenever you want..."* PT6's attitude about the EAP course was *"that [it] prepared me for bachelors, they will give the basic skills which I need."* PT6 was also aware of the support given through the university's Learning Centre, as did the other participants except for PT7. PT9 had been aware of the pre-sessional support sessions provided by the university, but unfortunately could not enrol in them due to lack of time. However, she had sought support from the Learning Centre in terms of aligning her assignments with standard academic writing conventions. Her perceptions about the support she gained were formulated as follows: *"I went to the Learning Centre for*

revisions of my assignments – sometimes grammar revisions but they did not give grammar revisions, just structuring revisions of organisation, overall structuring.”

The postgraduate students of this study cohort, as well as six other participants, had undertaken pre-sessional support in academic writing. The majority of these participants had been compelled to follow these pre-sessional EAP courses as a fulfilment of a pre-requisite for university entrance, as an alternative for the International English Language Testing System (IELTS). This mostly applied to international students who were from non-native English speaking backgrounds.

Even though the participants from native English speaking backgrounds believed that they wanted support in academic writing, they were not aware of any possible support except for the support given by the university’s Learning Centre. However, PT8 described the support that she gained through the university’s Learning Centre as “*....brief, not ongoing, not taught, and Learning Centre is not to teach*”. Six other participants supported the same idea in relation to the support provided by the university’s Learning Centre.

PT8 mentioned a separate course taught at USQ that was related to academic writing. This was CDMS1000, Communication and Scholarship, which she was enrolled in. Even though this could not be considered as pre-sessional support, she was satisfied with the content it covered: “*...in terms of writing they are going to show us how to write an essay and show an essay plan how to research, put together an academic argument, hope they will walk us through that...*”. These perceptions clearly denote the needs of university students in relation to academic writing support that has direct relevance to content knowledge.

PT8 continued with similar information related to PT5’s supervisor’s support in academic writing: “*...lecturers always tend to say that their job is to deliver us the content and not to teach us how to put all together. I find it really interesting as normally when I teach we are not meant to assess a skill that is not being taught but here....They assume that when you come to the uni you should know the writing skills or the lecturers say that you need to get them but not specifically knowing how and from where to get those skills upgraded*”. She further commented on some specific areas that she needed to improve: “*...It’s (assignment) readable stuff but it could be more succinct and my vocabulary should probably be more academic.*”

Lack of standard academic vocabulary was a common issue among some of the pre- and undergraduate students of this case study, despite their demographic differences. All native speakers of English in this study cohort valued academic writing support in addition to their main course work. However, they were not able to find any information about ongoing academic writing support programmes from the university, nor about the support given by the Learning Centre.

The participants of this case study mentioned the importance of gaining ongoing academic writing support towards completion of their university education. Among them, PT7 highly valued gaining academic writing support continually, for a range of reasons: *“I would reckon that would be good, because no wonder that we can learn everything within one day or two. Obviously there is a lot you are going to learn within half a day that is going to be impossible for a human to absorb. That’s why you have four years to come out as an engineer or an accountant.”* Among the others for whom having academic writing support continually was important, PT3 stated that *“For a student, continual support is very important. Learning never ending if there is a shadow behind me then motivated.”*

(5) Perceptions of frequently used digital social media

The participants’ opinions about their frequently of using digital social media was useful when setting up the academic writing support session during the intervention stage. Overall, the participants mentioned Facebook as the most commonly used platform within digital social media. The majority of them were frequent users of Facebook; however, they mentioned that they did not use it for educational purposes. Seven participants claimed that they use Twitter, Blogs and LinkedIn in addition to Facebook. PT3 used blogs and LinkedIn for educational purposes, mentioning some of the benefits of blogging: *“Actually worked online and had access to lot of data, facts and learning opportunities.”* She also thought positively about blogs in terms of improving her ability in academic writing: *“interesting, sharing knowledge, peer programming, in my previous employment. This maintains quality, standards, knowledge.”*

In relation to the use of Facebook for educational purposes, five participants mentioned their perceptions and involvement within Facebook groups. PT4 mentioned a USQ Facebook group. However, she was not happy with the experience

that she gained when it comes to improving educational values. By contrast, PT7 was more positive about his engagement with a Facebook group based on Civil Engineering. He said that *“the group members kept on posting interesting civil engineering project related posts even though these were not directly related to a specific study or course.”* PT6 mentioned his experience in discussion forums with regards to links between education and digital social media. He valued having connections with the lecturers and their comments through these forums, describing them as similar to face to face meetings. PT9 stated that even though she used Facebook, she did not post any personal details, but rather used it to read and listen to news in English. However, she as an ESL speaker, she had a tendency to being drawn to other interesting topics. All the postgraduate students in this case study were connected to a specific USQ HDR student Facebook group. PT15 stated that *“This gives us some kind of motivation to continue with our work, and also gives exposure to what others do in this field.”* PT16’s idea about this Facebook group was that *“It allows us to know about relevant seminars and workshops that will help HDR students.”* All postgraduate students in this case study felt they were not alone once they saw notifications in this Facebook group.

4.5.1.2 Findings from the intervention stage

The researcher of this case study had the opportunity to interact virtually with the participants during the intervention stage. The data related to the participants’ perceptions about the support they gained during this stage. These findings were further added to by observing the participants’ behaviour and collecting their views as they communicated with the researcher and their peers while engaging in activities during the intervention stage. The observations were noted down as field notes by the researcher and they contributed towards the qualitative findings of this case study.

The participants’ perceptions during this stage were based on the academic writing support provided via digital social media by the researcher. The field notes included the main ideas that were part of the participants’ perceptions about this support session, rather than a word-for-word transcription, as the researcher was involved in providing academic writing support to these participants simultaneously, which was considered more important at this stage of study.

The researcher’s field notes that were made during the intervention stage of the study are underpinned by the three models that were mentioned in Chapter Three of this thesis: Self-Regulated Strategy Development (SRSD) model and Technology Acceptance Model (TAM) and Chickering and Gamoson’s (1987) *Principles of Good practice in Undergraduate Education*.

Self-Regulated Strategy Development (SRSD)	Technology Acceptance Model (TAM)	Principles of Good practice in Undergraduate Education
<ul style="list-style-type: none"> •Develop background knowledge •Discuss it •Model it •Memorise it •Support it •Independent performance 	<ul style="list-style-type: none"> • Perceived usefulness of digital social media • Perceived ease-of-use of digital social media 	<ul style="list-style-type: none"> •Encouraging contacts between students and faculty •Developing reciprocity and cooperation among students •Using active learning techniques •Giving prompt feedback •Emphasising time on task •Communicating high expectations •Respecting diverse talents and ways of learning

Figure 4.6 Classification of field notes

The results gathered as field notes during the intervention stage are discussed under these sections.

First this section discusses the participants’ perceptions about the academic writing support they gained and the digital social media platform. These discussions are underpinned by the concepts of the SRSD model and TAM. This is followed by a discussion of their overall perceptions about this academic writing support process and its contribution towards their academic writing self-efficacy, which is guided by the *Seven Principles of Good Practice in Undergraduate Education*.

Self-Regulated Strategy Development (SRSD)

The majority of the participants of this case study expressed positive views about the step by step process that was used in providing academic writing support during the intervention stage of this study. This process was guided by the six stages of SRSD model, as outlined in Figure 4.7. The participants liked the stage “*Develop background knowledge*”, as through this stage they felt they were guided to think

more in-depth using their previous, existing knowledge. One participant stated that *“Even though I was trying to find stuff to write in my assignment all over, I realised that I have sufficient facts within me that are at least needed to start writing.”* When the facilitator asked some questions from these participants that aligned with their assignment task, they managed to respond and elaborate to some extent. This means that these participants already possessed some of the necessary knowledge that was sought by their tasks. However, they stated that the guidance they received through the session enabled them to see the relationship between the knowledge they already had and the task requirements.

The participants of this case study stated that they much valued the *“Discuss it”* stage, mainly because this enabled them to focus their thoughts in relation to the given task. As one participant said: *“I felt so confident when I had the opportunity to discuss about the task prior to structuring it. Otherwise I was not sure of what I was writing and I always doubted if I am in the correct track.”* Once they had a clear idea through this second stage of the SRSD model, some of the participants stated that they felt very productive: *“Once I had a structure of what I am going to write, I felt very happy. This also helped me to get the things complete section by section, so less stress.”* The stage *“Memorise it”* was experienced by these participants when they went through the structure and the elaborated version of each section of the assignment. Participants stated that this stage enabled them to see their own errors as they went through the written assignment several times. All the participants felt they benefitted from the fifth stage of SRSD model, *“Support it”*, as this helped them to get feedback on their completed assignments from both the facilitator and their peers. Towards the end of this support programme the majority of the participants stated that they feel confident about performing independently in their future assignments.

The participants further mentioned that they highly valued the use of criterion-based instructions, authentic writing tasks, and constructive feedback during this session. During the intervention stage, the facilitator noticed some of the participants becoming excited while preparing themselves to start writing. This was visible through their frequent questioning behaviour.

Technology Acceptance Model (TAM)

The participants expressed their perceptions about the use of digital social media and their impact on gaining academic writing support. Their views were based on the perceived usefulness of digital social media and their ease-of-use. The participants' views about the integrated collection of digital social media, including applications such as Facebook, Zoom, blogs etc., were positive for various reasons. Mainly, the participants mentioned that they were able to get support in a stress free environment, as they could stick to their own space and pace. One participant stressed this aspect: *"during this period I was able to write in my own space and pace."* Other participants said that this non-traditional learning platform had made them enthusiastic to learn: *"I was enthusiastic to get involved in developing my ability in academic writing, mainly because I had the opportunity to post questions to Facebook group whenever I felt confusing. More importantly this didn't want to be formal nor lengthy. This was really helpful as I could post even minute or may be silly questions that I needed to clarify."* Other participants agreed, saying that they were not able to receive this kind of support in other, more traditional, learning support environments.

Another participant stated that he was motivated to be actively involved in this programme. His reasoning was that he could observe how the other participants continued bit by bit. One participant mentioned that *"The postings of other participants in the Facebook group and the blogs were really helpful in this. When I was within this learning community, I didn't feel that I am the only one who struggle to develop academic writing."*

The other comments of these participants about the advantages of this digital social media platform in delivering academic writing support, were based on the seven *Principles of Good Practice in Undergraduate Education*, as outlined in Figure 4.7. The most common perception related to its enhancement of communication and interaction between participants and the facilitator. The participants stated that the majority of the questions raised by other participants were relevant to their issues, and these also helped them to be informed about the suggested solutions for the poster assignment. These participants liked Facebook as it was quick and easy for

them to get information and to get connected with the rest of the learning community. This led them to develop reciprocity and cooperation.

The participants of this study considered this to be a faster way of communicating, especially when it came to responses to questions and facilitation, when compared to sending and receiving emails from their lecturer. Gaining prompt feedback was the most important aspect mentioned by these participants. They believed that, if not for the use of digital social media and other digital tools in this programme, they would not have gained such timely feedback.

These students also stated that they were facilitated and encouraged to write through blogging. Furthermore, they valued the ability to interact with the facilitator via Zoom, as this enabled them to share their screen while talking in real time, which in turn enabled both parties to edit the same document in real time. This affordance was felt to be quite useful as this was considered similar to a face-to-face meeting. More importantly, they valued the affordance of its recording ability, which meant that the students could save their work and refer to it later, if they wished. They also had the ability to share it with other participants if it touched upon a common area of concern.

All these participants' perceptions during the intervention phase enabled the researcher to draw conclusions from this case study.

4.5.1.3 Findings from post-intervention stage interviews

The interview findings of the post-intervention stage were useful in addressing the research questions of this study. They were useful in the qualitative analysis in isolation as well as in the mixed-analysis. The majority of the responses included in these findings tend to show some similarity with the participants' views as revealed during the intervention stage. Contrary to the pre-intervention stage interview data, the data gathered during the post-intervention interview stage tended to be less descriptive, resulting in the researcher identifying fewer categories when compared to stage one. However, the reasons behind this are discussed in more detail in the following two chapters, including details about how the researcher managed to address all the research questions aided by the participants' perceptions that were identified during the intervention phase of this study.

Perceptions related to digital social media as a platform for academic writing support

The majority of the participants affirmed their interest in gaining academic writing support to improve their ability in academic writing via digital social media. PT2 and fourteen other participants liked the concept of using Facebook as one of the platforms in this process. PT2 mentioned that *“Normally, I use FB so if contacted through FB is easy.”* However, PT9 disapproved of having Facebook as one of the platforms within this intervention process, as she did not want her opinions or questions to be publicised and she wanted to remain anonymous: *“I do not like Facebook because it opens all my life.”* She was comfortable in engaging with the programme later on, when the researcher explained all the privacy settings that were in place throughout the study, including a closed Facebook group.

Six participants stated that they liked this platform within this intervention programme as they disliked paper-based materials. PT8 was also comfortable with using Facebook as the platform for this particular intervention programme, mainly because of her previous experience being an online off-campus student. However, she valued being an on campus student as they get the opportunity to engage in face to face lectures. She mentioned some of the advantages of face to face lectures as follows: *“On campus students have advantage of getting more information from lecturers as in face to face lectures they tend to unpack more thing which is natural. Quite often they give other additional material which they don't give to on line students.”* PT8, PT17, PT20, and PT23 said that the quality of the forums depended on the lecturer's ICT skills. The majority of the nursing students of this cohort agreed as most of the nursing courses are delivered online except for the practical sessions. They stated that merely integrating these types of platforms would not be advantageous to students, unless it was assured that the lecturers were confident in using them effectively.

Advantages of using digital social media as the platform within this intervention process

The majority of the participants highlighted that they felt stress free and felt free to ask questions, either of the facilitator or of their peers. As PT13 for example said: *“Since it was informal I did not find it difficult to approach the facilitator, and since the whole community had the same need, I was not inhibited to seek support”*. PT19 mentioned that *“I really valued the other members’ learning experience and this made me feel that I am not the only one who is in trouble”*. PT16 similarly noted that the *“feeling of having someone or a group as a learning community made me feel confident”*. Conversely, PT21 was more apprehensive: *“with peers, I had little trust in comprehensive feedback because they are at the same language level, so how could they be of any assistance?”* PT11 and six other participants appreciated the support being instantaneous because of this platform.

Some of the participants identified digital social media platforms as adjuncts to traditional forms of delivery. However, PT4 mentioned that she felt embarrassed to discuss her issues related to academic writing with her instructor during one-on-one tutoring sessions, due to a fear of being judged for her lack of ability. Improved flexibility was another common comment about this platform from most of the participants. PT7 for example elaborated: *“I found this really beneficial because the stuff was recorded, you can still replay, think over it and keep them for later down the track as well. Especially good for adult learners as they tend to learn in different pace. If you finish work at 6/7 o’clock even, rather than running to the uni after a whole day’s work and exhausted and have to read again for recap but having it as digitally, yes great. It was easy to ask a question freely via the group and confirm what is coming out.”* Eight participants said that this platform motivated them as there were useful links being circulated very often. PT14, and the majority of the participants from the Open Access College, stated that they were motivated due to the circulation of assignment-related documents.

Overall perceptions of the intervention process and the support gained

Almost all of the participants gave positive feedback about the academic writing support programme via digital social media in terms of improving their ability in academic writing. The majority claimed that they had been able to alleviate their anxiety about academic writing. PT1 in particular mentioned how he valued the discipline-based discussions: *“This programme helped us to integrate academic writing skills that are discipline-based.”* He also stated that other academic writing support programmes he had engaged in had placed more emphasis on academic writing in isolation. Similarly, PT5, PT13, PT17 and three others stated that having the opportunity to learn how to find course-related material, rather than just generalised information, was as an advantage.

Through in-depth discussions with these participants, it was again revealed that all these positive effects impacted on time management, enabling them to submit their assignments on time. PT3 also mentioned some positive outcomes of this intervention process: *“Through this support we were supported with relevant information step by step to suit our levels of knowledge. Earlier I used to look for web sites by myself but most of them did not work well as I did not know a better way of searching. But later on I also learnt how to manage and evaluate information which helped me in becoming a life-long learner.”* Along with the step-by-step process that was liked by most of these participants, they mentioned that they gained confidence, enabling them to apply the same process for themselves in the future when it comes to writing other assignments.

The areas that the majority of the participants mentioned as useful were: referencing, paraphrasing, planning of essays, organising ideas, paragraphing, and understanding and interpreting the questions. Most of the other participants valued the motivation they had gained towards preparing drafts and the feedback they had received for their drafts and how that could be used in the future modelling and structuring of essays. However, PT10 was somewhat less positive and stated that: *“I was not being furnished with vast amount of information rather the appropriate material was selected to resolve my issues at each stage.”* At the same time, they revealed that they had learnt the importance of becoming competent in academic reading, as a strategy to develop their academic writing ability. They further mentioned that the

overall the support they gained via this programme had contributed greatly to improving their perceived academic writing self-efficacy.

4.6 Chapter summary

This chapter has included the results of this case study. The quantitative and qualitative data that were gathered during all three stages of this study: (1) pre-intervention stage, (2) intervention stage, and (3) post-intervention stage, have been discussed. The quantitative component was supported with the results from self-efficacy questionnaires. The results from interviews and field notes contributed towards the qualitative component of this case study. The quantitative results were discussed in terms of their item-wise and participant-wise dimensions. The qualitative results of this study were discussed under specific categories. These categories were supportive in addressing the research questions of this case study.

Chapter 5 Discussion

5.1	Introduction
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5.4	Chapter Summary

Figure 5.1. Structure of Chapter five

5.1 Introduction

The purpose of this case study was to explore university students' perceived academic writing self-efficacy. Their perceptions were investigated in the context of academic writing support provided through digital social media during the intervention stage of this study. The main findings of the quantitative results revealed that there was a significant improvement in the participants' perceived academic writing self-efficacy. However, the intention was to investigate what the

impact on this improvement was of the academic writing support provided during the intervention stage of this study, as well as the impact of the digital social media that were used as the platform for delivering this support to these participants.

An overview of the findings is presented prior to the main discussion. The quantitative component of this research is based on the results of the self-efficacy questionnaires that were given to participants in two different stages: pre- and post-intervention. The qualitative component included interview data and field notes that were collected across all three stages of the study.

The results from the self-efficacy questionnaires are used within this discussion as participant-wise and item-wise. Participant-wise ratings include the participants' perceptions of their overall academic writing self-efficacy. These participants rated their ability in performing standard academic writing in relation to all 20 items shown in the self-efficacy questionnaire. The ratings that were awarded for each item were calculated to arrive at each of the participant's overall ability. The distinction between the ratings gathered in the pre- and post-intervention stages of the study provides evidence to identify positive or negative impact each stage may have had on participants' academic writing self-efficacy beliefs.

The self-efficacy questionnaire results are also incorporated within this discussion as item-wise. This shows how each participant rated their perceived self-efficacy in relation to each item included in the survey questionnaire. The item-wise results enabled the researcher to identify the majority of the participants' academic writing needs.

The mixed-analysis of the results from this case study has been conducted through the integration of results from participant-wise self-efficacy questionnaires and the responses related to the research questions 2b, 3b and 4, as shown in Figure 3.9. This has allowed the researcher to ascertain to what extent the significant improvement in the participants' perceived academic writing self-efficacy was directly influenced by the academic writing support they received through this research and/or to what extent it was due to the influence of the digital social media, which were used as the platform of delivery. The following discussion explains how conclusion were drawn.

5.2 Key Findings

The overall participant-wise quantitative results showed a significant improvement in the participants' perceived academic writing self-efficacy. This was revealed through comparing data from the pre- and post-self-efficacy questionnaires. This was made possible through a two-tailed paired-samples t-test with an alpha level of 0.05 that included *p* values. The results of the test demonstrated a significant improvement in the participants' perceived academic writing self-efficacy after gaining academic writing support during the intervention stage.

Even though the differences between the overall participant-wise quantitative results showed a significant improvement in the participants' perceived academic writing self-efficacy, this could be due to them overestimating their capabilities. In line with Bandura (1997), this state of optimistic self-efficacy beliefs was not a failing but a benefit since it created a tendency for participants of the case study to raise aspirations and sustain motivation. This was evident through some of the participants' responses in the second stage of the interviews in which they clearly mentioned how they had overcome hindrances to their writing. The majority of the participants in this case study claimed that they were cognisant of the academic writing support they gained and they identified the digital social media platform as one of the main factors that contributed towards this development.

5.3 Discussion

The discussion in this section is underpinned by the mixed-analysis of quantitative and qualitative data from all three stages of the study. This is organised under the categories illustrated in Figure 5.2. These categories were revealed through the analysis of the overall qualitative data.

The four main sections of the discussion involve:

- Academic writing support
- Barriers to performing standards in academic writing
- Participants' perceptions of digital social media
- Participants' perceptions of the academic writing support intervention process.

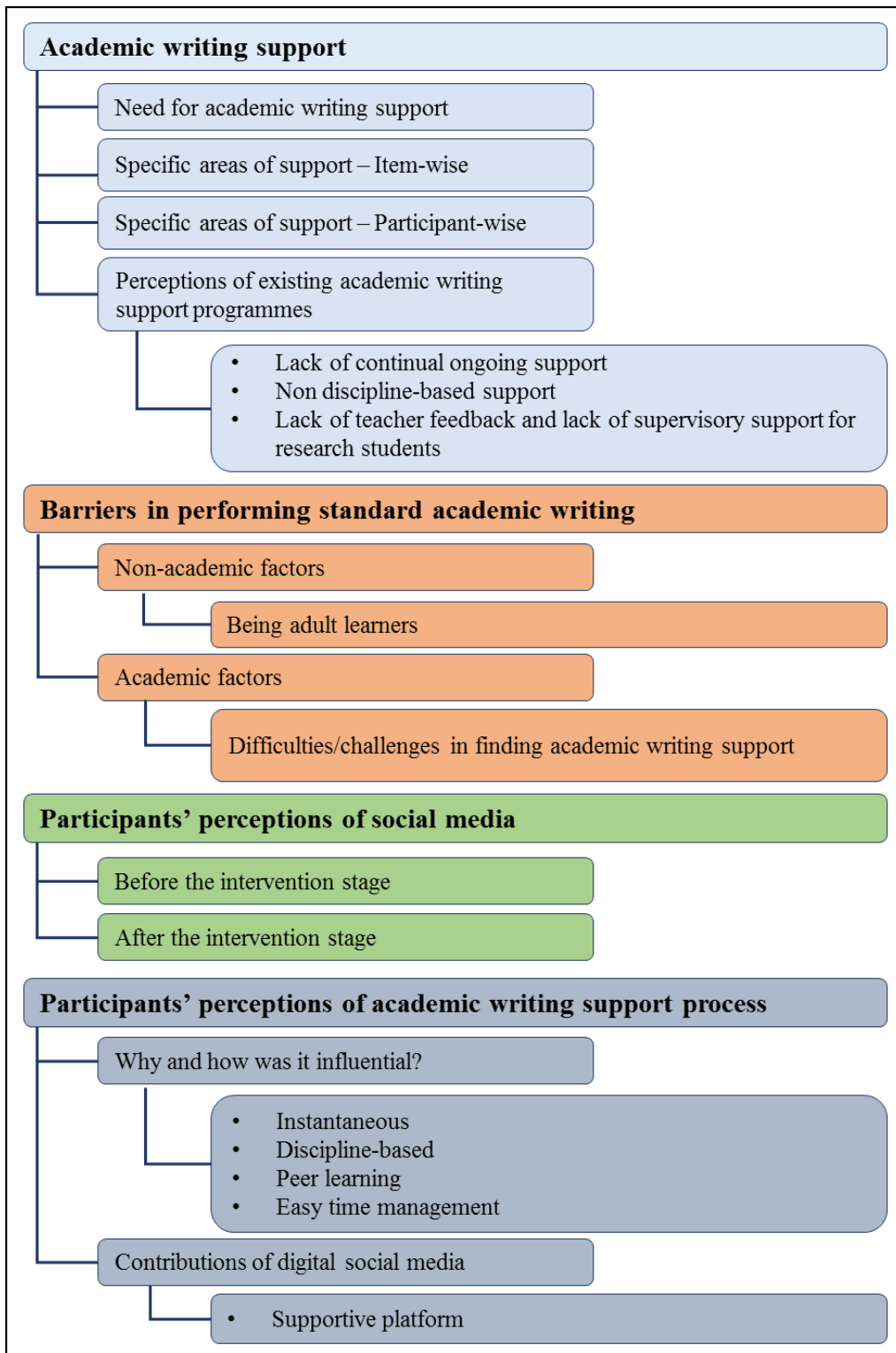
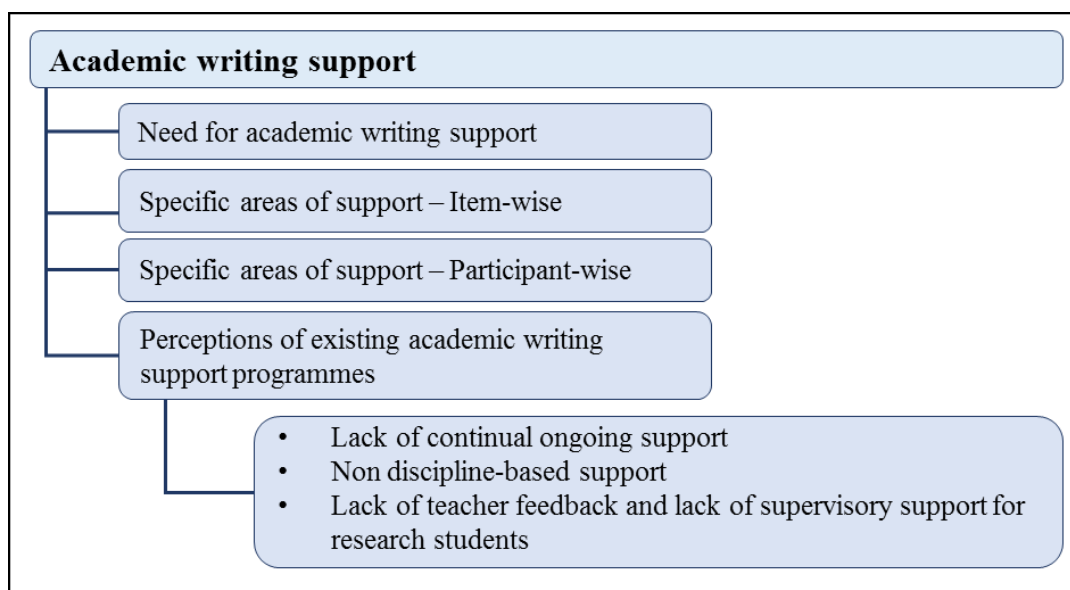


Figure 5.2 Key areas of the discussion

5.3.1 Academic Writing Support

This section includes academic writing support-related information.



The discussion of this section is related to two specific areas: (1) participants' need for academic writing support, and (2) perceptions of participants about the existing academic writing support programmes. The participants described the existing academic writing support programmes as non-continual and non-discipline based. The undergraduates' perceptions of inadequate teacher feedback and the postgraduates' dissatisfaction about supervisory support are included under the second section.

5.3.1.1 *Need for academic writing support*

From the beginning of the case study there were many university students who expressed their interest in joining this programme as they were in need of academic writing support. This may be mainly due to the help-seeking behaviour of adult learners (Kearns, Muldoon, Msetfi & Surgenor, 2015). Help-seeking behaviour is very common among university students. The seminal work of Tajfel and Turner (1979) emphasises that according to Social Identity Theory, learners value the help they receive from an in-group (small group of people with shared identity) more so than that from a source perceived as outgroup (people who do not belong to a specific in-group). Learners consider the support they gain from in-group sources as less threatening.

The participants of this case study included both native and non-native English speaking university students. The initial results of the self-efficacy questionnaire did not show any significant difference between the academic writing self-efficacy of native and non-native participants. This provided evidence for the researcher to hypothesise their academic writing support seeking behaviour was not correlated with language backgrounds. This is supported by Grav and Cayley's (2015) view, who suggest that there is a tendency for both native and non-native speakers of English to seek academic writing support.

Prior learning of these participants was also taken into consideration when investigating their academic writing support seeking behaviour. The majority of non-native English speaking participants, who had already undertaken their first or second degree outside Australia, stated that their prior learning had not been supportive of academic writing. These participants revealed that language was not a barrier in their own country, but rather that academic writing did not have a strong presence in their formal education. Even participants from native English speaking backgrounds stated that the academic writing knowledge they gained in TPP or EAP courses prior to their first degrees, was not beneficial in writing assignments. Baik and Grieg (2009) reinforce the importance of implementing academic writing support programmes that are discipline-based.

The postgraduate students in this case study claimed that even though they had prior relevant learning experience, they had difficulty in performing standard academic writing at this particular stage of their studies. They perceived their lack of ability in self-regulated learning as the main barrier. Another problem they faced was presenting the ideas logically, despite their competency in identifying the relevant content that needed to be included. All these issues impacted on the PhD students when preparing for their confirmation of candidature. However, this was not a common issue among the rest of the participants within this study. The MBA student in particular found academic writing challenging, as her assignments were summative and her lack of competency in academic writing meant that she was penalised. These issues aligned with the ratings from the first stage of the survey results that appeared item wise, as all these participants in general had low levels of self-efficacy in overall structuring, editing, analysing, generating ideas and in using varied vocabulary.

Regardless of the background of the participants in this case study, they continued to struggle with writing, despite the differences in the areas of support sought. The majority of them were often challenged when it came to organising their thoughts in accordance with standards of academic writing, which included analysis and synthesis. The participants from native English speaking backgrounds mentioned their negative beliefs about writing and lack of exposure as reasons behind their challenges, while non-native English speaking participants claimed that it could be for reasons such as language barriers and cultural differences. They in turn feared that these negative beliefs may have compromised their overall academic success. Providing adequate support in academic writing may help these university students to overcome these negative beliefs and to reach their goals.

Pajares and Johnson (1994) note that international students tend to demonstrate a lack of confidence, and preconceived notions, as well as encountering consistent negative criticisms about their academic writing capabilities. This then led to them possessing low perceived writing self-efficacy beliefs.

Overall, the results of this case study revealed that the participants' lack of positive beliefs and confidence in their academic writing abilities, in conjunction with feelings of inadequacy and intellectual inferiority, made them feel overwhelmed in the process of writing. This was the case despite their diverse demographic backgrounds.

Since academic writing is considered a key to academic success, the participants of this study believed that they should possess basic knowledge in critical analysis and synthesis. Some non-native participants, who had prior academic experience in their native countries, still identified similar challenges in performing standard academic writing when they wrote assignments. PT3 for example stated that "*expressing ideas coherently with accuracy and logic in an academic setting using another language is extremely difficult in achieving a significant accomplishment.*" Likewise, many participants had developed negative beliefs about writing, which then transformed into academic challenges. Pajares (2003) found that students who were unwilling to express themselves in writing lacked confidence in their writing abilities, or had high writing apprehension. They were less likely to perform well in their academic writing. The participants' responses in this study revealed that regardless of being

native or non-native speakers of English, they all faced similar obstacles in performing standard academic writing.

The participants in this case study revealed that they felt the need to be able to communicate sophisticated information to sophisticated audiences. Writing, being one of the four skills in language learning, needed more attention as it was considered the major tool by which learners can show their knowledge in the target language. According to the overall results from the first survey stage (54.09%), it was evident that all participants of this case study sought academic writing support due to their lack of academic writing self-efficacy.

5.3.1.2 Specific areas of support- Item-wise

The participants of this case study revealed the specific areas of support they needed in order to improve their competency in academic writing. The responses from the first stage of interviews and item-wise self-efficacy ratings of stage one were helpful in this context. The participants' self-efficacy ratings from the first stage of the study were compared with the responses from the interviews. This mixed-analysis of data enabled the identification of the specific areas of academic writing support these students sought.

The participants' issues ranged from simple grammatical sentence structuring to higher order writing skills. The facilitator was successful in providing support in most of the areas that were sought by the participants while being cognisant of the time constraints. Even though some of the areas of support were mentioned by only a few participants, almost all of the other participants still benefitted through these. This was revealed through some of the participants' positive comments as they felt they had improved themselves in specific areas. However, some of these areas had not explicitly been identified by them prior to this intervention support session.

Universal Design for Learning (UDL) (Meyer, Rose, & Gordon, 2014) is a useful framework for understanding different learner needs and this section of the discussion is underpinned by its underlying principles. This framework can be utilised to improve teaching and learning based on creative use of digital technologies (Meyer, Rose & Gordon, 2014). This approach can help educators improve and optimise learning experiences for all individuals as it creates a learning culture that provides diversity (Bernacchio & Mullen, 2007). Leinenbach and Corey

(2004) suggest that UDL can be used as a framework to show how digital media has enhanced students' ability to access information, demonstrate their understanding of concepts, and actively engage in the learning process.

a) *Academic writing support in paragraphing*

The participants' self-efficacy in their ability to write effective paragraphs was raised as one of the main concerns in this case study. As an initial step, their ability to write a simple sentence was taken into consideration. The participants demonstrated the highest self-efficacy ratings in writing grammatically correct simple sentences in both stages—Stage 1- 73.57% and Stage 2- 78.57%. However, they mentioned that they lacked the knowledge that was needed to structure an effective paragraph. Once the participants' self-efficacy ratings in paragraphing were compared with the above ratings, it was understood that merely being confident in writing a grammatically correct simple sentence did not contribute much towards making these participants self-efficacious in constructing an effective paragraph. This does not devalue the importance of an individual's ability to write basic sentence structures, as sentences are considered the basic building blocks of an individual's writing.

These participants agreed that merely being confident in the ability to write grammatically correct simple sentences did not contribute much towards standard academic writing. This was explicit in PT2's opinion who discussed "... *the need of learning to write good quality sentences...*", even though she rated 50% for item 1, which denotes her self-efficacy in writing a paragraph fluently, and she rated 30% for both item 13 and 14, which refers to writing a strong paragraph that has a good topic sentence/main idea and supporting it with relevant supporting details. This clearly depicts her perceptions of the distinction between various types of sentences that could have a direct impact on the standards and conventions of academic writing.

There was a disparity in the participants' ratings' for item numbers 1, 13 and 14 of the self-efficacy questionnaire even though these were all related to paragraph writing. This may be due to their lack of knowledge as to how a standard paragraph needed to be constructed or they may have considered normal writing that should not be categorised as "standard academic writing". This could also have been impacted by the specific placing of this particular item in the self-efficacy questionnaire as

number one. The descriptive format of the other two items (13 and 14) may have impacted on these participants in awarding a seemingly lower rating for these two areas in comparison to the first item, which was outlined quite briefly and directly (Bailey, 2014).

Overall, it was beneficial for these participants to realise the importance of improving their ability to write an effective paragraph. This can contribute immensely when performing standard academic writing, because effective paragraphs are able to inform, give an opinion, state facts or explain (Graham & Perin, 2007).

This realisation was more significant as expressed in the views of seven participants as they revealed that they had felt the importance of improving their ability in presenting information and ideas logically while communicating them effectively within their disciplinary conventions. It was quite evident that the support provided to these participants through the intervention phase of this study had a direct impact on improving their ability in paragraph writing, which then contributed enormously to their perceived academic writing self-efficacy.

b) Academic writing support in referencing and paraphrasing

The participants of this study clearly mentioned improvements in their self-efficacy in referencing and paraphrasing after the academic writing support provided through this study. Even though a particular item was not allocated to gauge the self-efficacy of their ability in paraphrasing, the ratings awarded under item 18 - *I can do referencing accurately, in the self-efficacy questionnaire is used in the discussion of both these areas* - could be considered as relevant.

Likewise, other areas such as plagiarism and search skills were also taken into consideration in supporting these participants to gain confidence in their referencing ability, one of the major areas in academic writing. Walker (2010) found higher rates of plagiarism among non-native speakers of English. However, the results of this case study did not specify any related significant distinction among the two cohorts, native and non-native speakers of English.

The majority of the participants of this case study sought support in developing their ability to reference. They revealed that due to inaccurate referencing they had been

penalised on several occasions when their assignments were marked. Hendrick and Quin (2000) emphasised the importance of teaching referencing initially to university students more explicitly. This would lay the foundation for them to further improve their ability in referencing, even though it is not sufficient for them to only know why and when to reference.

The majority of the participants specified that they needed support in referencing related to skills such as knowledge of referencing rules, what plagiarism is and how to avoid it. Since plagiarism is perceived to be a growing problem, universities are required to devote increasing time and resources to combat it. Most strategies involve detection and deterrence, among which the latter is a better educational approach, as it tries to change student attitudes and behaviour in regards to plagiarism (Gullifer & Tyson, 2010). The responses of these participants indicated their confusion regarding what behaviours constituted plagiarism. They further indicated their plagiarism related behaviours as the least serious. Some of them were not concerned about the fear of unintentional plagiarism. Therefore, to enhance university students' referencing skills, it is important to implement suitable policies on academic misconduct through the development of a university-wide systematic approach with an educative focus and including deterrence strategies. The quantitative data from this case study showed a 14.65% of participants' overall improvement in their self-efficacious beliefs in referencing. Even though these results did not show any significant distinction in plagiarism among native and non-native speakers of English, Walker (2010) has argued that there is a higher possibility of plagiarism among non-native speakers of English.

The majority of the participants who had a lower self-efficacy rating in Stage 1, item 18 - *I can do referencing accurately* - mentioned that they were able to gain confidence mainly through exposure to the EndNote software operation management during the intervention stage of the study. It was also noted that some of the participants wanted to know about the distinction between in-text and end references. The ways in which they could embed in-text references within sentences were discussed in detail. PT10 had some specific issues when it came to referencing, despite having a 60% overall self-efficacy rating in Stage 1. She was a nursing student and she always wanted to clarify what specific resources she should use to support her assignments. She was guided towards how she could use library websites

to search electronic as well as non-electronic sources that would align with assignment specifications. This also included ways of finding credible and reliable sources, as some of her assignments clearly specified either peer reviewed, primary sources or secondary sources. If she had been remiss in finding the correct types of sources, she could fail her whole assignment. This aligns with other findings that show that if university students are given extra support on referencing and anti-plagiarism, they will ultimately improve their performance in written assignments, which in turn will impact positively on their ability in academic writing (Brown, Dickson, Humphreys, McQuillan, & Smears, 2008).

Paraphrasing was another common theme within the discussion sessions during the intervention phase of this study. This was a main concern of the pre-undergraduate participants of this study as they had a particular set of assignments based on paraphrasing. These participants were exposed to academic reading that had explicit links with skimming and scanning as strategies, which could support them to develop their ability in paraphrasing (Plakans, 2009). This was successful as the support given was related to a genre-based approach. Wingate (2012) emphasised that analysis of discipline-specific texts is the best starting point for teaching and learning of academic writing. The participants further mentioned that competency in paraphrasing had enabled them to avoid plagiarism as well (Wallwork, 2011).

c) Planning of essays and organising ideas.

During Stage 2 of the interviews, the participants of this study revealed that they were able to increase their self-efficacy in planning essays and organising ideas after exposure to the academic writing support programme. They further mentioned that the overall support they gained during the academic writing support sessions had enabled them to enhance their confidence in this area.

Even though there was no single item in the self-efficacy questionnaire that specifically represents this idea, there were several items that described this context collectively. They are outlined below along with their item numbers:

Table 5.1 Self-efficacy questionnaire items related to planning of essays

Item number	Description of items
2	I can write an essay fluently.
9	I can use conjunctions, transitions correctly to maintain cohesion within an essay.
12	I can easily generate ideas to write about.
15	I can write a proper introduction and a conclusion.
16	I can analyse and synthesise the facts effectively.
19	I can write a well-organised and sequenced paper with good introduction, body, and conclusion, apart from the rest of the fundamental abilities that needed to be collated.

The participants' average self-efficacy rating in the above areas was 51.35% during Stage 1. Even though this rating depicts a moderate level of their ability in this context, their responses in Stage 1 interviews still suggested their need for academic writing support in all these areas. The majority of the participants insisted on specific support within this area. PT1 mentioned for example that: *"I want to improve my ability in presenting information and ideas logically while communicating them effectively across the discipline."* He further mentioned that he was competent with his content but that he lacked the ability to organise it under each section. PT3 did not specifically mention the organisation of essays; however, she said she struggled with overall assignment writing and report writing. It can be assumed that this was mainly related to her lack of ability in overall organisation of ideas within an essay on the basis of her low self-efficacy ratings for all of the above items. PT4, PT13 and six other participants explicitly stated that they struggled in essay formatting and formulating as well as developing an argument in lengthy documents. The above discussion thus shows the extent to which these university students sought support in improving their ability in planning an essay while organising relevant ideas appropriately (Krause, 2001).

The particular issue that was conclusive in this case study was that, even though there were native English speakers within this cohort, their perceived self-efficacy in

organising an essay was not any better than that of the non-native speakers. Coffin et al. (2005) expressed that inexperienced writers can benefit from using techniques that help to organise their thoughts for an extended piece of writing. Some of these techniques were used during the intervention stage of this case study to enable the participants to develop in this context. They were either graphic organising techniques such as mind mapping, clustering, and branching, and/or formal organisational techniques such as writing lists or essay plan or outline.

According to item number 2 of the self-efficacy questionnaire - *I can write an essay fluently* - the majority of the participants' self-efficacy rating was in the range of 50% - 60%, apart from two participants who had a lower rating of 40%.

Surprisingly, one of these participants was a native speaker of English. For example, PT8, a native speaker of English, had low self-efficacy in writing an essay fluently while the other native speakers of English in this cohort rated above the average level in this regard. Overall, this item was rated as 53.57% on average in the first stage. This shows that the majority of university students in this study struggled with planning an essay, irrespective of their demographics or prior tertiary learning. Wingate (2006) has identified the need for providing support to students at all levels for them to gain the experience needed to deal with academic writing tasks. Such support will enable them to transfer their skills to their particular contexts.

The self-efficacy ratings of these participants in item 9 - *I can use conjunctions, transitions correctly to maintain cohesion within an essay* - is considered next. This emphasises their ability in using conjunctions and transitions correctly, which would enable them to maintain effective cohesion within an essay. Overall, the participants had somewhat similar ratings that depicted their average ability in this area.

However, two native speakers of English, PT7 and PT13, were rated at 40%. The importance of placing equal emphasis on both native and non-native speakers of English during the intervention stage was felt by the researcher as a result of these ratings. By contrast, PT11, a non-native speaker of English had 70% in this area, which was a higher rating in comparison to the others. She revealed that the ESL teachers in her country teach conjunctions in isolation, as parts of speech. Halliday and Hasan (1976) have highlighted the importance of incorporating conjunctions in writing as they function as cohesive devices.

This section discusses the participants' perceptions in relation to self-efficacy questionnaire item 12 - *I can easily generate ideas*. The ratings for this particular item was reported as the third highest in Stage 1 at 57.82%. This denotes a relatively higher self-efficacy of these case study participants, in terms of their ability to generate ideas prior to essay/assignment writing. However, when the individual ratings of these participants were considered, it was noted that all three native speakers of English had high self-efficacy in this area, in comparison to the other participants who were from non-native English speaking backgrounds. PT7, PT8, and PT13, native speakers of English, rated their self-efficacy as higher: 70%, 90% and 70% respectively. The direct impact of English being their first language may be considered as the main reason for this. This may have made it easy for them to process their thoughts without any discontinuation, whereas the non-native speakers of English may have needed some more time and effort to transform their thought process into written form. The participants in this case study from non-native English speaking backgrounds showed their lack of ability in logical and thorough development of ideas (Jones, 2007).

However, PT3, a non-native speaker of English, showed higher self-efficacy in this area, rating 80% in terms of *generating ideas easily*, even though her overall self-efficacy was as low as 54.5% during the first stage of the quantitative data collection stage. Her demographics were then considered at this point to identify a possible explanation for this significant improvement. It then became clear that, even though she was a non-native speaker of English, she had been exposed to native English speaking culture as she had been working within an Australian context for a considerable number of years. Even though she had shown a lack of confidence in writing, she was able to gain confidence in speaking, which in turn affected her positively in generating ideas. Hoch (n.d.) identified that students' progress in English writing at different rates depends on a range of variables. These include their educational background, native language, literacy skills in their native language, and previous contact with English.

PT1's self-efficacy rating in this area was again different from the others as he rated it as 30%, which was considerably lower. He was one of the PhD students in this cohort, and he was from a non-native English speaking background. His comment on his competency in this area was: "*Thesis writing is totally different from course*

work.” The “course work” here relates to the EAP course he took prior to his enrolment as a PhD student at the university. Since EAP is a guided course, he found it difficult to be self-regulated at this stage of his studies. Bird (2009) and Thomas (2013) have emphasised the importance of self-regulated learning strategies for student transition in a problem-based learning context.

Item number 15 - *I can write a proper introduction and a conclusion* - in the self-efficacy questionnaire was based on the participants’ ability to write a proper introduction and a conclusion. The overall rating during Stage 1 was 52.85%, which shows their moderate ability in fulfilling this type of task. However, PT3 showed the lowest rating at 30% in this respect. The main reason for this lower rating was her lack of knowledge about the specific or general structure of either of these elements. She also had not considered these two areas to be as important as the rest of the content. Redman and Maples (2017) consider these two areas as the basics of academic writing.

The next item that shows direct relevance to academic writing is item 16 - *I can analyse and synthesise the facts effectively*. Overall, this was rated at 43.92% in general, and the majority of the participants showed uniformity in rating this, as they demonstrated a lower self-efficacy in this area. During the intervention process they were given clear instructions about how to be more analytical in their writing. This also included some information related to the distinction between analysing and synthesising. Hyland (2007) has highlighted that it is important for university students to improve their ability in sustaining arguments and synthesising ideas in writing English for academic purposes, as these are crucial factors for overall academic success. Once they had been given clear instructions with some samples from other studies, they were content and were motivated to attempt these types of assignments without any hindrance or procrastination. Irrespective of the diversity that was prevalent among the participants within this sample, everyone sought support in this area.

Item 19 of the self-efficacy questionnaire includes various areas that are supportive in constructing an effective essay, including: *‘I can write a well-organised and sequenced assignment/ essay with a good introduction, body and conclusion’*. Overall, the participants’ average rating for this section was 47.5%, which was the

second lowest out of these six areas of concern, as shown in Table 5.2. There may be several reasons for this. Martinez Lirola, and Irwin (2016) believe that teaching academic writing is a constant challenge as students are not normally taught to write academically. However, they insist on the importance of these university students gaining the required skills that would enable them to produce highly formal texts, as this would be useful for their professional lives.

Apart from the above items included in the self-efficacy questionnaire, ability in critical thinking is another important skill that needs to be improved for university students if they want to pursue graduate studies (Bean, 2011). These participants' interpretations of critical thinking, the factors that they perceive to affect the implementation of critical thinking, and their perceptions of their development as critical thinkers were revealed mostly through the field notes. These indicated that some of the participants, including the native speakers of English, despite coming from different discourse traditions, had a fairly comprehensive understanding of critical thinking and willingly engaged with it. The problem with the rest of the participants was based on their uncertainty in demonstrating an argument, insufficient knowledge, and problematic issues surrounding the essay genre, such as authorial voice and assessment demands. However, since these participants' overall self-efficacy rating was higher in Stage 2 of this study than in Stage 1, this suggests that although cultural background may influence their writing style, these students managed to learn this new discourse with appropriate support and they may be able to master it with time.

Even though the majority of the participants were low in self-efficacy in areas related to academic writing, it was evident that they benefitted from the instructions they received during the intervention phase of this study. This was made explicit in the form of the self-efficacy ratings in the second stage, which demonstrated a significant improvement in their overall academic writing ability .

d) Understanding and interpreting a question

The difficulty in understanding and interpreting an assignment question was revealed during the intervention stage of the study. This was identified in the researcher's field notes. This issue was mainly prevalent among pre-undergraduates and undergraduates as their studies were mainly based on assignments, which was

different for the postgraduate students. These participants were given support related to academic reading as a remedy for this issue. This included the importance of identifying the key words of the question and then structuring the paragraphs accordingly. These instructions and guided practice that were offered via digital social media allowed them to become confident in this area. However, there was no item in the self-efficacy questionnaire that could be linked explicitly with this issue. The participants rated themselves at a higher level of self-efficacy during the second stage of the interviews. They mentioned how their earlier submissions were marked as faulty mainly because they did not align some of the assignments with the task/rubric appropriately. Klingner, Vaughn, and Boardman (2015) argue that “knowing how to read words has ultimately little value if the student is unable to construct meaning from text” (p. 2). In order for a student to understand and interpret a given question, they need to develop their ability in reading comprehension, which is a process of constructing meaning by coordinating a number of complex processes (McKeown, Beck, & Blake, 2009), including word reading, word and world knowledge, and fluency.

e) Discussion of the remaining items in the self-efficacy questionnaire that affected these participants' perceived academic writing self-efficacy.

The discussion of this section is underpinned by the ratings of a selected set of items in the self-efficacy questionnaire of this case study, namely: 3, 4, 5, 7, 8, 10, and 11 (Appendix F). All these items are based on basic grammatical components such as spelling, punctuation, parts of speech in general, singular and plural forms of words, vocabulary and synonyms. These components are essential parts of any kind of English writing and they are not limited to academic writing. Being confident in these areas is equally important to becoming competent in standard academic writing.

Table 5.2 Description of a selected set of items in the self-efficacy questionnaire

Item Number	Description of items
3	I can spell all words in an essay correctly.
4	I can punctuate an essay correctly.
5	I can use all parts of speech in an essay correctly.
7	I can use singular and plural forms correctly.
8	I can use prepositions correctly.
10	I can use a wide range of vocabulary in essays.
11	I can use synonyms instead of repeating the same words over and over again.

The majority of the participants' overall self-efficacy ratings in areas 3, 4, 5 and 7 were somewhat below the median, which means that they were able to maintain their confidence to a moderate level. The reason for this may be the auto correct function that is embedded in word processing. This was used by these participants in preparing their assignments, reports and/or theses. Mistakes were found in the following areas: spelling, punctuation, use of correct parts of speech, and accuracy in singular and plural words. Lea and Street (2014) found that these features, related to grammatical structure at the sentence level, have been a concern related to students' poor formal language at university entrance. Another reason could be because the mistakes in these areas are easily identifiable. These participants stated that at tertiary level they had the potential to correct most of them on their own or with the help of their peers.

However, by contrast, the participants rated themselves low in self-efficacy in areas related to prepositions, vocabulary, and synonyms, when performing standard academic writing. They mentioned that they needed more support in these items than for the earlier ones. Item 8 being about the correct use of prepositions was rated as low as 52.14% and this had a lower rating from the native speakers of English as well. The main reason for this may be the lack of explicit prepositional concepts in semantic representations (Saint-Dizier & Moens, 2011). When it comes to ability to use a wide range of vocabulary in writing, the majority of the participants were low in self-efficacy, irrespective of the diversity. Even though the self-efficacy ratings on

the above mentioned areas do not show a distinction between native and non-native speakers of English, Storch (2009) has mentioned that students from non-native English speaking backgrounds tend to have issues in areas such as grammar, vocabulary, linguistic fluency and accuracy when performing standard academic writing.

The participants' ability in editing was another major area they sought support in. This is considered a higher order concern in writing. According to Bloom's Taxonomy (1956), the six levels of learning that include knowledge, comprehension, application, analysis, synthesis, and evaluation, determine the distinction between lower- and higher-order thinking skills. Overall, this was rated as the third lowest in the list at 46.78%. This rating was not impacted significantly by any elements of the prevailing diversity within this group of participants; rather, almost every participant demonstrated low self-efficacy in this area.

The participants valued the editing support provided by the facilitator. They liked the fact that they were initially made to realise the distinction between editing and writing, as most of them had a tendency to edit every sentence prior to moving on to the next sentence. The participants mentioned that this had slowed down their writing speed and also resulted in a low word count, which was often far below the desired word count if they had a limited amount of writing time. This may have caused them to dislike writing and also hinder them in their writing. Once these participants were given instructions via the academic writing support programme, they mentioned that they had gained considerable confidence, which was clearly shown in the second stage of self-efficacy ratings for this particular item at 60%. The Common Core Standards (CCSS) (2010) emphasise the importance of students' mastery of a variety of writing skills, processes and digital tools. The processes include planning, editing and revising of written texts.

Item number 20 of the self-efficacy questionnaire was used to measure participants' self-efficacy rating in their ability to complete a writing task without difficulty and to submit on time. Significantly, this was the lowest rating that students provided out of all 20 items in the self-efficacy questionnaire during both stages. In Stage 1 it was rated at 37.5% while in Stage 2 it was at 53.57%, which clearly shows an improvement in this rating in the second stage. It was first assumed that the reason

for this improvement could be the digital platform that was used in this study. However, Allen and Tay (2012) mention that they did not identify participants engaging in high-intensity academic writing as a result of the involvement of technology. Despite their somewhat negative conclusion, the participants of that study stated that they felt technology in learning was easy to use and they saw it as a valuable way to promote learning.

5.3.1.3 Specific areas of support – Participant-wise

This section of the discussion is based on participant-wise perceptions of academic writing self-efficacy ratings. The reasons for the participants' ratings on each of the self-efficacy questionnaire items will be elaborated here. The facts related to the participants' demographics, prior learning and their level of study will also be taken into consideration within this section. This discussion concentrates on assessing students' current perceived writing self-efficacy beliefs. Some researchers have demonstrated that enhancing students' self-efficacy would promote cognitive, behavioural, and motivational engagement (Hashemnejad, Zoghi, & Amini, 2014).

The participants with high self-efficacy were confident about finding the solution to a problem and they believed that their own competency would be improved if they worked hard. Moreover, they believed in their effort and accordingly, the participants who had a higher rating for their self-efficacy, especially within the first stage of study, showed a keen interest in participating in the intervention process through frequently posting questions via digital social media. They were not worried about peers seeing their errors, but rather acknowledged them as part of acquisition (Bandura, 1992).

By contrast, the participants who rated themselves low in terms of self-efficacy were not willing to share their queries in public within the group, but rather preferred personal communication with the facilitator at first. They were explicit about this even during the first stage of the interviews. As Bandura (1992) noted, this kind of behaviour is common amongst low self-efficacious learners who will choose tasks on which they will make few errors, and do not try hard because they believe that any attempt will reinforce their own lack of ability. However, Bandura in his social cognitive theory (Bandura, 1986, 1997; Schunk & Pajares, 2005) included the idea

that students learn by observing others perform the same or similar tasks. This learning is affected by reciprocal interactions between:

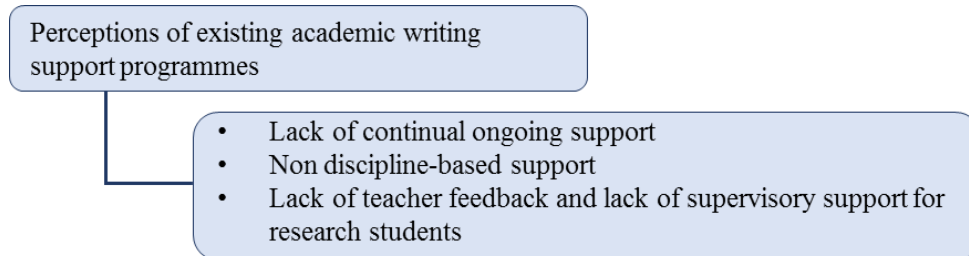
- 1 Personal factors in the form of cognitions and self-efficacy (perceived capabilities);
- 2 Behaviours in the form of cognitive strategies such as providing feedback and self-explanations; and
- 3 Environmental influences such as peer feedback, teacher feedback, and modelling.

As students work on tasks and measure their successful progress toward learning goals, their self-efficacy for continued learning is enhanced and their motivation is influenced positively (Hashemnejad et al., 2014). The low students with low self-efficacy in this study were less active within the group discussions at the beginning until they realised that there were other students with similar queries and problems in writing. This enabled most of the students to engage actively within social forums later on. Through the intervention support programme, these learners were given the opportunity to learn from their peers, allowing them to gain a higher level of self-efficacy in academic writing.

It was clearly noted that these university students' overall perceived academic writing self-efficacy was not impacted by their differences in terms of being native or non-native speakers of English, but was rather affected mostly by the normal support seeking behaviour of adult learners. The academic writing support they received during the intervention stage of this study seems to have impacted their self-efficacy ratings.

5.3.1.4 Perceptions of existing academic writing support programmes.

This section discusses the participants' perceptions of the existing academic writing support programmes that are provided by the university.



This discussion also includes participants' perceptions about the teacher feedback on their assignments and the supervisory support for research students.

The participants who had followed the pre-sessional English courses in this cohort stated that they were able to gain good grades for each module that was taught during this particular period, enabling them to enrol in their next level of study either as undergraduate or post-graduate. However, their main issues began when they had to apply the knowledge they gained via EAP in their actual university course work or in thesis writing related activities. The participants who took the EAP courses claimed that the main reason for this mismatch was a lack of discipline-based support offered through EAP, even though they did not realise that during their period of study. This may be due to their main need at that time, which was to fulfil their entry requirement rather than focusing on how they were going to apply that knowledge in their actual future studies. De Chazal (2014) argues that EAP is aimed at helping students to develop their abilities to communicate in English in academic settings, rather than enabling them to deliver their disciplinary knowledge using standard academic writing.

The participants of this case study further mentioned that it would have been more beneficial if this support was ongoing until they finished their university studies. This implies their need for discipline-based and continual support in academic writing to complete their future studies. However, Son and Park (2014) confirm that EAP students have demonstrated their satisfaction with EAP programmes. This was reinforced by the participants of this study who mentioned that they were highly confident about their competency in academic writing just after completion of that particular course. However, this did not last as they began to realise that the

knowledge they had gained through EAP had become less readily applicable in their actual courses of study for several reasons. This gap therefore needs to be addressed by all Australian universities by providing discipline-based ongoing academic writing support.

The remainder of the non-native English speaking participants in this study, expressed their preference for taking an EAP course, even though it was not a mandatory requirement for their enrolment. They had already obtained IELTS scores that were sufficient for their university enrolment. Despite their desire to enrol in EAP, as they could not find another course that supported students' academic writing, they were not happy about the money they had to pay as international students to take these courses. This also shows a disparity between the students' IELTS scores and the expectations of academic staff of Australian universities in terms of these students' academic writing skills. University writing is far more complex as students are required to compare, contrast and synthesise information from more than one text in order to argue a point of view, which they find difficult. According to Phakiti and Li (2011), IELTS scores could be used for admission purposes only but students from non-native English speaking backgrounds should be given an opportunity to engage in supplementary academic preparation after university admission. Overall, the findings of this study suggest that this kind of academic writing support should not be limited to a preparatory stage, but should be more discipline-based and continual.

Another important consideration in this context is twofold: first, there is a lack of research about native English speaking students' needs in relation to academic writing; second, there is a lack of academic writing support programmes that aim at providing support to native English speaking university students. This may be due to wrong assumptions of university authorities, which include the idea that university students from native English speaking backgrounds are competent in academic writing. The participants from native English speaking backgrounds in this study expressed the importance of academic writing support to complete their studies successfully. It is therefore argued that universities, should implement programmes that will enable all university students to gain ongoing discipline-based academic writing support rather than limiting them to pre-sessional support (De Chazal, 2014).

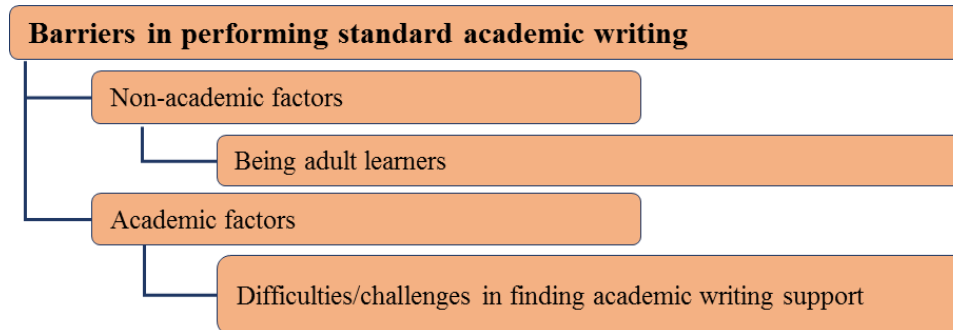
The status of teacher feedback on their assignments and supervisory support were two other important concerns of these participants in relation to their academic writing competency. They valued these as important facets in improving their academic writing. The pre-undergraduate and undergraduate students were satisfied with the content-based feedback provided on their assignments but not with the feedback they received on their level of academic writing performance. A number of researchers (Bitchener, 2008) have demonstrated the importance of teacher feedback on improving students' writing performance. Substantial feedback of teachers with specific instructions and guidance on their writing has a direct impact on improving students' perceived academic writing self-efficacy.

The post-graduate students of this study cohort complained about a different issue that had an impact on their academic writing competency. This was based on their supervisors' support in academic writing. These participants mentioned that the supervisors were friendly; however, their support in academic writing was not guaranteed. Since all the post-graduate students of this study were from non-native English speaking backgrounds, it was obvious for them to expect this kind of support even though supervisors have limited scope in supporting in this context (Kamler & Thomson, 2014). It is therefore suggested that implementation of university-wide academic writing support programmes can be a better solution to resolve this problem of enhancing students' academic performance (De Chazal, 2014).

Overall, the participants' perceptions of academic writing support provided by the university were less positive due to a lack of ongoing discipline-based support. It would therefore be beneficial if the universities consider implementing academic writing support programmes via digital social media to enhance the overall academic performance of university students.

5.3.2 Barriers in performing standard academic writing

This section discusses the barriers that affected participants' university studies in this case study.



Participants were adult learners and this section focuses on the issues they encountered in gaining academic writing support. The non-native English speaking participants' lack of competency in English academic writing has been mentioned as one of the major barriers to their learning. However, at times it was reported that this problem was not limited to this cohort. Participants from native English speaking backgrounds revealed that they had similar issues in terms of completing their higher education. These participants found it difficult to discuss and present their ideas in standard academic writing due to the fact that they identified themselves as verbal processors, and Finkelstein (2006) has stated that they do not consciously apply rules of grammar while writing.

A majority of the participants from non-native English speaking backgrounds in this case study mentioned literate and oral traditions, ethnocentric views, cultural practices, second language acquisition and learning styles as common aspects that they face when living and studying in another country (Street, 2014). These are also considered to be potential factors that contribute to their academic writing self-efficacy beliefs because they can create obstacles to learning (Phipps, Prieto, & Ndinguri, 2013). When these participants struggle to learn and do not have strong beliefs about their own capabilities, they may continue to underperform in their academic pursuits. These negative aspects can be mitigated by providing appropriate academic writing support to university students.

Even though age and gender of these participants were not considered much within this discussion/study, some of the barriers that these participants faced in performing

standard academic writing were related to specific age groups and specific gender issues. Female participants who had children struggled to maintain an effective balance between their study, work and family life. Knowles, Holton III, & Swanson, (2014) believe that adults' learning behaviour varies considerably due to developmental influences. These participants strongly believed that they needed some extra time and support to improve their additional skills such as academic writing. Effective technology-based learning could be helpful to mitigate these issues among adult learners (Knowles et al., 2014).

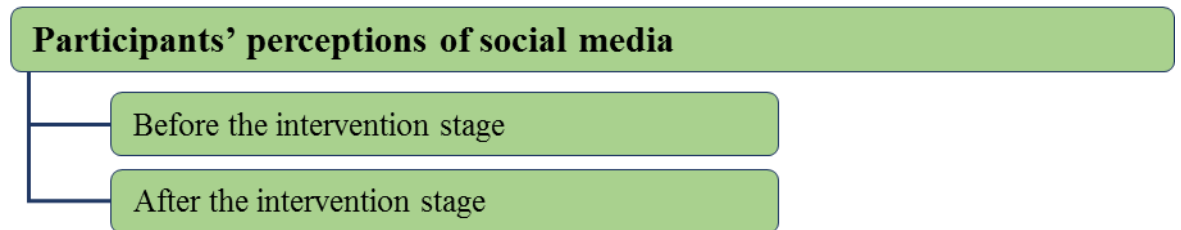
Effective time management was a common barrier to most of the participants of this case study. Overall, pursuing graduate studies can be challenging for students, especially as working adults with full time jobs and/or family commitments (Ferdinand, 2009). The majority of the participants of this case study mentioned that they had encountered challenges in meeting required standards of academic writing and submission deadlines for their assignments. Among them, PT14 was one of the participants who mentioned her engagement with household work. However, her main issue was with her inability to meet deadlines in submitting assignments. This issue was addressed within the intervention stage of this study by providing necessary guidance to prepare planners that aligned with each of their assignment tasks.

The participants expressed that the above mentioned challenges have impacted on the completion of their studies by causing lengthy delays. Farrell and Tighe-Mooney (2015) and Ngozi and Kayode (2014) mention inadequate time management skills, academic resources/support and academic writing skills as further contributing factors. According to Pintrich and DeGroot's (1990) and Zimmerman and Martinez-Pons' (1992) educational psychology research there are effective strategies that can have a positive impact on self-efficacy and performance outcomes. Zimmerman (2002) has also posited that self-efficacy motivates students to use learning strategies in their academic pursuits.

Overall, the academic writing support intervention process via digital social media, as organised by the researcher of this study, extended further support to these participants to enhance their academic writing.

5.3.3 Participants' Perceptions of Digital Social Media as the Platform

The discussion of this section includes the participants' perceptions of digital social media that were gathered in all three stages - pre-intervention stage, intervention stage and post-intervention stage - of this case study.



The majority of the participants were optimistic about using Facebook as the main mode of digital social media for this intervention process, as they were confident in using it effectively. The findings in Lambić's (2016) research established a positive correlation between the academic performance of students and the frequency of use of Facebook for educational purposes. However, one participant of this case study expressed her negative views about using this as a mode of delivery as she did not want to expose herself within the group and wanted to be anonymous. This may be due to her Asian cultural background, and she exchanged her views only with the facilitator for the first few days. The facilitator was subsequently able to change her attitudes on privacy related issues by providing assurance about the closed Facebook group that was used within this study. This enabled her to interact with the rest of the participants with more ease than before, as she managed to solve issues related to academic writing.

The majority of the participants agreed that they had been using Facebook quite frequently, but not for educational purposes. However, PT7, being an Engineering student, mentioned that he had joined a civil engineering Facebook group and this had enabled him to get updated news related to his field. This information had been very supportive in his professional career. Formulated digital traces lead the learners towards connected pathways to access online learning resources (Veletsianos, 2016).

By contrast, PT4 expressed her dissatisfaction with a university Facebook group which she had joined, assuming that she would be able to gain academic support. She mentioned that it just provided general information, which did not promote educational support at all. PT9 and five other participants stated that they had used

Facebook to get news updates. Other than that, almost all the participants had used Facebook to make connections with friends and family but confirmed that they had not had any chance to use this for educational purposes. Dron and Anderson (2014) highlighted the value of integrating social networks and interactions within formalised education. This mainly relates to the ability of incorporating collective intelligence among the learner group. However, Kerr and Hiltz (2013) criticise this opinion by pointing to a lack of a substantive role of the facilitator in this context.

Blogging was another digital tool that was incorporated during the intervention stage of this study. However, this was not very popular among the group of participants, who expressed their lack of exposure and experience in engaging with blogs. The facilitator therefore introduced the basic features of blogging to the participants. This motivated all the participants towards active participation in blogs. The facilitator provided participants with the relevant URL and they were able to log into the blog and write posts regularly. This was recognised by the participants as a useful strategy that helped them to mitigate their hindrance in academic writing (Lee, 2017).

However, the majority of the participants demonstrated their inhibition to write blog posts at the beginning of the intervention stage, as they thought that the other participants might criticize their poor writing skills. Later on, during the intervention stage, they expressed their positive views about this strategy as they had not only benefitted from writing blog posts, but also from reading others' posts. Participants realised that blogs allowed them greater freedom to produce their piece of writing while writing at their own pace (Lee, 2017). This change of behaviours implied an improvement in their perceived academic writing self-efficacy. Lee (2017) mentions that the instantaneous nature of content publishing on blogs has contributed towards learners' higher self-efficacy in writing.

Apart from the Facebook and blogs, the facilitator planned to use Zoom as another form of digital social media to support participants with different learning styles. The facilitator gave some initial instructions about installing and using Zoom to all the participants. Zoom became popular among most of the participants due to its attractive and interactive affordances that enabled them to gain authentic experiences whilst gaining feedback on their assignments (Glaser, Lengyel, Toulouse, & Schwan, 2017). Zoom has the ability to share the screen with the facilitator which enables written feedback on students' original documents. More importantly this

enabled them to clarify their queries on the feedback given instantaneously. They even had the option of recording the conversation, which they could then keep for later reference.

Overall, the participants in this case study believed that digital social media platforms contributed to strong and effective communication. Selwyn (2009) has emphasised that social networking sites have been attractive to university students as these sites offer multiple means for communication and exchange. The participants expressed their satisfaction about several affordances of digital social media platforms used within this study. They stated that they managed to exchange their views and seek support freely due to the informal learning environment. They appreciated the online learning engagement they had as a learning community which provided them with more confidence. This also helped them to feel that they were not the only ones who had been struggling with similar issues related to academic writing. The research findings of Patterson et al. (2017) have revealed that digital technologies have provided students with an enhanced learning environment through personalisation of learning, repeat viewings of material, ease of access to information, and engagement in a relaxed setting.

The participants of this case study also valued the peer support they gained during the intervention stage. This was made possible by the learning community that was created through the digital social media platform (Dron & Anderson, 2014). While the majority of the participants valued the peer support they gained during the intervention phase of this study, one participant mentioned that she had little trust in her peers' feedback as they were at the same level as her.

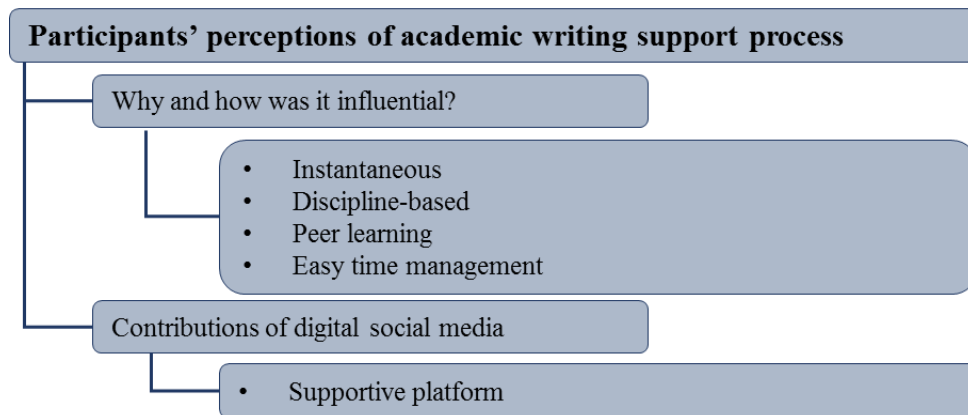
The positive views of the participants about the digital social media that was incorporated within this case study implied that these were effective modes to communicate their educational needs. Even though they had not used these modes directly for educational purposes previously, they mentioned that this intervention session has given them some insights into how they could make use of these media to improve their education. They also expressed their positive views on the privacy settings that had been in practice such as the *closed* Facebook group and the group blog. Wang et al. (2012) found that students are generally satisfied with using a Facebook group for educational purposes. Schroeder and Greenbowe (2009)

observed students' preference for Facebook, rather blogs and other forums, for educational discussions. However, these researchers valued the use of blogs for more detailed discussions and for discussions on more complex topics.

Integrating a variety of media to deliver teaching material to students is increasingly prevalent in university education (Wilson et al., 2007). However, incorporating the same technology to provide support to university students to improve their academic writing skills could be equally beneficial as this could support them immensely to overcome the barriers they encounter as adult learners. Digital technologies provide an environment that helps these students to engage and enrich the quality of their student experience through interactive learning activities (Sangeetha, 2016). Thus, the university students' positive perceptions about the digital social media that was incorporated during the intervention process of this study emphasised the different technical affordances that catered to their needs. This confirms the argument that promotes the use of a set of tools, rather than a single individual tool, to support collaboration needs (Kuswara, 2015). This is based on a number of factors, such as students' clarity of the tasks and positive expectations of what the tool can do for them based on their past experiences, which also contributes positively to the perception of the affordances.

Despite the positive influence digital social media can have on students' learning, Kuswara (2015) emphasises the importance of purposely enacted interventions of teachers in order to gain better learning outcomes. Even though it is believed that academics have little influence on the way students use technology in their learning, the importance of the role of a teacher matters when it comes to influencing perceptions of affordances and scaffolding the experience with technology during the teaching and learning process. This also contributes to nurturing an environment conducive to positive group work dynamics. Therefore, Kuswara (2015) insists on the importance of academics' interventions along with technology integration towards students' learning, as a hands-off approach can only guarantee accidental success.

5.3.4 Participants' Perceptions of Academic Writing Support they gained during the Intervention Phase of this Study



The majority of the participants stated that they were able to improve their perceived academic writing self-efficacy, as they were able to alleviate their anxiety towards performing a standard piece of writing due to this support programme (Wingate, 2006). Anxiety was one of the main barriers they encountered in their academic writing process, which greatly inhibited their writing (Andrade, 2006). They were mainly worried about what the others might think of them when they see their writing. This was evident at the beginning of the intervention process as most of the participants were reluctant to post their views within the group openly. They rather preferred to communicate their views only with the facilitator by sending private messages about their issues via Facebook. However, the facilitator posted the answers to these issues in a public post within the closed Facebook group without targeting any of the participants or personalising the issue. This made the others think that the issues were not limited to them only.

Until this kind of message was communicated to them, they were reluctant to communicate as a community. The researcher found that this was one of the main obstacles for these participants: expressing their views and needs related to academic writing in public. Once this kind of attitude fixing was addressed by the facilitator during the first few days, they engaged freely within this support programme by posting their issues related to academic writing and communicating with their peers as well. The participants mentioned the importance of seeing others' issues in Facebook group posts, as they were not aware of some of these issues as applying to them as well until they noticed them through others' posts. They stated that through

this community they were able to look at issues related to academic writing more in-depth. This exposure has also enabled the participants to have productive peer interaction and interaction with the facilitator. Swales (2009) also believed in the emergence of new kinds of academic genres and discourses that have resulted from the development of new technologies. However, the impact of these developments on EAP has received little attention.

The majority of the participants mentioned that they had not realised the importance of improving their skills related to academic reading, as a strategy to improve academic writing, until this support session. They benefitted from this advice as they learnt how to develop their skills in relation to academic reading, which in turn would enhance their academic writing competency. Grabe, and Zhang (2016) insist on the importance of the relationship between reading and writing in the overall academic learning context, which includes summarising, synthesis writing, note-taking, content-driven essay exams, theses etc.

The participants' stated that their issues were addressed as the facilitator gave step by step advice, which was in line with a process approach in academic writing (Silva & Matsuda, 2012). A number of participants stated that this strategy was more helpful for them in improving their academic writing, as opposed to attempting the whole product/essay in one go. The facilitator also enabled these participants to learn how to structure their essay/assignment responses in accordance with the given task. This was another way of helping them, underpinned by a process approach, and it also included instructions on how individuals could structure their assignments on the basis of the key words in an assignment task and instructions in the rubric. This was supportive for most participants as they had previously been paying attention only to the task as a whole when attempting the assignment. They stated that the instructions given in this area had been supportive in improving their perceived academic writing self-efficacy.

The other advantage that these participants mentioned about this academic writing support programme related to a majority of micro learning theory's affordances—micro content, microteaching, process of subsequent short learning activities, and a way of more people engaging in informal learning (Hug, 2009; Mosel, 2005). The participants of this case study could express their experience of learning facts related

to academic writing informally, which alleviated stress for them. This was also supported by their ability to post small facts one at a time during this academic writing support session, as opposed to other support services.

The facilitator could also provide the participants with discipline-based academic writing support as she was familiar with some of the courses linked to education, EAP and TPP. This too benefitted the participants even though they were unable to have direct contact with the subject lecturers, as suggested in the best practice model (McWilliam & Allan, 2014), during the intervention stage of this case study.

The guidance these participants received in improving their search skills was another important fact they valued. Bailey (2014) stresses the importance of locating the most relevant and suitable sources to develop an individual's academic writing. However, this also highlights the importance of developing an effective reading ability to enhance search skills. Even though the Internet provides individuals with a plethora of resources, it was difficult for these participants to select the most appropriate ones for each assignment. They mentioned that it took a lot of time for them to find suitable resources to support their assignment. This again enabled them to improve their academic writing self-efficacy as they gained confidence in finding suitable resources for their future assignments. During this intervention process it was really interesting to see how some of these participants improved their skills in academic writing as the facilitator was able to observe them finding their own errors in their writing.

Overall, they mentioned that the support they gained in academic writing had contributed towards enabling them to manage their time effectively, which in turn enabled them to submit their assignments on time. Submitting assignments on time was one of the significant barriers these participants encountered. This allowed them to avoid deflated grades that could occur due to late penalties. This once again shows how an individual's perceived academic writing self-efficacy can have a direct impact on overall performance.

Even though this section is aimed at discussing the factors that relate to academic literacy support specifically, this discussion is also linked to the involvement of digital social media, which also had significant influence on these participants' perceived academic writing self-efficacy. This can be linked to context-dependent

features of self-efficacy as the extension of a task can be influenced by competition, physiological state and environment (Pajares & Miller, 1994; Jinks & Morgan, 1999; Zimmerman, 1995). The participants of this study were highly influenced by all these three areas—competition, physiological state and environment. There was healthy competition within the learning community of this study that enabled them to learn from peers as well as from the facilitator. They were mostly in a healthy physiological state throughout the intervention phase as they managed to engage in the community regularly.

The digital social media that were used as the platform of delivery for the academic writing intervention phase of this study can be considered as the environment that influenced these participants' self-efficacy in equal measure to the academic writing support they received. As such, the perceived academic writing self-efficacy beliefs of these participants in this context were influenced by the surrounding circumstances—provided academic writing support and digital social media platform. The participants of this study had positive feelings about the engagement of digital social media compared to lectures, due to their flexibility in terms of time and accessibility. They also mentioned that the online engagement they had had during the intervention process had enabled them to become self-regulated. Shea and Bidjerano (2010) identified that self-regulated online students monitor their time and cognitive strategies, regulate their own learning environment, and exercise control over their interactions with peers to maximise learning.

The effects of digital social media, and their impact on the participants' perceived academic writing self-efficacy, is also reinforced by the definition of Bandura's (1986) social cognitive theory as mentioned in the self-efficacy section of Chapter Two. Accordingly, self-efficacy beliefs determine how people feel, think, motivate themselves and behave (Bandura, 1997). Thus, the participants had positive effects in these areas, which in turn impacted on their perceived academic writing self-efficacy. All these three areas together may have constituted the key factor of personal agency, while proving instrumental in the goals individuals pursued and the control they had over their environment.

This was facilitated by two areas: (1) participants were provided with necessary academic writing support for them to reach competency, which was one of their

major goals within this programme; and (2) they were given control over deciding the limits of their engagement within this academic writing support programme as they had control over the platform used, digital social media.

Overall, the findings of this study enabled the researcher to substantiate that these participants were able to demonstrate a significant improvement in their perceived academic writing self-efficacy. This was influenced by both the academic writing support provided during the intervention phase of this study and the digital social media platform that was used to deliver this support. At the same time, the digital social media platforms that were used within this study enabled most of the participants to mitigate the issues related to them being adult learners, as discussed in the barriers section in Chapter Four.

Apart from that, most of the advantages about the academic writing support programme that were mentioned by the participants under the section *Participants' perceptions of academic writing support they gained during the intervention phase of this study* in Chapter Four, would not have been possible without the digital social media platform. It should be noted that if Australian universities were to initiate the implementation of ongoing discipline-based academic writing support programmes for all university students via digital social media, higher academic performances may be expected.

5.4 Chapter Summary

The participants of this case study were content with the support they received during the academic writing intervention stage of this study. They expressed their views about adequate support that enabled them to enhance their ability in specified areas of academic writing. They also mentioned their positive attitude towards the integration of digital social media that helped them to mitigate some of the issues that hindered them in their learning as adult learners. The findings in this study suggest that there is a significant improvement in these participants' overall self-efficacy ratings as a result of the support they have gained through this intervention process.

The next chapter of this thesis is the conclusion to this whole study. It gives an overview of the whole study and it makes recommendations that are geared towards enabling university students to gain ongoing discipline-based academic writing support during the period of their higher education.

Chapter 6 Conclusion

6.1	Introduction			
6.2	Brief Summary			
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Figure 6.1. Structure of Chapter six

6.1 Introduction

This chapter presents a brief summary of this study. This includes the answers to the main research question and the sub research questions, which are underpinned by the categories identified during the analysis stage of this study. A brief recap of the methodology that was incorporated in this research is also included. Furthermore, there is a discussion about the theoretical and practical implications of the study. The strengths and limitations of this research, including suggestions for further research in this context, are discussed as an important area. Finally, the contribution to knowledge is identified.

Chapter Four and Chapter Five have provided a detailed account of what this research discovered with respect to university students' perceived academic writing self-efficacy. This discussion is based on the impact created by the academic writing support intervention process and the digital social media as the platform of delivery. The aim of this chapter is to create a balanced discussion about the theoretical and empirical outcomes and implications of the students' perceptions of their self-efficacy with regards to their academic writing ability. This also includes a discussion on how the outcomes of this case study can contribute towards these university students' success in their overall academic performance. Some policies and practices are then suggested, at a strategic and operational management level in university education, which explore the idea of academic writing support programmes for university students.

6.2 Brief Summary

The main aim of this study was to investigate university students' perceived academic writing self-efficacy in terms of academic writing support they received via digital social media. This was addressed through four sub research questions:

- 1) What are the perceptions of university students' self-efficacy in terms of their ability in academic writing, and the reasons behind these perceptions?
- 2) What level of exposure to digital social media do university students report?
- 3) What are the advantages and disadvantages of using digital social media to facilitate academic writing support?
- 4) What connections can be drawn between academic writing support provided through digital social media and university students' perceived academic writing self-efficacy?

The research was conducted in three main stages to enable the researcher to address the above sub research questions that focus on the main research question. These three basic stages were: (1) pre-intervention stage, (2) intervention stage, and (3) post-intervention stage.

The researcher gathered data that were needed to address the first two research questions during the pre-intervention phase. This included a self-efficacy questionnaire and an interview, which allowed the researcher to gain an objective perspective of these university students' academic writing self-efficacy beliefs. Both data sets supported the researcher to organise the academic writing support intervention, which was the second stage of this study.

The initial data sets provided a clear idea about the content that needed to be included as part of this intervention, in accordance with learner needs. The data collected during the pre-intervention stage were also useful to identify the participants' competency levels in academic writing and their exposure to digital social media.

The quantitative and qualitative findings of the pre-intervention stage clearly address the first two sub research questions. These findings clearly show that participants' of this case study had lower self-efficacy ratings in terms of their academic writing ability. They also revealed several reasons behind these lower ratings. The majority of the participants criticised the lack of adequate academic writing support provided by the university. They also criticised the prevailing academic writing support programmes, as they were not ongoing nor discipline-based. These two features were emphasised by the participants, as they were perceived to have a direct impact on their overall academic performance. Even when the findings are placed within the context of the literature, it clearly shows the importance of implementing ongoing, discipline-based academic writing support programmes for all university students regardless of their first language. Many of these participants also expressed their dissatisfaction with the feedback they received for their assignments. This had contributed a lot towards their perceived lower self-efficacy in this context. Some of them further mentioned additional barriers that had inhibited them from performing standard academic writing, such as being adult learners and non-native speakers of English. These factors had a direct impact on their lower perceived academic writing self-efficacy ratings.

The findings also focused on discovering how frequently these participants used digital social media for two reasons. Firstly, it was useful when planning the intervention stage of this study, and secondly it could be beneficial for further research on this topic. The majority of the participants were exposed to Facebook; however, they revealed that they hardly used it for educational purposes. Since they had an interest in using Facebook, they believed that they would be motivated to engage in this intervention process.

After the pre-intervention stage, the researcher emailed all the participants about the information related to the platforms that were used during the intervention stage, including a closed Facebook group, Zoom, and a Blog. During this period, the majority of the participants were more enthusiastic about receiving academic writing support to complete their actual assignments, rather than receiving generic academic writing support. The researcher was able to gather a lot of information about these participants' perceptions during

this intervention stage, by taking notes about their behaviour and attitudes. These were also useful in addressing the fourth and main research question of this study when combined with other data.

The post-intervention stage of the study enabled the researcher to collect quantitative and qualitative data that related to the participants' perceptions about the academic writing support they received during the second stage of this study. This involved self-efficacy questionnaires and interviews, similar to the first stage of data collection. The self-efficacy questionnaire was the same as the one that was used in the first stage of data collection. This quantitative data supported the researcher in identifying if there were any changes in these participants' perceived self-efficacy, by comparing the self-efficacy ratings of the pre- and post-intervention stages of the study. There was a significant difference between the first and second self-efficacy ratings of these participants. Thus, it was evident that these participants had developed their perceived academic writing self-efficacy beliefs, influenced by the intervention stage during which they received academic writing support. However, at that stage it was not clear whether the impact was related to the academic writing support and/or the involvement of a digital social media platform.

Therefore, qualitative data collected during and post-intervention stages were collated to identify whether the academic writing support provided and/or incorporated digital social media had any impact on the participants' perceived academic writing self-efficacy beliefs. The participants revealed that both these factors had contributed to developing their perceived academic writing beliefs. However, they were unable to see a demarcation between these two factors; rather, they believed that both these factors contributed towards their self-efficacy development equally. They also valued the strategies and approaches that were incorporated during the intervention stage and in the provision of academic writing support, including the use of digital social media. Overall, all the participants expressed their preference over the integration of digital social media in the intervention stage, due to the informality of the learning platform. Some of the participants also mentioned that they were able to connect with the facilitator and other peers whenever they were free due to the nature of this platform. The ability to learn at their own pace was another advantage highlighted in this study. However, only one participant stated that this platform may affect the privacy of the students.

6.3 Implications and Recommendations

6.3	Implications and Recommendations	
	6.3.1	Theoretical implications
	6.3.2	Practical implications

This study has identified possible ways to support universities to provide ongoing discipline-based academic writing support to students. It has indicated that these university students valued support in improving their academic writing ability. This study suggests ways to implement academic writing support programmes in Australian universities that can provide ongoing discipline-based support to both native and non-native speakers of English. Incorporating digital social media platforms promotes personalised learning while alleviating institutional issues in implementing these types of academic literacy support programmes.

The conclusions that are drawn from the findings align with the research questions of this study. These conclusions are drawn on the basis of the literature review and the participants' views that were expressed through the interviews, questionnaires, and field notes, as collected by the researcher during this study. The overall findings of this study indicated that university students in this case study benefitted from academic writing support that was provided via digital social media, which in turn may have positively impacted on their perceived academic writing self-efficacy beliefs that could consequently benefit their overall academic performance.

6.3.1 Theoretical implications

The theoretical implications of this study are discussed in this section. One of the common types of theoretical contributions is based on identifying factors that moderate or mediate key relationships (Baum & Wally, 2003), as illustrated in Figure 6.2.

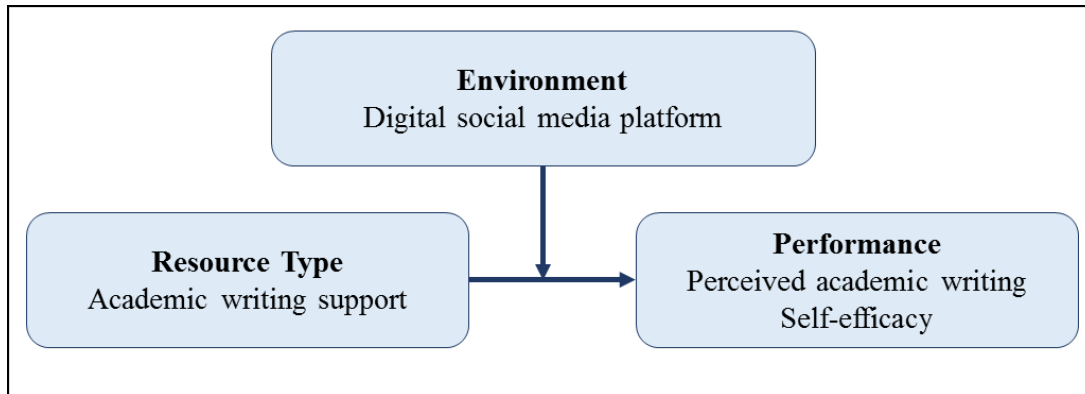


Figure 6.2 Theoretical contribution of the study (Baum & Wally, 2003)

This study has demonstrated that the integration of digital social media as the platform for delivering academic writing support to university students influenced their perceived academic writing self-efficacy beliefs. The implementation of ongoing discipline-based academic writing support programmes for university students from diverse backgrounds may be successful if they are underpinned by the above theoretical foundations.

The conceptual framework of this study thus lay a foundation to examine a practical way that can be adopted by universities to provide ongoing discipline-based academic writing support to native as well as non-native students. The combined two models were elaborated on in Chapter Two, Section 2.5: The Self-Regulated Strategy Development Theory (SRSD) (Harris et al., 2008) and the Technology Acceptance Model (TAM) (Davis, 1998). Providing academic writing support to the participants during the intervention stage of this study was guided by the underlying theoretical principles of these two models. The principles of SRSD theory are aimed at providing discipline-based academic writing support in accordance with learner needs and their style of learning, while TAM is meant to provide ongoing support in the form of a digital social media platform. Integration of these two models may be beneficial for universities in providing university students with ongoing discipline-based academic writing support. It is therefore implied that integration of digital social media as a platform in providing this support may be a possible strategy in developing university students' academic

writing self-efficacy, as the majority of these students in this case study sought ongoing support in this respect.

6.3.2 Practical implications

Combining suitable academic writing teaching methods/approaches is suggested as a promising way to provide academic writing support to university students, rather than limiting this to one specific method. Incorporating Facebook among other digital tools, such as blogs, skype, and email, was found to be effective in this context, as the main platforms for the delivery of academic writing support programmes. It was also revealed that the majority of the adult learners in this were supported to overcome their inhibitions towards academic writing through the use of these platforms, due to the knowledge-sharing ability and allowance for interpersonal interactions. The easier flow of communication between the facilitator and other participants was another benefit. Participants also identified it as effective and timely and they preferred the informal context within the virtual environment.

It is also believed that the benefits of Facebook, and other digital tools incorporated within this study, helped these learners to develop positive self-efficacy and motivation. In the process, learners perceived that they could develop and improve their academic writing performance as well. Overall, it is worth paying attention to supporting university students to improve their ability in academic writing as this is likely to have an impact on their overall academic performance.

6.4 Strengths and Limitations of this Thesis

6.4	Strengths and Limitations of this Thesis	
	6.4.1	Strengths
	6.4.2	Limitations

The following discussion includes information related to the strengths and limitations of this study.

6.4.1 Strengths

This case study has allowed the researcher to investigate and explore answers to the research questions posed in this research. Thorough and deep investigations were possible due to this approach as the researcher had the opportunity to administer an intensive case study. The integration of mixed-methods also enhanced the quality of the findings as they involved both quantitative and qualitative results. Using the information of this case study, new studies could be organised to explore better ways to implement ongoing, discipline-based academic writing support programmes for university students.

The use of multiple data collection instruments enabled the researcher to collect a plethora of data that was useful when drawing conclusions in this research. There was a possibility to investigate the reasons behind the participants' self-efficacy ratings through the use of semi-structured interviews and field notes. The direct contact between the researcher and the participants during the academic writing support intervention stage enabled the researcher to gather more authentic data. The main reason for this was the rapport that developed between the researcher and the participants.

This academic writing support programme was practice-based, as the support sought by these participants in relation to academic writing was linked to their actual assignments. Thus, the researcher was able to identify these participants' needs related to academic writing that had a direct relevance to their real life situations. Receiving academic writing support to complete the participants' assignments was their main concern. They mentioned that they were somewhat confident about their ability in terms of general academic writing as a result of their prior learning and the pre-sessional support they had received in academic writing.

The integration of digital social media tools to provide academic writing support was another strength in this study. The platform as well as the small sample size of the study enabled the participants to gain personalised support most of the time during the intervention phase. These factors also enabled the participants to communicate their needs to the facilitator directly. This was highly appreciated as they stated that most of their issues were not being addressed by the earlier support programmes they were engaged in due to their generic teaching and learning strategies. They sometimes criticised the content that was used in those programmes as irrelevant and too generic. However, through this study the facilitator received positive feedback from the participants as they valued the uniqueness of this learning environment. The participants were also impressed by the spontaneous support that was provided most of the time.

The interactive approaches during the intervention phase between facilitator-participant and participant-participant promoted mutually beneficial learning among the group. This not only strengthened personalised learning, but also promoted peer learning as the others saw the facilitator's feedback. This feedback was shared among the other participants only when there was no objection on the part of the author of the assignment. Some of the participants in this group who were more competent in academic writing were willing to provide support to other participants with regards to some of the issues they faced.

6.4.2 Limitations

This section discusses some of the limitations of this study. Overall, the findings of this case study could not be generalised as the results were only valid for this particular study cohort. However, this was not a challenge as the main aim of this case study was not to generalise the results.

The data collection process was intensive and time-consuming across three main stages. This included collection of both quantitative and qualitative data, which made it more challenging. Despite the challenges in collecting data using a number of instruments, the data analysis process was also difficult. Apart from the analysis of quantitative and qualitative data in isolation, the mixed-analysis of data made it more complicated. However, the findings that were revealed through all these stages provided strong evidence.

Lack of facilitators could have been another limitation in this study. Having more facilitators would have allowed the participants to have a choice, rather than depending only on the

researcher. However, the researcher did not have ethical clearance to hire another facilitator or a learning advisor to provide academic writing support to these participants. Furthermore, she did not have enough funding to pay another facilitator for his/her service in this programme. The final results however, did not reveal any negative impact on these participants as a consequence of this.

6.5 Recommendations for Further Research

The findings of this study point to some valuable areas that would need more emphasis in further research to enhance academic writing support provided to university students in Australian universities.

This study investigated the efficacy of utilising digital social media as platforms for providing academic writing support to university students. However, the conclusions drawn about this specific area would have been strengthened if it had been investigated using a control group, which would also have avoided any possible biases. It is therefore recommended for extended research to take place to investigate the impact of digital social media as the platform of delivery in academic writing support programmes within universities with the use of a control group, as explained below. However, this could only be possible if the study managed to obtain relevant ethics approval for various reasons.

To investigate this in particular, a researcher could incorporate university students who seek support in academic writing as two separate groups. One group of these students could be the experimental group while the other group would be the control group. The digital social media would be the independent variable in delivering academic writing support, which would be used by the experimental group, while the control group would be given this support within a synchronous conventional teaching learning environment. The dependent variable in this study would be the academic writing competency of university students. The consistency of the controlled variables, such as the facilitators, uniformity in students' courses and levels, and the teaching and learning strategies, would need to be maintained during the period of this study in order to test the relative relationship between the dependent (academic writing competency) and independent (digital social media) variables.

The academic writing support intervention programme should not be held in isolation; rather, it should be preceded and followed by pre- and post- tests that are prepared in accordance with benchmarks, to evaluate these university students' academic writing competency levels.

6.6 Contribution to Knowledge

It is evident that academic writing support is important for university students; not only for them to complete their assignments, but also for them to succeed in their professional development after graduation. Critical thinking is considered a highly valued outcome of tertiary education, which is sought after by employers. Graduate employees therefore should be able to transfer their critical thinking abilities to the workplace. This can be achieved through organisational support within Australian universities in implementing academic writing support programmes.

Universities should make use of the opportunities and authority they have to develop effective frameworks that can assist students with their academic writing needs. These frameworks need to be developed in accordance with relevant and valid theories and pedagogies that align with academic writing. However, prior to implementing these theories and frameworks, they also need to be evaluated at both the institution-wide and the individual programme levels. This will allow the development of a range of resources that could cater to different types and levels of learners.

The practitioners may consider incorporating the modified best practice model (Figure 6.3), which includes digital social media as the context in addition to the original model of McWilliam and Allan (2014). The underlying principles of this model explain how this model could accommodate individual variations in student learning (Prosser & Trigwell, 1999, p. 17) that could be used in future academic writing support programmes. Overall, the modifications that have been made to the best practice model of McWilliam and Allan (2014) indicate the researcher's contributions. These modifications include additions such as the digital social media context and institution-wide ongoing support, and replacements of the involvement of the subject lecturer. Some of the tasks in this model were meant to be accomplished collectively by the learning advisor and the subject lecturer. However, some strategies were identified that enabled the learning advisor to undertake them with the use of other resources. These strategies incorporated access to course materials, engagement in

specific subject forums with the support from course examiners, updating contextual knowledge with the use of contemporary research and library resources, attending relevant workshops, and student feedback. Such modifications would equip the facilitators to respond and manage challenging behaviours that could occur during the support programme. These would also allow them to minimise potential risks and reduce constraints. The other incorporated sources provide regular reviews and knowledge updates that could assist in keeping similar academic writing support programmes up-to-date and relevant.

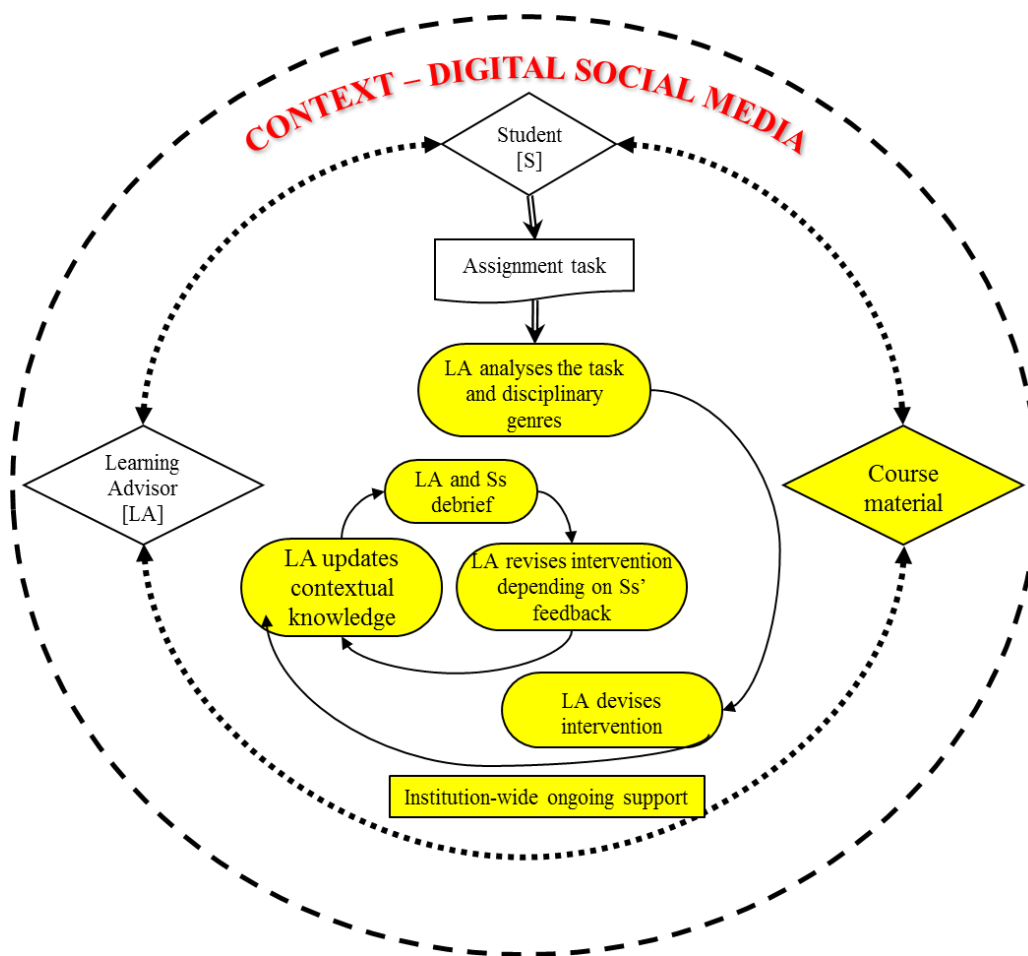


Figure 6.3 “Best Practice model of McWilliam and Allan (2014)” – modified by the researcher

The addition of the digital social media context to this could promote a convenient learning environment for adult learners as it would help them to overcome most of their barriers, such as difficulty in balancing work and study life.

Among other suggestions for future practice, it is equally important that this academic writing support is provided continually for these university students, as the majority of the students

express their dissatisfaction with pre-sessional and non-continual short courses that are currently available in universities. Practical initiatives towards improving students' academic writing can be envisaged through careful utilisation of frameworks. Overall, the above recommendations could promote effective academic writing support to university students while promoting their overall academic performance.

6.7 Chapter Summary

The main aim of the study was to explore a practical way in which university students can be provided with academic writing support during their course of study in an Australian university. The efficacy of digital social media platforms for delivery of an academic writing support programme was investigated. The university students' perceptions of these platforms were considered in terms of drawing the main conclusions of this study. Apart from this main issue, the researcher paid attention to providing necessary academic writing support to these university students as a measure of enhancing their overall academic performance. Even though the university students' need for this type of support is currently visible, it has not yet been addressed by most of Australian universities as an ongoing, continual programme that also links with specific disciplinary support. This study therefore suggests digital social media as platforms that can provide these students with academic writing support due to the advantages of such platforms that have been identified through the participants' perceptions expressed in this study.

Digital social media may benefit both university students and universities due to their affordances that have been identified within this study. The majority of the participants, being adult learners in universities, will benefit from the flexible, virtual environment as it promotes learning anytime, anywhere. Even the universities will find this a practical mode as it requires minimal effort to implement this type of academic writing support programme. The above recommendations will be useful in implementing this type of support programme for university students, which will be continual and discipline-based, unlike the prevailing pre-sessional academic writing support programmes.

Firstly, the findings of this study have addressed all the research questions that have been outlined. Significantly, the participants in this case study were not satisfied with the prevailing academic writing support programmes that are conducted by Australian

universities. They claimed that they were not able to gain continual, personalised, and discipline-based support in this prevailing context.

Secondly, the barriers faced by these university students, in terms of performing standard academic writing, were taken into consideration. The main intention of gathering data in relation to this area was to identify if the digital social media being the platforms of delivery could support them to overcome their issues. One of their main barriers was lack of competency in performing standard academic writing, irrespective of them being native or non-native speakers of English. They also found it difficult to balance work and study life mainly due to being adult learners. It was identified that both of these main issues may be addressed through implementing academic writing support programme. This platform would enable them to gain necessary academic writing support without spending extra time to attend classes in person. These university students were highly satisfied with the academic writing support they gained during the intervention phase of this study and the digital social media platform, which was reflected in their improved perceived self-efficacy ratings.

Overall, the analysed data of this case study clearly indicate that the university students may benefit if effective academic writing support programmes were to be implemented with the support of appropriate institution-wide measures. In conclusion, providing academic writing support to university students via digital social media is beneficial in terms of improving their perceived academic writing self-efficacy, which will in turn impact positively on their overall academic performance.

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Appendices

Appendix A – Ethics Approval

OFFICE OF RESEARCH
Human Research Ethics Committee
PHONE +61 7 4631 2690 | FAX +61 7 4631 5555
EMAIL ethics@usq.edu.au



3 December 2015

Mrs Lalanthi Seneviratne

Dear Chula

The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	H15REA249
Project Title	Self-efficacy of university students seeking academic literacy support: A phenomenographic study
Approval date	3 December 2015
Expiry date	3 December 2018
HREC Decision	Approved

The standard conditions of this approval are:

- (a) conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the HREC
- (b) advise (email: ethics@usq.edu.au) immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project
- (c) make submission for approval of amendments to the approved project before implementing such changes
- (d) provide a 'progress report' for every year of approval
- (e) provide a 'final report' when the project is complete
- (f) advise in writing if the project has been discontinued.

For (c) to (e) forms are available on the USQ ethics website:
<http://www.usq.edu.au/research/ethicsbio/human>

Please note that failure to comply with the conditions of approval and the *National*

Statement (2007) may result in withdrawal of approval for the project.

You may now commence your project. I wish you all the best for the conduct of the project.



Annmaree Jackson
Ethics Coordinator

Copies to: LalanthiChulika.Seneviratne@usq.edu.au

Appendix B - Notice



Looking for free academic writing support?

I am a PhD student at USQ and I am researching university students interested in ongoing academic literacy support via digital social media. In January 2016, I will be running a free academic literacy support programme via digital social media.

As part of the research project, you will be able to participate in all of the literacy support activities. You will also be asked to participate in interviews, focus groups and a short self-test of self-efficacy. These will not take more than 20- 40 minutes. Overall, the whole process will be conducted within a friendly environment.

All the information you provide will be kept confidential and I will not use any real names in any reports. A summary of the final results can be provided at the conclusion of the study upon request.

If you're interested in being involved, please contact me.

Chula

Principal Researcher: Lalanthi Chulika Seneviratne (Chula)

HREC Approval Number: H15REA249

Email:

Phone:

Appendix C – Participant Information Sheet – Interview



University of Southern Queensland

Participant Information for USQ Research Project Interview

Project Details

Title of Project: Self-efficacy of university students seeking academic literacy support: A phenomenographic study

Human Research Ethics Approval Number: 8000REAN00X

Research Team Contact Details

Principal Investigator Details

Mr. Lalanthi Chulika Seneviratne
Email: Lalanthi.Chulika.Seneviratne@usq.edu.au
Telephone: 0470364489
Mobile: 0470364489

Supervisor Details

Associate Professor Warren Midgley
Email: Warren.midgley@usq.edu.au
Telephone: +617 4631 5403

Description

This project is being undertaken as part of my PhD.

The purpose of this project is to investigate the impact created on university students' self-efficacy in gaining academic literacy support via digital social media.

The research team requests your assistance because gaining first hand views and experience on academic literacy support is essential to investigate the efficacy of this type of support programme via digital social media which will also help to analyze the hypothesis of this research.

Participation

Your participation will involve two interviews which will be held prior and after to the academic literacy support intervention programme that will take approximately 20-45 minutes of your time in both the interviews.

The interview will take place at USQ Toowoomba campus and times will be advised but still they can be negotiated as per your convenience. However, there is possibility for you to undertake this session by teleconference as well.

Questions will not be of sensitive nature, rather they will include

- your perceptions on restrictions encountered as adult learners
- your computer literacy level
- your level of exposure to social media
- the type of existing support you get towards academic writing

After the support programme you will be asked about your experience on that.

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The interview will be audio recorded.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

It is expected that this project will directly benefit you as you will be getting support towards **upliftment** of your academic literacy knowledge and at the same time the results and the analysis of this study will be useful for future enhancement in academic literacy support in a broader perspective while contributing towards across universities.

Risks

Risks associated with your participation in this research project are concerned minimal. Time imposition is one considered risk as it will take approximately 20-45 minutes of your time to take part in the interviews. Apart from that you may consider that knowing the researcher or her supervisor at an earlier instance within the university environment would cause social risk. This can be easily mitigated as the participation is voluntary. However, if you happen to feel anxious in the midst of the process you can withdraw at any time.

Privacy and Confidentiality

Any information or personal details gathered in the course of this research will remain confidential. No individual will be identified by name in any publication of the results. All names will be replaced with a code; this will ensure that you are not identifiable. All comments and responses will be treated confidentially unless required by law.

The audio recordings of your interviews will be stored on the **USQ** server as well as on a password protected computer that only the research investigators can access. The consent form containing your full names will be stored securely by the project team and will not be distributed to any transcription service, research assistant or used in any publication of data.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. Data that is reported in journals, reports or disseminated through any other means will not contain any of your personal information. A summary of results can be requested by contacting the researcher once they are being finalized.

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.


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Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix D – Consent Form – Interview

	University of Southern Queensland
Consent Form for <u>USQ</u> Research Project Interview	
Project Details	
Title of project: Self-efficacy of university students seeking academic literacy support: A <u>phenomenographic</u> study	
Human Research Ethics Approval Number: <u>HXXXXXXX</u>	
Research Team Contact Details	
Principal Investigator Details Mrs. <u>Lalanthi Chulika Senewiratne</u> Email: <u>LalanthiChulika.Senewiratne@usq.edu.au</u> Telephone: 0470364489 Mobile: 0470364489	Supervisor Details Associate Professor Warren <u>Middley</u> Email: <u>Warren.Middley@usq.edu.au</u> Telephone: +617 46315403
Statement of Consent	
By signing below, you are indicating that you:	
<ul style="list-style-type: none">• 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 the interview will be audio recorded.• Understand that I will not be provided with a copy of the transcript of the interview for my perusal and endorsement prior to inclusion of this data in the project.• Understand that you are free to withdraw at any time, without comment or penalty.• Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.• Are over 18 years of <u>age</u>.• Agree to participate in the project.	
Participant Name	<input type="text"/>
Participant Signature	<input type="text"/>
Date	<input type="text"/>

Appendix E – Participant Information Sheet – Questionnaire



University of Southern Queensland

Participant Information for USQ Research Project Questionnaire

Project Details

Title of Project: Self-efficacy of university students seeking academic literacy support: A phenomenographic study

Human Research Ethics Approval Number: XXXXXXXX

Research Team Contact Details

Principal Investigator Details

Mrs. Lalanthi Chulika Seneviratne
Email: Lalanthi.Chulika.Seneviratne@usq.edu.au
Telephone: 0470364489
Mobile: 0470364489

Supervisor Details

Associate Professor Warren Midgley
Email: Warren.Midgley@usq.edu.au
Telephone: +617 46315403

Description

This project is being undertaken as part of my PhD.

The purpose of this project is to investigate the impact created on university students' self-efficacy in gaining academic literacy support via digital social media.

The research team requests your assistance because gaining first hand views and experience on academic literacy support is essential to investigate the efficacy of this type of support programme via digital social media. This will also help the researcher to find out how your self-efficacy has been affected through this kind of support programme. Furthermore, the results of this questionnaire will also help to analyze the hypothesis of this research.

Participation

Your participation will involve completion of two self-efficacy assessment questionnaires which will be held prior and after to the academic literacy support intervention programme that will take approximately 15 minutes of your time.

The questionnaires will be sent via email and they will be based on your experience in terms of gaining academic literacy support.

Questions will not be of sensitive nature, rather they will include your perspectives about the phenomenon of learning academic writing or gaining academic literacy support via digital social media. This will also include questions related to academic writing and about your self-efficacy in terms of the support you've gained.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected Benefits

It is expected that this project will directly benefit you as you will be getting support towards upliftment of your academic literacy knowledge and at the same time the results and the analysis of this study will be useful for future enhancement in academic literacy support in a broader perspective while contributing towards across universities.

Risks

There are no anticipated 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.

Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy.

Consent to Participate

The return of the completed questionnaire is accepted as an indication of your consent to participate in this project.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix F – Self-Efficacy Assessment Questionnaire

Perceived academic writing self-efficacy belief rate scale

Directions: On a scale from 0 (no chance) to 100 (completely certain), please rate how sure you are that you can perform each of the writing skills described below by writing the appropriate number. Of course, there are no right or wrong answers, so do not spend too much time on any one statement. Thank you for your cooperation. Your answers will be kept strictly confidential, and you will not be identified by name.

0 10 20 30 40 50 60 70 80 90 100

Cannot do at all	Moderately can do	Completely certain can do
------------------------	-------------------	---------------------------------

1.	I can write a paragraph fluently.	
2.	I can write an essay fluently.	
3.	I can spell all words in an essay.	
4.	I can punctuate an essay correctly.	
5.	I can use all parts of speech in an essay correctly.	
6.	I can write simple sentences with correct grammar.	
7.	I can use singular and plural forms correctly.	
8.	I can use prepositions correctly.	
9.	I can use conjunctions, transitions correctly to maintain cohesion within an essay.	
10.	I can use a wide range o vocabulary in essays.	
11.	I can use synonyms instead of repeating the same words over and over again.	
12.	I can easily generate ideas to write about.	
13.	I can write a strong paragraph that has a good topic sentence or main idea.	
14.	I can write paragraphs with details that support the ideas in the topic sentences or main ideas.	
15.	I can write a proper introduction.	
16.	I can write a proper conclusion.	
17.	I can edit my essays.	
18.	I can do referencing accurately.	
19.	I can write a well-organized and sequenced paper with good introduction, body, and conclusion.	
20.	I can complete a writing task without difficulty by the due date.	

Appendix G – Interview Questions

Sample interview questions

Pre-intervention stage

Demographics

Age, What country were you born in? What is your first language?

Study or training after high school

How many years of full-time education have you had after finishing high school?

What were you studying for and in what sort of institution?

Future goals

What course are you enrolled in now and what is your goal for future career?

Questions for developing the intervention program.

1. Academic writing

What are the barriers you encounter in learning academic writing?

What are the specific areas that you need support in academic writing?

What is your idea about pre-sessional support in academic writing?

How do you perceive the current academic writing support programmes?

2. Digital social media

How do you find using digital social media as the platform for this support programme?

Which social media do you frequently use and for what purposes basically?

Why do you use social networking sites?

How have social networking sites helped you so far?

Have they helped you in education or have you made use of them academically?

Post-intervention stage

Did you manage to overcome the barriers you encountered in academic writing through this intervention stage?

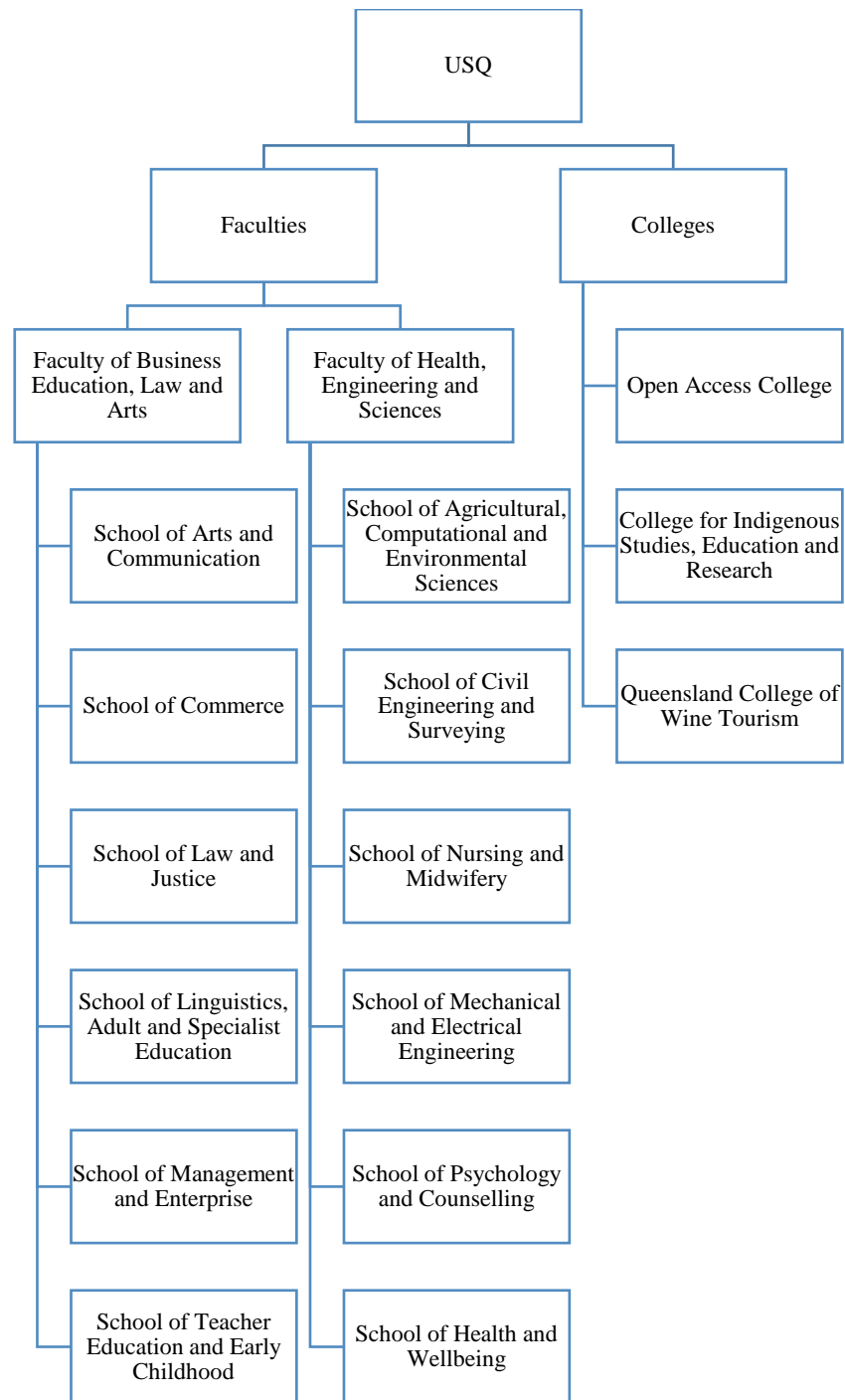
Which areas were you being supported specifically? What do you like or dislike about this support session?

What differences have you identified: normal academic writing support programmes vs this academic writing support programme?

What are your suggestions to improve this kind of academic writing support?

What are the advantages and disadvantages of digital social media in this programme?

Appendix H - USQ Faculties, Schools and Colleges



Adapted from: <https://www.usq.edu.au/-/media/USQ/About-USQ/USQ-Organisational-structure.ashx>.