

The use of Vernacular English and Health Professional Terminology in Nursing Education

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BN

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ABSTRACT

As new students of Nursing adjust to the demands of self-directed learning and the academic language, an English as an additional language (EAL) student needs to navigate the additional load of the translation and comprehension of a second language. The language that students encounter may contain vernacular English (VE) and in Nursing, Health professional terminology (HPT), jargon and acronyms. In such circumstances, subsequent distraction and cognitive effort involved in seeking understanding of the lesson curbs a student's ability to participate in the class progression and activities and poses a risk of disengagement from the class. Student participation in class and group activities is important for clarifying understanding and the construction of schema for memory and recall.

This study sought to establish whether VE and HPT were being used during educational sessions and if so, in what ways they were being used.

A qualitative grounded theory study was conducted, to learn how HPT and AVE were being used during first year classes in the Bachelor of Nursing at a South Australian University. First year topic coordinators provided 50-minute lectures and tutorials (five of each) as data that were transcribed and analysed using the NVivo20 program.

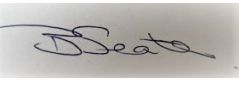
The findings indicated that some but not all academic staff use VE during their teaching. Much of the VE used was global rather than Australian Vernacular English (AVE) and may therefore have been familiar to EAL students due to previous exposure. However, idioms were used for various purposes during teaching, and many could not be translated literally, and therefore had the potential to divert a student's attention from the class. HPT was used during the health focussed educational sessions. In

some instances this was supported by an explanation from the educator, but in others the word/phrase was unsupported.

A study recommendation is that the use of HPT and VE during educational sessions should be explained during the class. An explanation of HPT and ambiguous language in the early stages of their nursing study could enable students to learn the language and still have the ability to follow the main focus of the teaching session.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed.....

Date.....20/9/2022.....

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ABBREVIATIONS

ACSQHC	Australian Commission for the Safety and Quality in Health Care
ADH	Anti-diuretic Hormone
ATP	Adenosine Triphosphate
AVE	Australian vernacular English
BPM	beats per minute or Blood pressure machine
CILT	Centre for innovation in Teaching and Learning
DNA	Deoxyribonucleic acid
EAL	English as an additional language
GPA	Grade point average
HPT	Health professional terminology
ICN	International Council of Nurses
LBGTIQ	Lesbian, bisexual, gay, transsexual, intersex, queer
MDT	Multi-disciplinary team
NMBA	Nursing and Midwifery Board of Australia
NPT	Nursing professional terminology
OED	Oxford English dictionary
ORIF	Open reduction internal fixation
RNA	Ribonucleic acid
VE	Vernacular English

CHAPTER ONE: INTRODUCTION

When a student commences classes at university, they enter a world where the language spoken by the academic who teaches and instructs them, may contain discipline related jargon, formal academic language and /or idiosyncratic words or phrases in their way of speaking (vernacular), such as colloquialisms, idioms, and slang. To many of the students, the language used by the academic could potentially be unfamiliar. The reasons may include attending a higher education institution for the first time, or because they are a recent arrival to the geographical region in which the university is located, including those who have a first language other than English. A recent arrival in the area may not have had time to become attuned to how the local residents converse using vernacular English (VE). Additionally, when the student is commencing university study in a discipline, it is possible that students will not be familiar with the specific discipline related terminology or jargon unless they have had previous involvement within the area. In addition to these challenges, an English as an additional language (EAL) student has to contend with understanding and conversing effectively with native English speakers.

Vernacular is the “language or dialect: That is naturally spoken by the people of a particular country or district; native, indigenous” (Oxford English Dictionary [OED], n.d.) and Australian Vernacular English (AVE) is the Australian form of informal common language. Vernacular English (VE) can be further divided into slang (highly colloquial language, using new words or current words given new meanings), colloquialism (form of speech used in familiar and ordinary conversation) (OED, n.d.). and idioms (“multi word phraseological units whose meaning is not predictable from their constituent parts” (Fraser, 1970 in Alagozlu, 2018). AVE development occurs within the wider Australian community, where groups of people may collectively formulate or construct

interesting and colourful words and phrases for items, illnesses, body parts and functions. The vernacular words can sometimes be selected due to a historical or contextual basis or may be derived by altering the meaning of a word or phrase (Bergs, 2020).

In relation to discipline related terminology, jargon has been described by Brown, et al, (2020) as “socially learned words or expressions used by a particular profession or specialised group, which are used in place of more broadly accessible and less formal alternatives and are difficult for outsiders to understand” (p.275).

Over time within the healthcare profession, acronyms and terminology have developed to refer to conditions and equipment, which is specific to each specialty. For people working in a specific area, the acronyms hold a defined meaning, but often the acronyms are used by people in other workplaces to refer to different items, therefore any acronyms in use in a discussion involving a wider audience, require defining at the time of usage, even between members of the same profession (Australian Commission on Safety and Quality in Health Care [ACSQHC], 2021).

The type and style of language used by academic staff during tutorials and lectures can have an impact on the level of students’ understanding in both learning situations. Bolkan et al. (2016) found that if the educational content delivered can be readily interpreted by students, then the students are able to focus on and participate in the class discussion, rather than being distracted by trying to decipher the meanings of unclear terminology.

Furthermore, Ashton-Hay et al. (2016) revealed that international students attending an Australian university needed at least one, and often several months to become attuned to the speed of Australian accented English with colloquial expressions, and to become familiar with discipline related jargon. Students initially reported extreme difficulty with understanding a lecturer’s words and therefore suffered

from high levels of stress during their commencing year at university. More recently, Glew et. al. (2019) undertook research with a mixed group of 4472 Australian domestic and international nursing students over 3 years and found that improved understanding and comprehension was gained by students who attended learning support classes, evidenced by superior academic outcomes and higher completion rates.

It is apparent from the studies discussed above that the language employed by academic staff teaching in a topic can have a significant impact on the student experience. If the language in which teaching occurs during lectures and tutorials is readily understood, the ability of the student to utilise the information within the immediate context and to participate in the group learning environment is enhanced.

Teaching Nursing context

At the Australian university involved in the current study, many international students are being taught, in most cases, by Australian native speakers, so the question arises as to what extent, the use of AVE in teaching is problematic.

The university's Centre for Teaching and Learning provides recommendations in the form of university learning and teaching principles and good practice guidelines, which are based upon the Higher Education Standards Framework (Threshold Standards) 2015 (Cth) ("TEQSA Act 2011," 2015). The university recommendations explain that academic language needs to be accessible to all students and that the use of jargon, slang and colloquial types of language should be avoided in teaching situations. From this, university lecturers are expected to use a more formal style of speech, avoiding ambiguous terminology and jargon, to facilitate comprehension by students, in all courses that are taught.

While avoidance of VE and professional jargon is recommended by the Higher Education Standards Framework guidelines, this recommendation may at times, be detrimental in the study of a profession such as Nursing. In Nursing the practitioner

relies upon the clear understanding and interpretation of communication between a patient and the Nurse, for the delivery of safe and appropriate care. The inability of a Nursing clinician to accurately comprehend a patient's description and explanations of their history, background and symptoms could lead to inappropriate care and treatment with potentially life-threatening consequences. Therefore, it could be beneficial for students if a university nursing course provided frequent and supported exposure to VE and Health Professional Terminology (HPT). This would enable students to gain familiarity with diverse types of VE and HPT and increase their communication skills in the clinical area (Muller et al. (2015).

The Nursing and Midwifery Board of Australia (NMBA) Standards for Registered Nurses (2016), outline that nurses must have the ability to fully understand their patients and to be comprehensively understood by the patients and other members of the Multi-Disciplinary Team of Allied health professionals (MDT). These directions are described within the Standards, especially within numbers 2 and 3, particularly in the sections "2.2: the registered nurse communicates effectively, and is respectful of a person's dignity culture, values, beliefs and rights" and Standard 3, "They are also responsible for providing information and education to enable people to make decisions and take action in relation to their health" (NMBA, 2016).

Crawford et al. (2017) stressed the requirement of nursing students to acquire before the completion of their nursing degree, the ability to understand and interpret health professional terminology, and at times, translate the information not just into clearer simpler English language, but also into VE to promote patient comprehension.

At the commencement of a student's Nursing studies there appear to be possible advantages to limiting the amount of exposure to AVE and HPT, such as improved student comprehension, more rapid understanding of learning content and the ability to participate during class (Bolkan, 2016a). Increased exposure to the AVE, and HPT and

the provision of learning support in the area, may improve student knowledge, appreciation interpretation and uptake of the language. Frequency of exposure to and the use of particular types of language by EAL students has been linked by Muller (2011) to the development of language automaticity, and a lowered cognitive demand required to achieve understanding.

However, there is no currently available research that describes the language that the academic staff are using within the nursing educational space, specifically tutorials and lectures. For example, it is not known whether VE is being used, in what situations it is being used and whether tertiary students are able to understand what academic staff are saying within nursing lectures, tutorials and any other learning situations. Or, whether once nursing students have been participants in the university course and the Australian environment for six to 12 months, it would be reasonable to increase and encourage their exposure to VE.

1.1 The significance of the study

The aim of this study was two-fold. Firstly, the study sought to establish the incidence of AVE and HPT used by Nursing academic staff during tutorials and lectures. Secondly the study aimed to identify and classify the type of VE and HPT that was typically used. Lectures and tutorials of entry year topics of the Bachelor of Nursing were examined for this purpose.

The NMBA has published professional requirements for Registered Nurses (RN) as the Registered Nurse Standards for Practice (2016), the Code of Conduct (2018), the ICN Code of ethics (2012) and several other practice guidelines. Together the documents describe the minimum criteria that must be attained to achieve and retain registration as an RN in Australia and are designed to provide direction and encourage development as an RN. The RN Standards for Practice (2016) that have been identified to be particularly relevant to the use and understanding of VE during a student's university education are

Standard 2, “Engages in therapeutic and professional relationships”, and Standard 4, “Comprehensively conducts assessments” (NMBA, 2016). To establish a therapeutic relationship, and thoroughly assess a patient, a situation of trust and an effective means of communication must be found, which promotes the giving and receiving of personal information. To facilitate holistic patient care, the RN also requires the ability to share their findings with other health care professionals. Therefore, communication competency in formal and informal English language (including VE), has been identified as an essential skill for the student RN. The legal guidelines for the practice, behaviour and conduct of Australian Nurses have been described in the Code of Conduct for Nurses (2018). Several sections of the Code identify the need for clear effective communication, particularly in the sections such as;

Domain: Practice safely effectively,

Principle 2 Person centred Practice, 2.3 Informed consent, a) support the provision of information to the person about their care in a way and /or in a language/dialect they can understand. and

Principle 3 Cultural Practices and respectful relationships, 3.3 Effective Communication,

a), be aware of health literacy issues, and take health literacy into account when communicating with people,

c) endeavour to confirm a person understands any information communicated to them. and

d) clearly and accurately communicate relevant and timely information about the person to colleagues, (NMBA,2018, p.9-10).

To reiterate, in order to meet the requirements of the Code, a commencing RN must be able to communicate effectively and accurately with other members of the multi-

disciplinary team (MDT) and with patients and their families, in a variety of language styles which include VE and Health Professional terminology (HPT).

The information gained from this study will be used to determine whether first-year students are being exposed to AVE and HPT and jargon during lectures and tutorials of the Bachelor of Nursing (BN). The study will provide an indication of some of the types and styles of language being used that may be confusing to commencing students.

Findings from this study are intended to provide the basis for further study, which will design and propose methods for including vocabulary, phrases, and idioms, which have been identified by this research, for inclusion in the academic support module of the BN first year study program.

There are three research questions that have been formulated to guide the study. These are.

1) Is AVE being used by academic staff in the delivery of lectures and tutorials in first year topics?

2) If so, what AVE is being used?

3) What HPT is being used by academic staff in the delivery of lectures and tutorials in first year topics

CHAPTER TWO: BACKGROUND

2.1 Introduction

Students attend university in order to access knowledge and assistance in learning about areas of interest. The environment of a tertiary institution can present the student with that education in a number of ways, however, to be successful, any methods used for the dissemination of knowledge are dependent upon the ability of students to comprehend and work with that information.

Several studies have been noted that have looked at the experiences of commencing EAL students in nursing, have identified some common problems encountered by these students, and some of the impacting factors. Studies by Bolkan (2016) and colleagues focussed on students' difficulty in understanding language within the classroom, the implications of the difficulty and the impact on cognitive loading.

During the Bachelor on Nursing (BN), students are required to complete a number of practicum placements. The experiences of placements increase the exposure of students to VE and HPT, and several studies have been mentioned that pertain to the need for students to be adequately prepared for the clinical field.

In the current chapter these studies are used to create a demonstrate the interaction between the language used during classes and the ability of EAL students to participate in class and/ achieve academically.

2.2 Literature review and conceptual foundations

2.2.1 educational setting

Ashwin et al. (2016), described several methods of sharing educational content with students, for example, through lectures, tutorials, online sites, although the degree of learning achievable by a student will always be dependent upon their ability to understand

the content as delivered. They have noted that lectures are a commonly used method for the dissemination of content, where teaching can be didactic, or interactive dependent upon the lecturer's choice, while tutorials, by comparison, are a setting in which student enquiry and comprehension and therefore engagement, can be stimulated. In tutorials by contrast to lectures, students are encouraged to be interactive with the learning content and to discuss and clarify concepts with their tutors (lecturers) and peers.

However, when delivering a lecture or tutorial, it is possible that the main focus of an English-speaking nursing academic could be on their prepared educational content, rather than their style of delivery and therefore there may be a tendency for the lecturer to inadvertently use VE and HPT including discipline related jargon. For some groups of commencing students, the use of VE and HPT could lead to learning difficulties and stress related issues. Ashton-Hay et al. (2016) examined the transitioning experiences of international students as they commenced their tertiary study and found that several of the students reported only understanding 40-60% of the lectures during class time. Students reported often having to relisten and/ or repeat the lecture to gain sufficient understanding of the concepts presented, due to difficulties with understanding the Australian accent, speed of delivery and vernacular language used.

2.2.2 VE in the classroom

Ashton-Hay and colleagues (2016), found during their study of international student transitioning experiences, that English as an additional language (EAL) students, who have had formal English classes conducted in English by a non-native English speaker, or by a native English speaker from a country other than Australia, were likely to have had no previous experience of AVE before their enrolment and arrival for university, simply because these colloquialisms are unique to Australia. Similarly, Bai and Qin (2018) examined second language acquisition by college students in China, and found that in order to learn a language, the student needs to acquire a degree of understanding of the

target culture and their colloquialisms. Their findings showed that if the instructor was a Chinese speaker of English, who had limited knowledge of other cultures, it was possible that the graduating students would have insufficient knowledge of foreign culture to understand the eccentricities of regional languages, such as Australian Vernacular English and VE in general. Additionally, Bai and Qin (2018) in discussing the connection between culture and vernacular language, found that an understanding of the region's culture assisted with the interpretation of speech and writing, but that it could take a number of months to acquire a sufficient level of cultural understanding.

A further finding from the study by Ashton-Hay et al. (2016) was that the students experienced difficulties with understanding AVE and the speed of speech particularly during the first 6-12 months of their tertiary study. These difficulties may be partially explained by Wu et al. (2015), who researched the experiences of international students studying in the southern United States of America (USA). They noted that within each country there are local dialects, unique colloquialisms, slang and idioms, which impact the speaking language used within different regions. In their qualitative study of ten students, some of the students thought that they had acquired good English skills in their home countries prior to arrival in the USA for study, but on arrival found that they had great difficulty understanding and conversing with the local people, whose conversation contained VE, which was related to the style of home country English language instruction.

Difficulties with the comprehension of VE, which were encountered by commencing international university students in North-western USA, were also studied by Lin and Scherz (2014). They found that the five participants' comprehension of course material was adversely affected when the barriers of unfamiliar language, slang and a rapid pace of delivery were present and compounded by the use of culturally unfamiliar examples.

A common theme between the studies mentioned above, is that there is a connection between the student acquiring an understanding and appreciation of the cultural context, in order to develop the ability to interpret the related VE.

2.2.3 HPT in the classroom

Similarly , the interpretation of HPT and jargon can be aided by gaining an understanding of the health discipline, simply because the terminology can then be understood and applied within the correct context. Health professional terminology is a broad area and students need to become familiar with the terminology as soon as possible in their courses to incorporate the language of the discipline into their knowledge base, and to facilitate the development of automaticity, where the meanings come readily to them (Muller, 2011). By identifying which terminology students are likely to encounter in their initial year of study, the educational support for students can be targeted to assist with the most common phrases that are in current use within the university, and focus on that terminology rather than a general, wide range of health professional language that may not be nursing specific. In this way the number of terms can initially be limited to useful terminology, readily accessible and available online for the students to use easily as a reference.

From this it would appear that allowing students some time to become oriented to both the Australian culture and the course of study, and then gradually increasing the exposure to AVE and HPT/jargon, could increase their ability to understand and use the language in the clinical setting.

2.2.4 VE and HPT in the clinical setting

Students of Nursing undertake practicum placements during their courses as a compulsory completion requirement for the Bachelor of Nursing. Garone and Van de Craen, (2017) discussed the need for the students on placement to be able to

communicate with patients in the ward setting, and that this includes recognising the types of VE that the patients use, especially to describe symptoms, feelings, and body parts. Both Muller et al. (2015), and Garone and Van de Craen (2017) indicated that Nurses will encounter widespread use of VE and HPT / jargon, in ward conversations and other multidisciplinary interactions. These studies suggest that educational resources should be provided in these areas during the BN, to facilitate the successful transition of nursing students into the workplace.

Not only is there extensive use of medical and nursing jargon, during student practicum placements, but students of nursing need to become adept at translating the HPT/ jargon into phrases and VE that patients require in order to understand their treatment (Muller, 2016). According to Garone and Van der Craen (2017), formal introduction to HPT/ jargon during students' undergraduate studies could be beneficial in terms of learning how and when to use the specific HPT and how to interpret information in an easily understandable manner for a patient or layperson.

Using focus group interviews, which explored the intercultural communication challenges of a group of clinically based nurses and students in the broader context of both the university and the clinical (nursing) environment, Henderson et al. (2016), found that the interpretation of the VE of a country is a challenging task when a person is unfamiliar with the culture of the country. However, they noted that once knowledge of the culture was present, the level of understanding of VE improved. They explained that by incorporating positive pedagogical practices into teaching, such as incorporating a familiar sociocultural context for the student group into exemplars, students could more readily interpret the information under discussion. They suggested therefore that interactions should be tailored to address the cultural range of students in the learning. In practice, this means that educational content should be delivered and discussed during class with several cultural contexts, in a way that the comprehension requirements of a diverse

student group can be met, which can assist with student interpretation of behaviours and vernacular language.

2.2.5 Cognitive Loading

In a related domain, Bolkan (2016a) studied the effects of cognitive load on the motivation of students to be able to learn effectively during lectures. He found that if the cognitive load was very high, (as would occur when a student has experienced difficulty understanding the language being used in the learning situation), the student's level of motivation and ability to work with the information provided was negatively affected. As an outcome, the student would be less inclined to participate in the class and with the class content, and this would be detrimental to their academic progress. The comprehension difficulties having not been able to translate the terminology could cause a student to become confused by the content under discussion during a lecture and tutorial, and subsequently would become disconnected from the class.

Muller (2011) argued that if Academic staff are using the vernacular language within a cultural context that is familiar to the EAL students of Nursing, then with repeated exposure, the students would over time, develop the ability to interpret the correct meaning. Additionally, she indicated that repeated exposure would lead to automaticity, where the student would require less time and effort (a decrease in cognitive loading) to process the meaning of the individual words both for the vernacular language and the health specific terminology. Once that level of understanding was achieved, the student would then develop the ability to concentrate broadly on the overall concept and therefore participate in class discussions and activities.

Glew et al. (2019) studied the relationship between student access to university professional learning support services and improved academic literacy and grade (GPA) improvement for nursing students as well as student retention at a university in Sydney. They found that greater access and use of the student academic support services related

to an increased GPA and student satisfaction. Noteworthy is that the focus of the support sought in the study had been on oral and written linguistic abilities for improving English understanding.

2.3 Summary

A student who has learned EAL in their home country may experience difficulty understanding English language on arrival in Australia as the interpretation of a regional dialect and the use of VE requires an appreciation of the local culture. The requisite level of cultural understanding can take from between 3 and up to 12 months to acquire. The difficulty experienced in understanding the content during classes due to being unable to understand the content, has been related to very high levels of cognitive loading in the students. The increased cognitive load of interpretation and comprehension of the academics' language, limits the ability of an EAL student to focus on the class topic of learning. Resultantly an affected student could have limited ability to learn and/or participate in the class.

Similarly for the entire commencing student cohort, the use of high levels of HPT without adequate explanation, for the students with no previous medical or nursing experience could cause excessive cognitive loading, with the associated loss of ability to maintain contact with the class progression.

Currently literature that specifically related to the incidence and type of AVE or healthcare jargon used by academic staff during the delivery of educational content is very sparse. The aim of this research is to fill this gap in the literature.

CHAPTER THREE: METHOD

3.1 Methodology

A qualitative study was conducted, using the grounded theory research design, as described by Creswell (2012). The study focussed on the use of Australian vernacular English (AVE) and health professional terminology (HPT) within the Bachelor of Nursing. The data for examination during the research was drawn from a collection of recorded tutorials and lectures presented within first year topics, which were conducted online from the College of Nursing and Health Sciences during the semester one of 2020.

3.1.1 The Research paradigm

A research paradigm has been suggested by Kivunja and Kuyini, (2017) to be reflective of the abstract view with which a researcher interprets their environment. The researcher uses their personal experience to identify the topic of study, and the chosen paradigm then provides influence upon what can be studied, how it can be studied, and shapes the interpretation of the data findings (Kivunja & Kuyini, 2017). Qualitative and quantitative paradigms differ in several ways, including the type of events the research is able to use in furthering understanding.

According to Creswell (2012), quantitative research involves the identification of a research problem, which requires an empirical approach of measurement to answer the research question. Data is measurable and standardised using objective measurement tools. Research hypotheses and statements of purpose are investigated, analysed, and compared against predicted outcomes. The structure of the study seeks to generalise findings to a population.

In contrast, the qualitative research paradigm allows the researcher to delve into and explore an identified phenomenon, to gain increased understanding (Creswell, 2012). The sample size can be small and limited, to enable the ability to focus on the quality of

responses, rather than the quantity of responses, enabling a depth of personal detail to be included in the review. The analysis of the data includes subjective (interpretive) analysis of content, in terms of themes, descriptions and concepts, which leads to report writing that will discuss the emerging trends, development of structures, and methods of evaluation (Creswell, 2012).

The current study has been conducted under a qualitative paradigm, which enabled the exploration of the observed phenomena of the use of AVE and Health professional terminology and jargon during lectures and tutorials in entry topics of the BN.

A paradigm has three to four basic elements inherent in it, the epistemology, the ontology (or the underlying understanding of reality) (Francis et al., 2016), the methodology and some authors also include the axiology (or the philosophical approach of ethical and value considerations) (Finnis, 1980, in Kivunja & Kuyini, 2017). Each of these elements comprises a selection of understandings, assumptions, and criteria, which provide consistency to a particular paradigm (Kivunja & Kuyini, 2017).

The epistemology and perspective or underlying theoretical knowledge, within which the study has been based is Social Constructionism. Constructionism as described by Crotty (1998) suggests that meaning attributed to occurrences and physical objects, develops as a social construct, due to the tendency for people to interpret the world and the processes within it, by utilising their socially constructed experiences. The interpretation of an event or experience is therefore influenced by the culture and previous exposure of an individual (Crotty, 1998).

In the current study the social constructionism epistemology acknowledges that the interpretation and meaning of the themes, and the words and phrases themselves, has been completed using predominantly Western literature and an Australian Nursing academic viewpoint. Therefore the interpretation and meaning attributed to the VE has

been influenced by the social construct in which the Western resources (online and printed) were developed, which was Australian, the USA and from the UK.

Grounded theory was selected as the methodology for the study. It was first described by Glaser and Strauss (1967) as the methodology used to explain their interpretation of data from a study into the terminal healthcare experience of staff, patients, and families. The methodology involved working through the data drawn from human behaviour, in a systematic manner, to generate concepts and theories about the acquired information (Stern & Porr, 2011). Glaser and Strauss originally considered grounded theory from the perspective of symbolic interactionism, which meant that their theory was influenced by a desire to further understanding of how human behaviour is influenced by social interaction (Stern & Porr, 2011). Stern and Porr (2011) suggest that there are four principles that guide grounded theory-based research. These are, firstly that findings should be discovered rather than verified, that is, that the methodology is used to generate findings, not to verify predetermined theories. Secondly that the function is to explain observed phenomena, that is, the information gathered is used to identify what is occurring, and to make connections between concepts, with the intention of developing an explanation of the phenomena. The third guiding principle is that the ideas and concepts should be permitted to emerge from the data, rather than preconceived ideas be applied to the data. The final principle for using grounded theory is that there is an iterative comparative process, collection, analysis, reflection and then back to collection through the analysis stage etc.

Grounded theory can be used when there are no pre-existing theories that adequately explain the subject, interaction, or other topics under research. In this situation, the grounded theory design procedures enable the use of the gathered data to generate or “ground” the findings (Creswell, 2012). Grounded theory methodology has evolved since 1967, as several theorists have suggested different interpretations of the methodology,

due to consideration from alternate epistemological perspectives. Subsequently there have been three main approaches to grounded theory described, and these have been listed by Creswell (2012) as: the Systematic design, the Emerging design and the Constructivist design.

The Systematic design, developed by Strauss and Corbin (1990 in Creswell, 2012) contains set procedures, that include open coding, then axial coding then selective coding, in a proscribed sequence to generate a logical theoretical model to explain the observed phenomena. This design was highly criticised by Glaser as being too rigid and controlled, as there were perceptions that the theory was not being permitted to simply emerge from the data (Creswell, 2012).

The Emerging design, which was Glaser's redeveloped theory from 1992, suggested the use of iterative coding and comparison of coding, to identify connections between categories until theories emerged. The concept was based on the premise that Grounded theory was a highly abstract concept, in which the theory should suit the data rather than be forcibly made to be suitable. To qualify as a legitimately generated theory, it must be relevant, suit the situation, and explain variations of behaviour as well as be flexible enough to accommodate variations (Creswell, 2012).

The third approach to Grounded theory that gained popularity was the Constructivist design, which was described by Charmaz in 1990 (Charmaz, 2008). The constructivist approach to grounded theory has been described as using the researcher's beliefs and values and priorities to explain the meaning attributed by a participant in a study to an event or phenomena (Creswell, 2012). The experience of the researcher is valuable in shaping the collection and direction of the interpretation of the data, and therefore the depth of the investigation of the beliefs and values of the participant(s) (Creswell, 2012).

From the three described approaches, Glaser's Emerging design grounded theory process was selected as the base methodology to be used in the current research study.

During the current study, after the initial thematic coding, some trends in the obtained results enabled further themes to be coded in subsequent examinations. Understanding of how the themes were being used in the classroom environment was progressively formed as a result of the findings. The conditions for use of an Emerging design were met by the current study, however the iterative process was focussed on re-evaluating the data within a differing context, such as a different focus of the vernacular language, rather than returning to the topic coordinators seeking more recordings for inclusion in the research.

3.1.2 Justification of chosen methodology.

The selection of a constructionist epistemology was appropriate, due to the intended purpose of the study, being to gain knowledge about the use of AVE and HPT, in the context of lectures and tutorials. The selection of a constructionist epistemology to investigate an event or phenomenon, which occurred within the speech of academic staff during the delivery of educational content, enabled the decision to conduct the research from a grounded theoretical methodology.

As the selected methodology for the current study, the grounded theory methodology enabled the data to be collected and analysed in the absence of preconceived theories, allowing any theoretical findings to be drawn from the acquired information. The intention being to learn about the types of AVE and HPT that was being used in the educational space within the College of Nursing, and to identify some of the types of these forms of language, which were in frequent use.

3.2 Ethics

Approval to conduct the research about the use of vernacular and health care jargon by academic staff in first year lectures and tutorials in the College of Nursing and Health Sciences was granted by the Dean of People and Resources.

There were twelve topics that a student commencing a Bachelor of Nursing could possibly encounter in their first year of the course. The coordinators of each of the

qualifying topics were approached by email and invited to supply recorded lectures and tutorials for the study. Each topic coordinator was supplied with a Participant information and Consent form (Appendix A) to read, and a completed consent form was required in order for them to supply recorded material for inclusion in the study.

Each topic coordinator who supplied a recording of a lecture and /or tutorial was assured that the topic name, number, and the lecturer/tutor details would be removed during media download and transcription. The Participant Information and Consent form outlined that their agreement to be involved in the study involved the provision of audio recordings for inclusion and that the topic coordinators had a right to withdraw their agreement of involvement at any time, without the provision of any explanation, or incurring any repercussions. All the recordings of lectures and tutorials that were supplied for inclusion in the study were to have been recorded prior to the topic coordinators having received notification or having been advised of the nature of the study, to ensure the inclusion of only uninformed recordings in the data for evaluation. This exclusion ensured that there was no possibility of artificially modified recordings by the conscious or unconscious tendencies of academic staff to modify their language patterns due to heightened awareness of the study focus.

The study data were drawn from the deidentified audio files. The files were transcribed by the researcher, which prevented access to identifiable tutorials and lectures by an unauthorised person. All data transcriptions have been securely stored on a university database, for the required duration of the study and beyond (5 years in total).

There was a risk that a topic coordinator could be identified and linked to the study outcome, simply due to being a coordinator of a topic that met the study inclusion criteria. However, the process of initial deidentification of the audio files immediately upon download, and then further redaction of remaining identifiers from the data during transcription, (including any references to the gender of academic staff and/or topic titles)

removed any incidental means with which to identify the topic or academic staff member. Additionally, the redaction removed the possible interpretation by participants that their educational practice would have been under direct scrutiny by the researcher. Only the possibility of a topic fitting the inclusion criteria would be identifiable from the final study outcomes, not whether the teaching content of a specific academic was included in the study.

Feedback will be provided to the topic coordinators who assisted with the study, in the form of a summary of the results and free access to the written report at the completion of the study.

With respect to possible conflict of interest, the researcher is an academic employed by the College of Nursing and Health Sciences and has taught across several topics in the Bachelor of Nursing curriculum. To avoid taint and bias in the study, recorded tutorials and lectures by the researcher have been precluded from the study.

No student information has been accessed or utilised in the current study, and there are no further perceived risk categories to others, who are not participating in the research. There has been no compensation or payment made to any person involved in the study. No external funding was sought or received for this study.

Ethics approval to conduct the research was granted by the Human Ethics Low Risk Panel, Project ID 1951.

3.3 Lecture and Tutorial data

Topic coordinators of the entry topics in the Bachelor of Nursing, were invited to make available for the study, recorded tutorials and/or lectures, from which the data for this study was drawn. There were no actual participants involved in the gathering of data. The tutorials and lectures may or may not have been personally recorded by the topic coordinator, however the recordings contained within the topic site remained the responsibility of the relevant topic coordinator. Both sessional and permanent teaching

staff were included in the recorded lectures and tutorials of the study, and the experience level ranged from first semester tutors to highly experienced senior academic staff.

Therefore, a theoretical sample was drawn from a set group of topics in the Bachelor of Nursing. Creswell (2012) explained that when a researcher conducts grounded theory research, theoretical data sampling is used to selectively collect an intentionally focussed group of data, in order to generate a theory. In the current study, in order to information about the use of the target types of language in the topics encountered by commencing students, the lecture and tutorial data had to be drawn from only those topics, and additionally only the topics that had recorded class interactions. Additionally, number of educational sessions that could be examined within the scope of the current study was limited by the constraints of a Masters thesis.

The recorded lectures and recorded tutorials (5 of each, making a total of 10 overall) were subsequently collected from the topic coordinators. The collection of the recordings was completed in several ways, either the topic coordinator emailed the files (that they had selected for inclusion in the study), to the researcher, or alternatively the topic coordinator provided topic access to the researcher to collect specific files directly from the topic site.

An early finding of the study was made when collecting lectures and tutorials from the topic coordinators. From the twelve topics that were included in the scope of the study, six topic coordinators provided content, or access to content for inclusion in the study, and only two of these topics had lectures in their topic content. A series of informal discussions held with some of the topic coordinators of topics within the scope of the study, revealed that apparently the remainder of the topics base the sharing of educational content upon the students accessing and reading journal articles and textbooks via a reading list, and the use of audio-visual media. Resultantly, the five lectures used in the data analysis were acquired from only two topics.

The topic coordinators from first semester topics responded to the researcher's request for assistance with the study in greater numbers than topic coordinators of second semester topics. Of the six responses received from topic coordinators, five agreed to supply content for the study, the sixth coordinator was unable to supply any recorded content, as the topic had been conducted in a face-to-face format during semester two 2019. The request for assistance with the study was sent out on the 25th of September 2020 and the first responses arrived on that day, the final offer for assistance was received in early December 2020.

From the acquired recordings, 5 tutorials and 5 lectures were selected according to a set of predetermined criteria. The first of the criteria was that the files were to be approximately one hour in duration, which was deemed by the researcher to be a manageable length for analysis of content, and to add consistency to the data, by minimising the possibility of time effects on the content, such as level of educator fatigue during a class. The second qualifying criteria was that the audio recording had to be clear and readily understandable to facilitate accurate transcription. For mixed media files submitted for inclusion in the study by topic coordinators, only the audio files (no videos) were utilised.

The audio files were downloaded and any identifying features on the labelling, such as those that identified the participants and/or the topic, were removed. Subsequently, the recordings were identified only as tutorial one or two or three etc, or lecture one or two or three etc. Each audio file was then transcribed by the researcher and any remaining identifying features of the topic and or the academic staff member involved were redacted, to protect the privacy of the lecturers and tutors. The audio files were destroyed at the conclusion of full transcription. Each transcribed data file was subsequently entered into NVivo20 for the study analysis.

3.4 Data Analysis

The first stage in the grounded theory method of data analysis was to categorise the base data gained according to themes and using memos to record the researcher's thoughts during the process. Creswell (2012) refers to the initial stage as "open coding", when a basic understanding of the phenomena under observation begins to emerge. The use of an emerging grounded theory methodology permitted the analysis of data to commence as the transcription of the first files was completed, rather than waiting for all data to be transcribed and ready for analysis.

The transcribed files were imported into the NVivo20 program, and the initial codes were established. The data were thematically sorted initially between two categories of coding: health professional jargon/terminology and AVE. Further division into subcodes to enable clarification of the data was undertaken as identified in Table 1.

Table 1

Example of the sequential thematic coding of data in NVivo 20.

Coding run or pass number	1	2	3	4
Primary code name	Subcode added/amended	Subcode added or amended	Subcode added or amended	Subcode added or amended
Health professional terminology/jargon (HPT)	Health professional terminology (HPT)	Codes added, HPT *Acronyms *Jargon *Professional Terminology And NPT *Acronyms *Jargon *Professional Terminology	Previous coding amended to a common set of *Acronyms *Jargon *Health professional terminology (HPT)	
Australian Vernacular English (AVE) and/or Vernacular English (VE)	Colloquialism Slang Idioms	Colloquialism /slang Idioms	*Greeting or grouping *Agreement, acceptance, praise, approval *Space filler function *Shortened word *Increase understanding *Comparative tool *Explain complex concepts *Facilitate the seeking of assistance	Add code *Health slang

The presence of any qualifying and defining explanations (such as the academic explaining the terminology) with the use of the language of interest in this study were also examined as part of the context to inform when and how these terms were utilised within the delivery of teaching material.

For the analysis of the lectures and tutorials, the initially selected NVivo coding subcategories for the AVE were colloquialism, slang, and idioms. During the initial coding

run through the collected files, the researcher noted that there was no clear delineation between the codes of colloquialism and slang. The issue identified was that there was no definitive way to selectively code words between an “informal” and a “very informal” use of language. Subsequently, the two categories were combined, and during the second of the iterative coding passes, the data files were recoded with the two AVE codes, idioms and colloquialism/slang.

When the results from the second iterative coding pass were examined, in the colloquialism /slang coding outcomes, there appeared to be several ways in which the colloquialisms/slang were being used within the educational space. In response to the perceived variations, the third iterative coding pass of the data was completed with several subcategories included under the colloquialism/slang code. The additional subcategories identified whether the language was being used to meet the need of; agreement, acceptance, approval, or praise; as a space filler as a greeting or referring to the group collectively or as an abbreviation or to shorten a word.

Another subcategory for health slang was added during a fourth coding pass, due to the presence of colloquialisms related to health and illness being used in the lectures and tutorials. The words included in this category were common, or consumer (public) language terms related to the body and conditions.

The health professional terminology and jargon in the data were initially coded to a single category, which provided the researcher with a general insight into the types of terminology that were in use during the tutorials and lectures. During the review of the initial coding run, several different kinds of health professional terminology were evident, and the need to further divide the coding category was identified. The subcodes of acronyms, jargon and professional terminology were established for the second coding pass, which enabled differentiation of the types of professional language that was in use in the data group.

Vernacular English (VE), such as idioms and colloquialisms were identified in terms of how the idiom or word use originated and from that, whether it was an Australian use of words or a more globally understood phrasing, how the researcher understood that the word or phrase had been used within the educational context. Origins and/or definitions of the language was sought in order to determine whether the phrases were in common use globally, or were likely to be Australian in origin. The relevance of the acquired information was subsequently considered, as to whether the findings were aligned with the University teaching and learning guidelines for academic teaching, (based upon the Higher Education Standards Framework (Threshold Standards) 2021), and how AVE and globalised VE exposure during learning may assist students to meet the professional requirements for Registered Nurses.

3.5 Study Rigor

The rigor of the study was maintained by addressing the credibility, auditability and interrater reliability during the research (Owens et al., 2000). The credibility of the study was assessed at completion of the research as two colleagues were provided with copies of the study report for review and asked to provide feedback to the researcher about whether the interpretations and descriptions in the report were recognisable, and to determine whether they considered the results obtained by the study (as described in chapter 4) to be credible. A record of the type of work that had been conducted on the study each day, was maintained for auditing. Interrater reliability was checked by the development of clear guidelines for the sorting of data into the codes or themes. The researcher and supervisors each individually coded a selected transcript. A meeting was then held, where the transcription coding results were discussed, and the discrepancies of coding were reviewed. The interrater agreement level determined to be 78% and the coding reference list was adjusted by level of agreement. Subsequently to the discussion, all coding was based upon that level of agreement.

CHAPTER FOUR: RESULTS AND DISCUSSION

4. Results and Discussion

The aims of the study were to identify whether AVE and HPT was being used by academic staff during their teaching of lectures and tutorials in the Bachelor of Nursing. The study sought to examine some of the ways in which VE (and AVE in particular) was being employed during classes.

4.1 Australian Vernacular English.

Is AVE being used by academic staff in the delivery of lectures and tutorials in first year topics?

Academic staff members who conducted the sampled lectures and tutorials were found to be using AVE and VE in several ways within the nursing educational context. The types of language employed and whether the lecturer used vernacular terminology during their sessions, appeared to be random, since more examples were collected from some of the sampled classes than others. For example, during lectures 1 and 2 , only a few vernacular words or idiomatic phrases were coded, but in the other transcribed educational sessions, multiple examples of vernacular expressions and words were noted. This suggests that academic staff members may not use VE in all situations within the educational space or that the type of educational context may have influenced the selection of language expressions, however further research would be needed to investigate whether this was occurring.

Different types of VE were noted to be in use during the educational context, and there appeared to be a variety of purposes for which the identified types were utilised. Some of the differences in the types of language that were identified as in use during the sampled teaching sessions included VE that was not unique to Australia, and AVE, for which an Australian origin could be identified. The significance of identifying the origins of the vernacular language is that students who have recently arrived in Australia may not

have been exposed to the idiosyncrasies of AVE but may have encountered other VE. Ashton-Hay, et.al. (2016) identified that to understand locally and culturally specific types of language in a “new country”, students require a level of environmental acclimatisation, and cultural awareness, which could take some time (from one month up to six months) to gain. Whereas VE that originated elsewhere in the world and has been circulating globally, may have been encountered by students during English language education and/or in another English-speaking country, or used in some form in another language or from electronic media (Coleman, 2014).

Although intercontinental movement and travel of people has occurred for centuries, there has been an acceleration in the flow of people, trade, and technology during the past one hundred years, enabled by more rapid transport, and the development of means to transmit messages and information instantaneously across the globe (Scholte, 2008). Resultantly the thoughts and practices of diverse groups of people and cultures have been subject to comparison, exchange and in some instances, blending in the process of globalisation. Scholte (2008) defined globalisation in terms of “the spread of transplanetary and... supraterritorial social relations” (p.1471). One of the effects of global sharing of technology and the internet, has been an acceleration of the spread of some elements of culture, such as the use of language (Coleman, 2012; Smith, 2018). Social and audio-visual media usage, communication, and the migratory nature of people for work, education, and social reasons have assisted in the global uptake of colloquial expressions. Frequent waves or fashionable trends of language acquisition have occurred via a transiently favoured source, such as online media, (for example, television programs, movies or online games (Coleman, 2012). Coleman (2012) identified that while the colloquial language spoken within a geographical area, may retain regional idiosyncrasies, it can become embellished with words and expressions from transnational origins, for example the movement of words such as *sushi* (Japanese) and *tai chi* (Chinese) into

English and vernacular terminology, such as *Guys* and *chicks*, throughout English in different regions. The findings of the current study were consistent with the globalised spread and usage of VE identified by Coleman (2012).

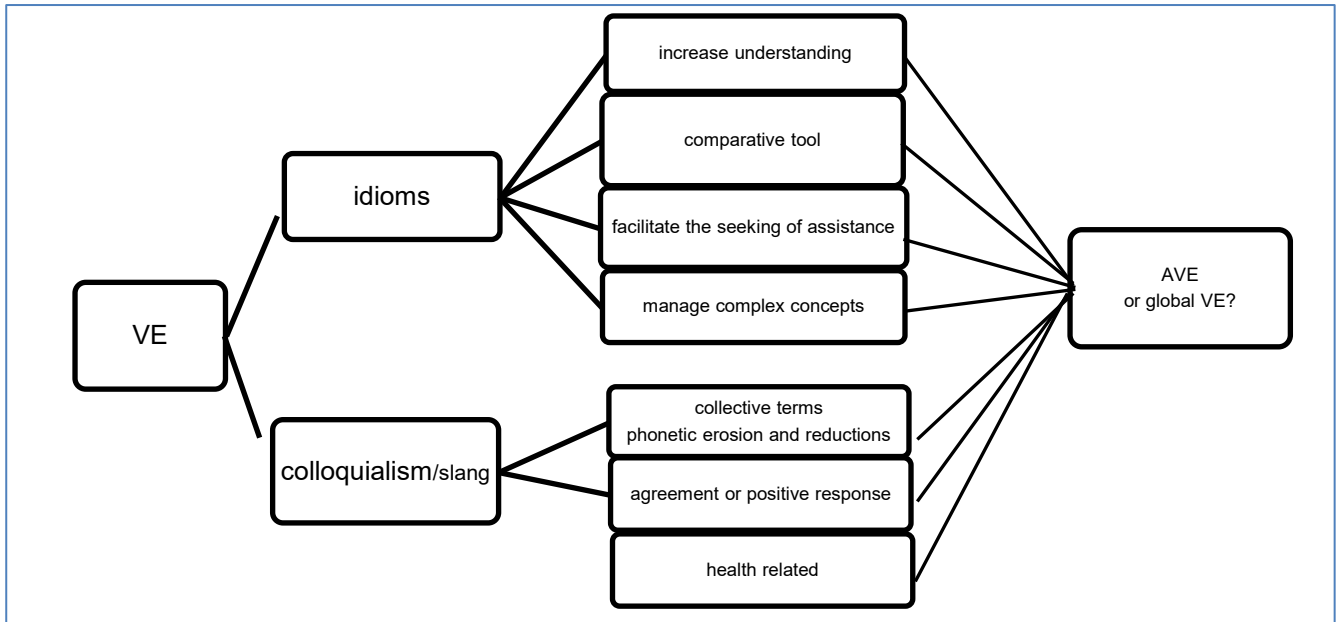
The study found that rather than uniquely AVE being used, much of the VE spoken by academic staff appeared to be global in origin. For example, during the tutorials, when the academic staff members referred to the class as a group, “*guys*” was the commonly used terminology and to indicate that an answer was correct or feasible, the response was often, “*OK*” (*okay*). Coleman (2012, 2014) identified that the movement of these words into regional vernacular languages has been evident for some time. The identification of the origin of the words served to remind the author that some VE words and phrases have been assimilated into “normal spoken English” and users may no longer consider them to be vernacular.

What AVE is being used?

The findings indicated that VE was being utilised in a variety of different ways during nursing lectures and tutorials. The VE data was thematically coded into either idioms, or slang and colloquialisms and will be discussed within the categories in which the language was utilised during classes (Figure 1).

Figure 1

Diagrammatic representation of the Vernacular English (VE) coding.



4.2 Idioms

Idioms were used for several purposes during the lectures and tutorials. Noted uses of idioms were, to increase student understanding; comparatively to emphasise similarities and differences; to encourage students to seek assistance with their learning; to decrease perceptions of hierarchal barriers in the educational environment; and as a learning aid in explanations of complex concepts.

Each use is discussed individually, with examples and where possible the origin of the idiom has been identified where it can assist with interpretation. Where examples are provided, the acronym L with a number will replace the word lecture and number, and T 1-5 will replace tutorial and number.

4.2.1 Idioms to increase student understanding.

As noted in Lecture one (L1), a number of idioms were used to assist students in the development of mental images of the cellular constructs for learning.

Understanding of the constructs was required for scaffolding of learning in the remainder of the topic. Some of the idioms used to assist student understanding in this way were used as analogies and others as metaphors. For example, cells were equated with “*building blocks*”, mitochondria to “*powerhouses*” and platelets are said to be a “*plate that is used to plug holes*”. The clear understanding of a learned concept has been identified as an integral element in schema construction for memory and recall by van Kesteren and Meeter (2020).

First described by Bartlett (1932) Schema is the cognitive, organisational framework required for building retrievable long-term memories. Bartlett theorised that the construction of memories for recall was a process that “demands an organisation of ‘schemata’ that depends upon an interplay of appetites, instincts, interests, and ideals peculiar to any given subject.” (p.309). For any given memory, the student’s experience and interests have an influence on information collection and schema construction, that is, how items are grouped or “chunked” together to enhance recall. The schemata can be enhanced by association with analogies (or conceptual comparisons), and the utilisation of multiple modes of learning. Bartlett found that an advantage of building broad associations to and enhancing schema, was that the multiple connections (overlaps or common themes) between schemata could be stimulated and that promoted recall. The use of analogous and metaphoric idioms to assist a student to imagine or mentally construct an image of a concept is an example of enhancing schema by increasing the connections through reinforcing auditory learning with a visual element.

Further research on schema was conducted by others including Piaget, who studied *accommodation*, the ability to adapt previous schema as new information was

encountered, and *assimilation*, the ability to enhance schemata with new information, which clarified knowledge scaffolding and adaptive learning (van Kesteren & Meeter, 2020). The clarity of schema for recall is therefore reliant upon the quality of the information acquired in all stages of knowledge acquisition (Bolkan, 2016). If a student misunderstood or misinterpreted information during a class, it could possibly result in a corruption of the memory process from imperfect schematic construction, and this could be investigated as a topic for future research.

Analogies have been described as a type of structure mapping where perceptual (physical) or relational (abstract) similarities are noted between two objects or things, that may not otherwise be similar (Behrens, 2017). Two examples of analogous idioms used during lectures were, likening the red blood cells to “*doughnuts without holes in the middle*”, and macrophages to “*vacuum cleaners*” (L1).

The use of analogous idioms in the gathered data was interpreted to have been to provide an explanatory comparison, which utilised similarities between the unfamiliar object, and another (hopefully) more familiar one for the student. Van Kesteren and Meeter (2020) suggested that the association made using an analogy could prompt the student to develop an interpretive framework to promote understanding. However, the use of analogous idioms could cause confusion, such as, the “*doughnut without a hole*” analogy for a red blood cell. The problematic nature of using an analogous idiom such as the “*doughnut without a hole*”, may not be readily apparent to an Australian, because a yeasty bakery doughnut, may be easily imagined. However, for a person of a different cultural background, the idiom could be misleading, if their understanding of a doughnut differed from their Australian peers. Some of the different types of doughnuts, (or donuts) identified during a quick internet search (such as a confused student may have used) were, the “Berliner” doughnut, (a round bun injected full of jam), the Spanish “Churros”(fried dough batons dusted with sugar and cinnamon), and varieties of eastern European and Asian

sweet or savoury pastries, which varied between round, twisted, or flattened, and either fried dough, or crispy flatbread. Therefore, the doughnut analogy had an ambiguous meaning that could have caused confusion and misunderstanding. To have shown a red blood cell diagram during the lecture may have been of more assistance for student understanding and schema construction.

The complex interpretation of an unfamiliar analogy has been identified as a stressor that can create an extraneous cognitive load, which could dominate the student's concentration during the learning situation and result in an impaired ability to think about and understand the class information (Bolkan, 2016a). Whereas clarity of communication style by the educator would be more likely to support student comprehension and participation during class by the prevention of additional cognitive loading required for complex language interpretation (Bolkan, et.al, 2016).

Another potentially confusing analogous idiom (L1), was "*vacuum cleaners of the cell*", used to describe the action of macrophages. Macrophage cells are part of the immune system that engulf and ingest pathogens, absorbing or expelling the deaminated waste products (Martini, 2018). A vacuum cleaner can only suction and collect waste, therefore as an analogous idiom for macrophage, the idiom could only encourage a limited understanding of the function of the macrophage in the immune system. Nursing students require knowledge and understanding of the immune system in order to learn and apply pathophysiology and pharmacology clinically, to appreciate how disease processes can affect the human body, and to enable the assessment and planning of a patient's care needs. To enhance student understanding, a preferable option may have been to have included a short media clip of the function of macrophages rather than the use of the misleading analogy.

Overall while the use of analogies for improving student understanding were identified in lectures, unless there is adequate contextual information to assist the student

to understand the analogy, or an explanation provided by the lecturer, studies suggest that the resultant distraction and increase in cognitive loading would be most likely to impair the students' ability to remain engaged and to construct effective schemata for learning and retention (Bolkan, 2016: Bolkan et.al, 2016a).

4.2.2 Comparative idioms to emphasise similarities and differences.

Metaphors were used as comparative idioms during the lectures and tutorials. The metaphorical idioms were used to emphasise similarities and differences between items.

The descriptive phrase, "*apples with apples*" and "*apples with oranges*" (L5) was used, as a metaphorical idiomatic expression, which in the noted situation was applied to the addition and subtraction of fractions. The metaphor referenced the necessity to have the same or common denominators, (or apples with apples), to add and subtract fractions. However, when the denominators were different, (apples and oranges), obtaining the sum would be more complex, due to the need to match the denominators before proceeding to the addition. The use of this phrase was reported to have originated in 1670 England as comparing apples and oysters (Baldwin, 2020) and similar phrases of comparison have been used in various countries to imply that similar items can be compared, but that dissimilar items cannot as they are unequal. The use of the phrases, *apples with apples* and *apples with oranges* within the educational context could cause a student to experience a high cognitive load due to the effort required to translate and interpret the meaning of the phrase if it was unfamiliar to the student. This could include students from countries where apples and oranges are not cultivated or included in their diet.

Bolkan (2016) suggested that distraction from the class due to lack of cultural understanding, would have an impact on student understanding and retention of information. The literal translation of analogous and metaphorical idioms by an EAL student may be an unproductive and time-consuming process, due to the nature of idioms and when the translation provides little or no achievement in terms of the topic learning

aims. Rather, Bolkan (2016) has suggested that the higher cognitive load associated with the translation, identification, and attempt to understand or interpret an idiom, may have prevented a student from active participation in the class group activities, originally designed by the instructor to enhance the construction of schemata. Subsequently the student's recall of the information could be impaired, and this would impact the scaffolding of learning and the logical accumulation of knowledge (van Kesteren & Meeter, 2020).

The use of complex idioms as analogies and metaphors may require further research to identify whether a significant association could be identified between the usage frequency of complex idioms during educational interactions and the level of student cognitive loading. To identify whether there was an identifiable link between student comprehension of analogies and metaphors used by academic staff, and student classroom engagement and motivation, may be useful in the development of teaching practices to support students, where ambiguous language can always be accompanied by an explanation.

4.2.3 Idiom use to facilitate the seeking of assistance.

Some of the idioms that were used appeared to have been focussed on encouraging students to identify their learning needs, and to seek assistance when required to support their learning. One phrase that was used to describe levels of understanding or comprehension, was, "*don't let anything go over your head*" (L3), which was used to imply that when the information under discussion was too complex and not understood, a student should request further clarification. The source of "*don't let anything go over your head*" was suggested by several resources, to have been a 15th century colloquialism, related to non-swimmers bathing in shallower water, to decrease their drowning risk (Cambridge Dictionary, n.d.; idiomorigins.org, n.d.). Fortunately, the phrase was used immediately following an explanation that students who felt uncertain about the discussion should request further explanation. Without any contextual clues, the literal interpretation

of the phrase, “*don’t let anything go over your head*” would have been potentially confusing, and an unnecessary distraction for an uncertain student. The lecturer also asked whether any concept “*really didn’t sink in*” (L3), during the same discussion. The idiomatic phrase “*really didn’t sink in*” was identified as meaning that the new information may have been sitting outside the brain and to be useful, needed to be absorbed or assimilated with previously acquired knowledge in the brain (Farlex Dictionary of Idioms, n.d.).

Another idiomatic phrase that was identified was, “*doing it won’t hurt at all*” (L3) which according to the Farlex dictionary of idioms (n.d.) means that it would be beneficial to do something or get something. In the lecture context, the phrase appeared to imply that further practice in using the learned formulae and methods would have been beneficial for student learning. The common definitions of “hurt” are to injure or cause harm and pain (Cambridge, n.d.; OED, n.d.). Therefore, the literal translation of the idiom could confuse a student., i.e., how could the completion of a theoretical problem cause them harm or pain. An alternative option in the situation may have been to use positive phrasing, such as “doing a couple more of these will help your understanding”, to encourage student participation.

The complex idioms could have presented problems during literal interpretation, especially for an EAL student and demonstrate that commonly used idioms that describe the simple concept of ensuring understanding, could be raising student stress levels, by increasing the cognitive load during classes, as described by Bolkan, (2016). Therefore, if an educator thought about the language they used during class, and whether it could be translated literally, spoke in easily interpreted language, and provided clear explanations and diagrams, the extraneous cognitive loading of interpretation could be decreased.

4.2.4 Idiom use to manage more complex concepts.

Various other uses of idioms were interspersed throughout lecture delivery, such as “*the fly in the ointment*” (L3) for a particularly difficult section of an otherwise simple process. The phrase was used in an explanation of moving from a percentage to a fraction, described as usually quite simple, the process could be complex at times (*the fly in the ointment*) when the simplest form of the fraction was sought.

The fly in the ointment idiom is a historical idiom, which originated in biblical times, from a passage in the Old Testament book of Ecclesiastes, which referred to dead flies that caused an apothecary's ointment to acquire an offensive odour (Ayto, 2020). An EAL student, who was focussed on interpreting and understanding a discussion about numeracy, would have had few contextual clues during the lecture with which to translate the phrase, “*a fly in the ointment*” and therefore would have required time to investigate the meaning of such a non-essential phrase. The cognitive load experienced in learning during the class would have been increased for those students who did not understand the idiom, by the additional effort required to interpret the phrase. Bolkan et al. (2016) found that students who experienced a high cognitive load during learning situations were more likely to become disengaged from the class progress. The increased cognitive load could be due to a lack of clarity and explanation by a lecturer, who used unclear language and expressions (Bolkan, 2016). From this, clarity of language and examples, with unambiguous analogies, with or without supporting diagrammatic representations are important. The value of an analogous idiom to the teaching situation should be carefully considered by the educator before use, in terms of the ease of comprehension and the breadth of the cultural application (whether the meaning/application is constant for different cultural groups).

4.3 The Use of Colloquialisms and /or Slang

Colloquialisms and slang were used by the educators for several purposes during the tutorials and lectures. A notable point is that a substantial proportion of the terminology

used was that which could be considered as global slang, rather than slang from an Australian origin. As discussed earlier in chapter 4, global slang terminology and phrases are colloquialisms and slang that originated and were used within a specific group or geographical region but have spread due to multiple factors including the global dissemination of media content and population movement. Over time the words and phrases can become adopted into spoken English globally (Coleman, 2012). An example of this phenomenon is the word *OK* or *okay*, which was reputed to have originated around 1840, either in a satirical edition of a Boston newspaper, in which the phrase, “all correct” was deliberately misspelt as “orl korrekt”, and abbreviated as *O.K.*, or when General Jackson marked some dispatch papers with *O.K.* for all correct, due to his poor spelling (Eubanks, 1960). From there, the word “*ok* or *okay*”, as a term that indicated approval or agreement, spread globally including into the Australian vernacular (Coleman, 2012). A few other globally used slang words appeared frequently during the lectures and tutorials such as “*yeah*,” “*gonna*,” “*cool*” and “*guys*.” The words were used throughout the collected tutorials and lectures in general for various purposes that will be discussed in subsequent sections. In terms of cognitive loading due to the use of these global words, the frequency of use of the words in and on media, it is likely that students would have encountered the vernacular words and become familiar with how the words were used (Coleman 2012). An increased familiarity with the phrases would decrease the cognitive loading associated with interpretation, as the student would begin to develop automaticity with respect to the words (Muller, 2011).

4.3.1 Colloquialisms and / or slang words used as collective terms

The student group was frequently referred to by the collective word, “*guys*” during the classes (T 1-4 and L3 and 5). Other collective terminology was also used, such as

everybody, and *everyone* and during one tutorial, the “*interstate group*” for a number of online students.

The use of “*guys*” to refer to a group of people originated from a given name, Guy which in German means wood. To use “*guy*” to indicate a person came after the Gunpowder Plot of London (1605) when burning effigies of the perpetrator, Guy Fawkes on bonfires was encouraged by the British Parliament in the “Observance of 5th November Act (1606)” (Metcalf, 2019). Over time the name *guy* altered to refer to a scruffily dressed man, and then broadened into a casual term meaning man or men. By the mid to late 1900’s, the word “*guys*” had broadened significantly and could be applied to a mixed gender group of people. (Metcalf, 2019).

Therefore, “*guys*” was identified as globalised slang as described by Coleman (2012), which was used to refer to a mixed group of students. As a globalised slang term, and the use of *guys* in various media, the majority of students are likely to be familiar with this word and therefore unlikely to experience difficulty with understanding. The use of the word *guys* during the study appears to have been consistent and used as a convenient and informal means of referring to the entire group of students by the educators.

4.3.2 Colloquialisms and / or slang; phonetic erosion and reductions

Another theme of colloquialism usage noted during the study was phonetic erosions and reductions. Phonetic erosions occur when words are blended into a shortened form and occur in high frequency phrases and those used during informal speech (Bybee et al., 2016; Hildebrand-Edgar, 2016) and have been noted in the English language since the 16th century. Examples of the reductions that were identified during the lectures and tutorials were, “*coz*” or “*cause*”, that replaced because, “*gonna*” instead of going to, and “*gotta*” for “got to” (L.3 and 5 and T1-3). The identified reductions have been in common use as part of global English language for an extended length of time (Davie, 2019), and are listed in the Oxford English dictionary. There were a number of reductions and

phonetic erosions, such as *gonna*, *gotta*, *wanna*, *bye*, commonly used throughout the transcribed sessions, and it appeared that students would be likely to be exposed to high frequency repetitions of these types of words during their ongoing education. The phonetic erosions and reductions appeared to sound quite similar during speech to the normal words, and therefore it is possible that an EAL student would be able to understand the intended meaning of the eroded or reduced words. Additionally, as the reductions are used globally, it is likely that students could have encountered them during previous English lessons and media interactions and be familiar with the intended meanings.

Muller (2011) and Hildebrand-Edgar (2016) noted that frequent exposure to VE words in recurrent patterns, could lead to automaticity, an important stage in second language acquisition. Once automaticity had been achieved, the researchers noted that the cognitive load associated with translation would decrease and the student would demonstrate an ability to widen their focus and broaden learning with an increased ability to apply acquired knowledge (Muller, 2011; Hildebrand-Edgar, 2016). Therefore, the frequent use of phonetic erosions and reductions during educational sessions could be assisting students with acquisition and understanding.

4.3.3 Colloquialisms and / or slang; to signify agreement or a correct response.

Various colloquialisms were identified as being used as responses to students during the sessions, to indicate an affirmative or positive reply. Single words were used, such as “*okay*”, “*awesome*”, “*cool*” and “*excellent*” (L3 and 5, and all tutorials) and phrases and idioms such as “*you have blown me away with your response*” (T2) were used. Responses of this nature were less common during lectures than tutorials. This most probably was due to the lack of discussion during lectures.

A positive response appeared to have been used to encourage students to respond and maintain student engagement during the learning session. The use of “*okay*” (as discussed in 4.2), was an identified indicator of acceptance and agreement. Single word

expressions of approval, such as “*awesome*” and “*excellent*”, have been more recent additions to VE in Australia, and are likely to have developed from a global source, for example, international media (Coleman, 2012). The use of global VE words and phrases could be transient, due to international trends, which tend to build and wane with time. The words *awesome* “extremely impressive, inspiring awe” and *excellent* “extremely good, outstanding” (OED, n.d.) are only considered VE when in a suitable context of use (Coleman, 2012). That is, when used by the lecturer or tutor to respond to a student's answer during class, the word *excellent* or *awesome* would be more likely to be interpreted as a positive response. However, the educators also were using the words intermittently as space fillers, or words that were used while they were changing PowerPoint slides or between topics, which may have caused some confusion for students. The use of clearer and more descriptive words as feedback in an open-ended response may have been more useful for the students, such as “that is a correct answer... and why would...”, and “that is a good description of the situation, and how could....” and the response could have been utilised as a discussion point, stimulate student critical reasoning and engagement with their learning.

4.3.4 Health related colloquialisms and / or slang.

Colloquialisms and slang that referred to informal health terminology, or the terminology and phrases commonly used by the public and/ or people with no professional health experience, to discuss an illness, or body part were common during the lectures and tutorials. Occasionally, health related VE were identified alongside professional terminology, but in several instances, there was no supporting explanation. Some examples of the informal health slang noted included *shin* and *shinbone* (L2) instead of tibia; *eggs* (T2) instead of ova or ovum; *hips* (T3) for pelvis and iliac crest and *strokes* (T4) when referring to cerebrovascular accidents.

Patients who access the health care system, may have a limited understanding of health, and may become confused by professional terminology. They will need to explain their medical and surgical issues and the reason that assistance has been sought. The patient's explanation would usually include VE with which they normally refer to their bodies and problems. Possessing fluency in and understanding a range of colloquial health terminology, can enable an RN to communicate flexibly with a patient, or member of the general public and to achieve understanding. Additionally, the patient can explain their situation with familiar words to promote understanding of the signs and symptoms of their presentation.

The inclusion of colloquial health terminology during lectures and tutorials, and the simultaneous introduction of health professional terminology, may be beneficial to students for several reasons. It could promote student recognition of the linkage between publicly used terminology and health professional terminology, enhancing the construction of schemata and knowledge scaffolding (Bartlett, 1932). Additionally, the frequent exposure to and the use of the identified terminology could stimulate automaticity, permitting the student to focus more on the consideration of the assessment during a patient interview (Muller, 2011).

4.4 Student understanding of lectures

The Flinders University Centre for Innovation in Learning and Teaching (CILT) has published guidelines for teaching practices at the university in the document, "Educational Quality Framework", (based upon the Higher Education Standards Framework (Threshold Standards) 2021). In the Framework document, appendix A, Learning and Teaching Principles, CILT has suggested that language used during teaching be inclusive to encourage student learning and involvement, in principle 3 "the use of accessible language, with attention to student diversity", and principle 4, "the development of multiple literacies ...within the curriculum" (Flinders University Centre for innovation in Learning

and Teaching, n.d.). Bolkan (2016) identified that a higher cognitive load occurred in EAL students who attended classes in which colloquial language, rapid discussions and jargon were prevalent, than that of native English speaking students who attended the same class. The study concluded that EAL students could lose contact with the progress of the class, due to the additional time spent deciphering the language used. From the findings of Bolkan, (2016) the use of a complex idiom, metaphor or analogy that was not integral to the learning goals of the class, could be a distraction that decreases the ability of a student to focus on and learn during the class activities. Extrapolating from the experiences of the above study, where students had difficulty understanding vernacular language when they had limited understanding of the cultural context, it would seem that when AVE and professional jargon are included into any university lecture and tutorial content, without sufficient explanation and supportive information, commencing students could be disadvantaged in terms of comprehension and achievement.

Henderson et al., (2016), Muller (2016), Crawford, et al. (2017) and Garone and Van der Craen (2017), agree that nurses require the ability to fluently converse with patients in both professional and vernacular language, to establish a therapeutic relationship and to communicate effectively, for patient safety. The NMBA Registered Nurse Standards for Practice (2016) "Standard 2, the Registered nurse must be able to engage in therapeutic and professional relationships" outlines that an RN must possess the ability to establish and maintain effective communication with the patient (NMBA, 2016). If a clinician is unable to form a therapeutic relationship with patients and to conduct a comprehensive physical and verbal interview and assessment, key health indicators are likely to be overlooked. The Australian Commission on Safety and Quality in Health Care (ACSQHC) (2016) has identified that in the absence of correct assessment and communication, the conclusions made, and treatment or care provided can be incorrect, inadequate, and potentially life threatening for the patient.

Therefore, to enable the delivery of safe, high-quality individualised care, nursing students must achieve competency in communication during their course of study. The therapeutic communication skills required include the ability to understand and converse with patients as a health professional as well as the competency to use and interpret colloquial or vernacular language correctly. Conversely, nursing students require the ability to recognise and use health professional terminology, acronyms, and jargon to permit effective communication with multi-disciplinary health team members, and enable comprehensive, holistic care (Muller, 2016).

Frequent exposure and use of VE leading to automaticity for EAL students may improve their ability to work competently as an RN. Automaticity of VE would enable the commencing RN to focus on patient assessment, treatment, and care, which has been identified as a core attribute required in the provision of a safe environment for patient management, where carer distraction and misunderstandings have been implicated as major factors in patient care incidents.

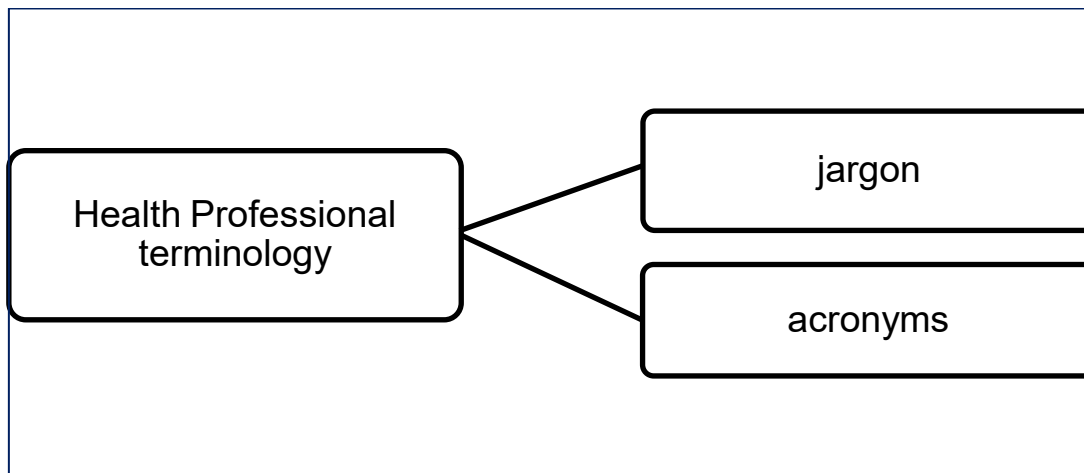
4.5 Health Professional terminology

What health professional terminology /jargon is being used by academic staff in the delivery of lectures and tutorials in first year topics?

The type of health professional terminology used during the educational sessions was sorted in the data analysis into two themes. The first theme to be identified as an area of focus during this study was professional jargon and the second theme was acronyms, (as depicted in figure 2).

Figure 2

Diagrammatic representation of Health Professional Terminology (HPT) coding



4.5.1 The use of Health Professional terminology: Jargon

Health or Medical jargon may be used on a regular basis within the health profession and would be likely to require further clarification and / or explanation to someone who did not work in the area. Some general examples of these words and phrases that were identified during the study included, *fluid and electrolyte balance* (L4), *pressure area care* (L2), and *Wernicke's* (T4).

Jargon usage was present in both the lectures and tutorials, however a higher utilisation rate was noted during several lectures, where body systems were under discussion, than during discussions about health care governance and numeracy skill development.

In addition to the numeracy lectures, during several tutorials about community environmental situations and health care governance were discussed, there was a notable absence of medical jargon. A possible reason for the lack of jargon in these sessions could have been that the teaching staff were nurses whose clinical experience had been hospital based. Resultantly the teaching staff would be familiar with hospital workplace jargon, but not necessarily community healthcare jargon, since jargon development occurs between

people who work regularly within a specialised area, often as an efficient means to describe a concept (Brown, et al, 2020). Therefore, it was likely that as hospital-based nurses, the academic staff might not have possessed any knowledge of community health and nursing jargon. More investigation would be required to verify whether there was a significant difference between hospital and community health professional jargon, and if so, community nursing experience may be a desirable attribute for academic staff providing community health education for students of nursing.

4.5.2 The use of Health Professional terminology; Acronyms

The theme, health related acronyms, contained various entries, ranging from *ORIF*, “open reduction internal fixation” (a procedure used in the repair of bone fractures), to *ADH*, “antidiuretic hormone”, (action in the conservation of body fluids), to the gender identifier acronym, *LBGTIQ*, “lesbian, bisexual, gay, transexual, intersex, queer”. The acronyms used during the educational sessions were sometimes accompanied by an explanation, which would have assisted students’ understanding. However, at other times there appeared to be little or no explanation provided, for example during lecture one, where the educator mentioned, *ATP* (adenosine triphosphate), *RNA* (ribonucleic acid) and *DNA* (deoxyribonucleic acid), in which case students would have had to research the answer themselves, or if during a class, ask for further explanation. The tutorials appeared to flow through a discussion rapidly, which may have left little time for a student enquiry. To be pedagogically aware of the group to which a session is being delivered is extremely important. In terms of meeting the needs of the entire group, the educator should ensure that their delivery is easily understood by all students, with explanations and/or supporting information provided in the form of diagrams, support notes and a glossary of important words. In an educational session, periods of learning concepts should be accompanied by a review or summary of the learning, and the educator evaluating the level of understanding in the student group through collaborative discussions.

Acronyms are widely used in the health professional arena and are department or work area specific. The same acronym having different meanings between departments may be unlikely to cause a serious patient incident in itself, however, may easily be related to an interdepartmental misunderstanding and confusion, resulting in delays of service and repair of important equipment. For example, *BPM* in a nursing context can mean, beats per minute, and in the Biomedical department refer to a blood pressure machine. Other medically common acronyms may have moved into the public domain, and therefore have been familiar to commencing students, for example from tutorial one, *GP* (general practitioner). Additionally there can be multiple acronyms that refer to the same item or condition, an example of which was identified during tutorial 3, where illness associated with sexual interactions was referred to as an *STI* (sexually transmitted infection), and an *STD* (sexually transmitted disease) interchangeably. The practice of using multiple acronyms for the same condition could promote ambiguity.

Significant acronym ambiguity can and has been implicated in significant treatment and medication errors. Many examples of acronym confusion that have previously been implicated in patient incidents have been itemised in the Recommendations for terminology, abbreviations and symbols used in medicines documentation (ACSQHC, 2016). A few examples from the lists that are not acceptable to use are, *IO* (intraosseous) as it can be mistaken for the number 10 or oral route of administration, *OJ* (orange juice as a mixing medium for medication) as it can be mistaken for *OD* or *OS* (right or left eye) and *SSRI* or *SSI*, (sliding scale *regular* insulin) could be misread as “Selective serotonin reuptake inhibitor”, or “strong solution of iodine” (ACSQHC, 2016, p.4).

The Recommendations were written in response to the ambiguity that can occur with acronyms and the inherent danger to patients of misunderstanding and miscommunication in medication administration. The guidelines are used in documentation and can be a good resource for students when trying to interpret acronyms. However, the

guidelines have not necessarily been adopted in the interprofessional verbal exchanges, and students still need to have contextual knowledge and the ability to understand co-workers. In the future as the population ages, and hospitals and healthcare facilities become busier, the demand on healthcare staff to be able to communicate quickly and efficiently can only become more important. Therefore, supporting students of nursing to achieve a high level of competency in communication across the spectrum from vernacular to formal health professional language, would be likely to promote safety in the health sector.

4.6 The Significance of the findings

Several of the academic staff who provided the lectures and tutorials to students of nursing were identified as having used vernacular language and health professional terminology during their classes. The university Centre for Innovation in Learning and Teaching (CILT) guidelines for teaching do not recommend the use of vernacular language or professional terminology/ jargon during educational sessions, instead the guidelines suggest that accessible language, in the form of formal English to be used, and generic terminology and names, to enhance student engagement and understanding (Flinders University Centre for Learning and Teaching, n.d.).

However, students of Nursing are required to possess high level communication skills by the end of their course to meet the professional requirements as outlined by the NMBA. The Registered Nurses Standards for Practice (2016) clearly describe that a Registered Nurse needs the ability to communicate effectively (Standard 2.2) and requires competency in speaking and understanding the English language to provide education and information to patients or clients, of sufficient quality to enable them to make informed decisions about their care (Standard 3) (NMBA,2016).

From the work of Ashton-Hay et.al (2016), and Bai and Qin (2018), EAL students require between 3-12 months in a new country to gain sufficient familiarity with the local culture to interpret regionally specific vernacular words and phrasing. Therefore, particularly during the initial topics of study when students are becoming familiar with the professional language and cultural aspects of the learning environment, clarity and explanation of the language used with additional support for their learning would be advantageous. Indeed, Muller (2016) found that students of Nursing require repeated exposure to professional terminology, jargon, and vernacular English, during their study, to achieve the required language and communication skills for Nursing professional registration. Further to this, repeated exposure to the terminology, both in hearing and

using the language, would be necessary to gain automaticity or the ability to rapidly recognise, interpret and incorporate AVE into speech (Muller, 2011).

The provision of language support for commencing students, when they are exposed to high volumes of AVE and HPT, may lower the cognitive load and decrease student stress during the transition period to tertiary study, and have a positive impact on student academic success and retention rates.

The finding that many of the VE used during the educational sessions was global in nature suggests that many of the words may have been easily interpreted by many EAL students. However, idioms were used for many different purposes, and some were complex in nature, which would not have made literal interpretation, especially by an EAL student, a simple task. Further explanation during the educational sessions at the time of use and/ or academic support in understanding complex idioms could be beneficial in the reduction of high cognitive loading, to enable students to focus on their specific topic, rather than the idiosyncratic language of staff.

In the same way, if HPT was taught in parallel with Health VE, the entire student cohort may benefit from broadening their knowledge and acquiring automaticity in the translation between professional language and informal language. Academic staff could be encouraged to be more aware of their language choices, and to use HPT and VE during class sessions, but to provide pedagogical support for the language at the time of use.

As described in the ACSQHC (2016) effective communication has been identified as a key component in the delivery of safe and effective health care. Beginning practitioners are a group in which improved communication skills and automaticity (associated with a decrease in cognitive loading) would enable greater focus on the patient assessment and requirements, resulting in a safer patient environment.

4.7 Limitations of the study

The study as described was based upon the examination of a small sample obtained from a single course of study in a South Australian university college (faculty). The academic staff members working within the College work in multiple topics within the Bachelor of Nursing, which meant that the same staff member may have delivered more than one of the recorded sessions. Therefore, the sampling may have included more than one recording from a tutor, in which case the examples of VE and HPT coded would have been limited if the tutor was not a habitual user of VE and HPT, or conversely many similar examples would have been noted if the tutor used VE and HPT prolifically. Although the recordings were deidentified before transcription, there were indications during the data analysis, that one staff member may have been responsible for several of the lecture recordings, and another tutor for two tutorial recordings, therefore the variety of data available for analysis was limited. A larger pool of topics from which to draw data for the study and the analysis of a greater number of educational sessions may have negated the issue, however the limitation imposed by the scope of a master's thesis study, precluded increasing the size of the data collection.

The scope of the study was limited to examining recorded transcripts for the language use of the teaching staff. The student experience of understanding the different types or forms of language used during teaching could not be considered within the limited scope of the current research. To investigate these experiences from the student perspective would be a useful focus for further study, to improve understanding of the factors that impact students' engagement and academic achievement.

The study was conducted during the 2020-21 global pandemic environment when tutorials were conducted online, which enabled examination of the recorded tutorials and lectures. There were a limited number of lectures offered that met the study criteria, which caused recordings to be sourced from two topics, the other topics had not included

lectures in the teaching program, which also would have impacted the variety of language available for analysis.

The experience level and familiarity of the tutors with online tutorials may have impacted the style of communication, dependent upon the tutor's technical skills. Language selection may have been indicative of the tutor's level of comfort in working in the online environment. All of the included lectures were recorded prior to the university "pandemic closure" therefore the lecturer's delivery was unlikely to have been affected by the pandemic situation.

In a larger study an increased sample size would have been possible, and the identified limitations may have been mitigated. Manual recordings of lectures and tutorials during on-campus sessions, may have avoided any of the described effects due to online teaching. However, then the effect of tutor awareness of the recording device and/or researcher and study purpose would have been an additional consideration that could have altered the use of VE and HPT in teaching.

4.8 Reflexivity

The findings from the study were interpreted by the researcher, guided by personal direction and life experiences. While every attempt was made to interpret the data using resources without bias, the expressions and VE may have actually been used by the tutors and lecturers in an unanticipated manner. A subconscious influence from experience as an academic working within the College of Nursing, a Registered nurse, and a native Australian English speaker, who has spent several decades living in South Australia may have influenced the data interpretation. However, some of the influence may have been offset by the researcher having lived and studied for several years, in another country, and lived experience of the interpretation of VE.

The focus of the study was from an EAL perspective, if the focus had been from another perspective, such as from students from other English-speaking countries, but as a non-Australian speaker, or as a true bilingual person, the findings may have been different. Students who know English from another country, would be likely to know different VE, and may have a different meaning for some words and phrases, that is a word in AVE may possess another completely different meaning/use in another country or region. The change of meaning and/or use of a word would be an additional element of interpretation as the student would need to recognise that the intended meaning was different in order to realise their understanding was incorrect in the current context. A simple example of this in common AVE is thongs, for many South Australians, *thongs* are summer footwear, however in many other regions, *thongs* are undergarments. The different cultural experience and understanding would impact interpretation and comprehension within the Bachelor of Nursing course

During the data analysis it was evident that some tutors used VE regularly during discussions, whereas other tutors used VE infrequently or not at all. Both sessional and permanent teaching staff were included in the recorded lectures and tutorials of the study,

and the experience level ranged from first semester tutors to highly experienced senior academic staff. Whether there was an identifiable relationship within the data in terms of staff employment position and/or experience level, and the use of informal VE or more formal academic language, would require further investigation. As would whether the classroom environment (lecture or tutorial), the delivery format (face to face or online), or the subject, made an impact on language selection. Within the general university context, the information may be useful in the provision of advice to early career academic staff, who wish to improve their teaching delivery. For the Nursing context, however, from the findings of the current study, it could be suggested that to include education that supported the learning of health-related VE alongside the other topic content, could be a practical initiative that may enhance student competency in communication with patients (the general public).

4.9 Future Studies

Further examination of the relationship between the use of colloquial idioms as analogies and metaphors during educational sessions and EAL student comprehension would be useful. The EAL student ability to comprehend information as it is delivered during the class could then be examined in terms of class engagement, in class group participation, ability to participate in group assessment tasks and overall academic engagement, and achievement. All of which can impact the rates of student satisfaction and completion of their course of study.

Research could be used to evaluate the academic staff member's perceptions of student understanding and engagement during class, and the student's perspective of whether their ability to understand and follow the class content was enhanced by the additional in class support.

CHAPTER FIVE: CONCLUSION

5.1 Summary

The aim of this study was to identify whether AVE and HPT was being used during educational sessions conducted for commencing students of nursing, and if so, what types were being used. The findings were that VE was commonly used during the educational sessions; however, the words and phrases were generally global VE rather than uniquely Australian. The use of global slang in the classroom could be easier for EAL students to understand than regionally specific AVE, due to the high likelihood that students would have encountered the global VE during previous interactions with media, such as interacting in online games and watching international movies.

Idioms were used as analogies and metaphors (to assist with student understanding, for example, likening red blood cells to “doughnuts without holes in the middle” (L.1) and to illustrate a concept. They were also used to prompt students to seek assistance, for example, “don’t let anything go over your head” (L.3). The varied use of idioms in the classroom could be detrimental to student engagement due to the increased cognitive demand required for interpretation. In the classroom, where complex idioms with an ambiguous meaning are used, an EAL student could become distracted by attempting to understand the literal meaning of the terminology.

The use of these language types by academic staff may be beneficial during the education of Nursing students. Frequent exposure to the expressions with educational support could enable students acquire competency in communication, an ability that is essential to establish and maintain therapeutic relationships with patients

Frequent exposure to VE and HPT with explanations and support by their teachers could encourage the development of automaticity with understanding and using the words. Automaticity with VE and HPT could lower the cognitive loading associated with

communicating with others, and therefore the student could focus their attention on safe patient care and critical reasoning processes.

If an academic staff member is teaching in a first-year topic of the course and is aware of a tendency to use VE and HPT, supplying an explanation of a phrase or words at the time of use could be beneficial to the student group. The explanation could lead to a decreased cognitive load for students, and enhance their ability to maintain focus and concentration, due to increased understanding. Due to the practice of scaffolding learning, each level of learning needs to be clearly understood, therefore if understanding has been compromised by misconceptions, and misinterpretation from ambiguous content delivery in educational sessions, the ability to link information and critically reason may be impacted. From this aspect, if academic staff support and clarify their language with concise explanations during teaching, students would be assisted in their understanding and more likely to have a manageable level of cognitive loading and the ability to participate in the class. However, this would need to be confirmed with further study.

REFERENCES

- Alagozlu, N. (2018). Engagement strategies for unknown vocabulary in L2 texts. Idioms**. *Journal of Language and Linguistic Studies*, 14(4). Retrieved from <https://files.eric.ed.gov/fulltext/EJ1201937.pdf>
- Ashton-Hay, S., Wignell, P., & Evans, K. (2016). International student transitioning experiences: Student voice. *Journal of Academic Language & Learning*, 10(1), A1-A19.
- Ashwin, P., Boud, D., Coate, K., Hallett, F., Keane, E., Leibowitz, B., MacLaren, I., McArthur, J., McCune, V., & Tooher, M. (2016). *Reflective teaching in higher education*. (A. Pollard & A. Pollard, Eds. 1 ed.). Bloomsbury.
- Australian Commission on Safety and Quality in Health Care. (2016). Patient-clinician communication in Hospitals. Communicating for safety at transition of care. [Information sheet]. *An information sheet for senior executives and clinical leaders*. www.safetyandquality.gov.au
- Australian Commission on Safety and Quality in Healthcare. (2021). *Communicating for safety resource portal*. Australian Commission on Safety and Quality in healthcare. Retrieved 18/6/21 from <https://c4sportal.safetyandquality.gov.au/communicating-with-patients-and-colleagues>
- Ayto, J. (Ed.). (2020). *Oxford dictionary of idioms*. (4 ed.) [reference]. Oxford University Press.
- Bai, L., & Qin, J. (2018). A study of negative language transfer in college students' writing from cultural perspective. *Theory and Practice in Language Studies*, 8(3). <https://doi.org/10.17507/tpls.0803.05>
- Baldwin, E. (2020). *Comparing apples to oranges*. Retrieved 20/10/21 from <https://poemanalysis.com/idiom/apples-to-oranges/>

- Bartlett, F. C. (1932). *Remembering: a study in experimental and social psychology*. Cambridge University Press. <https://doi.org/10.1111/j.2044-8279.1933.tb02913.x>
- Behrens, H. (2017). The role of analogy in language acquisition. In M. Hundt, S. Mollin, & S. Pfenninger (Ed.), *The changing English language: psycholinguistic perspectives*. Cambridge University Press. <https://doi.org/10.1515/icame-2018-0012>
- Bergs, A. (2020). What do you think this is, bush week? Construction grammar and language change in australia. In K. Allan (Ed.), *Dynamics Of Language Changes* (pp. 109-124). Springer. https://doi.org/DOI10.1007/978-981-15-6430-7_7
- Bolkan, S. (2016a). The importance of instructor clarity and its effect on student learning: facilitating elaboration by reducing cognitive load. *Communication Reports*, 29(3), 152-162. <https://doi.org/10.1080/08934215.2015.1067708>
- Bolkan, S., Goodboy, A. K., & Kelsey, D. M. (2016). Instructor clarity and student motivation: academic performance as a product of students' ability and motivation to process instructional material. *Communication Education*, 65(2), 129-148. <https://doi.org/10.1080/03634523.2015.1079329>
- Brown, Z. C., Anicich, E. M., & Galinsky, A. D. (2020). Compensatory conspicuous communication: Low status increases jargon use. *Organizational Behavior and Human Decision Processes*, 161, 274-290. <https://doi.org/10.1016/j.obhdp.2020.07.001>
- Bybee, J., File-Muriel, R. J., & Napoleão De Souza, R. (2016). Special reduction: a usage-based approach. *Lang. Cogn*, 8(3), 421-446. <https://doi.org/10.1017/langcog.2016.19>
- Charmaz, K. (2008). Constructionism and the grounded theory method. In J. A. G. Holstein, J.F. (Ed.), *Handbook Of Constructionist Research* (pp. 397-412). The Guilford Press.
- Coleman, J. (2012). *The life of slang*. Oxford University Press.

- Coleman, J. (2014). *Global English slang : Methodologies and perspectives*. Taylor & Francis Group.
- Crawford, T., Roger, P., & Candlin, S. (2017). Tracing the discursive development of rapport in intercultural nurse–patient interactions. *International Journal Of Applied Linguistics*, 27(3), 636-650. <https://doi.org/10.1111/ijal.12166>
- Creswell, J. W. (2012). *Educational research. planning, conducting, and evaluating quantitative and qualitative research* (4 ed.). Pearson.
- Crotty, M. (1998). *The foundations of social research : meaning and perspective in the research process*. Thousand Oaks, Sage Publications.
- Davie, J. (2019). *Slang across societies : Motivations and construction*. Routledge.
- Eubanks, R. T. (1960). The basic derivation of 'O. K.'. *American Speech*, 35(3), 188-192. <https://doi.org/10.2307/453884>
- Farlex dictionary of idioms (n.d.) it won't hurt. In *Farlex dictionary of idioms*. Retrieved September 8, 2022, from <https://idioms.thefreedictionary.com/it+won%27t+hurt>
- Farlex dictionary of idioms (n.d.) sink in. In *Farlex dictionary of idioms*. Retrieved September 8, 2022, from <https://idioms.thefreedictionary.com/sink+in>
- Flinders University Centre for Learning and Teaching (n.d.). Good practice guide - Accessible and inclusive learning [teaching and learning resources]. Flinders University. <https://staff.flinders.edu.au/learning-teaching/good-practice-guides/gpg-accessible>
- Francis, K., Chapman, Y., & Whitehead, D. (2016). An overview of research theory and process. In Z. W. Schneider, D. (Ed.), *Nursing and midwifery research, methods and appraisal for evidence based practice* (5 ed., pp. 19-32). Elsevier.
- Garone, A., & Van de Craen, P. (2017). The role of language skills and internationalization in nursing degree programmes: A literature review. *Nurse Education Today*, 49, 140-144. <https://doi.org/10.1016/j.nedt.2016.11.012>

- Glew, P. J., Ramjan, L. M., Salas, M., Raper, K., Creed, H., & Salamonson, Y. (2019). Relationships between academic literacy support, student retention and academic performance. *Nurse Educ Pract*, 39, 61-66.
<https://doi.org/10.1016/j.nepr.2019.07.011>
- Henderson, S., Barker, M., & Mak, A. (2016). Strategies used by nurses, academics and students to overcome intercultural communication challenges. *Nurse Educ Pract*, 16(1), 71-78. <https://doi.org/10.1016/j.nepr.2015.08.010>
- Hildebrand-Edgar, N. (2016). Disentangling frequency effects and grammaticalization. In (Vol. 26, pp. 1-23). University of Victoria, Department of Linguistics.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal Of Higher Education*, 6(5).
<https://doi.org/10.5430/ijhe.v6n5p26>
- Lin, S., & Scherz, S. D. (2014). Challenges facing Asian international graduate students in the US: pedagogical considerations in higher education. *Journal Of International Students*, 4(1), 16-33.
- Martini, F. (2018). *Fundamentals of anatomy & physiology* (Eleventh, Global edition. ed.). Pearson.
- Metcalf, A. (2019). *The life of Guy: Guy Fawkes, the gunpowder plot, and the unlikely history of an indispensable word*. Oxford Scholarship online.
<https://doi.org/10.1093/oso/9780190669201.001.0001>
- Muller, A. (2011). Addressing the English language needs of international nursing students. *Journal Of Academic Language & Learning Vol. 5, No. 2, 2011, A14-A22. ISSN 1835-5196*, 5(2), 14-22.
<https://journal.aall.org.au/index.php/jall/article/view/145>
- Müller, A. (2016). Language proficiency and nursing registration. *International Journal Of Nursing Studies*, 54, 132-140. <https://doi.org/10.1016/j.ijnurstu.2015.01.007>

- Muller, A., Arbon, P. A., & Gregoric, C. (2015). A school-based approach to developing the English proficiency of EAL university students. *Journal Of Academic Language & Learning* 9(2), A63-A78.
- Nursing and Midwifery Board of Australia (2016). *Registered nurse standards for practice*.
<https://www.nursingmidwiferyboard.gov.au/codes-guidelines-statements/professional-standards/registered-nurse-standards-for-practice.aspx>
- Nursing and Midwifery Board of Australia (2018). *Code of conduct for nurses*
<https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards.aspx>
- Owens, L., Shute, R., & Slee, P. (2000). "Guess what i just heard!" indirect aggression among teenage girls in australia. *Official Journal of the International Society For Research on Aggression*, 26(1), 67-83.
- Oxford English Dictionary (n.d.). Colloquialism. In Oxford English dictionary. Retrieved September 5, 2022, from <https://www-oed-com.ezproxy.flinders.edu.au/view/Entry/36435?redirectedFrom=colloquialism#eid>
- Oxford English Dictionary (n.d.). Slang. In Oxford English dictionary. Retrieved September 5, 2022, from <https://www-oed-com.ezproxy.flinders.edu.au/view/Entry/181318?rskey=YgWFBf&result=3#eid>
- Oxford English Dictionary (n.d.). Vernacular. In Oxford English dictionary. Retrieved September 5, 2022, from <https://www-oed-com.ezproxy.flinders.edu.au/view/Entry/222608?redirectedFrom=vernacular#eid>
- Scholte, J. A. (2008). Defining globalisation. *World Economy*, 31(11), 1471-1502.
<https://doi.org/10.1111/j.1467-9701.2007.01019.x>
- Smith, N., & Tikkanen, A. (2014). Neoliberalism. In *Encyclopaedia Britannica*.

- Stern, P. N., & Porr, C. J. (2011). *Essentials of accessible grounded theory*. Taylor & Francis Group. <https://doi.org/10.4324/9781315429410> (2011 by Left coast press inc)
- Tertiary Education Quality and Standards Agency Act 2011 F2015L01639 § 58(1) (2015). <https://www.legislation.gov.au/Details/F2015L01639>
- van Kesteren, M. T. R., & Meeter, M. (2020). How to optimize knowledge construction in the brain. *NPJ Science Of Learning*, 5(1), 1-7. <https://doi.org/10.1038/s41539-020-0064-y>
- Wu, H., Garza, E., & Guzman, N. (2015). international student's challenge and adjustment to college. *Educational Research International*, 2015, 1-9. <https://doi.org/10.1155/2015/202753>

APPENDICES

Appendix A

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Title: The use of the Australian Vernacular English and Health Professional terminology, in the delivery of tutorials and lectures by Academic staff, teaching in first year topics of the Bachelor of Nursing.

Chief Investigator

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Dr Grace Skrzypiec

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My name is Lindi Seaton, and I am a Flinders University Master of Education student. I am undertaking this research as part of my degree. For further information, you are more than welcome to contact my supervisor, Dr. Mirella Wyra.

Description of the study

This project will investigate the incidence and type of Australian vernacular language (idioms, colloquialisms, and slang) and health profession jargon, that are being used by Academic staff during the delivery of lectures and tutorials. The focus of the study is on the entry topics in the Bachelor of Nursing, as in these topics. Students who have English as an Additional Language (EAL) and students who are new to health care, are likely to have had only limited (if any) exposure to Australian health care jargon and the Australian vernacular. Audio recordings of tutorials and lectures will be transcribed and deidentified to protect the privacy of all participants and topic content. The transcribed material will be entered into Nvivo20 for identification and comparison of themes related to the incidence of particular phrases. This project is supported by Flinders University, College of Education, Psychology and Social Work.

Purpose of the study

This project aims to identify the types of Australian Vernacular and Australian health care jargon being utilised during the delivery of lectures and tutorials by academic staff, in order to raise the awareness of forms of language used in the learning space and whether these are aligned with best practice for university education. The results of this study may be used to assist with updating medical terminology student support sessions currently operating within the College of Nursing and Health Sciences, by obtaining information about the terminology currently being used by teaching staff.

The information gained from the Australian Vernacular study will be useful to demonstrate to teaching staff how casual use of language with vernacular expressions can be confusing to EAL students when literally translated and therefore may be a causal factor in students not remaining engaged in class.

Involvement and potential risks

If you agree to assist me with the research study, you will be asked to:

- Provide an audio file of a recorded tutorial and/or a recorded lecture to the researcher for transcription and examination in the study. Provision of a recording is entirely voluntary.

There are no anticipated risks involved to the topic coordinators who provide recordings for consideration in this study,

- ***all audio file names will be altered on receipt, into a descriptor, such as tutorial 1-5 or lecture 1-5.***
- ***numbered files will be transcribed by the researcher, any identifying features on the transcribed files will be redacted during transcription, for example, any identification of topic, tutor, topic coordinator or student group, will be removed.***
- ***Only the Vernacular English and the Health Professional Terminology will be noted and used as data.***

However, if you are topic coordinating an entry year topic of the Bachelor of Nursing, it will be possible to identify that you MAY potentially have provided information for inclusion in the study.

Withdrawal Rights

You may, without any penalty, decline to take part in this research study.

If you decide to take part and later change your mind, you may, without any penalty, withdraw at any time without providing an explanation. To withdraw, please contact the Chief Investigator, or you may just not participate. Any data collected up to the point of your withdrawal will be securely destroyed, where possible. (If data has been fully deidentified and analysed, it may no longer be possible to remove it from the study.)

Your decision not to supply any recordings or to withdraw from this research study will not affect your relationship with Flinders University and its staff and students.

Confidentiality and Privacy

Only researchers listed on this form have access to the individual information provided. Privacy and confidentiality will be assured at all times. The research outcomes may be presented at conferences, written up for publication or used for other research purposes as described in this information form. However, the privacy and confidentiality of individuals will be protected at all

times. You will not be named, and individual information will not be identifiable in any research products without your explicit consent.

No data, including identifiable, non-identifiable and de-identified datasets, will be shared or used in future research projects without my explicit consent.

Data Storage

The information collected may be stored securely on a password protected computer and/or Flinders University server throughout the study. Any identifiable data will be de-identified for data storage purposes unless indicated otherwise. All data will be securely transferred to and stored at Flinders University for at least five years after publication of the results. Following the required data storage period, all data will be securely destroyed according to university protocols.

How will I receive feedback?

On project completion, a short summary of the outcomes will be provided to all participants.

Ethics Committee Approval

The project has been approved by Flinders University's Human Research Ethics Committee, reference number HEL1951-4

Queries and Concerns

Queries or concerns regarding the research can be directed to the research team. If you have any complaints or reservations about the ethical conduct of this study, you may contact the Flinders University's Research Ethics & Compliance Office team via telephone 08 8201 3116 or email human.researchethics@flinders.edu.au.

Thank you for taking the time to read this information sheet and if you accept our invitation to be involved, please sign and return the enclosed Consent Form.

CONSENT FORM

Consent Statement

- I have read and understood the information about the research, and I understand I am being asked to provide informed consent to supply recorded educational sessions for this research study. I understand that I can contact the research team if I have further questions about the research study.
- I am not aware of any condition that would prevent the supply of the requested recordings , and I agree to support this project.
- I understand that I am free to withdraw at any time during the study and that my withdrawal will not affect my relationship with Flinders University and its staff and students.
- I understand that I can contact Flinders University's Research Ethics & Compliance Office if I have any complaints or reservations about the ethical conduct of this study.
- I understand that my involvement is confidential, and that the information collected may be published. I understand that I will not be identified in any research products.
- I understand that I may be unable to withdraw my data and information from this project once it has been completely deidentified. I also understand that this data **will be used** for this research study.

Signed:

Name:

Date: