



UNIVERSITY of LIMERICK

OLLSCOIL LUIMNIGH

FINAL YEAR RESEARCH PROJECT_SL6036

Student Experience of the Visiting Aphasia Scheme
(VAS); Impact on Attitudes and the Learning Experience

Student Name: Amy Stack. Student Number: 12011231.

Research Supervisor: Áine Kearns. Word Count: 6815.

Speech and Language Therapy, University of Limerick

May 2015

Acknowledgement

Sincere gratitude goes to my fellow researcher, supervisor, and the student participants; whose contribution to this study was greatly valued.

Table of Contents

RESEARCH OVERVIEW	3
INTRODUCTION	4
LITERATURE REVIEW	4
Overview	4
How Negative Attitudes Impact on Patient Care	4
The Attitudes towards Disability within those choosing a Healthcare Profession	5
Role of Education	6
The Visiting Aphasia Scheme	7
Enhancing Communication Skills of Healthcare Students; Previous Studies	7
The Impact Student VAS Experience has on Attitude and Learning	9
METHODOLOGY DESIGN	9
Design Overview	9
Participants	10
Questionnaire Design (including IDPS Likert Scale)	10
Focus Group Design	11
METHODOLOGY FOR ANALYSIS	13
Overview of Analysis	13
Analysis of Quantitative Data	13
RESULTS OVERVIEW	15
QUALITATIVE RESULTS	16
THEME 1: EXPERIENCE SHAPING ATTITUDE	16
THEME 2: ROLE AND LOGISTICS OF EDUCATIONAL EXPERIENCE	18
THEME 3: COMMUNICATING WITH CONVERSATION PARTNER	19
THEME 4: PROFESSIONAL DEVELOPMENT AND ROLE OF SELF	21
QUANTITATIVE RESULTS	23
The 'Visiting Aphasia Scheme' Questionnaire (adapted from Welsh and Szabo, 2011)	23
Interaction with Disabled Persons Scale (IDPS) (Gething, 1991)	24
DISCUSSION	26
FUTURE RECOMMENDATION AND STUDY LIMITATIONS	28
Appendix A: Focus Group Opening Statement	29
Appendix B: Focus Group Closing Statement	30
Appendix C: Focus Group Questions	30
Appendix D: Student Information Sheet	32
Appendix E: Informed Consent	33
Appendix F: Visiting Aphasia Scheme – Questionnaire for Students	35
Appendix G: Interaction with Disabled Persons Scale	36
Appendix H: Analysis of Quantitative IDPS Data (Gething, 1991)	37
Appendix I: Method of Transcribing Focus Group Data	37
Appendix J: Thematic Analysis Diagram	38
Appendix K: Thematic Analysis: Quotes to Support Themes	39
REFERENCES	62

Student Experience of the Visiting Aphasia Scheme (VAS); Impact on Attitudes and the Learning Experience

University of Limerick, May 2015.

RESEARCH OVERVIEW

Background: Experience of participating in a conversation partner scheme can make significant improvements in the students' ability to build a rapport with their client (Legg et al., 2005). Internationally, the impact VAS (a conversation partner scheme) has on both learning and attitude is not widely studied. **Objectives:** To explore students learning experience of the Visiting Aphasia Scheme (VAS) and investigate the impact on their attitudes to disability. **Methods:** The 'Interaction with Disabled Persons Scale' (Gething, 1991) and a 'Visiting Aphasia Scheme' questionnaire (adapted from Welsh & Szabo, 2011), assessed 29 students basic understanding of aphasia, intention to work with adults with aphasia, and attitudes to people with disability. The data was analyzed for change in attitudes after the program using SPSS paired t-test (SPSS Inc. 1998), and the 'Visiting Aphasia Scheme' questionnaire was analysed for change using Microsoft Excel (2011). The Focus group (consisting of 8 of the participants) explored the students VAS experience. This data was analyzed using thematic analysis (Braun and Clarke, 2006). **Results:** The quantitative results showed a significant change in students' attitude (p -value = 0.049), improvement in the students' basic understanding of aphasia, and no overall change in the students' intention to work with adults with aphasia. Four themes emerged from the qualitative data; experience shaping attitudes, role and logistics of educational experience, communicating with conversation partner, and professional development and role of self. **Conclusion:** The Visiting Aphasia Scheme may improve students' confidence, attitude, and understanding. It may reduce fears associated with communicating with adults with communication difficulties, and encourage students to critically self-reflect and adapt to client's needs, implementing strategies and utilizing material when available. **Keywords:** Visiting Aphasia Scheme, attitudes, and learning experience.

INTRODUCTION

Aphasia is a disability. It affects the individual's ability to communicate across any of the four modalities of language; speaking, writing, auditory comprehension, and reading comprehension (Sandt-Koenderman et al., 2012). It affects approximate 14,500 in Ireland (Ruddle, 2014) and 1+ million in the USA (NINDS, n.d.). The goal of aphasia intervention is to enhance communication between the client and their environment (Sandt-Koenderman et al., 2012), maximizing the client's opportunities for inclusion and involvement (Gray and McAnespie, 2004). The importance of such intervention is highlighted by the media, reporting "people with disabilities are twice as likely to be isolated from family and friends, facing barriers to everyday activities" (RTE, 2012). For a student clinician, the experience of participating in a conversation partner scheme can result in significant improvements in their ability to build a rapport with their client (Legg et al., 2005). However, as this is an area not widely studied there is a need to explore students' VAS learning experience, and investigate the impact on their attitudes to disability.

LITERATURE REVIEW

Overview

The reviewed literature looks at the impact negative attitudes can have on patient care, the role of education, and how students' learning and attitude can be enhanced by experience and training.

How Negative Attitudes Impact on Patient Care

On the 19 January 2012, RTE News reported that public attitudes to people with disabilities had become increasingly negative, and that 26% of those with a disability felt it had been a "barrier to their participation in life."

In 2014 Siobhan Barren (Director of the National Disability Service Authority) was

interviewed on RTE radio, about the impact negative attitudes played on individuals with a disability. She reported that negative attitudes might restrict a person with a disability from having the opportunity to live independently, noting, the more contact a person had with an individual (with a disability), the better their attitude was towards the disability population. In addition, Gray and McAnespie (2004) noted that people with communication difficulties might be excluded from public involvement or, at best, included in a tokenistic way. For Bauby (2008) his first-hand experience as a person with locked-in-syndrome highlights the effect attitude and knowledge can have on patient care. In his book *“The Diving Bell and The Butterfly”* he describes hospital staff as two types, the type that would not leave without attempting to decipher his SOS message, and the type that would pretend not to notice his ‘distress signals’ (Bauby, 2008, p.48). Therefore, his opportunity to communicate appears to be dependent on the attitude of individuals.

Symons et al. (2014) found that the attitude of the Physician to persons with disabilities may be a barrier to the client receiving adequate health care. The researchers suggest that the Physicians may have adopted a negative attitude towards this population, due to lack of training, and that this may result in inadequate diagnostic testing and provision of preventative services. They noted that early and frequent encounters with the general disability population might increase students’ knowledge, attitude, and skills with regards to patient care.

The Attitudes towards Disability within those choosing a Healthcare Profession

A pre and post-ATDP (Attitude Towards Disabled Persons) questionnaire in a study by Seccombe (2007) looked at the attitude of undergraduate nurses towards persons with a disability. The results indicated that students might already have a positive attitude towards persons with a disability, prior to starting their course. In addition, Freudenthal et al. (2010) examined healthcare workers interaction with participants in the Special Olympics. The research looked at how the attitude of healthcare workers towards individuals with intellectual disability was altered by the experience, but found no significant change, as they already held a positive attitude. In contrast, a study by Li and

Wang (2013) published findings on the interaction of non-healthcare workers with participants in the International Special Olympics, held in China. The findings reported that following a one-week duration; the attitude of non-healthcare workers was enhanced and maintained one-month post-intervention. An additional study by Stachura and Garven (2003) compared the attitudes of Physiotherapy and Occupational Therapy (OT) students, both in their first and final year of study. The study found that Physiotherapy students had a more negative attitude when compared with OT students (both in their first year of study), and that this attitude improved towards the end of their course. In contrast, little change was seen amongst OT student participants, as they already had a positive attitude in their first year of study. This study tells us that those choosing a career in OT may share certain character traits that differ to that of an individual choosing a career as a Physiotherapist and vice versa.

Persons working in the healthcare service may have a more positive attitude towards persons with a disability than non-healthcare workers (Seccombe, 2007, Freudenthal et al. 2010; and Li and Wang, 2013); an attitude influenced by their study and experience. Therefore, research needs to look at students' attitude pre and post-VAS, assessing what may have influenced their decision to choose the Speech and Language Therapy (SLT) profession.

Role of Education

A study by Werner and Grayzman (2011) identified fieldwork, coursework, and a carefully designed curriculum as factors that can influence a student choosing to work with a specific population. In addition, Jack and Mosley (1997) found that the reluctance of social work students to work with individuals with Intellectual Disability (ID) was attributed to their perception that the ID population lacked the potential for change. This study highlights the need for an integrated disability education system that incorporates fieldwork/coursework into its design. The World Health Organization (2014) also acknowledges this need, suggesting integrated disability education within all healthcare professions (both at undergraduate and continuing education levels).

The Visiting Aphasia Scheme

The goal of aphasia therapy is to enhance communication between the client and their environment (Sandt-Koenderman et al. 2012). More specifically, the role of the SLT is “enabling and supporting communication to maximize an individual’s potential for inclusion and involvement” (Gray and McAnespie, 2004).

Kagan et al.’s (2001) conversation training program achieved this by focusing on developing the client's communication skills; acknowledging client competence, and providing them with supported opportunities to express what they know, think, and feel. Kagan et al. (2001) suggested that this method removes communication barriers, decreases communication avoidance, and increases life participation. The conversation partner training demonstrated positive outcomes ($p < .01$) with respect to acknowledging aphasia clients competence (Kagan et al., 2001), however, it did not appear to discuss if volunteers learning and attitudes were enhanced in areas other than acknowledging client competence. In addition, Simmons-Mackie, et al. (2010), in a systematic review of partner training, found a lack of research relating to partner training for acute aphasia. Therefore, future research needs to account for variations in the aphasia population.

Enhancing Communication Skills of Healthcare Students; Previous Studies

At the University of Cape Town, a generic communication-training program was incorporated into a sixth-year medical student syllabus. Its purpose was to enhance clients’ management and accuracy of clients’ diagnosis, by providing students with supported communication techniques for taking a case history (from clients with aphasia) (Legg et al. 2005). In total, there were fifteen female and nine male student participants, with an average age of 25:4 years, and all patients had a diagnosis of aphasia. The results indicated significant improvements in the students’ ability to gather a case history, initiate a session, and build a rapport with their patient. Therefore, the results showed that students could benefit from a communication-training program (Legg et al. 2005).

Finch et al. (2013) reported a lack of confidence amongst student SLT’s participants

(communicating with people with aphasia). They suggested students might benefit from strategies that facilitate communication between the carer and the aphasia patient (Finch et al., 2013).

Hausberg et al. (2012) used the Kalamazoo Consensus Statement [Makoul, 2001] as a framework for developing medical students' communication skills (Hausberg et al., 2012). Training involved participation in peer/ simulated patient role-playing scenarios, and case studies. The students developed guidelines (based on the Kalamazoo Consensus) covering core elements of patient-physician communication (e.g. building a doctor-patient relationship and handling emotion). Hausberg et al. (2012) found using real world settings was an effective method of teaching communication, especially when implemented early on in the degree program. It gave students the opportunity to practice and reflect on their skills (Hausberg et al., 2012).

Makoul (2001), reported on the SEGUE framework; a 'checklist' tool aimed at enhancing the communication skills of medical students. This tool encouraged students to self-monitor their communication skills; assessing and discussing with peers/lectures what skills/strategies they implemented when communicating with their client e.g. did they give the patient time to talk. Makoul (2001), found that medical students benefited from communication training, accomplishing more communication tasks than practicing Physicians (who used no communication framework). The framework provided an effective organizational structure for their communication skills (Makoul, 2001).

Carvalho et al. (2011) investigated whether or not role-playing hypothetical clinical situations, with hypothetical patients (who were unable to speak), could enhance the communication of twenty-five healthcare professionals (Physicians, Nurses, Clinical Psychologists, and Physiotherapists). Results indicated that longer exposure to course materials and practice, prior to commencing clinical placement, increased clinical communication competencies and was effective in improving communication performance (Carvalho et al., 2011).

The Impact Student VAS Experience has on Attitude and Learning.

Effective communication between the patient and their healthcare workers can lead to enhance patient health outcomes (e.g. diagnosis, treatment, patient self-care, and adherence to treatment) (O'Halloran et al., 2012), improvements to patient's psychosocial health (Street et al., 2009), and enhanced patient satisfaction with healthcare system (Di Blasi et al., 2001). This can dramatically change the life of an individual, such as Bauby (2008), who describes his SLT as his 'guardian angel', without which he would be "cut off from the world" (Bauby, 2008, p.47).

Incorporating fieldwork, role-play, and structured communication tools into the healthcare education system, may enhance student knowledge, change the attitude of students working with clients who have communication difficulties (Carvalho et al, 2011, Legg et al., 2005, Finch et al., 2013, Hausberg et al., 2012, and Makoul, 2001), and influence a student's decision to work with a specific population (Werner and Grayzman, 2011).

The participation of SLT students in the VAS program may enhance not only student learning and attitudes, but also patient treatment and therapy outcome. However, the impact VAS has on attitudinal change and learning is not widely studied. Therefore, this research will explore the SLT VAS experience; impact on learning and attitude.

METHODOLOGY DESIGN

Design Overview

This research implemented a mixed methods quasi-experimental study, with a pre and post questionnaire and post-VAS focus group. The research has been conducted with a single cohort of First Year M.Sc. Speech and Language Therapy students from Limerick, Ireland.

Participants

Following ethical approval to run this research from August 2014-to-December 2015, 31 students (29 female, and 2 male), enrolled on the postgraduate course at week one, were invited to participate in the study (a convenient sample). All students who consented to the study were assigned to the experimental group. 29/31 (93.5%) students completed, a pre and post questionnaire (27 female, and 2 male), and 8 of the 29 (27.5%) participated in a post-VAS focus group (8 female, and 0 male). The age range of the participants was 23-43 (pre, and post). There were no exclusion/inclusion criteria, other than current enrollment on the M.Sc. SLT first year course, and participation in the VAS program. The cohorts' undergraduate background was mixed. Approval from the Education and Health Science committee included agreed anonymity of the data.

Entry to the degree program required prior knowledge and experience in areas relating to speech and language therapy, so prior experience and reading was expected upon entry. However, specific experience/knowledge of aphasia was not.

In week one, all first-year students participated in a day-and-a-half of VAS training. Training included videos examples of Aphasia/VAS intervention, and 8-10 minutes supervised conversation partner practice and 8-10 minute observation. During training, the aphasia trainers (persons with aphasia) had prior experience of the scheme, and the supervising SLT lecture had prior experience working with clients with aphasia. Training was compulsory regardless of whether or not they choose to volunteer for this study.

Participation in VAS took place in the students' first semester and involved eight one-hour visits (one per week). Where the student/client needed to postpone a visit, an additional week was added in the end.

Questionnaire Design (including IDPS Likert Scale)

The IDPS (Interaction with Disabled Persons Scale) (Gething, 1991) and a Visiting Aphasia Scheme questionnaire (adapted from Welsh and Szabo, 2011) was used pre-and post-VAS.

The IDPS (which compares favorably with existing overseas instruments in terms of test-retest and internal reliability coefficients) assessed the students' level of comfort, interacting with a person with a disability (Gething and Wheeler, 1992). The VAS questionnaire was used to demonstrate the benefits of communication training, in terms of learning outcomes, and desire to work with the aphasia population (Welsh & Szabo, 2011). In total 29/29 completed the pre and post VAS-questionnaire, 29/29 completed the pre-IDPS, and 28/29 completed the post-IDPS. The questionnaire consisted of 7 questions (see Appendix F). Questions 1-6 assessed the participants' knowledge of aphasia, and question 7 assessed whether or not the participants would work with patients with aphasia or had done so in the past. The IDPS (see Appendix G) consisted of 20 Likert scale questions; whereby an increase in IDPS score would correlate to an increase in students' discomfort; interacting with a disabled person (Gething, 1991).

Focus Group Design

Eight of the 29 questionnaire/IDPS participants also consented to and participated in a Focus group two months after completing the VAS program. All participants were female. 5/8 participants previously worked in health care (Assistant Psychologist, Nurse, Health Care Assistance, and children with intellectual disabilities), and 2/8 had experience in an acquired brain injury Centre or support group for aphasia. Their educational background was mixed, (psychology, law, and European studies, chemistry, geography and linguistic, psychology and linguistics, nursing, nutrition, and human development and geography). One student reported having a family member with Down Syndrome.

The 8 participants (who were unknown to the researchers) were split into two focus groups (4 in each), with a 30-45 minute time slot allocated to each group. This is in line with the theory that the physical and psychological limit for most people is two-hours (Kruger, 1998). Participants were explained the nature of the focus group, by means of an opening and closing statement, read aloud by one researcher (see Appendix A and B). Kvale and Brinkmann (2009) notes that this helps the researcher(s) explain the purpose of the focus group, whilst giving participants the opportunity to ask questions about the research.

A common goal in self-contained focus groups is to learn about participants' attitudes and opinions (Moran, 1997); an essential element of this study. However, participants may be reluctant to challenge another person's opinion. Therefore, to enhance the flow of communication in the group, it is better to encourage participants to share their experiences/perspectives (Moran, 1997). Learning about the participant's perspective can provide a broader basis for their specific attitudes and opinions, providing a more useful data set than you would get from opinions with an unknown basis in behaviour (Moran, 1997). Therefore, for the purpose of this research the participants are encouraged to discuss their overall experiences. In addition, the researcher employs the use of open-ended questions (where possible), to enhance the studies rigor, a key discipline of a qualitative researcher (Sofaer, 1999). In the focus group, the researcher asks sets of questions, relating to the topic of student learning and attitude. This provides the researcher with more consistent results, because, for example, "since an attitude is complex, it is unlikely that a single question will reflect it adequately" (Oppenheim, 1992 p.147).

In analysis, "the researcher strives for theoretical saturation, which is only possible with consistency of questioning" (Krueger, 1998, p.53). However, when the participant does not understand a question, simple repetition is usually inadequate (Krueger, 1998). Therefore, in this study, when a participant did not understand a question, the researcher adopted the use of parallel questioning. This shift in question format allowed the interviewer to add slight variation to the original question. This is particularly important when it is believed a participant has more to say on a topic (ibid). However, if a participant gives no response, report they do not understand the question, or give a response that suggests they misinterpreted the question, the researcher may change or eliminate the question completely (ibid); an approach adopted in this study.

Handling of Data

All data has been recorded on a tape recorder and deleted following submission of this thesis. The data transcribed, assigned a numerical value to each participant (1-8), allowing

the researcher to differentiate between, and protect participants' identity. Equally, the questionnaire data has been kept in a secure locked location within the University.

METHODOLOGY FOR ANALYSIS

Overview of Analysis

This study adopted a qualitative thematic analysis of the focus group transcript (highlighting emerging common themes), and quantitative (comparing pre and post changes in attitude and student learning). The analysis of the information used an inductive (bottom-up) approach.

Analysis of Quantitative Data

The participants completed a questionnaire both pre and post-VAS visit. In question one, the participants were asked to define what aphasia is. Students who noted aphasia is caused by a stroke/acquired brain injury were recorded in the data as having some understanding of what aphasia is. The number of correct responses was then calculated, and noted in the results. For questions two-to-six, participants were asked to answer 'true' or 'false' in relation to their understanding of aphasia. A response of 'true' scored a value of 1, and a response of 'false' a value of 0. The sum of the cohort response for each question was calculated and noted in the results. In questions seven, participants were asked to answer 'yes' or 'no' in response to five statements. These statements assessed participants' interest in working with persons with aphasia. A response of 'yes' scored a value of 1, and a response of 'no' a value of 0. Again, the sum was calculated and noted in the results. The statistical analyses of questions one-to-seven were achieved using Microsoft Excel (2011). Finally, the IDPS (Gething, 1991) Likert scale was analyzed using SPSS statistical software (SPSS Inc., 1998), and numerical values were assigned (See Appendix H).

IDPS Test-retest reliability

Assessing the students' pre and post score, over a period of 10 weeks, has (in previous studies) shown to have a reliability coefficient of +0.72. This positive increase suggests that the 10-week gap, used in this study, is a reliable duration of time. It is long enough not to be influenced by the students' memory (answers they gave in the pre-questionnaire/Likert scale), and short enough, to reduce the influence of external experience ('history effect') e.g. clinical placements (Gething, 1991).

Analysis of Qualitative Data

One researcher transcribed the focus group data (See Appendix I), and a second researcher checked the transcript. It was then inputted into NVivo (computer software program) for thematic analysis. How themes were extracted followed Braun and Clarke's (2006) 'six phase of analysis' (see Figure 1). Two researchers carried out the analysis together.

As the significance of themes can be based on prevalence (Braun and Clarke, 2006), the entire data set was analyzed and recorded in the results. This form of analysis is beneficial when the participants' views on a topic are unknown (Braun and Clarke, 2006) because it provides the reader with a sense of the predominant or important themes. However, as there may also be instances where themes are not dependent on quantifiable measure, but rather provide valuable contributions to the overall research question (Braun and Clarke, 2006), emerging themes were analysed on both their prevalence and significance to the research.

Braun and Clarke's (2006) 'Six Phase Thematic Analysis

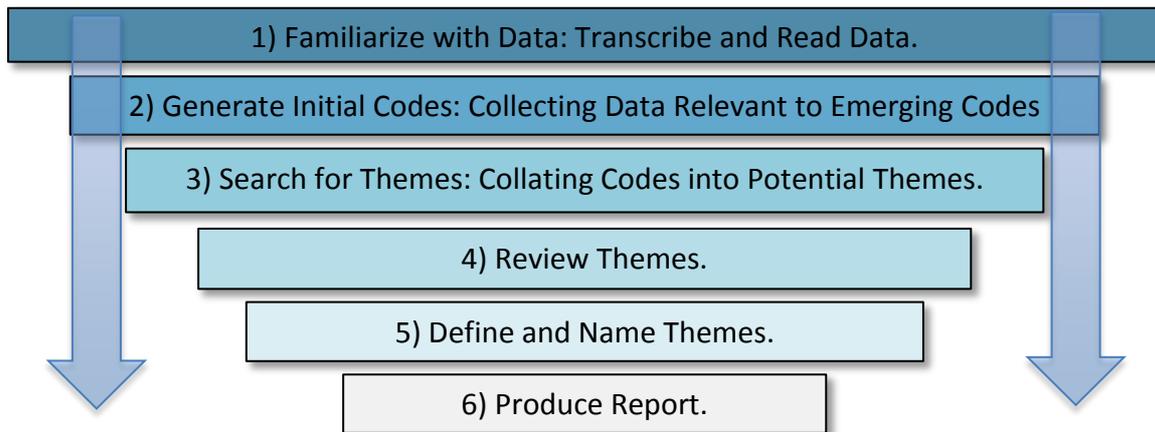


Figure 1

This research is inductive (data driven); it is not driven by the researchers' preconceptions, but on the themes that emerge. How themes are identified take on what Boyatzis (1998) describes as the 'semantic' approach. Themes are identified, arranged to demonstrate patterns in semantic content, and summarized; with the broader meaning, significance of the patterns and implications of the results discussed.

RESULTS OVERVIEW

Quantitative data provides an overview of the basic understanding and attitude of the entire participating SLT student body, in relation to Aphasia and VAS. However, if we only focus on the quantitative data "we risk ignoring factors that are more significant in explaining important realities and relationships" (Sofaer, 1999, p.1102). Therefore, to add rigor to the study, the researchers incorporated qualitative data (thematic analysis). Qualitative research, not only "serves the desire to describe; but also helps move inquiry towards more meaningful explanations, by identifying patterns and configurations among variables, and to make the distinction" (Sofaer, 1999, p.1102). In addition, quantitative does not always support the understanding of complex dynamic data as well as qualitative (ibid). In particular, qualitative allow people to state their views and opinions without the restrictions of conforming to categories and terms imposed by others (such as is observed in quantitative) (ibid). Therefore, this studies mixed methodology, allowed for quantitative

change, and a rich data on student experience via qualitative methods. The results are outlined in the following sections.

QUALITATIVE RESULTS

Four themes emerged from the thematic analysis; experience shaping attitudes, role & logistics of educational experience, communicating with conversation partner, and professional development & role of self (See Appendix J and K). The details of each are discussed in the following pages.

THEME 1: EXPERIENCE SHAPING ATTITUDE

Students' Attitude (pre/post-VAS) to Persons with Communication Disabilities

STUDENTS REFLECT ON THEIR PRE /POST-VAS STUDENT ATTITUDE

Following completion of the VAS program, students reflected on their pre and post VAS attitude to persons with communication difficulties. 3/8 students reported they did not know how to talk to a person with a communication difficulty prior to VAS, 2/8 students (including one nurse) reported that they were more nervous about visiting a person in their home than meeting a person with a communication disability, and one participant demonstrated empathy for persons with communication difficulties.

“The thought that someone else can’t talk; I’d be just dumbfounded that there is any way you can communicate without that, bar like sign language.”

6/8 students reported that their attitude changed as a result of their experience, reporting that prior to VAS, they would have ‘seen the disability’ before ‘seeing the person’, but now they ‘see the person’; recognizing client’s strengths and ability to communicate.

“You do sort of label them a little bit, saying: ‘okay, I’m going to see a person with aphasia’. You don’t say that: ‘I’m going to see this really fun person and

have a laugh', and it kind of makes you a bit more patient...like..that to get to know the person rather than straight away saying..'oh this person has aphasia'."

STUDENTS ATTITUDE TO WORKING WITH APHASIA CLIENTS

With regards to working with adults with communication difficulties (post-VAS) one student reported an increased interest in working with aphasia clients, one student reported an increase in their confidence towards working with aphasia clients, and 2/8 students reported that they already had an interest in working with aphasia clients, prior to commencing the SLT course.

"I'd definitely be looking forward to doing adult placement much more now...I've a bit more of an idea."

IMPACT OF PERSONAL EXPERIENCE SHAPING ATTITUDE

Personal experience was another influential factor that may have affected students' attitude. For one student, it was her personal experience of having an aunt with Down Syndrome; reporting that some people treated her aunt ***"as if she wasn't a person"***. In addition, prior to commencing the course, all students (8/8), had previously shadowed an SLT (7/8 students) or spoke with an SLT, demonstrating some understanding of the role of the SLT. Therefore, students' prior experience and reasons for entering the course may have a positive impact on their attitude to persons with disabilities.

"I was going down the psychology route to start with, but having worked with the kids with disability ...and seeing the kinda impact ..of speech therapist...and communication on those kids ...that kind of inspired me".

THEME 2: ROLE AND LOGISTICS OF EDUCATIONAL EXPERIENCE

Students' VAS Training Experience and opinions of the VAS Visit Logistics.

LOGISTICS OF THE VAS VISIT

6/8 students commented on the logistical challenges faced during the VAS visit, namely the location, duration of visit, and limitations of its set-up; reporting on how this affected their experience; with one student reporting that as the assignment deadlines grew closer it was harder to devote her time.

“How far away it was...amm..it was over 2 hours of driving..to spend not even an hour with her...a lot of traveling and it...I think it was more just the workload in the first semester / on top of everything.”

STUDENTS' SUGGESTIONS FOR IMPROVING VAS VISIT LOGISTICS

5/8 students made suggestions on how the logistics of the VAS program could be changed. Three students suggested it could start earlier, and 2/8 students discussed the possibility of seeing more than one client. Of these, one student reported that seeing just the one client, gave her only one specific view.

“Starting it earlier in the term would be good.”

STUDENTS POSITIVE REFLECTION ON VAS TRAINING

2/8 students reported that the two videos they watched (in training) supported their learning, increasing their understanding of how to communicate with a person with aphasia. A further 2/8 students reported that having a one-to-one conversation with a person with aphasia for eight minutes, under the guidance of a University lecture prepared them for their VAS visits and one student reported that training on how to use conversation ramps helped prepare her for the unknown.

“I found the actually coming in and chatting to them really helpful... ‘amm’, because otherwise I would have been to be honest.. I’d have been really freaked, because I’d have had the thought of ‘ok I’m going out to somebody that might

not be able to speak at all. How am I going to survive this?"

STUDENTS NEGATIVE REFLECTION ON VAS TRAINING

During training, the aphasia trainers were asked to assess the student's conversation skills, however, 2/8 students found this awkward, subjectively noting that the client appeared to also find it awkward. One student also noted that meeting the aphasia trainers gave her a false impression of VAS. Furthermore, 2/8 students reported that training on how to use conversation ramps was "intimidating", and an additional one student reported it gave her a false impression on what the client needed.

"It seemed really intimidating that we're going out we're going need all these resources, but er it actually was much more natural when we were there, and we didn't need all these ramps".

STUDENTS SUGGESTIONS FOR MORE PRE-VAS TRAINING

During the students' second semester (post-VAS) students study acquired neurological speech and language disorders, as part of their M.Sc. SLT training. However, 4/8 students felt it would have been of greater benefit to study this module in this first semester when they were participating in VAS. One student reported that this would have given her a better understanding of her client. In contrast, one participant noted that a module in aphasia, running parallel to VAS, may have been distracting.

"If we were doing the aphasia module it would have been more beneficial".

THEME 3: COMMUNICATING WITH CONVERSATION PARTNER

Challenges Students Encountered, and Strategies Students Used, to Communicate and Engage with Conversation Partner

CHALLENGES STUDENTS ENCOUNTERED

Of the challenges encountered, one student reported difficulty adjusting to abrupt

changes in the client-student conversation, and one student reported difficulty communicating with someone who showed no interest in communicating. In addition, 2/8 students had difficulty handling awkward situations, 2/8 reported difficulty adapting to clients communication style and one student reported her lack of knowledge to be a challenge.

“How do you chat to someone who isn’t too bothered about chatting”.

DEVELOPING A RELATIONSHIP WITH THE CLIENT

4/8 students commented on the acceptance of the student by the VAS client. One student reported difficulty engaging with her VAS client, and three reported that their VAS client ***“enjoyed the visit”***. In addition, one student reported that she was unaware of her client’s memory difficulties until the last day. Furthermore, one student reported that the client’s spouse did a lot of the talking, which she felt took away from what she was supposed to be doing with the client. Another student reported that her client had difficulty relaxing around them, as the client mistakenly thought she was going to get SLT intervention; intervention the client did not want.

“It took about three or four sessions before she realised we were just there for a chat...and that we weren’t there to assess her and to diagnose her”.

STRATEGIES STUDENTS IMPLEMENTED, IN RESPONSE TO CHALLENGES FACED

7/8 students used the client’s interests (travel/GAA) and materials (photo/newspaper) as conversation ramps, with one student reporting it grew increasingly difficult to come up with new ideas as the weeks progressed. 2/8 students found using non-verbal communication (gestures) to be a useful strategy, with one student reporting having learned this by observing how other healthcare staff interacted with her client. 3/8 students found allowing the client more time to be a useful strategy, and 7/8 students reported they felt it was important to recognize client’s limitations (e.g. know when to stop).

“Let her take her time, and know when to move on as well”.

TALKING ABOUT THE CLIENT'S STROKE

2/8 students found that their client wanted to talk about their stroke. However, in contrast, another student reported that her client "***never even mentioned the word stroke***" in conversation.

"She used to talk quite a lot about her stroke, as in..not the details of the stroke, but.....we found that her stroke was quite central to who she is now."

THEME 4: PROFESSIONAL DEVELOPMENT AND ROLE OF SELF

How the VAS Experience Promoted Critical Reflection, Self-Confidence, and Impacted on the Students Understanding of what the VAS Program is

STUDENTS REFLECTION ON THEIR PRE /POST-VAS SELF-CONFIDENCE

One student reported that she was nervous about meeting the VAS trainer; another one reported that the VAS training experience made her more nervous about the VAS visit, and one student reported no nerves, due to prior experience working with this population. In addition, one student reported that she was more anxious about going into the client's home than meeting a person with aphasia.

I was really nervous...yeah. I think maybe as well because of not having had experience working with adults..kind of not knowing what to expect".

However, 2/8 students acknowledged that the VAS experience increased their confidence in communicating with clients with aphasia.

"It gives you confidence, and I would feel a bit more confident going into ...amm.... kind of.. similar situations".

STUDENTS CRITICAL REFLECTION OF SELF

The VAS experience promoted student critical reflection. 2/8 students acknowledged the importance of being comfortable with silence, and 2/8 recognized the importance of being patient. One student acknowledged the

importance of speaking slower, and recognizing clients' limitations (knowing when to stop).

“I definitely learnt I need to slow down” / “if he can't understand you don't have to keep trying to going and going and going and going”.

STUDENTS CRITICAL REFLECTION OF LAST VAS VISIT

3/8 students reported that they found it difficult at the end (last VAS visit), saying that it ended abruptly/suddenly.

“You kind of develop a relationship. You're going into their homes, and you know then after whatever amount of time it just stops. You 'kind of' feel a bit bad. It's a bit abrupt, I think, at the end”.

STUDENTS UNDERSTANDING OF THE VAS PROGRAM

One student reported that she felt the purpose of VAS was to become more comfortable with a person with aphasia; however, after VAS participation she learned that it is a mutually beneficial program, learning it is possible to build a relationship with someone with aphasia. 4/8 students demonstrated recognition on how VAS may benefit the client, with one student reporting that (in her case), where the client did not want speech and language therapy; VAS was a good alternative to ease her into communicating again, and becoming more sociable.

“I think that it's mutually beneficial”. / “It was actually building a relationship with somebody despite the fact that they've communication difficulties..knowing that that's possible and at the end of it actually being sad to go”.

In addition, 4/8 students commented on how VAS was a positive experience that prepared them for working with adults with communication difficulties. 2/8 students reported VAS was a good opportunity to ***“realize how difficult it can be”*** for the clients, and, one student reported that integrating the program into the course without being examined was 'a positive'.

“A positive experience where like we can develop our communication skills”.

QUANTITATIVE RESULTS

The ‘Visiting Aphasia Scheme’ Questionnaire (adapted from Welsh and Szabo, 2011)

See Appendix F

All students had heard the word aphasia pre and post-VAS, with 21/29 (72.4%) reporting aphasia is caused by stroke/acquired brain injury. Post-VAS the results showed an increase in the students’ basic understanding. However, in relation to aphasia affecting intelligence, no change was found (See Table 2). Results also showed no overall change in students’ intention to work with adults with aphasia, with 25/29 (86.2%) reporting that they would work with persons with aphasia in the future (See Figure 2).

Statement	Correct Answer	Number of students’ Correct Response	
		Pre-VAS	Post-VAS
“Aphasia can affect the persons ability to read and write”	True	21	29.
“People with chronic aphasia can continue to get better two or more years after they have it”	True	18	24.
“Aphasia affect a person’s intelligence”	False	27	28
“A person who has aphasia is able to make decisions about healthcare “and othe important life matters”	True	24	28.

Table 2

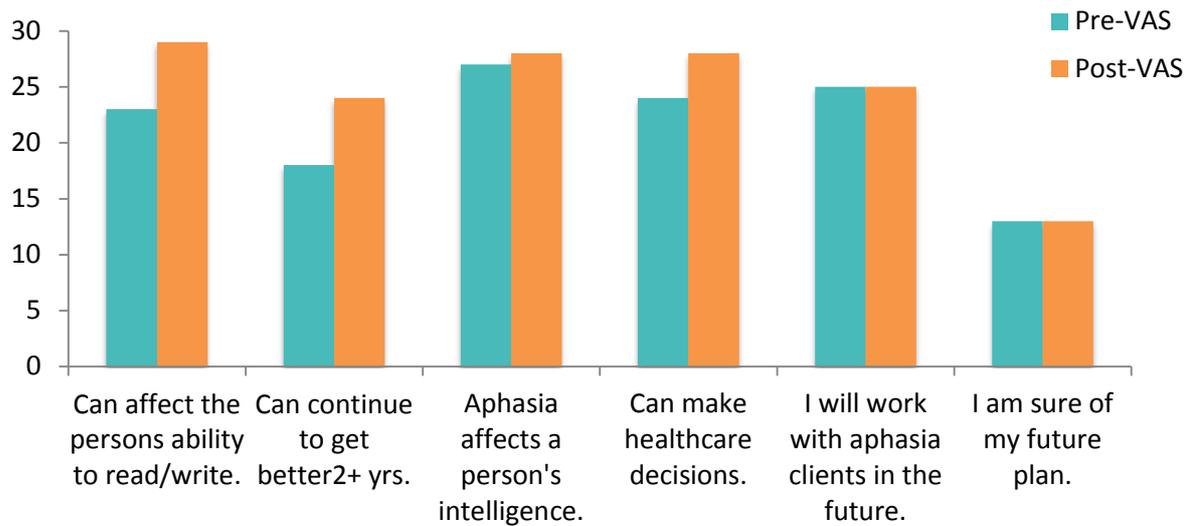


Figure 2

Interaction with Disabled Persons Scale (IDPS) (Gething, 1991).

Post-VAS one participant did not complete the IDPS. Therefore, results show group outcome based on 29 participants (pre-VAS) and 28 (post-VAS).

The sample size was <50. Therefore, the Shapiro-Wilk test of 'normality' was used (Shapiro and Friancia, 1972). The results indicated 'normal distribution' (Ghasemi and Zahediasl, 2012), with a p-value >0.05 (0.326 pre-VAS, and 0.083 post-VAS) (See Figure 3, Figure 4, and Table 3). Following this, the paired sample t-test (used in parametric testing) assessed for statistical significance in the data (See Table 4). The null hypotheses stipulate that two variables are not related and that the maximum level, where statistical significance is acceptable is $p < 0.05$ (Bryman, 2012). Therefore to accept this null hypothesis and show significance in the data, the p-value of the data needed to be <0.05. Therefore, the results of the paired sample t-test (0.049) indicated significant change in student attitude; with a decrease in students' discomfort, interacting with disabled clients.

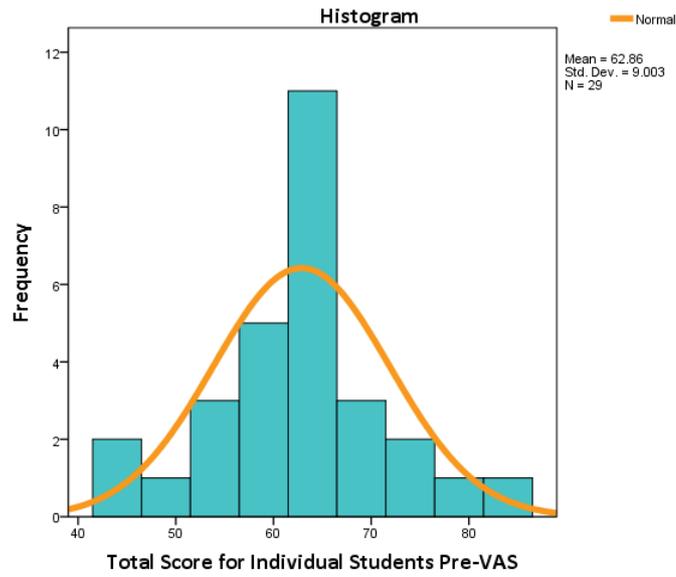


Figure 3

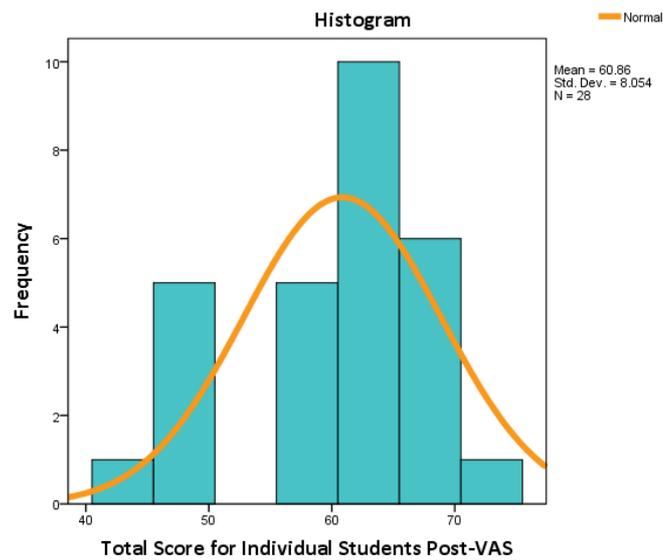


Figure 4

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Total Score for Individual Students Pre-VAS	.142	29	.139	.960	29	.326
Total Score for Individual Students Post-VAS	.147	28	.125	.935	28	.083

Table 3

Paired Samples Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1: Total Score for Individual Students Pre/Post-VAS	2.679	6.869	1.298	.015	5.342	2.063	27	.049

Table 4

DISCUSSION

Prior to clinical placement there is a lack of confidence amongst SLT students, when communicating with persons with aphasia (Finch et al. (2013). Supported communication techniques (taught in pre-training), may provide students with the opportunity to practice and reflect on their skills (Hausberg et al., 2012). This research has shown that VAS experience can provide students with the opportunity to develop and practice communication strategies, self-reflect, and build confidence, resulting in a readiness for clinical placement.

Current communication training tools/courses e.g. the SEGUE framework or supported communication techniques, have shown to be affective in improving communication performance; enhancing student learning (Makoul, 2001, and Legg et al., 2005). The results of this current study show that the VAS program could increase students' understanding of aphasia, developing their communication skills with persons with aphasia. This includes learning to recognize clients' strengths and limitation, adapting to clients needs, developing communication strategies in response to communication challenges, and becoming comfortable with silence.

Kagan et al. (2001) reported that a conversation-training program could remove communication barriers; decreasing communication avoidance, and increasing life participation. The results of this research found that the VAS (conversation-training program) experience may prepare students for working with adults with communication

difficulties reducing nerves associated with communicating with a person with aphasia. It may also provide students with a better understanding of how to talk to a person with a communication difficulty; recognizing the person and not just seeing the disability, and learning it is possible to build a relationship with someone with aphasia.

However, whilst Werner and Grayzman (2011) suggests fieldwork experience influences students' decision to work with a particular population, the pre and post VAS questionnaire indicates that VAS experience has no significant impact on an SLT student's decision to work with clients with aphasia.

It is also noted, that experience can make significant improvements in the students' ability to build a rapport with their patient (Legg et al., 2005); and while the VAS experience may educate students on how to adapt to clients' needs, acknowledge clients' strengths, and critically reflect on self, the qualitative data suggests the need for additional training and logistical changes. This need for additional training is also reflected in the quantitative data, where 28/29 (post-VAS), still held the belief that aphasia affects a person's intelligence, indicating that their understanding of intelligence in aphasia hadn't changed as a result of the program.

Health care providers may have a positive attitude to persons with disability, prior to studying for a health care profession (Seccombe, 2007; Stachura and Garven, 2003) and while the qualitative results of this study suggested that students' experience (prior to entering the course) may have a positive impact on their attitude, the results of this study were based on a small sample, where the students' previous profession/experience was not the primary focus of the study.

In summary, the VAS experience may improve students' confidence, attitude, and understanding. It may reduce fears associated with communicating with adults with communication difficulties, and encourage students to critically self-reflect and adapt to clients needs, implementing strategies and utilizing material when available. In addition, the concurrent validity of the research is demonstrated by the correlations between the quantitative measurements and qualitative results.

FUTURE RECOMMENDATION AND STUDY LIMITATIONS

This current research did not reach saturation (small sample), and the post-VAS attitudinal scale had a significance of 0.049 (0.001 shy of an insignificant result). Therefore further research, with a larger sample, is recommended. In addition, a study, which looks at the VAS client, and the impact students' attitude and skill have on their experience, is also recommended. However, evidence suggests that the VAS experience can provide students with the opportunity to develop their communication skills, self-confidence, and basic understanding of aphasia, as well as significantly enhance students' attitude. Therefore, as a learning experience, VAS should be continued.

Appendix A: Focus Group Opening Statement

“Hello everybody, my name is [researcher 1] and this is [researcher 2]. First of all, [researcher 2] and I would like to thank you for coming today to contribute to our research; we really appreciate your time. So, just to give you an overview of what will happen, I will conduct the discussion and [researcher 2] will observe and take notes. [Researcher 2] may also ask some questions during the discussion.

As you are aware, we invited you all here today to gather your opinions and views of the Visiting Aphasia Scheme (VAS). As you know, you all completed a questionnaire before and after the scheme. The purpose of this focus group is to add depth and richness to the research findings of the questionnaires. The questions will be broad questions in order to elicit your personal opinions and views and there is of course, no right or wrong answer – We really just want your perspectives. Please feel welcome to express yourself freely during the discussion.

This conversation will be recorded on digital recorders. This is only for purpose of the research; only [researcher 2] and I will listen to the tape. Please note all your responses and data will be both confidential and anonymous (i.e. the group will not be identified in any publications etc., and there will a system in place for ensuring your individual responses are not identifiable to you). The data on that tape will be downloaded to a computer for transcription and analysis of the content, and then deleted from the recorder. The recorder is used so that no comments are missed. For ease of transcription we would appreciate if you could say your name before contributing to the discussion. This will also reduce people talking over each other and will allow everyone to express their opinions during the conversation. You can address each other when expressing your opinion. We are only here to assist in the discussion.

So just some practical issues, the discussion will last for approximately 30-45 minutes. We ask you to please switch off your mobile phones so there is no interference during recording. We would appreciate if you could write your first name clearly in capitals on a label and put it on? This will help us when transcribing the data.

We have provided you with pens and sticky notepads so you can write down any comments you want to make, either as a reminder to yourself or to give to us after the session so we can add it to the data from the group.

As you know, your participation is voluntary. If you feel you do not want to participate that is your decision and you will need to leave the group. If you change your mind about participating during the group, that is also your prerogative and you should leave the room. So before we get started is everything clear about the course of the focus group discussion? Does anyone have any questions before we begin? Great, let's get started so!".

Appendix B: Focus Group Closing Statement

"Ok. That's great, thanks. We appreciate your participation today. We will be collating the data from today's session, which we will summarize. This summary is intended to be a fair and accurate representation of your comments from this session. We would like to send this summary to you in the coming weeks. If you have any comments or feedback on the summary please do let me know. If you would like a copy of the summary, please jot your email on this sheet here. Again confidentiality will be preserved".

Appendix C: Focus Group Questions

Encouraging participation

- Would anyone else like to contribute to this opinion?
- Do people agree with this opinion or have an alternative view/experience?

Details of Participant

- What age are you?
- Where are you from?
- What did you study prior to commencing the course?
- What area of work do you have previous experience in?
- What (if any) prior experience do you have with aphasia do you have (work experience, personal experience, study)
- What prior experience with communication difficulties/disorders do you have (work experience, personal experience, study)
- What prior experience with disabilities do you have (work experience, personal experience, study)
- Why did you choose to study SLT? Did any specific area interest you?
- What other modules did you study/experience during, and outside of the VAS. Were they of benefit during your visit?
- Tell me about your knowledge of aphasia prior to participating in the scheme?
- What was your prior understanding of the role of an SLT with this population? If none...in general, what did you think was the role of an SLT (in general)?

General Question

- What is the visiting aphasia scheme?

Student's Personal Experience with Client

- Client group (age, location, sex level of communication and specific difficulties, visits durations and consistency, other persons present (their influence on clients interaction, environment) student Participants in pair or individual visit.

Student Learning

- How did you feel prior to commencing the VAS
- What did the VAS training involve? What did you learn from it? Are there any skills, which you learnt during training that you used during the VAS?
- Did you feel prepared for the experience? In what way did you/ did you not feel prepared?
- Tell me about your experiences of the Visiting Aphasia Scheme? What did you learn during the Visiting Aphasia Scheme?
 - An average day – Progress made over the weeks.
 - Challenges faced/overcome
 - What worked/didn't
 - Support/help from college?
 - Support/help from peer?
 - Support/help from visiting partner?
 - How did you maintaining client interest and develop a plan.
 - What interaction style did you use with client(s)
 - Did you use any communication tools / role-play prior to visit or plan in advance. If yes. What did you do? Methods /materials.
 - Were there any barriers for you or your client?
- How did you feel during the scheme?
- Has the Visiting Aphasia Scheme changed your communication style with clients with communication disorders? If so, how?
- Do you feel your participation in the scheme contributed to your learning as a student speech and language therapist? If so, how?
- Are there any factors that you felt contributed to your learning as a student?
- Are there any factors that you felt inhibited your learning as a student?
- How did you feel after completing the scheme?

Attitude Towards People with Aphasia

- What was your attitude towards people with communication disorders prior to participating in the Visiting Aphasia Scheme?
- What was your attitude towards the person with aphasia during the scheme? Did it change during the visit? Why? (Specific to client)
- Having visited a person with aphasia, did you feel your attitude towards a person with a communication disorder changed in any way? If so, can you explain? (Specific to general population with a communication disorder)

- Do you feel your attitude towards people with aphasia/communication disorder was altered due to your learning experience as a student during and after the scheme? How?

The SLT: Final Questions

- What do you think the role of an SLT is when working with this population?
- As a student SLT, what, if anything, have you learnt from the experience?
- In what way could the VAS program be enhanced? What, if anything, would you like to change about the Visiting Aphasia Scheme?
- Prior to commencing this course, do you think you would have been interested in working with this population? If no, what population were you most interest in working with. What about now, having participated in the Visiting Aphasia Scheme? Do you think you would have been interested in working with this population? Why?

Appendix D: Student Information Sheet



UNIVERSITY of LIMERICK
O L L S C O I L L U I M N I G H

Dear Student Speech and Language Therapist,

I would like to invite you to participate in research, which will explore the student learning experience of participating in a conversation partner scheme namely, the *Visiting Aphasia Scheme*. The *Visiting Aphasia Scheme* is carried out each year with the first year MSc. Speech and language Therapy Students and involves two days of training provided by members of the Practice Education Team and local speech and language therapists. During the scheme you will be paired with another student and you will carry out eight visits with a person with an acquired communication disorder.

This research will look at your knowledge and attitude to acquired communication disorders, particularly aphasia. It will also explore your learning experience, as well as the benefits and challenges you encountered during the *Visiting Aphasia Scheme* in semester 1 of the MSc. Speech and Language Therapy program.

If you wish to participate in this research you will be asked to complete a questionnaire before the training in induction week and after the program is finished. The questionnaire will not take longer than 30 minutes. You will also be asked to complete a focus group after the program is completed. This will be facilitated by two final year students and will give you an opportunity to discuss your experience of the scheme. The focus group will be recorded on digital audio Dictaphone and transcribed into a word document for analysis.

You are not obliged to participate in this research. It is important to note you can participate in the *Visiting Aphasia Scheme* as part of the MSc. SLT program and not participate in this research. If you are interested in participating in the research and require further information you can contact

me via email. You are free to withdraw from the research at any time. All information will be stored in a locked cabinet and/or password protected hard drive and will be kept anonymous. This research will be useful for establishing the benefits and challenges of this scheme. It is part of a larger research project, which will also establish the impact of the scheme on those who access it with acquired communication difficulties.

Yours Sincerely,

Áine Kearns

Regional Placement Facilitator/SLT

Department of Clinical Therapies

Email: Aine.Kearns@ul.ie



This research study has received Ethics approval from the Education and Health Sciences Research Ethics Committee (quote approval number). If you have any concerns about this study and wish to contact someone independent you may contact:
Chairman Education and Health Sciences Research Ethics Committee
EHS Faculty Office University of Limerick
Tel (061) 234101, Email : ehsresearchethics@ul.ie

Appendix E: Informed Consent



UNIVERSITY of LIMERICK

OLLSCOIL LUIMNIGH

Dear Participant,

You have been invited to participate in research on the evaluation of a conversation partner scheme, namely the *Visiting Aphasia Scheme*, which is part of SL6043 on the MSc. Speech and Language Therapy program.

Please sign below after you read the information sheet and agree to the following:

1. I have read the information sheet
2. I have had a chance to ask questions and understand what is expected of me in this research
3. I agree to participate in the (please where agreed):
 - Questionnaire before and after the program ONLY
 - Questionnaire (as above) and focus group after the program
4. I understand the information I provide will be anonymous
5. All information will be stored securely in a locked cabinet and password protected hard drive
6. I am free to withdraw from the research process at any time
7. I can participate in the *Visiting Aphasia Scheme* and not be part of the research

8. I understand the research is part of a larger project evaluating the scheme

Name: _____ Witness: _____

Signature: _____ Signature: _____

If you have any questions you can contact:

Áine Kearns

Regional Placement Facilitator/SLT

Department of Clinical Therapies

Mb: 086 8090415/ Office: 061 233794

Email: Aine.Kearns@ul.ie



This research study has received Ethics approval from the Education and Health Sciences Research Ethics Committee (quote approval number). If you have any concerns about this study and wish to contact someone independent you may contact:

Chairman Education and Health Sciences Research Ethics Committee

EHS Faculty Office

University of Limerick

Tel (061) 234101

Email: ehsresearchethics@ul.ie

Appendix F: Visiting Aphasia Scheme – Questionnaire for Students

Please complete this form to help us in future training programmes. We appreciate your feedback. We will study the responses from this survey. No names will be included in our study. We will use what we learn to further develop the programme. We may also share what we learn with others in journals, presentations, and conferences.

1. Define the following: Aphasia is

Please Circle as appropriate:

2. **Yes/No** I have heard the word “*aphasia*” before today.
3. **True/False** Aphasia can affect a person’s ability to read and write
4. **True/False** People with chronic aphasia can continue to get better two or more years after they first have it
5. **True/False** Aphasia affects a person’s intelligence
6. **True/False** A person who has aphasia is able to make decisions about healthcare and other important life matters

7. Select all that apply:

_____ I have worked with people who have aphasia in the *past*

_____ I work with people who have aphasia *right now*

_____ I will work with people who have aphasia in the *future*

_____ I *do not plan* to work with people who have aphasia

_____ I am *not sure* of my future plans

(Adapted from Welsh & Szabo 2011)

Initials_____ Date_____ Age_____

Please circle : Male/Female

Welsh, J.D. & Szabo, G.B. (2011) “Teaching Nursing Assistant Students about Aphasia and Communication” *Seminars in Speech and Language*, 32(3), 243-255.

Appendix G: Interaction with Disabled Persons Scale

Here is a list of statements that some people have said describe how they feel when they have contact with a person with a disability. Of course, how we respond to people depends on how well we know them as individuals. However we would like to know how you feel in general when you meet a person with a disability. Please read each statement carefully and decide how much it describes how you feel.

Please place one tick next to the question under the column that describes how you feel.

I disagree very much	I disagree somewhat	I disagree a little			I agree a little	I agree somewhat	I agree very much
			1	It is rewarding when I am able to help	1		
			2	It hurts me when they want to do something and can't	2		
			3	I feel frustrated because I don't know how to help	3		
			4	Contact with a person with a disability reminds me of my own vulnerability	4		
			5	I wonder how I would feel if I had this disability	5		
			6	I feel ignorant about people with disabilities	6		
			7	I am grateful that I do not have such a burden	7		
			8	I try to act normally and ignore the disability	8		
			9	I feel uncomfortable and find it hard to relax	9		
			10	I am aware of the problems that people with disabilities face	10		
			11	I can't help staring at them	11		
			12	I feel unsure because I don't know how to behave	12		
			13	I admire their ability to cope	13		
			14	I don't pity them	14		
			15	After frequent contact, I find I just notice the person not the disability	15		
			16	I feel overwhelmed with discomfort about my lack of disability	16		
			17	I am afraid to look at the person straight in the face	17		
			18	I tend to make contacts only brief and finish them as quickly as possible	18		
			19	I feel better with people with disabilities after I have discussed their disability with them	19		
			20	I dread the thought that I could eventually end up like them	20		

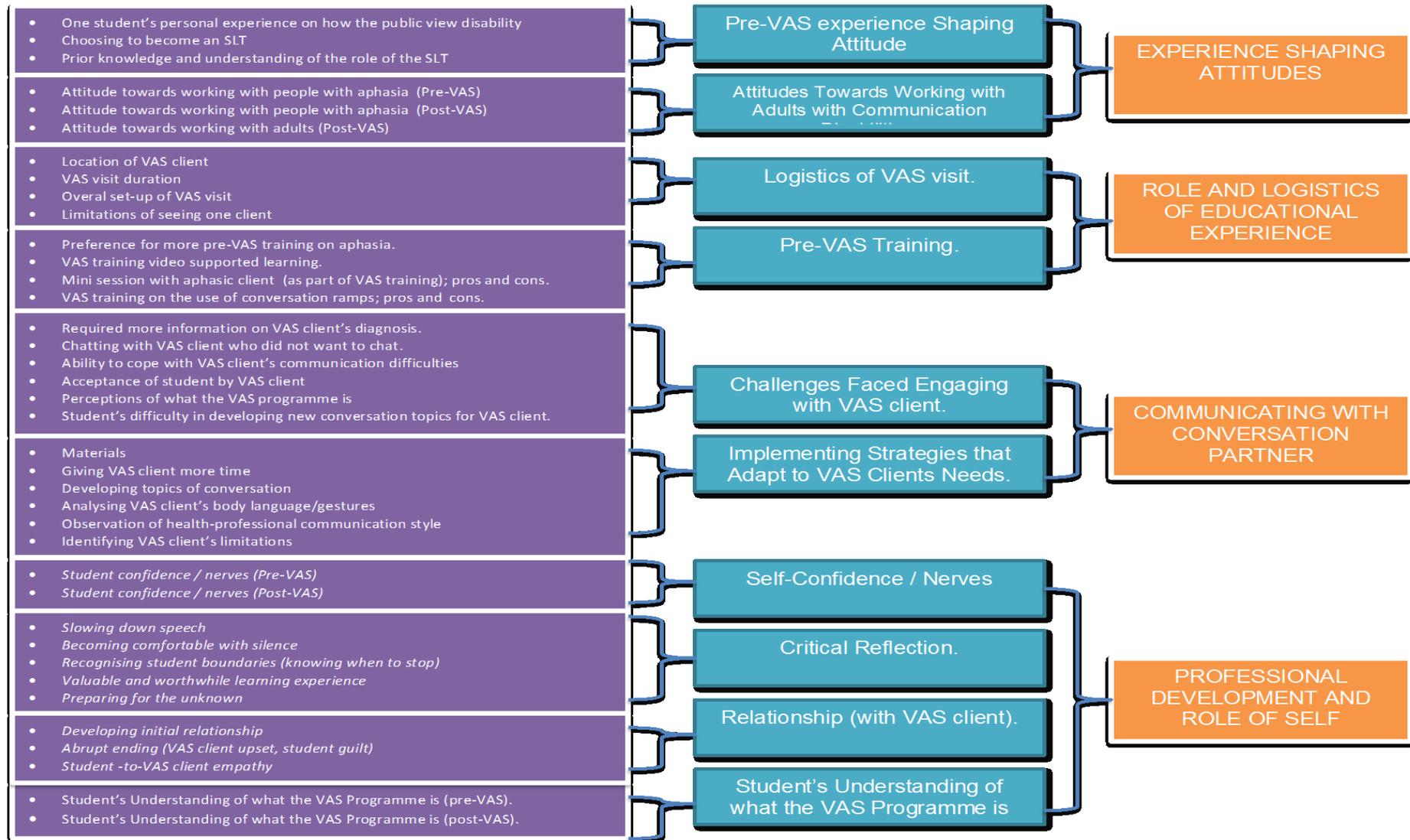
Appendix H: Analysis of Quantitative IDPS Data (Gething, 1991)

Answer (on Likert Scale)	Value Assigned
I disagree very much.	1
I disagree somewhat.	2
I disagree a little.	3
I agree a little.	4
I agree somewhat.	5
I agree very much	6
*Values assigned were reversed for answers to question 10, 14, and 15.	

Appendix I: Method of Transcribing Focus Group Data

All transcripts are transcribed as spoken, with any slang terms placed in inverted commas. Non-words (e.g. “ahh...ummm”) are written non-phonetically (to allow for those with no previous knowledge of phonetics). Any relevant visual information or expression observed during the focus group is placed in brackets, to aid clarity to the information. The unintelligible speech is noted as “(unintelligible).” Full stops are used as normal, however, where there is an extended speech-break this is recorded using two full stops for a two-second break, three full stops for a three-second break, etc. As it is importance to be able to distinguish between researchers’ and participants’ on paper (Gillham, 2000), the participants’ quotes are written in an italic (bold) font. Where one person interrupts another, two full stops are placed at the end of the first persons’ sentence.

Appendix J: Thematic Analysis Diagram



Appendix K: Thematic Analysis: Quotes to Support Themes

MAIN THEME 1: EXPERIENCE SHAPING ATTITUDES

Descriptor: This theme describes how pre and post VAS experiences shape the students' attitude towards individuals with communication disabilities.

SUB-THEME 1 (A): Pre-VAS Experience Shaping Attitudes.

1.1 One student's personal experience on how the public view disability

1.2 Choosing to become an SLT

1.3 Prior knowledge and understanding of the role of the SLT

Relevant Quotes	
1.1	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 4 (C): "My aunt used to live with it....she had Down Syndrome, and like you could tell..like people were just like, as if she wasn't a person. Yeah, so I definitely...yeah, I was kind of aware of that before".
1.2	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 7 (A): "It was always in my head to hopefully go into the undergrad but the points were so high but I emm just shadowed a speech and language therapist for a day..like she did assessments ..I didn't really see that much therapy... just the relationship she'd built with them all the kids were so individual she just had it off the top of her head ...and she'd know what resources to take out...That was brilliant...Very interesting (laughs)". • PERSON 6 (L): "In my final year in nursing I worked on an oesophagectomy ward for..six months kinda towards the end then I stayed there afterwards and we worked really closely with speech and language therapists on that ward and yaa I just followed her around the whole time 'cause it was so interesting" / "And just from there. I had no interest previous I always wanted to be a nurse and then.. it all changed in my final year". • PERSON 8 (K) "I did a few shadowing days and I went into hospitals" / "saw the videofluoroscopies" / "and so that was really really interesting". • PERSON 5 (J) "My mum actually had a speech and language therapist so that kinda. Got me interested". <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 1 (H.P): "I like looking into loads of different stuff, but i ended up shadowing 3 different SLT's ..for a while ..and then I just went..yeah..this is what I want". • PERSON 2 (H.S): "I was going down the psychology route to start with, but having worked with the kids with disability ...and seeing the kinda impact ..of

	<p>speech therapist...and communication on those kids ...that kind of inspired me”.</p> <ul style="list-style-type: none"> PERSON 3 (M): “I just was doing different volunteering things ..and like there were speech and language therapist there, and I saw what they were doing and kind of started volunteering and seeing different sides of it so...and I just really liked it so..decided..yeah..i want to do that”. PERSON 4 (C): “When I was in UCD our lecturer brought students from this course (speech and language Therapy M.Sc) in to talk about .. amm .. SLT ‘cause a lot of the linguists ..thats kind of like the natural route to go into speech and language therapy so they came and talked to us about the course ...and then I applied”.
1.3	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 7 (A): “Shadowed a speech and language therapist for a day” she did assessments I didn’t really see that much therapy but I loved the idea” / “just the relationship she’d built with them” [children in community care] / “it just seemed so interesting”. PERSON 8 (K): “Just to help people who are having difficulties communicate”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 1 (H.P): “I would have had..fairly good idea from shadowing three different SLT’s” / “doing research on-line and reading up”. PERSON 2 (H.S): “Yeah, I worked with Speech and Language therapist” / “When I was actually thinking about applying I spoke to some people ...that hadn’t done the masters, but had done the undergrad in Ireland, so I would have got information from them about the course and what it might be like in Ireland”. PERSON 3 (M): “Researched it and .. I knew a little..like...kind of..the general areas where they would work, but maybe not...kind of more and more realising how much..there....its a lot broader.. in different areas that you can go into”. PERSON 4 (C): “I had a general idea, but I think even the application process kind of forces you to actually really realise, ‘cause you have to have your experience with kids, and ...and to actually get into the course you...you have to really..’cause it’s so competitive...you actually need to know”.

SUB-THEME 1 (B): Attitudes Towards Working with Adults with Communication Disabilities.

1.4 Attitude towards working with people with aphasia (Pre-VAS)

1.5 Attitude towards working with people with aphasia (Post-VAS)

1.6 Attitude towards working with adults (Post-VAS)

Relevant Quotes	
1.4	<p>Focus Group 1</p> <ul style="list-style-type: none">PERSON 8 (K): "I wasn't too nervous going in I was more nervous about going into the person's home... than going to meet a person with a communication disability".PERSON 5 (J): "You're a little bit anxious about what to expect, and what you know. how well they're going to be able to communicate?"PERSON 8 (K): "Kinda empathise with them a bit saying like 'it must be really difficult not to be able to get your point across', and then, I think from..my volunteering..like you could see people, and they wanted to say something, and the other person just wasn't getting it... So it's just how difficult it must be on a day to day basis".PERSON 6 (L): "I had a good bit of exposure, just through my nursing, so I didn't find the communication end of it daunting at all...that was fine. emm again goin' into someone's home was just it was different I was used to like a hospital setting where I was in my comfort zone. emm it was it was completely different to walk in there - And you're in control in the hospital. mostly". <p>Focus Group 2</p> <ul style="list-style-type: none">PERSON 1 (H.P): "I'd have been really freaked, because I'd have had the thought of 'ok I'm going out to somebody that might not be able to speak at all'".PERSON 1 (H.P): "Before I would have just been like 'ok, they can't talk, now what?' because I'm an awful talker. So for me the thought that someone else can't talk; I'd be just dumbfounded that there is any way you can communicate without that, bar like sign language".PERSON 1 (H.P): "I think I'd have been very scared of them, as in not that they were going to do something, but scared of how I would talk to them...ammm. So I'd have been very nervous if I got landed in a room with someone with a communication difficulty. I'd have been there going 'oh..hi... am..how can I get out of here'".PERSON 2 (H.S) "If you come across somebody else with a communication difficulty...like myself say that would feel awkward, you feel like you have to fill spaces and kind of help them".

	<ul style="list-style-type: none"> PERSON 2 (H.S): "I suppose my thing would have been more that I wouldn't understand what the person was trying to say."
1.5	<p>Focus Group 1</p> <ul style="list-style-type: none"> PERSON 6 (L): "I think 'cause sometimes you kind of paint everyone with the same same brush" / "But like he had such a funny personality..and..that shone through straight away so like the minute I walked in the door initially I thought 'okay this is going to be a challenge', but the end I saw a man, that he was actually a comedian at the end of the day, but when I walked in the door I didn't think about his personality.. yeah I panicked about how I was gonna communicate". PERSON 6 (L): "You go in thinking well ..you just.. we communicate so easily verbally" / "you watch them and how they get through every day and the coping mechanisms that they develop and you you kind of..you you just switch" / "onto his kinda page and how he communicated" / "Like verbal wasn't the first way to communicate anymore.. so yeah..you just kind of admire how he's coped so well". PERSON 8 (K): "You do sort of label them a little bit, saying 'okay, I'm going to see a person with aphasia'. You don't say that 'I'm going to see this really fun person and have a laugh', and it kind of makes you a bit more patient... like ..that to get to know the person rather than straight away saying..'oh this person has aphasia'." PERSON 5 (J): "I think it makes you more confident as well, 'cause you know... you'd be a little bit nervous yourself about how you're going to be.. around..them, as well, and.. you know [laughs] it's just realising [laughs] they're a normal person as well. I would definitely feel more confident going into a hospital and dealing with stroke patients". / "I dunno if it was my attitude just more that I would be a bit more relaxed now". PERSON 7 (A): "Maybe a greater understanding". <p>Focus Group 2</p> <ul style="list-style-type: none"> PERSON 1 (H.P): "It would make me more confident" / "If I met somebody with difficulties I wouldn't be as taken back or be as 'oh, god I can't do this', you'd be just like 'there is obviously a way'" / "They are still..for want of a better word...they're not stupid or anything..they are just having communication difficulties that's it... so all you have to do is find a way to get the communication going and it would be fine". PERSON 1 (H.P): "Now, I feel like I'd be able to ..you know... get communication going and I wouldn't be like 'oh, Jesus get me out of here' I'd be more like ...relaxed I think about it". PERSON 2 (H.S): "I think I'd be like 'no, just give them time' and try and communicate that way and just see what happens and not kind of panic about it".

	<ul style="list-style-type: none"> PERSON 3 (M): "It was like just getting to know somebody, it wasn't getting to know somebody with aphasia".
1.6	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 8 (K): "My background in psychology I was always interested in aphasia we did a few neuro modules and it was just something that I was always interested in I'd always be doing papers on it and things like that so it was something I was really interested in..but it wasn't until I did the volunteer work that I had kinda the hands on experience of it...but I was definitely very interested in it...." / "Definitely..I still like we start our placement with kids emm I start next week..and I'm looking forward to it but I think I just feel a bit more comfortable with adults..I'm kinda looking forward to that a bit more....might change when I get there [laughs]". PERSON 7 (A): "Emm I always thought kids"/ "That's just..say working in emm preschools and" / "There was a school with emm they'd severe.. emotional and behavioural difficulties..so I always assumed kids but emm..yeah no it..I think as a speech therapist hopefully now in a few years" / "You have to be ready to work with any age..you know that's the thing so I'd easily go into an adult care setting now..yeah". PERSON 6 (L): "I always wanted to work..well.. since my..emm final year I always wanted to work with you know.. acquired.."/ "Ehh just language disorders rather than kids..so..it.. I think..yeah after the the VAS it still.. I still I still want to but now I'm kind of preparing for clinic and I'm getting really excited about working with kids too so..yeah it hasn't changed much". <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 2 (H.S): "I'd definitely be looking forward to doing adult placement much more now...I've a bit more of an idea, but that has also come from ..ammm.. even like just doing the FEDS, like yesterday., and it got me like..'oh yeah!.. it would be really interesting to see all that a bit more with adults as well".

MAIN THEME 2: ROLE AND LOGISTICS OF EDUCATIONAL EXPERIENCE

Descriptor: This theme describes the students' view on the logistics of the VAS visit and the role of pre-VAS training.

SUB-THEME 2 (A): Logistics of VAS visit.

2.1 Location

2.2 VAS duration

2.3 Set-up

2.4 Limitations of seeing one client

Relevant Quotes	
2.1	<p>Focus Group 1:</p> <ul style="list-style-type: none">PERSON 5 (J): "I suppose the travelling probably". <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 1 (H.P): "How far away it was...amm..it was over two hours of driving..to spend not even an hour with her".
2.2	<p>Focus Group 1:</p> <ul style="list-style-type: none">PERSON 5 (J): "A lot of travelling" / "I think it was more just the workload in the first semester...on top of everything".PERSON 6 (L): "Emm...yeah I think it did become a little bit..of..more demanding at the end I think.. maybe if it was a tiny bit shorter or something"/ "Like orrr..yeah maybe..if we could like..we could have gone on for an hour and a half each day" / "You know or two hours we could have stayed there all evening...emm but yeah I think it became more.. more a chore" / "or something towards the end..where it was really exciting at the beginning there was lots of talk about like where we could have that time could have been more beneficial might be by running into another half an hour or" / "Rather than going an extra..an extra week / Because..emm like we had assignment every week for six weeks or something" / "So it was just horrendous.. and then you didn't enjoy it as much" / "Because at the back of your mind you're thinking I have to get out of here I really have to do that assignment" / "And you're like listening but at the same time it's not it doesn't have your full attention".PERSON 8 (K): "How much time will this cost us". <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 1 (H.P): "I just found it was too far for the length of time we got to spend with the person...i found that quite frustrating, especially as it got later in the term and there was more stuff going on".PERSON 2 (H.S): "It pretty much took up the whole day".PERSON 2 (H.S): "Think starting it earlier in the term would be good" / "We

	<p>didn't start for about four weeks" / "When it was really like getting into assignments"/ "It was harder to enjoy it when your mind is kind of somewhere else"/ "I mean it went fine but you didn't feel like..like you'd kind of given it your all cause we'd just handed in some massive assignment or something that week".</p> <ul style="list-style-type: none"> • INTERVIEWER: Is there anything major you would like to change about the scheme or even the way it is conducted?" <ul style="list-style-type: none"> ○ PERSON 1 (H.P): "To have it close" / "I think the earlier it starts... definitely the better...and because the end of the semester is..as you know..madness". ○ PERSON 2 (H.S): "There is no reason why it couldn't start like week one". ○ PERSON 4 (C): "And things happen like...they could have a birthday....and then like they can't come... it's better to have it start early, so it doesn't run into the last".
2.3	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 8 (K): "I know people had said as well from their volunteer experience where just previous work experience some people had worked in stroke clubs and they were sayin' it would have been great if two or three people went out to a hospital or a stroke club or something like that for the a morning and facilitated a class or eh" / "Stuff like that I know we do for where when I was doing the brain injury clinic they've had a set schedule for the week and cause I was there for a while and on Tuesday mornings I'd start leading they do a cognitive course for like six or eight weeks" / "and then say they were busy there were like we can do that just read through the notes and go through it with them"/ "And if we got to do stuff like that and it would be a different setting that they've come to the centre" / "So it might be just a slightly different..kinda way of doing it but I think it would be really beneficial to do that" / "Do something like that". <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 3 (M): "When I came back from it I'd feel more energised" / " It was like real busy during the day, then we'd go and have like a nice relaxing lunch with her or something.. you know chat away with her ... then I'd feel kind of relaxed after". • PERSON 3 (M): "we weren't tested or examined, there was no report or anything like that, it was kind of nice having that cause you were just..you could... you know relax".
2.4	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 1 (H.P): "I wouldn't have minded seeing somebody else's cause I heard other girls talking about theirs, so I would have loved even to have one day ..say like... week six you get to do an exchange with somebody" / "I have

	<p>my specific idea now” / “it gave me one specific view and I would have loved to just ... I don't know ..go along to meet somebody else”.</p> <ul style="list-style-type: none"> PERSON 2 (H.S): “Especially because we had such a range of different people”.
--	---

SUB-THEME 2 (B): Pre-VAS Training.

2.5 Preference for more pre-VAS training on aphasia.

2.6 VAS training video supported learning.

2.7 Mini session with aphasic client (as part of VAS training); pros and cons.

2.8 VAS training on the use of conversation ramps; pros and cons.

Relevant Quotes	
2.5	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 6 (L): “We’re doing aphasia now and it just seems like awww we could have used some of..maybe some of the skills back then”. PERSON 8 (K): “If we’d of had a bit more of a background into it [aphasia] it probably would have been good really”. Person 6 (L): “If we were doing the aphasia module it would have been more beneficial”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 3 (M): “It would have been maybe nice to have..ammm. a class alongside it so that we can understand aphasia as well, you know”. INTERVIEWER: Would you have liked to have done your aphasia module before hand? <ul style="list-style-type: none"> PERSON 3 (M): “Maybe, yeah...I don't know actually...I’m not 100% sure because it was like nice to have it as well just to get to know the person and not....I think maybe if you had a class alongside it you might be looking out for things” / “kind or pros and cons of not having the class along side it”. PERSON 4 (C): “I don't remember having a class like actually on the condition itself” / “It might be good to have a more like in depth picture of like the actual condition before we went in”.
2.6	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 1 (H.P): <ul style="list-style-type: none"> “Yeah they showed us a couple of videos before, and there was one; well there were a few different ones. They were just helpful because it made you just realise a little bit more what it was all about” / “He wanted to sell their house, and she was trying to attract attention,

	<p>and they were just ignoring her completely, and it just kind of brought home the message that she was there listening to this conversation, in the room, trying to get a message across, and because they weren't giving her the opportunity, she was just like sitting there doing that [person 1 demonstrates gesture by knocking on table] and they were just 'yeah, we are going to sell the house happy days'".</p> <ul style="list-style-type: none"> ○ [continued discussion of video watched in training] "I saw that reflected in my person". ○ "I got the concept of it from watching the videos...I wouldn't have known how to do it, and I wouldn't have walked in day one going, oh, she looks happy, but it's just even to watch out for that and realise from the videos what's actually possible through...through body language. I did realise that, that day with the videos. I was like, god you can actually see, physically, if you just know to watch out for it". <ul style="list-style-type: none"> ● PERSON 2 (H.S): <ul style="list-style-type: none"> ○ [discussing video watched in training] "You just saw the guys body language, as he was just 'erh!!!, no one is listening to me, I'm just going to sit here', versus where the doctor was kind of of involving him more, and you could see that he was like taking a role and enjoying the conversation and stuff". ○ "And I think with our lady that became more evident afterwards. Like now I look back and go, gosh those first few weeks.. like, I think she was just 'what are these girl?' and as time went on she seemed excited when we'd come, like because we were able to communicate with her better, and then when you look back at that video ...you can see how she was reacting.. kind of.. matched some of that..what we saw in the videos as well".
2.7	<p>Focus Group 1:</p> <ul style="list-style-type: none"> ● PERSON 5 (J): "I was more anxious the day that we had in the clinic here" / "I didn't know what to expect" / "I think that relaxed me a little bit". ● PERSON 6 (L): "We just had a little conversation...otherwise we didn't have any like formal training". <p>Focus Group 2:</p> <ul style="list-style-type: none"> ● PERSON 4 (C): <ul style="list-style-type: none"> ○ "I think the training definitely..'cause just it was kind of like a mini session... definitely helped..amm going in. The only thing is the way they kind of assessed us". ○ "Made it seem like more daunting going to the visit, because it seemed like it was going to be ..like we were going to be assessed going to that as well". ○ "It kind of made it more stressful I think".

	<ul style="list-style-type: none"> ○ It was just the grading thing made it kind of different from actually what it was, do you know that kind of a way. You went into the aphasia thinking it would be something similar. It built up something". • PERSON 1 (H.P): <ul style="list-style-type: none"> ○ "The grading part was quite weird 'cause it was like the people you were chatting to didn't really want to do it either". ○ "I think it might have been more helpful if they had like a piece of paper for each person and then had been like 'ok the biggest area you need to work on is'..and then put a circle around say two things on the page". ○ "I found the actually coming in and chatting to them really helpful... ammm, because otherwise I would have been to be honest..I'd have been really freaked, because I'd have had the thought of 'ok I'm going out to somebody that might not be able to speak at all. How am I going to survive this?' / "this way, you came in and you were with people who couldn't actually speak or only had a few words or whatever, and you come out and you go 'ohh I actually managed to chat to them there for five minutes. God that's ok I can do this' you know so I did find it extremely helpful". • PERSON 4 (C): "I think it was awkward".
2.8	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 6 (L): "When we were preparing for it they like told us that we'd need all these ramps and like we went out and like I had a notebook but we didn't need anything" / "it seemed really intimidating that we're going out we're gonna need all these resources but er it actually was much more natural when we were there and there was we didn't need all these ramps"/ "we didn't have any like formal training" / "otherwise we didn't have any like formal training". <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 3 (M): "They showed us about having conversation prompts"/ "Just to be prepared...you know... not go in there without kind of a plan B sort of thing". • PERSON 2 (H.S): "The training was really useful and helpful that we had here, but it kind of made me more kind of like 'I really don't know what I need to prepare or not' because they'd gone through all the different prompts that you might take with you, but having not met the person yet, it was really hard to know what to take". • PERSON 2 (H.S): "You kind of make these assumptions that ok this person has limited communication so they're going to want to use all these things. Actually that wasn't kind of how it worked out".

MAIN THEME 3: COMMUNICATING WITH CONVERSATION PARTNER

Descriptor: This theme describes the challenges faced by the students when they engaged with their VAS client, and the strategies the students implemented which adapted to the VAS client’s needs.

SUB-THEME 3 (A): Challenges Faced Engaging with VAS client.

3.1 Required more information on VAS client’s diagnosis.

3.2 Chatting with VAS client who did not want to chat.

3.3 Ability to cope with VAS client’s communication difficulties (Inappropriate comments- awkward for student, adapting to abrupt changes in conversation topic).

3.4 Acceptance of student by VAS client (student wanting to be liked).

3.5 Perceptions of what the VAS programme is (student and VAS client).

3.6 Student’s difficulty in developing new conversation topics for VAS client.

Relevant Quotes	
3.1	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 5 (J): “I know that she had a stroke” / “But apart from that I don’t really know anything else about her...diagnosis” / “What kind of part of her language was affected” / “So I suppose a bit more detail and that would be nice”. <p>Focus Group 2: N/A</p>
3.2	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 8 (K): “She had had they told us that she’d had two or three speech and language therapists’ before” / and she just had no interest”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 1 (H.P): “Lots of people seem to have people that really needed to talk and ...you know have a social event...she wasn't that bothered, so you’d come in and you’d be like chatting and she would try and chat back, but she was just as happy to just sit there and not get as involved, so we kind of had a bit of an issue with that, as in, how do you chat to someone who isn’t too bothered about chatting”.
3.3	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 8 (K): “There was one day actually we were out and we we brought out a few magazines..and..eh we had just left them down on the sofa and we were chatting and eh her daughter came in with two of her grand-kids that were in school and they were doing a collage” / “And..the lady we were seeing was trying to tell them to stop cutting up the magazine” / “Cause we were taking it home and we were trying to say no no we don’t want it but the daughter was kind of stepping in she didn’t realise that we had brought them”/ “ She thought that they were her own and she was saying aww the girls don’t want to read them.. and she was trying the woman was trying to say no” / “Let them take them home and we were sitting there saying no we

don't want them work away cut them up but you could see the difference of.. emm she was just filling in the gap from where she had come in" / "Cause we were like no it's fine (laughs)" / "Yeaah I suppose not to like we weren't going to but it never crossed my mind but it would have been very easy to jump in and correct the daughter and say that's not what she's saying" / "And you couldn't say that to someone" / "If someone tried to say that to me about my mum I'd be like I know what she's saying (laughs)" / "But emm..they like we were all the time laughing the mum was laughing as well 'cause we knew what was going on but I could see how it could have gotten 'verry' awkward".

Focus Group 2:

- PERSON 2 (H.S): "The first week or two that we went out was quite a struggle to ah... because she didn't have much.. emm language"/ "on her right side she didn't have the movement so even gesture were...emm..she only kind of had one hand to gesture" / "she was trying to explain stuff to us and we were trying to guess and we weren't very good at trying to work it out and then she'd kind of get frustrated and we could tell that from her sort of facial expression and things and so she'd just kind of be like ...oh, err like forget it".
- PERSON 3 (M): "She'd be fine for like five minutes talking no problem, but then she'd get at a point and she just couldn't remember a word, maybe at the beginning we were kind of like trying to'was it this was it this was it this'"
- PERSON 4 (C): "It was difficult as well because some of his gestures weren't kind of like ...he'd put his finger just under his nose, and that would be like Germany..like Hitler...like when he wants to talk about Germany..so he had like really strange gestures..like he thought about countries so much that he literally had a gesture for every country, because he travelled so much, so it was kind of just getting used to his...gesturing style. It's also he was very like un-PC, so he'd. he'd be like "oh that man, he was like black, but he was very nice"..and I had to kind of learn to kind of cope with kind of awkward situations where we didn't know kind of how to respond".
- PERSON 4 (C): "Like in particular our fella, like he literally could jump from talking about like horse racing to like anything..to like Guinness in two seconds, that was like coping with where has the conversation gone. The was good experience to get us used to that".

3.4 **Focus Group 1:**

- PERSON 8 (K): "I just found it a bit hard to get her to kind of relax around with us".
- PERSON 6 (L): "I was quite fortunate emm because I had someone who was in in the VAS a long time so he like was just so excited about us coming out and he then like made conversation and he he was brilliant like he loved it" / "because he was so into this and something he wanted to do so".

	<ul style="list-style-type: none"> PERSON 5 (J): “She really enjoyed the visit she was very sociable”. PERSON 7 (A): “They loved seeing us coming ‘cause we were the same age as her daughter”. <p>Focus Group 2: N/A</p>
3.5	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 8 (K): “We got the impression that she thought we were going to come out with books and tests and flick through them like what’s this picture what’s this picture and it took her a while to ease into it like they were lovely they were soo nice but it took about three or four sessions before she realised we were just there for a chat” / And that we weren’t there to assess her and to diagnose her and then to try this treatment plan that she didn’t really want”. PERSON 8 (K): “It was the first year our lady had..that she was doing the programme” / “felt like they didn’t really know what the scheme was” / “once or twice were they [clients daughter] asked us how was our project going and didn’t did we need to know anything about her to write up on”/ “I felt like she didn’t really know so if she does it again next year it might be completely different experience for her” / “I think it felt like she didn’t really know..why we were there and was afraid of what we were gonna try and do thinking that we were gonna come out an..try fix her or something”. PERSON 8 (K): “Her husband was having a bit of trouble kind of understanding what she was going through” / “he’d start asking us stuff about her tablets I think he thought we’d have a much more of a medical background than we did” / “And we had no clue”. PERSON 8 (K): “She had had they told us that she’d had two or three speech and language therapists’ before” / and she just had no interest“ <p>Focus Group 2: N/A.</p>
3.6	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 4 (C): “You kind of need a bigger range of strategies to deal with when people are talking about their life, because there is no context” / our fella, like he literally could jump from talking about like horse racing to like anything..to like Guinness in two seconds, that was like coping with where has the conversation gone. The was good experience to get us used to that”.

SUB-THEME 3(B): IMPLEMENTING STRATEGIES THAT ADAPT TO VAS CLIENT’S NEEDS.

3.7 Materials

3.8 Giving VAS client more time

3.9 Developing topics of conversation

3.10 Analysing VAS client’s body language/gestures

3.11 Observation of health-professional communication style

3.12 Identifying VAS client’s limitations

Relevant Quotes	
3.7	<p>Focus Group 1:</p> <ul style="list-style-type: none">• PERSON 5 (J): “I think having the activity.. you know really helped, because there are days when you just (laughs) you know you have run out of conversation you know”.• PERSON 5 (J): “She was very sociable she used to love going out emm playing bingo..she had a better social life than I” / “going out every day” / “we ended up playing bingo ourselves” / “a picture bingo game she loved it”.• PERSON 7 (A): “With our lady, photos” / “They were huge because they were huge in her life”/ “She’d bring us around each room and show us..emm say the family albums and stuff like that so photos were the main thing” / “the only thing actually that we used really”.• PERSON 8 (K): “To bring out photos they had loads up on the wall and they had em a two year old grand-child as well so they loved to talk about her” / she loved to actually look through ahmm..like Hello magazine or the RTE guide” / “Anything with pictures”.• PERSON 6 (L): “He always had the newspaper” / “so we’d I’d always take that out and go through the headlines”. <p>Focus Group 2:</p> <ul style="list-style-type: none">• PERSON 4 (C): “Getting people to write things down, that's really the main one we used”.• PERSON 2 (H.S): “She really liked photos and things so emm we would kind of take in photos that she wanted to see, like our families and we...she’d show us her..kind of photos of her family and it kind of got easier”.• PERSON 1 (H.P): “She did like lovely paintings and they were like all over err the house and stuff and she had done like mini art projects with the careworker that came before but that care worker had actually left so we said grand we’ll do an art project, so we ended up following like I think six weeks we had left doing an art project with her bit by bit every week and err painting her nails”.

3.8	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 6 (L): “Initially you try and finish their sentences” / “I thought ohh it makes it makes it easier for them” / “But..eh I think it was just eh again just giving time...it was probably more beneficial”. PERSON 5 (J): “I suppose we just have to be very patient as well really like” / “give them opportunity to kind of ‘yano’ get their words out”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 3 (M): “We didn't really need to employ kind of strategies, as... because she wasn't to bad.. you know..other than learning I guess...when she'd...ok when she was at the beginning..... when she'd stop..when she'd have like... she'd be fine for like five minutes talking no problem, but then she'd get at a point and she just couldn't remember a word, maybe at the beginning we were kind of like trying to'was it this was it this was it this' and then... yeah we kind of learnt to just ..to just give her time..she'll come up with it and she...if she's not going to come up with it, she'll just say 'oh, it's not coming now' and we'd just kind of move on”. PERSON 3 (M): “Let her take her time, and know when to move on as well”.
3.9	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 5 (J): “She was very sociable she used to love going out emm playing bingo..she had a better social life than I” / “going out every day” / “we ended up playing bingo ourselves“ / “a picture bingo game she loved it”. PERSON 6 (L): “When we were in the car on the way we would think about topics or during the week have conversation but as the weeks went on I think it did become a little bit more difficult to like we'd start repeating things” / “Christmas was coming up so that was a good topic to talk about “ / “It was natural in the beginning but it did become a little bit more difficult towards the end”/ “he always liked..the.. GAA and soccer so I was.. paired with one of the guys which was great because he knew about soccer as well”. PERSON 7 (A): “Her husband had told us that.. even though they never spoke about the stroke they never even mentioned the word stroke”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> PERSON 1 (H.P): “Adapting to what she actually wanted to do and what she wanted out of the session instead of what I wanted out of the session like I don't mean to sound self-absorbed or anything but you kind of go in with this kind of idea that you're going to sit there and learn how to get this person to get their message across and then you get there and you're like 'actually she's not that interested in getting her message across maybe she just wants to do something else'”.

	<ul style="list-style-type: none"> • PERSON 1 (H.P): “We asked her about her kids and she kind of told us who they were..and then...it wasn't that she didn't love them, but sure they popped over every day why would she be singing their praises”. • PERSON 4 (C): “He'd kind of like talk about how he used to love travelling...and how the stroke had limited his life and he had a wife as well who had had a stroke and she was like completely twenty-four hour care, bed bound.. so the son was kind of splitting his care time between the father and the wife..so he loved like the company”. • PERSON 3 (M): “She just loved to chat and she loved the company I think, she ..and she used to talk quite a lot about her stroke, as in..not the details of the stroke, but.....we found that her stroke was quite central to who she is now kind of, she..like she was involved in a stroke group, a lot of her friends would be from the stroke group, so ..she...it's quite central to her social life as well”. • PERSON 1 (H.P): “Sometimes when you are chatting to her and she'd be just like 'I'm not interested in this'... she'd be saying yes, but her whole body language was 'like whatever' and you'd start talking about something else or you'd change, or whatever would happen, and all of a sudden she'd come alive”.
3.10	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 2 (H.S): <ul style="list-style-type: none"> ○ “She'd kind of like raise her hand up [person 2 demonstrates gesture by raising up her hand] you know and we'd be guessing ten twenty thirty you know, she'd be... so we kind of got better at working out what she was trying to communicate so amm.. as time went on we could have a better conversation”. ○ “watching some of the nurses communicate with her and how they did it kind of gave us idea so amm..you know like..the number example I was giving...we saw the nurses doing that ..so...you know...'how many times, was it one, two, three, four' and she'd kind of just raises her hand when they say the right number”. ○ “It was very individual to her so we had to go out and meet her a couple of times before we kind of got to that realisation”. • PERSON 4 (C): <ul style="list-style-type: none"> ○ “He kind of learnt his own little gesturing style”. ○ “He compensated so much with his hand gestures” / “Just say if he wanted to talk about china he'd go like this” [person 4 physically demonstrates what client did by horizontally stretching the side of her left eye with her left index finger].

3.11	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 2 (H.S):“watching some of the nurses communicate with her and how they did it kind of gave us idea”.
3.12	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 5 (J): “There was a couple of weeks as well where she was emm she wasn’t feeling well but like we offered to leave early and she didn’t want us to (laughs)” / “And she was really like in pain”. • PERSON 7 (A): “She’d very limited verbal output but emm there was never like a moments silence (laughs)”. • PERSON 6 (L): “We didn’t know that his memory was affected like we didn’t even pick up on that”. • PERSON 8 (K): “Our lady she wasn’t very mobile so it was just what was in the room”. <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 1 (H.P): <ul style="list-style-type: none"> ○ “She had a particular form of palsy that I don't remember the name of”. ○ “Was losing control over her muscles...so she was having difficulty speaking because of that”. ○ “You could see that she was with it she could understand everything her hearing was fine and so on and so on but it was actually just getting words out..amm..so it depended as well on the day...so some days she wouldn’t be able to speak at all some days she’d be able to whisper some day’s she’d actually be able to talk in between, or sometimes she’s get like a word out like normal conversational tone, but the rest of the time it was more whispering”. ○ “She live in a house with her husband and her kids were around as well...so they’d kind of be in and out, and he grandkids and so on... amm, but she’d had a bad fall as well just before we started and she had broken her wrist so the whole time we were there she had the wrist in the cast and so on, and then near the end it came off but errr even that you could see that her functionality wasn't great and you could see that she had the shakes all the time”. • PERSON 2 (H.S): <ul style="list-style-type: none"> ○ “She would probably be in her early sixties and she’d had a stroke about seven years previously. Amm ..she was in a nursing home, because she was very physically affected as well, so her whole...her whole right side”. ○ “Her speech was very limited, she probably had around three or four words”. ○ “She did have her husband and she used to go home once a week, but I

	<p>think she was quite isolated from the nursing home, and she was able to communicate with us that she felt they were all a lot older than her as well because she was actually quite young compared to a lot of the others in there as well”.</p> <ul style="list-style-type: none"> • PERSON 3 (M): <ul style="list-style-type: none"> ○ “Late sixties, and she had had her stroke about ten years ago”. ○ “She had aphasia, but it wasn't very severe..so you wouldn't actually..when you meet her you wouldn't actually think..you wouldn't..she's no viable signs of stroke...well actually she has like a tremor and that was quite..like you know when she was pouring tea you'd notice it quite a lot, but her aphasia.. you wouldn't even, notice unless you were talking to her for quite a while, its ahh....just had her word finding difficulties. She'd be talking and then she'd just stop on a word..and she'd get it, but it might just take her a little bit longer, so she didn't have like very severe stroke symptoms I guess..or after effects”. ○ “She was quite social, she could drive, and she's..she lived very near her son”. • PERSON 4 (C): <ul style="list-style-type: none"> ○ “He was about late sixties and he had a stroke maybe five years before.” ○ “he didn't have a whole lot of speech”.
--	---

MAIN THEME 4: PROFESSIONAL DEVELOPMENT AND ROLE OF SELF

Descriptor: This theme describes the students' self confidence (pre and post VAS), their critical reflections (post-VAS), the relationship with their VAS client, and their understanding of what the VAS is.

SUB-THEME 4 (A): Self-Confidence

4.1 Pre-VAS

4.2 Post-VAS

Relevant Quotes	
4.1	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 5 (J): “I don't remember feeling that anxious I think I was more anxious the day that we had in the clinic here”. • PERSON 5 (J): “You're a little bit anxious about what to expect, and what you know. How well they're going to be able to communicate?” • PERSON 7 (A): “Em.. I did two days in a support group for aphasia and it was the first time I ever actually came across it” “so I felt that prepared me”. • PERSON 8 (K): “Emm I volunteered in an acquired brain injury centre. So it's kind of... I wasn't too nervous going in I was more nervous about going into the person's home... than going to meet a person with a communication

	<p>disability" / "It's just 'cause it's their home and you want them to like you and to" / "accept you into the home".</p> <ul style="list-style-type: none"> • PERSON 8 (K): "Excited and anxious". • PERSON 6 (L): "I think we were kinda made to feel a little bit anxious". <p>Focus Group 2:</p> <ul style="list-style-type: none"> • PERSON 2 (H.S): "I was really nervous...yeah. I think maybe as well because of not having had experience working with adults..kind of not knowing what to expect". • PERSON 3 (M): "I think that maybe the first day going there you are a little bit nervous, not sure what to expect". • PERSON 1 (H.P): "Eer..I was quite nervous going out the first time".
4.2	<p>Focus Group 1: N/A</p> <p>Focus Group 2:</p> <ul style="list-style-type: none"> • INTERVIEWER: "So do you feel you gained more confidence?" <ul style="list-style-type: none"> ○ PERSON 3 (M): "Yeah ammm...confidence, that's probably the main thing" / "You're going to visit this person that you never met before, and you've got to try and find common ground with them..and ..and then build a relationship with them as well, so you've got to kind of..amm..yeah, I think , I gained confidence in that side of it as well". ○ PERSON 3 (M): "Yeah, I think so, it gives you confidence, and I would feel a bit more confident going into ...amm.... kind of.. similar situations". ○ PERSON 4 (C): "I'd say I'm more confidence as well, because like I've worked with people who have literally like no speech, but it's kind of different, because.. same thing... you're kind of building relationships, whereas like before my previous experience would have been more about amm care".

SUB-THEME 4 (B): Critical Reflection.

4.3 *Slowing down speech.*

4.4 *Becoming comfortable with silence.*

4.5 *Recognising student boundaries (knowing when to stop).*

4.6 *Valuable and worthwhile learning experience.*

4.7 *Preparing for the unknown.*

Relevant Quotes	
4.3	<p>Focus Group 1: N/A.</p> <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 4 (C): "I definitely learnt I need to slow down because people tell me I really talk fast" / "you could literally see when I was talking to him that it was literally going over his head".
4.4	<p>Focus Group 1:</p> <ul style="list-style-type: none">PERSON 7 (A): "it really made sense there just to be comfortable in silence". <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 4 (C): "It's good to have the programme because it kind of made..errr...it's okay if there is silence, and it gave us the strategies to like....you can just move on if they can't if they can't...or the conversation is stilted like you can just move topic".
4.5	<p>Focus Group 1: N/A.</p> <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 4 (C): "if he can't understand you don't have to keep trying to going and going and going and going".
4.6	<p>Focus Group 1:</p> <ul style="list-style-type: none">PERSON 5 (J): "Very positive".PERSON 8 (K): "It kinda makes you be a bit more patient like that to get to know the person rather than straight away saying..oh this person has aphasia".PERSON 7 (A): "You have to be ready to work with any age..you know that's the thing so I'd easily go into an adult care setting now".PERSON 6 (L): "I definitely think it's a positive experience where like we can develop our communication skills". <p>Focus Group 2:</p> <ul style="list-style-type: none">PERSON 2 (H.S): "I hadn't really had any exposure to adults with communication difficulties, so I think that was really kind of helpful to have that experience before going out and trying" / "therapy or something, or assessments" / "without the kind of pressure of having to do anything else".

4.7	<p>Focus Group 1</p> <ul style="list-style-type: none"> • PERSON 7 (A): “You know you don’t really know what to expect or their level”. • PERSON 5 (J): “I’d no experience of I suppose it was quite new”. <p>Focus Group 2: N/A</p>
-----	--

SUB-THEME 4 (C): Relationship (with VAS client).

4.8 Developing initial relationship

4.9 Abrupt ending (VAS client upset, student guilt)

4.10 Student -to-VAS client empathy

Relevant Quotes	
-----------------	--

4.8	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 8 (K): “it was a lot of her husband talking which is still lovely but it kind of felt that we weren’t doing exactly what we were supposed to be doing” • PERSON 6 (L): “I was quite fortunate emm because I had someone who was in the VAS a long time so he like was just so excited about us coming” / “something he wanted to do so” / “she really enjoyed the visit she was very sociable”. • PERSON 8 (K): “you like you’re going in there willing to do anything but they mightn’t”. <p>Focus Group 2: N/A</p>
-----	---

4.9	<p>Focus Group 1:</p> <ul style="list-style-type: none"> • PERSON 7 (A): “On the last day we hadn’t said anything and..they put up a huge dinner”. • PERSON 6 (L): “I had quite a negative experience.. we well a little towards the kinda ended on a little bit of a bad note” / “he got quite upset on our last day and it was like he didn’t really understand, I suppose his memory was affected, but again we didn’t know that his memory was affected like we didn’t even pick up on that” / “ we were all very sad at the end cause..we felt like bad that we’d left it on a bad note kind of cause he was so upset”. • PERSON 8 (K): “You take the eight weeks to kind of get these people to really welcome you into their home they look forward to you and then you turn around you’re like okay...That’s the end” / “We won’t see you you’ll have two students next year if you want” / “It’s just the way it ends is a bit sudden I think”. • PERSON 5 (J): “You kinda develop a relationship and then” / “you’re going
-----	---

	<p>into their homes and you know then after whatever amount of time it just stops”/ “You kinda feel a bit bad (laughs) to be honest” / “you kinda get (laughs) close with them as well so” / “It was difficult like just kind of..it’s a bit abrupt I think at the end”.</p> <ul style="list-style-type: none"> PERSON 8 (K): “If they were coming to your clinic they’re as aware of the process as you are but because we were going to them and then all of a sudden we just stopped I felt like it ended a bit differently”. <p>Focus Group 2: N/A</p>
4.10	<p>Focus Group 1</p> <ul style="list-style-type: none"> PERSON 6 (L): “You do get a little bit attached” / “they get to know you quite well” / “you do get kind of build up a relationship”. <p>Focus Group 2: N/A</p>

SUB-THEME 4 (D): Student’s Understanding of what the VAS Programme is.

4.11 Pre-VAS.

4.12 Post-VAS

4.11	<p>Focus Group 1: N/A</p> <p>Focus Group 2</p> <ul style="list-style-type: none"> PERSON 1 (H.P): <ul style="list-style-type: none"> “It was more to sort of get comfortable with being with someone that has communication difficulties”. “Normally you’re going to try and help somebody else, but in this case you’re actually going to help yourself, so it’s a little bit...like that was my feeling of it...and like obviously the person I was with got something out of it as well, because she got company one a week and she loved having us there and all the rest..amm....but its just that first kind of initially getting over that hump that you’re not doing anything, you’re actually getting something from it, so hopefully it’s a two way system and she got something out of it as well”.
4.12	<p>Focus Group 1:</p> <ul style="list-style-type: none"> PERSON 5 (J): “it was a really good thing to do and to kinda get you more comfortable I suppose with dealing with people who have had a stroke”. PERSON 6 (L): “A slow introduction into what we might be doing. eh in the future and just to help us build up our communication skills and to to show us how difficult it can be” / “and emm what’s required of us. emm in the future”.

- PERSON 5 (J): “Yeah I suppose it’s like emm for people who hadn’t.. you know worked either in a hospital setting or have had no exposure to you know. emm dealing with people with communication difficulties. It’s you know a good opportunity to be able to.. emm I suppose to realise how difficult it can be” / “and you know I suppose get more comfortable as well”.
- PERSON 7 (A): “An opportunity to kind of ease you in ‘cause the first semester is difficult enough”.
- PERSON 8 (K): “She just didn’t want any more speech therapy at that time” / “So it probably would be a good programme for her to be in maybe to ease her into getting her conversation back a bit / Or just to..being a bit more social”.

Focus Group 2:

- PERSON 3 (M): “It was kind of just like a natural chat”.
- **INTERVIEWER: What would you say the VAS is if you were to sum it up?**
 - PERSON 1 (H.P): “ I think that it’s mutually beneficial” / “It was actually building a relationship with somebody despite the fact that they’ve communication difficulties..knowing that that’s possible and at the end of it actually being sad to go”.
 - PERSON 2 (H.S): “I’m not sure like with our lady it would have massively benefited her communication or anything like that, but I think she really enjoyed us going”.
 - PERSON 4 (C): “It gives them the chance to get things off their chest as well, cause when there with their carer or family all day they can’t say certain things like...like kind of frustrations that they have, but I found that when we went to them they were kind of like..you know been like...I” can’t even go to the pub anymore” / “‘cause one day he’s like “if I don't want to talk to anyone, I just take out my hearing aid and pretend not to hear them” [laugh]”.
 - PERSON 1 (H.P): “Because they can confide , cause you’re not connected” / “you’ve no aim” /, “They were trying to get her to go one week to bingo or something and ...and she was like ‘no no no’ and they left and she just went ‘bingo’s cr@p’” / “But, she wasn't going to say that to her careworker or to her husband”.
 - PERSON 4 (C): “Its kind of therapeutic for them in a way”.

REFERENCES

- Bauby, J. (2008). *The Diving-Bell and the Butterfly*. London: Harper Collins Publishers.
- Boyatzis, R.E. (1998). *Transforming qualitative information: thematic analysis and code development*. Sage.
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3: 77-/101.
- Bryman, A. (2012). *Social Research Methods*. 4th ed. Oxford: Oxford University Press.
- Carvalho, I.P., Pais, V.G., Almeida, S.S., Silva, R.R., Figueiredo-Braga, M., Teles, A., Castro-Vale, I., and Mota-Cardoso, R. (2011). Learning Clinical Communication Skills: Outcomes of a Program for Professional Practitioners. *Patient Education and Counseling* 84, 84–89.
- DiBlasi, Z., Harkness, E., Ernst, E., Georgiou, A., and Kleijnen, J. (2001). Influence of context effects on health outcomes: a systematic review. *Lancet*, 357:757-62.
- Finch, E., Fleming, J., Brown, K., Lethlean, J., Cameron, A., and McPhail, S.M. (2013). The confidence of Speech-Language pathology Students regarding Communicating with People with Aphasia. *BMC Medical Education*, 13:92.
- Freudenthal, J.J, Boyd, L.D., and Tivis, R. (2010). Assessing change in health care professions volunteers' perceptions after participating in Special Olympics Heath Athlete Events. *Journal Dental Education*, 74, 970-979.
- Gething, L. (1991). *Interaction with Disabled Persons scale: Manual and kit*. Sydney: University of Sydney.
- Gething, L., and Wheeler, B. (1992). The Interaction with Disabled Persons Scale: A new Australian instrument to measure attitudes towards people with disabilities. *Australian Journal of Psychology*. vol. 44 (2), pp. 75-82.
- Ghasemi, A., and Zahediasl, S. (2012) *Normality Tests for Statistical Analysis: A Guide for Non-Statisticians*. *Int J Endocrinol Metab*. **10**(2), 486-489.
- Gillham, B. (2000). *The Research Interview*. London: Continuum.
- Gray, R., and McAnespie, L. (2004). Consulted or excluded? *Learning Disability Practice: Vol 7, no 6*. RCN Publishing Ltd.

Hausberg, M.C., Hergert, A., Kröger, C., Bullinger, M., Rose, M., and Andreas, S. (2012). Enhancing medical students' communication skills: development and evaluation of an undergraduate training program. *BMC Medical Education* 12:16. BioMed Central Ltd.

Jack, R., and Mosley, S. (1997). The client Group Preferences of Diploma in Social Work Students: What are they, do they change during programs and what variables affect them? *British Journal of Social Work*, 27, 893-911.

Kagan, A., Black, S.E., Duchan, J, Simmons Mackie, N., and Square, P. (2001) Training Volunteers as Conversation Partners Using "Supported Conversation for Adults with Aphasia" (SCA): A Controlled Trial. *Journal of Speech, Language, and Hearing Research*. Vol 44, pp. 624-638. American Speech-Language-Hearing Association.

Krueger, R.A. (1998). *Developing Questions for Focus Groups*. London: Sage Publications.

Kvale, S. and Brinkmann, S. (2009). *Interviews. Learning the Craft of Qualitative Research Interviewing*. 2nd ed. London: Sage Publications.

Li, C., and Wang, C.K.J. (2013). Effects of exposure to Special Olympic Games on Attitudes of Volunteers towards inclusion of People with Intellectual Disabilities. *Journal of Applied Research in Intellectual Disabilities*, 26, 515-521.

Legg C, Young L, Bryer A. (2005) Training sixth-year medical students in obtaining case-history information from adults with aphasia. *Aphasiology*, 19:559-75.

Makoul, G. (2001): Essential elements of communication in medical encounters: the Kalam azoo consensus statement. *Academic Medicine*, 390-393.

Makoul, G. (2001). The SEGUE Framework for teaching and assessing communication skills. *Patient Education and Counseling* 45 23-34.

Morgan, D.L. (1997). *Focus Groups as Qualitative Research*. 2nd ed. London: Sage Publications.

O'Halloran, R., Grohn, B., and Worrall, L. (2012) Environmental Factors That Influence Communication for Patients with a Communication Disability in Acute Hospital Stroke Units: A Qualitative Metasynthesis. *Archive of Physical Medicine Rehabilitation* Vol 93, 77-85. American Congress Rehabilitation Medicine.

Oppenheim, A.N. (1992). *Questionnaire Design, interviewing and Attitude Measurement*. New Ed. London: Continuum.

RTÉ Commercial Enterprises Ltd (2014). RTE News, *Attitudes towards Disabled 'More Negative'*. Available: <http://www.rte.ie/news/2012/0119/311180-disability/> [accessed 15th November 2014]. Dublin: Association of Online Publishers.

Ruddle, N. (2014) *Speech and Language Therapy*. <http://www.stroke.ie/media/pub/strokeie/niamhruddle.pdf> [accessed 26th November 2014].

Seewooruttun, L., and Scior, K. (2014). Intervention aimed at increasing knowledge and improving attitudes towards people with intellectual Disabilities among Lay People. *Research in Developmental Disabilities*. 35: 3482-3495. London: Elsevier.

Seccombe, J.A. (2007). Attitudes towards Disability in an Undergraduate Nursing Curriculum: The effects of a curriculum change. *Nurse Education Today*. 27, 445-451. Elsevier.

Simmons-Mackie, N., Raymer, A., Armstrong, E., Holland, A., and Cherney, L.R. (2010). Communication Partner Training in Aphasia: A Systematic Review. *Archive of Physical Medicine Rehabilitation* 1814-1837.

Shapiro, S.S., and Friancia, R.S. (1972) An Approximate Analysis of Variance Test for Normality. *Journal of the American Statistical Association*.

Sofaer, S. (1999). *Qualitative Methods: What Are They and Why Use Them?* Health Services Research 34:5.2 1101-1118.

Stachura, K., and Garven, F. (2003). Comparison of Occupational Therapy and Physiotherapy Students' Attitudes towards People with Disability. *Physiotherapy*, Vol 89. No 11.

Street R., Makoul G., Arora N., Epstein R. (2009). How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Education Council*, 74:295- 301.

Symons, A.B., Morley, C.P., McGuigan, D., AND Akl, E. (2014). A curriculum on care of People with Disability: Effects of Medical Student self-reported attitudes and comfort levels. *Disability and Health Journal*. 7 88-95.

Welsh, J.D., and Szabo, G.B. (2011) "Teaching Nursing Assistant Students about Aphasia and Communication" *Seminars in Speech and Language*, 32(3), 243-255.

Werner, S., and Grayzman, A. (2011). Factors Influencing the Intention of Students to Work with Individuals with Intellectual Disabilities. *Research in Developmental Disabilities*: Elsevier.

World Health Organization. (2014) Disability and Health. Available: <http://www.who.int/mediacentre/factsheets/fs352/en/> [accessed 26th November 2014].

The National Institute of Neurological Disorders and Stroke (NINDS) (2015). *NINDS Aphasia Information Page* Available: <http://www.ninds.nih.gov/disorders/aphasia/aphasia.htm> [Accessed April 24th 2015] MD: National Institutes of Health.