

CHAPTER IV : DATA ANALYSIS

4.1 Introduction

This chapter discusses the findings of the research to answer all the research questions and thus achieved the three research objectives of the learning style in memorising Braille Quran codes among typical students in the Faculty of Quranic and Sunnah Studies, USIM. The data were obtained through semi-structured interviews, document analysis and direct observation of students who studied the QNR3013 subject during the learning session.

The discussion of this section begins with the background information of the research participants to provide an overview of the background of the research participants involved, followed by the findings of the research through group interviews of students focusing on excellent students in the subject QNR3013 to achieve research objectives. The findings of the research consisted of the challenges, learning styles of research participants and memorisation techniques practised by research participants in memorising Braille Quran codes.

Main data were obtained through an in-depth interview method on five outstanding students who took the QNR3013 subject. Data were triangulated through the observation directly on students during the teaching and learning (T&L) process and student interviews to strengthen and enrich the findings of the research. In addition, the data were also triangulated through the document analysis process of the VAK learning style from the previous research. The process of data analysis was performed after the data were collected.

The data analysis process was carried out after the data collection process was conducted to achieve saturation level. Data is streamlined and grouped under several categories and labelled according to nodes that have been encoded and classified in the order of research objectives. Data that has been collected through the interview

and observation process is analysed using NVivo12. This helped the researcher manage the data easily and answer the research questions. By using this program, it helps the researcher explore and understand the research holistically about students' learning styles in the process of memorising Braille Quran codes.

The data were analysed based on the sequence of research questions and research objectives:

No.	Research Questions	Research Objectives
1	What are the challenges in learning Braille Quran codes?	To examine the challenges in learning Braille Quran codes among typical students.
2	How do students memorise the Braille Quran codes?	To explore the learning style of memorising Braille Quran codes among typical students.
3	How effective students' memorisation techniques are?	To analyse the learning style of memorising Braille Quran codes.

Table 2: Research Questions and Research Objectives.

The research findings were analysed and described based on the research objective sequence displayed in Table 4.1. The themes of the research findings were obtained and refined from the analysis of interview data. The research findings were supported by data from direct observation and analysis of documents. At the end of the discussion, the researcher summarised the research findings of the research that could be proposed to the relevant parties for the purpose of improving the learning style of typical students to memorise Braille Quran codes well.

The research data started with the background of the research participants which helps to give an overview of the research participants involved in this research.

4.2 Background of Research Participants

This section focuses on the information submitted regarding the background of the research participants consisting of five typical students selected. The findings were related to the profile of the research participants, the experience of research

participants studying Braille Quran codes, score grades obtained and even graduation years. The research participants' information was supplemented by the memorisation style practised during the memorisation session and the duration taken to memorise all Braille Quran codes.

The research participants were selected based on the scores obtained in the subject QNR3013. This research involved five students of TQC1 class, Sunnah and Information Management Studies, FPQS, USIM to obtain data on learning styles practised during the process of memorising Braille Quran codes. These typical students were chosen based on purposive sampling which is the selection of research participants based on the participants who scored the highest in the QNR3013 subject. Research participants' profile information is briefly included in Table 3:

Profile	Information				
Research participants	Nurul	Naielah	Ahmad	Aqilah	Rahimah
Gender	Female	Female	Male	Female	Female
Experience learning Braille Quran	8 months	4 months	4 months	4 months	4 month
Grade marks obtained	A 85%	A 83%	A 87%	A 85%	A 88%
Year of graduation	2018	2018	2018	2018	2018
Memorisation technique	Visual (Reflection technique)	Visual + Audio (Reflection technique)	Visual (Equate technique)	Visual (Equate and Digit technique)	Visual (Digit technique)
Memorisation time period	A month and a half	3 days	A week	Two weeks	A week

Table 3: Profile and information of research participants.

This personal details information is collected from five research participants through the medium of interview and analysis of the documents obtained. Referring to the above table, the research consists of four typical female students and one typical male student who obtained excellent results in the subject QNR3013.

	Number
Female	4
Male	1

Table 4: Number of research participants by gender.

All research participants got an A grade in this subject. Referring to Table 3, a research participant conducted an internship in the field of Braille Quran at Yayasan Faqeh, Nilai, Negeri Sembilan. Therefore, the experience of each research participant in learning Braille Quran codes is different depending on the duration of their involvement in the field of Braille Quran. Most of them only learned Braille Quran for a period of 4 months in the 5th semester of the 3rd year of study at USIM. However, they managed to memorise the Braille Quran codes very well. The graduation year of all research participants is 2018.

In this research, research participants were given pseudonyms. This is intended to facilitate the process of identifying the original name (Zanaton Ikhsan, 2014), in addition to keeping the real identity of the research participants secret from public knowledge. Apart from the above reasons, the researcher used pseudonyms for the five TQC1 students involved in this research consisting of Nurul, Naielah, Ahmad, Aqilah and Rahimah to facilitate the process of data analysis and research report writing.

The results of the interview found that all research participants have the same memorisation technique which is the visual memorisation style in which there are research participants who develop reflection techniques, digits and equate Braille alphabet code with *hijaiyyah*. It can be concluded that almost all typical students use visual style throughout the period of memorising the Braille Quran codes. This is because the visual senses of typical students are stronger than the sense of touch used by the visually impaired. The length of time required to memorise all Braille Quran codes is different.

The following research data describe the background of the research participants:

4.2.1 Background of research participant 1

Nurul was a female 23 years old student from Kedah, Darul Aman. She was a 5th-semester student of the 3rd year of Sunnah and Information Management Studies, FPQS, USIM. During her study at USIM, she had the experience of learning the Braille Quran for 8 months, which was 4 months from lectures in theory, practice during tutorials and final tests. Meanwhile, for another 4 months, she chose to practice in the field of Braille Quran at the Ibnu Umri Maktum Research Center (UMMI). The marks obtained in the course QNR3013 is 85%, which is grade A. This student graduated in 2018.

During Nurul's internship at UMMI, she was given the task to transcribe audiobooks into Braille. For Malay Braille writing, she only uses Duxbury Braille Translator (DBT) software. However, for Arabic words, she needed the diligence to write and check persistently. This is due to the Braille writing system for Arabic/Jawi writing that is almost lacking.

Nurul was assigned to place lines on the Quran verses and Arabic sentences and then print the task for the purpose of reviewing the Braille writing. With this, she built her strength in memorisation and understanding of Arabic/Jawi Braille writing correctly while at the same time memorisation can be strengthened according to the techniques developed.

4.2.2 Background of research participant 2

Naielah was a 23 years old female student. She was from Kedah, Darul Aman, a 3rd-year student of Sunnah and Information Management Studies, FPQS, USIM. This research participant had the experience of learning Braille Quran for 4 months during lecture sessions in theory, practical tutorials and quizzes to test the level of memorisation and comprehension of writing and reading Braille Quran codes while studying at USIM the blessed earth.

This student had no experience in learning Braille Quran or Braille Alphabet before continuing her studies at the Bachelor of Sunnah and Information Management Studies, USIM. Within 4 months of study in the 5th semester, she managed to master

the Braille Quran well by obtaining a grade A in the Application of Braille in Quranic and Sunnah Studies (QNR3013) course with a score of 83%. This student graduated from USIM in 2018.

With a high level of curiosity, she felt that this application course was something new that today's teenagers like to explore. The closest example given by this student is the Braille writing found in elevators where most of us use elevators in study buildings or workplaces or shopping malls. Continuing studies at USIM, especially at FPQS, is an added value and the gap that can be covered by USIM students because they can learn "dot writing".

4.2.3 Background of research participant 3

The third research participant (Ahmad) was a male student from Tanjung Karang, Selangor who was 23 years old. Participant of this research has furthered his study at FPQS, USIM. He took the Sunnah Information Management course and was in his 3rd year of study during the research. Prior to furthering his study at USIM, the participant did not have the basics or experience of learning the Braille Quran.

During the 4 months of his study in the 5th semester, this student was able to memorise the Braille Quran codes and write and read the Braille Quran well. During that period, the research participant learned Braille Quran during lecture and tutorial sessions. The quiz at the end of the semester tested the level of memorisation and understanding of students in learning Braille Quran. According to this participant, the course offered is also a new thing in life. Students will learn more about Braille and understand Braille writing well as well as help the visually impaired to read.

This research participant obtained grade A in course QNR3013 with a score of 87%. This student is a USIM alumnus after graduating in 2018.

4.2.4 Background of research participant 4

Aqilah was the fourth research participant involved in this research. The participant of this research was 23 years old female student from Gua Musang, Kelantan. She was a student of Sunnah and Information Management Studies, FPQS, USIM in the 5th semester of the 3rd year of her study.

This research participant did not have any basics about Braille before continuing her study in USIM, especially Braille Quran. She only studied Braille

Quran for 4 months during theoretical learning sessions in the lecture room, practical in tutorial classes and quizzes at the end of the semester. However, this research participant managed to obtain grade A in the Application of Braille in Quranic and Sunnah Studies with a score of 85% and graduated in 2018.

This student thinks that the offering of QNR3013 is a good thing and is highly recommended because this subject can add more knowledge from to the students in addition to training the students to immerse themselves in Braille learning methods as learned by the visually impaired.

4.2.5 Background of research participant 5

Rahimah who was selected as a research participant in this research was a 23 years old female student from Temerloh, Pahang. At the time of this research, this student was in the 5th semester of the 3rd year of study in Sunnah and Information Management Studies, FPQS, USIM. As a USIM student, this student had the experience of learning the Braille Quran for 4 months only. Braille Quran learning was utilised as much as possible during lecture sessions, tutorials and quizzes.

This student also had the opportunity to complete her final year project with classmates in the last year of their study, which was the 4th year of her studies at USIM. They have built the eBraille *Hijaiyyah* website which is a tutorial site for learning Braille Quran codes that can be accessed online by the visually literate, especially students of the FPQS, USIM who study Braille Quran codes (Nurul Hikmah Sharin et al., 2019). eBraille *Hijaiyyah* is the first multimedia-based website at USIM built to support the teaching and learning process of Braille Quran to parents, teachers, volunteers and students, especially students of FPQS, USIM. However, due to some unavoidable factors, this learning Braille Quran code website could not be continued.



Figure IV-I: Front page of eBraille Hijaiyyah website

This participant also obtained grade A in the Application of Braille in Quranic and Sunnah Studies with a score of 88%. This research participant successfully completed her study in 2018.

4.3 Research Findings

The results of the research from interviews with five research participants found the need for an alternative way to memorise Braille Quran codes among typical students which are the challenges during memorisation sessions and the time required if the absence of a specific memorisation technique to facilitate students to memorise the Braille Quran codes.

Next, the researcher explored the learning style of memorising Braille Quran codes among typical students. The researcher found the memorisation technique practised by the students who got the highest marks in the TQC1 class. They have a memorisation technique that is built according to the creativity of students to make it easier for them to memorise the Braille codes of the Quran and be able to answer tests with excellence and type nonvisually.

4.4 Examine the challenges in learning Braille Quran codes among typical students

The researcher obtained an overview of the research participants' understanding of the learning needs to understand the Braille codes of the Quran among typical students. The researcher used the interview method as a medium to initiate data collection. The interviews began with a few light questions before more

challenging questions were posed to the research participants. To achieve the first research objective, the researcher produced questions related to the Application Braille in Quranic and Sunnah Studies (QNR3013) course: “*Apakah pandangan anda terhadap penawaran kursus Aplikasi Braille dalam Pengajian Quran dan Sunnah?*” (see Appendix A).

Data from this question was collected from each research participant through the interview method as the main data to achieve the first research objective that touches on aspects of the needs in learning Braille Quran codes among typical students.

After the data was analysed, the themes and sub-themes for the category of needs in this learning were divided into 6 main themes namely; i) Opinions on offering QNR3013 subject, ii) Interest in the subject, iii) Challenges, iv) Introduction of special methods by the lecturer, v) Need a special technique to memorise the codes and vi) Improvement to increase student’s interest. In each of the main themes, there are sub-themes stated by the research participants related to the need for an alternative way to memorise Braille Quran codes.

Category	Themes	Sub-Themes
To examine the challenges learning Braille Quran codes.	Opinions on offering QNR3013 in subject.	Can read Braille Quran. The example of visually impaired friendly products. Deepen knowledge of Braille. Never learned Braille. Add knowledge. Exposed to something new.
	Interest in the subject.	Factors of interest.
	Challenges.	Facing the challenges.
	Introduction of special methods by the lecturer.	
	Need a special technique to memorise the codes.	Creating own memorising style. Existing method of

	memorising.
	Lesson from lecturer.
	Present the method.
	eBraille <i>Hijaiyyah</i> website.
Improvement to increase student's interest.	Activity outside the class.
	Quizzes.
	Typing exercise.

Table 5: The summary of themes and sub-themes for the category of the challenges in learning Braille Quran codes.

There are sub-themes under the theme Opinion on offering the QNR3013 subject, which are Can read Braille Quran, The example of visually impaired friendly products, Deepen knowledge of Braille, Never learned Braille, Add knowledge and Exposed to something new.

Secondly is the theme Interest in the subject and the sub-themes are Factor of interest. Thirdly is the theme Challenges with its sub-theme is Facing the challenges. Fourthly is special technique from the lecturer who are teach QNR3013 course. Which is, existing memorisation method can be used by students without students developing on their memorisation technique. Lastly, improvement to increase student's interest on this course. Among these are the activities outside the class, quizzes and typing excercises using the Perkins Brailer.

All research participants clearly understood the questions posed by the researcher regarding the challenges in learning Braille Quran codes. They provided different opinions according to their perspectives on the learning Braille Quran codes.

4.4.1 Opinions on offering QNR3013 subject

The first theme for the first research objective is about the opinions from research participants on the offering of the subject Application of Braille in Quran and Sunnah Studies (QNR3013). Student who had never been involved with Braille learning all this time thought that learning Braille Quran is a newly learned knowledge at the same time students can deepen their knowledge of Braille with the hope of helping the visually impaired to read.

1. Can read Braille Quran

Can read Braille Quran by research participants in learning the Application of Braille in Quran and Sunnah Studies (QNR3013) is the first theme categorized in the first research objective.

This subject is an exposure to something new where Braille writing can not only be read by the visually impaired but also typical persons. Ahmad thought the same as Nurul that the offering of this course is something new for them as a typical person apart from being able to deepen their knowledge of Braille and know the meaning of Braille writing in public areas. Apart from that, this course offering exposes students to learning related to OKU visually impaired and at the end of this course learning students are able to read the Braille Quran codes.

Nurul	<p><i>“Kalau ikut pandangan saya, macam sebelum ni kan tak pernah ada terlibat dengan belajar Braille ni kan. Bila belajar ni kita terdedah dengan benda-benda ni. Dan yalah tambah ilmu baru bila kita tengok bila ada orang tunjuk buku pun macam Quran ke kita jadi boleh baca sikit-sikit. Haa macam tu lah.”</i></p>
Translated	<p>In my view, I had never been involved with learning Braille before. When learning this course we were given exposure to Braille as a whole. And can add new knowledge as well. When people pointing a books or the Quran at least we can read even a little.</p>
Ahmad	<p><i>“Pandangan... bagi sayalah macam benda baru. Tak semua orang yang normal ni kita boleh belajar. Kadang kita tak tahu pun, mungkin nampak tu pernah cuma tak mendalami tentang ilmu Braille tu sendiri. Bila ada kursus Braille, mungkin pelajar lebih mendalami dan bukan sahaja mendalami dia tahu contoh apa maksud susunan tulisan tu sendiri.”</i></p>
Translated	<p>This was a new thing for me. Not all typical people can learn. Sometimes we don't even know, maybe we've seen, but we just don't learn about Braille. Student will more in-depth knows what the means</p>

	of writing composition.
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Naielah shared her opinion on the offering of this course as a privilege not available in other public universities. Learning this course also enables to produce students who are able to read Braille Quran or Braille Alphabet on products in the market. For example, Shokubutsu bath products that have Braille writing on the product bottle. In addition, students can identify the Braille writing found in any elevator shopping mall, hotel, academic building and others.

Naielah	<i>“Sebenarnya kursus ni bagus sebab sebelum ni contoh kalau kita tak belajar lagi, kita tak tahu biji-biji tu apa function dia. Bila kita dah tahu, macam setiap kali kita tengok. Macam contoh kan, dulu masa... tapi bila dah belajar kita tahu okey ooo sebenarnya ni ada maksud-maksud dia. Kalau perasan di pasaraya botol sabun mandi Shokubutsu kut nama dia. Kalau perasan ada tulisan Braille. S H O W E R F O A M (in Braille). Ada pegang-pegang ada belek-belek. Maksudnya dia mesra dengan orang buta. Kalau tak belajar tak tahu apa maksud dia ni apa semua. At least macam kita tahu.”</i>
Translated	Actually, this course is good because before this we didn't know what dot's functioned. When we know, we know there's a purpose. If you notice a bottle of Shokubutsu body wash at the supermarket. There has Braille writing. S H O W E R F O A M (in Braille). I held and flip through. It means that the soap is friendly to blind people. If you don't learn, you don't know what means is it. At least we know.

4.4.2 Interest in the subject

Meanwhile, interest in the subject is the second theme constructed and coded for the need for an alternative way to memorise Braille Quran codes among typical students in this research. The first research objective is about the opinions from research participants on offering the Application of Braille in Quran and Sunnah Studies (QNR3013) subject.

Nurul told the researcher that she was interested in this compulsory course offered by FPQS even though at the same time she had difficulty memorising the Braille Quran codes. The Braille Quran codes not only code the *hijaiyyah* letters, but they also include special signs for *wāqf*, *harakat*, *sabd*, *mad* and others. In addition, Nurul built an easy way to memorise by using reflection techniques. This reflection technique was built based on an arrangement of code points that have reflections. For example:

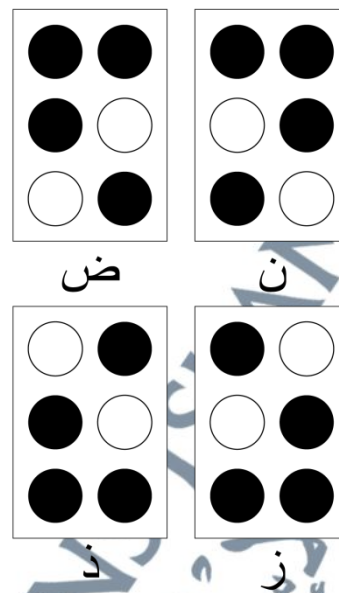


Figure IV-II: An example of the arrangement of reflection techniques found in the Braille Quran codes.

The lecturer's approach is a major factor in her interest in this subject apart from being exposed to something new. She was comfortable with the way and approach of the lecturer who teach this course because the lecturer gave the students the opportunity to develop their style of memorisation. Apart from that, Nurul had the opportunity to be an intern with UMMI in carrying out the task of transcribing the *Panduan Solat* book into Braille writing. She had the opportunity to share her experience in the process of transcribing the book.

Nurul	<p><i>“Sukalah. Haa mula-mula tu waktu belajar rasa macam susahlah sebab nak ingat dia punya kod tu kan. Cuba macam-macam cara lepas tu bila dah lama tu tukar-tukar yang last sekali saya guna kaedah pantulan. Lagi senanglah sebab yang pantulan pun dia pantul</i></p>
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	<p><i>huruf yang seakan-akan. Macam tu lah haa.”</i></p>
Translated	<p>I loved it. For the first time learn Braille I felt difficult because I couldn't remember the code. Try various ways lastly I use the reflection technique. It's easier because the reflection also reflects the letters that seem to be.</p>
Nurul	<p><i>“Pertama mestilah urmmm orang panggil apa ye? Pendekatan guru tu sendiri lah kan. haa macam tu. Yang kedua kita terdedah dengan benda-benda ni. Haaa saya suka je benda yang boleh tambahkan sesuatu yang baru dekat diri kita. Okay. Tambah, bila dah intern kan duduk dalam UMMI lagi mudah.”</i></p>
Translated	<p>The first must be the teacher's approach. Secondly we are exposed to Braille. I like things that can add something new to me. Add, intern with UMMI. easier</p>
Nurul	<p><i>“Kalau ikut saya pertama kita orang selesa. Ustaz tak terlampau memaksa kita untuk buat satu benda tu lah. Kiranya student pun boleh terima benda tu. Perlahan-perlahan kan. Cara Ustaz lagi dia suka bagi. Dia suka suruh kita buat. Bila kita dah buat baru dia akan tunjuk jadi kita nampak kesalahan kita tu. Dia suruh tu pun dalam keadaan tidak memaksa. Ada sesetengah dia paksa push kita kan haa yang ni tak lah. Tak tahu boleh saja kita tanya. Cuma dia nak kita cuba dulu benda tu haa.”</i></p>
Translated	<p>At first we were comfortable. Ustaz doesn't really force us to make one thing. Perhaps the student can accept the way Ustaz's approach. Slowly. Ustaz's way he likes to share. He likes to tell us to do things. When we have made it, he will point it out so we can see our mistake. He tells us to do it even if he doesn't force us to do it. There are some he forced to push us. If student don't know if we can ask. It's just that he wants us to try the thing first.</p>

Nurul	<i>“Masa intern tugas kami bagi yang perempuan buat buku audiobook untuk Buku Panduan Solat tu kan.”</i>
Translated	During the internship, the task for the female students was to create an audiobook of <i>Buku Panduan Solat</i> .

While Naielah’s view on the interest in this course is more on the gaps that can be accommodated by students if students take this course. The researcher can conclude that typical people can accommodate the gap in terms of reading printed materials, learning Braille for the visually impaired or literacy as an awareness of this isolated group.

Naielah	<i>“Satu benda yang baru. Dan saya rasa normal kalau macam zaman kami ni suka dengan benda baru. Dia orang akan explore ehh apa benda ea? Mesti akan nak tahu. Dia ada satu perasaan ingin tahu yang tinggilah. Macam contoh. Selalunya yang ada dekat dengan kita tu button dekat lift. Kalau saya, mesti saya nak tahu biji apa ni. Mesti nak belajar at least basic. Dah lama tahu saya nak tahu biji apa tu. Tiap kali masuk lift saya akan perhati, rasa. Bila masuk USIM. Belajar kat FPQS, dan dapat tahu yang akan belajar. Saya excited. Alhamdulillah, dapat juga. At least kita yang celik ni nampak bolehlah tolong. Apa kekurangan yang kita boleh tampong.”</i>
Translated	A new thing. And I think it's normal for our kind of age to like new things. We will explore. Must have to be curious and has a high curiosity. For example most of the time what's close to us is the button near the lift. For me, I want to know what this dots is. I want to learn at least the basics. I haven't known what the dots are for a long time. Every time I enter the lift I will observe and feel. When I went to USIM. Study at FPQS, and being able to know what to learn. I was excited. Alhamdulillah, I got it too. What shortcomings can we accommodate.

According to Ahmad, he was interested in this subject because he felt that the course offered by USIM is a new thing. He was also excited to learn this course in more depth. This is because there were no such courses or subjects offered either in primary schools, secondary schools or institutions of higher learning (IPT). USIM students, especially FPQS students, have added value because they can learn courses related to the learning of the visually impaired and this is a reward for students.

Ahmad	<p><i>“Minat. Sesuatu benda yang baru. Sebab kita kan sekolah menengah, sekolah rendah tak pernah pun tahu. Tahu Braille tu tapi tak pernah tahu pun apa maksud dia kan. Bila tahu tu kita macam teruja jugalah bila kita dapat belajar tu. Kira baguslah kalau ada ilmu ni. Tak semua tempat ada. Kalau kita tengok dekat universiti lain pun tak ada pun yang tawarkan kursus Braille ni. Kira kat USIM ni kira satu imbuhanlah.”</i></p>
Translated	<p>I'm interested. Something new. Because we in secondary school or primary school never knew about it. You know Braille but you never know what it means. When we know about it, we're kind of excited if we can learn about it. I guess it's good to have this knowledge. It's not available everywhere. If we look at other universities, there are none that offer Braille courses. At USIM, it's a value-added for students.</p>

Aqilah also shared that the interest factor in offering this course is one of the ways to find out how the visually impaired read.

Aqilah	<p><i>“Alhamdulillah minat sangat kursus ini. Kerana dapat mencari tahu bagaimana OKU penglihatan ni boleh belajar membaca.”</i></p>
Translated	<p>Alhamdulillah, I am very interested in this course. Because it can find out how OKU visually impaired learns to read.</p>

Meanwhile, Rahimah said she was very interested in this course. She added that the factor that made her interested in this course was that it was a new thing that had never been known before. Practically, this course is more effective than other

courses offered. This is because students learn this course practically during the tutorial session with the lecturer while being exposed to the visually impaired. They have programs with the visually impaired such as the *Khidmat Ummah* Program, *OKU Berdoa* and others.

Rahimah	<i>“Minat sangat-sangat. Waktu kelas Braille tak pernah rasa mengantuk ataupun malas pergi kelas.”</i>
Transalted	I am very interested. During Braille class, I never feel sleepy or lazy to go to class.
Rahimah	<i>“Pertama, belajar benda baru yang mana tak pernah tahu pun sebelum ni. Kedua, saya rasa tak semua dapat peluang belajar Braille ni dalam pengajian dan peluang yang ada tu guna sebaiknya untuk dapat ilmu tu. Ketiga, Braille antara subjek yang belajar secara praktikalnya amat berkesan berbanding subjek lain yang kurang praktikalnya. Akhir sekali, pensyarah yang mengajar sangat terbaik.”</i>
Translated	Firstly, I learnt new things that I never knew before. Secondly, I think not everyone gets the opportunity to learn Braille in studes program and we should use the opportunities we have to gain knowledge. Third, Braille among subjects who learn practically is very effective compared to other subjects who are less practical. Finally, the lecturer who taught me was the best.

These students share a similar interest in the offering of Braille Applications in Quran and Sunnah Studies course. Ahmad and Rahimah shared almost the same opinion, which is learning a new thing, they have never studied before and not all students have the opportunity to learn Braille, especially Braille Quran. Meanwhile, Nurul and Rahimah also have the same opinion about the approach of teachers who teach Braille subjects during tutorial sessions to attract students to delve into this course.

4.4.3 Challenges in learning Braille Quran

The third theme is related to the challenges faced by students during the process of memorising Braille Quran codes both during the learning session and outside the T&L session. Most of the research participants discussed the challenges they faced were related to confusion over similar Braille codes. Another challenge that students faced was memorising the Braille Quran codes which contain many punctuation marks and special signs such as *mād* signs and the like.

According to Nurul about the challenges she faced during the process of memorising the Braille Quran codes was that confusion over the code and errors often occurred during the memorisation process. This is due to the position of the Braille Quran codes. Failure to memorise the Braille codes of the Braille Quran made students confused about each of the codes which made the reading, typing and writing certainly difficult. In addition, students took a long time to type Braille Quran codes using Perkins Braille because during the typing session, students were usually given a blindfold so that they can feel the visually impaired reading Braille. They were asked to type without looking. A high focus was required during the session of typing Braille codes.

Nurul	<p><i>“(ketawa kecil) Cabaran ea? Waktu nak hafal cabaran dia sebabkan kod tu dia macam tambah-tambah bila kita terbalikkan kan, dia macam dekat-dekat kan. Berlaku kesilapan. Cabaran nak hafal tu lah kita tertukar kod-kod tu. Bila kita nak tulis kita boleh nampak kadang-kadang. Macam kita lorekkan dalam ada macam form tu kan haa. Kalau kita nak taip tu memang lambat. Tu antara cabaran juga. Bila kita nak taip. Antara taip dengan tulis sebab kalau kita tulis kita nampak. Kadang kita kena tutup matanya tu kan.”</i></p>
Translated	<p>(chuckles) The challenge is the code seems to be the same. There was a mistake. The challenge of memorising for me is that I confuse the code. When I write it can appear sometimes. Like we write in the form. For me, typing is slow. That's one of the challenges too when I want to type. Between typing and writing, if we write we are visible.</p>

	If we type, we get blindfolded.
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Apart from students need to know the *hijaiyyah* codes, students need to be smart to recognise the special sign as a signal at the end of the sentence. Each letter will be preceded by a line followed by a *šyāddāī* sign. The students had the same opinion, which was, the main challenge was to remember all the Braille Quran codes.

Naielah	<i>“Memang ada lah cabaran. Bahagian huruf hijaiyyah ni cabaran sikit. Kalau nombor ada special sign. 4 5 6. Nak bezakan Rumi dengan hijaiyyah ni masa zaman belajar dulu Ustaz kata kalau dia boleh baca Rumi lah. Kalau tak boleh baca hijaiyyah lah. Terutama yang ada baris tu. Banyak nak kena ingat.”</i>
Translated	There are indeed challenges. Part of the hijaiyyah letter is a challenge. I want to distinguish Rumi's code with hijaiyyah when studying, Ustaz said if we can read it is Rumi. If you can't read it is hijaiyyah. Especially the lines. I have to remember a lot.
Ahmad	<i>“Nak hafal kod tu lah. Kaedah-kaedah macam mana nak tahu bentuk ni apa, huruf apa. Haa tu antara cabaran juga.”</i>
Translated	The challenge of memorising the code. The method of how to know what shape this letter is. That's among the challenges too.
Aqilah	<i>“Cabaran utama adalah bila nak menghafal kod yang bahasa Jawi yang utama tanda-tanda mad dan seumpamanya.”</i>
Translated	The main challenge is if you want to memorise the Jawi's code. The main signs of mad and the rest.
Rahimah	<i>“Cabaran utama adalah untuk mengingati kesemua kod-kod huruf hijaiyyah.”</i>
Translated	The main challenge is to remember all the hijaiyyah letter codes.

Therefore, students adopted the Digit technique which is by arranging letters, *wāqf* signs or lines according to the number of dots in a cell. Starting with a letter, *wāqf* sign or line that has 1 dot followed by 2 dots to 6 dots. See Appendix F.

Meanwhile, students adopted the Reflection technique which is by arranging any letter or *wāqf* sign or line marks according to the shape that has a reflection shape in a cell. For example:

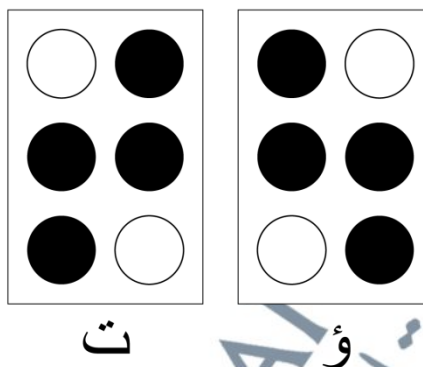


Figure IV-III: Reflection technique.

Most of the student took the initiative by creating their own style of memorising. The lecturer asked the students to present the memorising style in front of the class so that they could share it with other classmates to facilitate memorising the codes. Among the styles of memorising that they used were the Digit style and the Reflection technique. Some memorise using the Reflection technique. Refer to Appendix G.

As a result of observation and interviews with research participants, it can be concluded that there was almost no proper memorisation style that can be used as a guideline to students during the process of memorising the Braille Quran codes. Students need to find their own initiative in building their own memorisation techniques. They took a long time in forming those memorisation techniques. Thus, this research helps to introduce the technique of code memorisation to facilitate typical students in the next semester to memorise the Braille Quran codes.

4.4.4 Introduction of special technique by the lecturer

During the T&L process, students are not exposed to special techniques of memorising as an introduction that could have made it easier for students to memorise all the Braille Quran codes including special signs, line marks and others.

According to Nurul, the approach used by the lecturer at that time was to ask students to find out their memorisation style. At the end of the lesson, students only share their memorisation style with each other during the presentation session that was done in front of the class.

Nurul	<i>“Mula-mula Ustaz suruh kita cari dulu. Kenal pasti gaya nak hafal macam mana. Haa macam tu nanti Ustaz akan simpulkan Ustaz akan panggil ke depan. Macam mana kamu nak hafal benda ni.”</i>
Translated	At first, Ustaz told us to find the method of memorisation first. You know exactly what kind of memorisation style. Later Ustaz will conclude and will call to the front and present.
Nurul	<i>“Last rasa macam Ustaz ada bagi kut. Saya pun tak perasan sebab hat last pun saya guna cara saya lah. Sebab Ustaz kata ikut yang mana mudah dengan kamu kan. Teknik tu saya tak ingat.”</i>
Translated	I think Ustaz was shared the technique. I didn't notice it because I use my memorisation technique. Because Ustaz said follow which one is easy with you.

A lecturer only provides the existing style of memorising for Braille alphabet. Here, it can be concluded that students form their memorisation style by referring to the memorisation style of Braille alphabet codes shared by the lecturer.

The researcher found lecturers prefer that students develop their own style of memorising because students understand their respective memorisation styles better. Rahimah also stated the same thing that there was no style of memorising or specific memorisation technique given by the lecturer. But the lecturer only discussed the memorisation style presented by the students during T&L.

Rahimah	<i>“Tiada kaedah spesifik yang disediakan, tetapi pensyarah membincangkannya dalam kelas berpandukan pembentangan yang dilakukan oleh pelajar. Oleh kerana setiap pelajar kaedah hafalannya</i>
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	<i>lain-lain, jadi ianya terpulang kepada pelajar untuk memilih cara yang mana yang lebih mudah untuk mereka hafal.”</i>
Translated	No specific method is provided, but the lecturer discusses it in class based on the presentation done by the students. Since each student has a different method of memorisation, it is up to the student to choose which method is easier for them to memorise.

From the statements by Ahmad and Aqilah, the researcher can conclude that the lecturer shared the style of memorising with the students but it was not emphasised by the lecturer to be used by the students because the lecturer preferred students to develop their own style of memorising.

Ahmad	<i>“Masa belajar ada juga pensyarah bagi kaedah, tapi pensyarah lebih kepada suruh pelajar tu cari kaedah untuk mudah hafal. Masa tu kami develop kaedah sendiri kemudian kami bentangkan kaedah tu di depan kelas. Setiap pelajar ada kaedah masing-masing. Mungkin ada yang sama sikit-sikit.”</i>
Translated	During tutoring, there was also lecturer who shared memorisation methods with the students, but the lecturer were more interested in asking the students to find methods for easy memorisation. At that time, we developed our own method and then we presented the method in front of the class. Each student has their own method. Maybe some of them are slightly the same.
Aqilah	<i>“Pendapat saya perlu kot dan lecturer perlu bagi la sebagai garis panduan. Guna atau tak atas kemampuan pelajar masing-masing.”</i>
Translated	My opinion is that there should be a memorisation method given by the reciter as a guideline. Use it or not based on each student's ability.
Naielah	<i>“Ada. Olah balik. Huruf alphabet. A - J”. She added, “Kalau hijaiyyah, Ustaz minta pelajar bentang kaedah masing-masing. Sebab setiap orang tak sama.”</i>

Translated	Yes, there is. Recreate. Letters of the alphabet. A - J. If it's hijaiyyah, Ustaz asks students to spread their own methods. Because everyone has different memorisation methods.
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The existing style of memorising Braille alphabet codes was only used by the lecturer as a reference for students to build their own memorising style of Braille Quran codes. This can be shared via a print-screen from the video of style of memorising developed by final year project's student used by the lecturer during the T&L session. There are three techniques which are the Digit technique, Reflection technique and Equated technique. (Refer to Appendix G).

4.4.5 Improvement to increase student's interest

The last theme in the first research objective is improvement to increase student's interest in the QNR3013 course. In the T&L session, the lecturers or instructors must have their own teaching style so that students are more focused during the teaching and learning process to increase students' interest and the learning outcomes can be mastered by students well so that T&L objectives can be achieved after T&L session of the semester ended.

To increase students' interest in this course, Nurul suggested to increase the typing training of the Braille Quran codes in addition to organise quizzes. This can increase competitiveness among students. By increasing the typing practice, students can familiarise the position of their fingers against the full cell on the Perkins Braille. In addition, students can become familiar with other functions available on this typewriter.

Braille and the Perkins Braillewriter

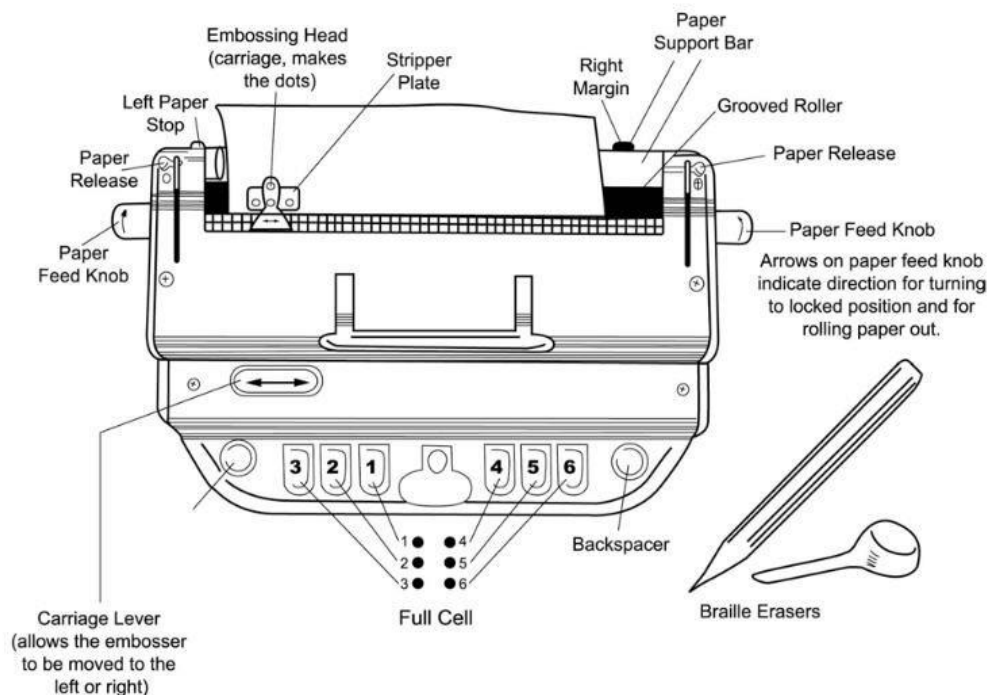


Figure IV-IV: Perkins Braillewriter (from Google).

Nurul	<p><i>“Ohh nak bagi tingkatan minat ea. Ummm mungkin boleh buat haa tulah kalau kuiz pun saya pun tak nampak bentuk kuiz tu macam mana tapi kalau macam kuiz selalunya orang macam nak bersaing kan dengan kawan-kawan dia kan. Satu lagi kalau Ustaz bagi menaip tu terlampau banyak, daripada kita menaip tu pun kita dah boleh ingat kod tu. Haa. Maksudnya mungkin latihan menaip lagi banyak ke, kuiz ke. Sebabnya selalu kuiz ni sebabnya orang selalu nak bersaing kan. Tambah dengan kawan-kawan dia jadi lagi triggerlah nak buat benda tu.”</i></p>
Translated	<p>To increase students' interest in this course, it may be possible to create a quiz to increase competition among students. Another thing is dah the Ustaz gives a lot of typing practice, it can make it easier for students to remember the Braille code. I mean maybe more typing</p>

	practice or quiz. The reason it's always a quiz is because people always want to compete each other. In addition, students become more encouraged to make something.
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Another opinion was voiced by Ahmad which is the activities outside the teaching and learning time can further increase the students' awareness on visually impaired people. In addition, a variety of knowledge can be learned when the knowledge corner and reading materials in Braille are multiplied, especially Braille Quran.

Ahmad	<i>“Cadangan saya agar mengadakan aktiviti di luar waktu pembelajaran. Sebagai contoh membuat pameran mengenai kod-kod Braille. Perkongsian ilmu seperti ceramah, public speaking, sharing dan membina sudut ilmu dan bahan bacaan serta informasi mengenai Braille.”</i>
Translated	My recommendation is to organise activities outside of class time. For example making an exhibition about Braille codes. Knowledge sharing such as lectures, public speaking, sharing and building knowledge corners and reading materials and information about Braille.

Suggestions for improvement to increase students' interest in the QNR3013 course were also suggested by Aqilah to always practice memorisation by writing or speaking with classmates or memorising while playing with gadgets.

Aqilah	<i>“Saranan saya untuk menambahbaikkkan minat pelajar untuk mudah hafal kod-kod Braille Quran adalah dengan selalu mempraktikkan hafalan sama ada dengan menulis atau lisan bersama kawan atau menghafal sambil bermain menggunakan aplikasi yang tersedia dalam gajet.”</i>
Translated	My opinion to increase students' interest in memorising Braille Quran codes is to always practice memorising either by writing or speaking

	with friends or memorising while playing using applications available on mobile devices.
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Rahimah viewed that learning can be done by inserting game elements by using teaching aids specifically for the visually impaired, namely Edu Braille known as Dominos. (See Appendix H). According to her, this game is more practical for beginners who want to know the Braille alphabet. Rahimah said, this toy only has 28 blocks, only a small amount of *hijaiyyah* Braille codes can be practiced by using this toy which has the same code as the Braille alphabet codes.

Rahimah	<i>“Cadangan saya pensyarah mungkin boleh menyelitkan sedikit game ketika pembelajaran dengan menggunakan bahan bantu mengajar yang telah direka untuk OKU penglihatan. Contohnya, blok-blok mainan (blok ni ada dalam Makmal Braille, tapi saya lupa nama dia), Edu Braille.”</i> Then Rahimah added, <i>“Nama game tu Dominos.”</i>
Translated	My suggestion is that the tutor may be able to incorporate a little gaming during the lesson by using teaching aids that have been designed for OKU visually impaired. For example, toy blocks (these blocks are in Makmal Braille), Edu Braille." Then Rahimah added, "The name of the toy block is Dominos.
Rahimah	<i>“Tapi, rasanya dia lebih praktikal untuk mula-mula kalau nak belajar alphabet kut. Sebab dia tak ada banyak blok-blok tile tu, ada untuk alphabet je. Untuk hijaiyyah tak cukup tu. Tapi, kalau nak mahirkan alphabet tu amat baguslah. Sebab dalam tu ade 28 blok saja.”</i>
Translated	But, I think it's more practical for beginners if you want to learn the alphabet. Because it doesn't have many blocks of tiles, it's for the alphabet. For hijaiyyah, it's not enough. But, if you want to master the alphabet, it's great. Because there are 28 blocks only.

Various suggestions and improvements can be taken to increase students' interest in this course. Among them are learning while playing, increasing reading

materials, information corners and quizzes. In this way, students' interest can be nurtured and encourage from the beginning of learning.

4.5 Exploring the learning style of memorising Braille Quran codes among typical student

Next, the objective of the second research focuses on the exploration of the learning style of memorising Braille Quran codes among research participants who are typical students. For the purpose of achieving the objectives of this research, the researcher pitched interview questions related to the memorisation style used by the research participants throughout the process of memorising the Braille Quran codes (See Appendix A).

This primary data was collected by using interviews because it is related to the memorisation style used by the research participants. Supporting data was collected by using document analysis from student learning style that has been documented. Each research participant has a different memorisation style therefore; in-depth interviews were conducted to achieve the objectives of this research. It touches on the aspect of learning style and how they memorise the codes whether visual style, auditory style or kinaesthetic style.

The themes and sub-themes of the second research objective is the exploration of the learning style of memorising Braille Quran codes among typical students is formulated in the following matrix table to facilitate the reader's understanding:

Category	Theme	Sub-theme
Learning style of memorising Braille Quran codes.	Learning style.	Visual style.
		Audio style.
		Kinaesthetic style.
	Positive impact.	

Table 6: The summary of themes and subthemes to explore the learning style of memorising Braille Quran codes among typical students.

Source: Interviews of research participants who are typical students who took the QNR3013 course as main data and document analysis as support.

Based on table 6, the research identifies there are two main themes related to the exploration of learning style of memorising Braille Quran codes. Next, three sub-

themes were built under the theme of learning style based on the perspectives of the five research participants.

The first theme is learning style with the sub-themes of visual style, auditory style and kinaesthetic style. The second theme is positive impact. In this research, the researcher found that all five research participants have almost the same view and memorisation style that was applied throughout the process of memorising Braille Quran codes to achieve the objectives of T&L in which students can reproduce and prepare Quran/*Sunnah* texts into Braille code and create an awareness project with a team member in performing community service (Norakyairee Mohd Raus, 2018).

4.5.1 Learning style – Visual style

The first theme was built to answer the research question of how students memorise the Braille Quran codes to identify the memorisation technique used by students during the session to memorise the Braille Quran codes both during and outside the learning session. According to Nurul, she applied the visual style throughout the process of memorising Braille Quran codes by writing each Braille Quran code on a piece of A4 paper and attached them as memorisation notes to make it easy to memorise. This is further reinforced by her additional statement by saying that she used the code reflection method throughout the memorisation process.

Nurul	<p>“<i>Saya rasa visual kut sebab benda tu kita nampak dia pantul. Kalau kita dah ingat dia satu saja, kita dah boleh ingat dah kawan dia satu lagi. Contoh macam huruf ‘ت’ dot 2 3 4 5 pantul dengan ‘و’ 1 2 5 6. Okey kalau kita dah ingat huruf ت kita dah boleh ingat dah pantulan dia apa. Haa kiranya kita ingat ‘ت’ titik dia dekat mana, kita ingat saja huruf lawan dia ‘و’. Jadi saya rasa tu visual.</i>”</p>
Translated	<p>I'm visual because I see the reflections on the Braille codes . If I remember one code, I will remember another code that has a reflection. For example, the letters ‘ت’ dot 2 3 4 5 reflect with ‘و’ dot 1 2 5 6. Okey if I remember the letter ‘ت’ we can remember what it reflect off. So I think it's visual.</p>

Nurul	<i>“Haa kiranya saya kalau menghafal saya suka bayang. Contoh kita baca Quran, saya suka bayang dekat mana ayat tu duduk, atas tengah bawah. Haa macam tu.”</i>
Translated	I think when I memorise I like to imagine. For example, when I read the Quran, I like to imagine where the verse is, either on the top, middle or bottom of the pages.

The researcher included examples of reflection methods used by Nurul throughout her period of memorising Braille Quran codes.

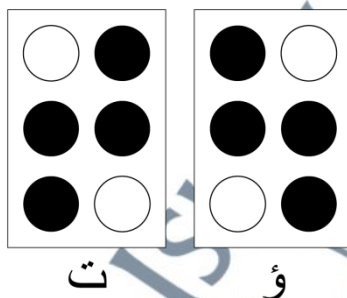


Figure IV-V: An example of the arrangement of the reflection method used by a student to memorise the Braille Quran codes.

This method helped her memorise the codes well. Furthermore, she was more inclined to a memorisation style by imagining the existence of a code or sentence.

Naielah’s memorisation style was very similar to Nurul’s memorisation style, where she memorised the Braille Quran codes by looking at the codes and rewrite them.

Naielah	<i>“Memang tulis balik. Saya memang apa-apa benda pun saya akan tulis balik sebab otak akan bergerak sekali dengan tangan. Memang akan tulislah. Saya orang visual. Bayang pastu tengok lama. Kalau bagi terus hafal-hafal memang tak ingat lah.”</i>
Translated	Indeed, write it down. I will write back anything because the brain will move along with the hands. I will write it down. I’m a visual person. Imagine and look for a long time. If I keep memorising

	without imagine, I won't remember it.
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The next research participant, Ahmad, explained that the memorisation style practiced throughout the period of memorising the Braille Quran codes was more to look at the Braille codes. This statement clearly shows that Ahmad practiced visual style in the process of memorising Braille codes during his studies. Next, Ahmad practiced the style of memorising the Braille Quran codes by starting memorising the Roman Braille codes first followed by the Braille Quran codes. This is because there are some Braille codes that have the same codes between the Braille alphabet codes and the Braille Quran codes. For example:

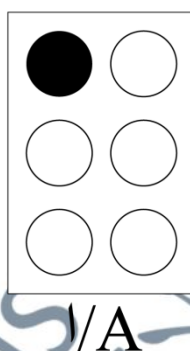


Figure IV-VI: The equation between Braille Quran codes and alphabet codes.

Ahmad	<i>“Kita yang normal ni memang lebih kepada penglihatanlah. Kemudian kita tengok bentuk tu kan. Maksudnya kalau alif tu titik satu. Mungkin deria rasa tu kurangnya. *ketawa. Tak selalu apply dengan benda tu kita lebih pada visual.”</i>
Translated	For those of us who are normal, it's more about eyesight. Then I look at the shape. It means that the alif is dot 1. Maybe the sense of touch is less. *laughs. I don't always apply with the Braille dots, I'm visual person.
Ahmad	<i>“Ingat rumi dulu. Lepas tu baru hijaiyyah sebab ada huruf Rumi yang sama dengan huruf hijaiyyah. Kira yang sama tu just... lagipun</i>

	<i>macam “P” = A. Dia tak jauh bezalah. Hafal ikut tulah. Cuma yang kod-kod lain macam “ط” ke mungkin ada penambahan-penambahan kaedah lain. Lebih kepada ingatlah.”</i>
Translated	I will remember Alphabet first. After that it was hijaiyyah because there are Alphabet letters code that are the same as hijaiyyah letters code. The letter code “P” is the same as the letter code “A”. I memorised it like that. For other codes like “ط” there might be other methods added. I'm more of a visualiser.

While Aqilah explained that she was a student who practiced visual memorisation style where she stated that she will look at the Braille codes based on the notes she made. Based on Aqilah’s statement, the researcher thinks that this research participant was a student who practiced visual memorisation style. This visual method was also practiced by Rahimah.

Aqilah	<i>“Ya saya akan tengok balik tak tulis dah. Saya berpandukan nota yang saya buat sendiri, kadang-kadang saya tegok dekat nota lecturer bagi.”</i>
Translated	Yes, I will look at the notes that I wrote. I rely on the notes that I make myself, sometimes I look at the lecturer's notes.
Rahimah	<i>“Ya. Saya lihat, hafal dan untuk lebih ingat saya tulis semula kod-kod tersebut sehingga saya ingat. Saya dapati cara ini berkesan terhadap saya.”</i>
Translated	Yes. I look at the code, memorise it and for better memorising I rewrite the code so that I remember it. I found this trchnique effective for me.

In summary, it can be concluded almost that almost all research participants adopted visual learning style while memorising the Braille Quran codes. Moreover, the researcher found there was almost absent specific memorisation styles that students can adopt as a guideline during the process. This is because students need to

find their own initiative in building their own memorisation style. They need a long time in forming a memorisation style to make it easier for them to memorise the Braille Quran codes. Thus, this research brings a solution by helping to introduce the Braille Quran codes memorisation style to facilitate typical students in the upcoming semesters to memorise the Braille Quran codes without needing a long time to build their own memorisation style. Students only need to choose what memorisation style is appropriate to practice during the semester.

4.5.2 Learning style – Audio style

The second sub-theme for this research is audio style used in learning. This sub-theme means the selection of audio as a learning style. In other words, research participants practice memorisation style by listening from audio-based sources throughout the period of memorisation of Braille Quran codes. For example, research participants listened to audio related to memorising the Braille Quran codes from classmates or by speaking on their own by repeating the voice until it was clearly heard until they memorise the codes well.

Nurul stated that she did not use audio-based learning materials but she would memorise the Braille Quran codes by repeatedly saying the codes she wanted to memorise aloud and repeatedly. To make memorisation easier, Nurul will repeat her memorisation of the codes with classmates.

Nurul	<p><i>“Ohh memang kena baca berulang-kali dengan kuat-kuat. Kadang-kadang lagi mudah ni untuk kalau saya hafal, ada kawan, kawan-kawan tu akan dengar macam saya kata contoh haa ingat “ت” pantulan dia “و”. Nanti bila kita nak jawab benda tu, kita nak buat benda tu kita ingat kat siapa yang kita bagi tahu. Haa kan kita ada cakap. Haa macam tu lah. *ketawa”</i></p>
Translated	<p>Ohh.. Indeed I read it over and over again loudly. Sometimes it's easier for me to memorise, there are friends, my friends will hear me say, for example, “ت” and “و”. Later when I want to answer, I remember who I shared it with. *laughs</p>

Ahmad, on the other hand, did not use audio-based learning aids in the process of memorising the Braille Quran codes. This proves that he chose visual as a learning style. Similarly, Aqilah and Rahimah stated that they never used audio-based learning aids during the process of memorising the Braille Quran codes.

Ahmad	<i>“Tak ada. Memang totally penglihatan.”</i>
Translated	Nothing. It's totally eyesight .
Aqilah	<i>“Tak pernah menggunakan audio sebagai learning tools semasa proses menghafal kod Braille.”</i>
Translated	I never used audio as a learning tool during the process of memorising Braille code.
Rahimah	<i>“Tak pernah menggunakan audio sebagai learning tools semasa proses menghafal kod Braille.”</i>
Translated	I never used audio as a learning tool during my Braille code memorisation process.

According to the evidence from all research participants, it can be concluded that almost all research participants did not practise audio style during the process of memorising the Braille Quran codes. Only one research participant who practised audio style in the process of memorisation is Nurul where she will read the Braille Quran codes and their letters aloud and speak out the codes with classmates then she will remember to whom she spoke during the process of memorising. In this way, her memorisation will be stronger after she wrote the codes she wanted to memorise and she will imagine the position of the codes and letters.

4.5.3 Learning style – Kinaesthetic style

The third theme is kinaesthetic learning style. This theme was developed to describe the use of learning tools as a medium to memorise the Braille Quran codes where students used learning aids based on touch or movement to memorise the codes. This is because kinaesthetic style requires movement in the learning process.

In the context of learning Braille Quran which is a compulsory subject of the faculty, students should seek initiative and creativity in building their memorisation technique to strengthen the memorisation of Braille codes. This is to facilitate the reading and writing of the Braille Quran at the end of the semester to answer the quizzes and tests given by the lecturer.

For Nurul, with teaching aids such as Pocket Braille and Board Brailier, the process of memorising the Braille Quran codes was more interesting and easy for her. Naielah was the research participant who argued that teaching aid-based learning was practical in the classroom during the T&L process and at the end of the semester when the test was conducted.

Nurul	<i>“Dalam tempoh belajar dengan Ustaz ada guna benda tu. Kan Ustaz nak perkenalkan macam mana cara guna dia. Satu lagi macam yang kayu tu. saya dah lupa dah nama dia. Haa Board Brailier yang tu kan. Ia memudahkan, membantu dan menarik kita untuk menghafal. Yang tu pun menarik juga tu.”</i>
Translated	In the period of learning with Ustaz, there is a use for that tools. Ustaz wanted to introduce how to use it. Another one is Board Brailier. It makes it easy, helpful and interesting for us to memorise. That one is interesting too.
Naielah	<i>“Ada praktikal benda tu first time tengok dan pegang so kita pegang ni Alif so Alif. Pegang dan tengok sebab kita celik kan so jari kita tak nampak sangat. Tapi pegang cuma dia tak sense. Sebab kita dah biasa dengan mata.”</i>
Translated	There is a practical. First time I look and hold. I hold the Alif code so that is Alif letter. Hold it and look at it because people with eyesight don't sense the code with finger. I hold it, it just doesn't sense. Because we're used to our eyes.
Naielah	<i>“Guna Board Braille masa exam.”</i>
Translated	I used the Braille Board during the exam

Ahmad explained that apart from looking at the letters and shapes as well as the position of the letter's code, with the teaching aid such as Board Brailer, it helps Ahmad memorise the code. While touching the Brailer Board to read, he will visualise the letters and codes first. As for Aqilah, she did not use teaching aids to memorise. Teaching aids were only used during the T&L process which was only introduced by the lecturer.

Ahmad	<i>“Ada juga. Mula-mula memang pada kita tengok dulu. Kaedah dia kita tengok dulu kod tu, kedudukan kod-kod tu dan apa huruf dia. Kemudian, cuba untuk nilah daripada segi deria rasa. Maksudnya kita sentuh tu haa. Lepas kita ingat tu barulah kita boleh dengan kaedah deria rasa.”</i>
Translated	There is also. At first, I look at the letter code. I look at the position of the code and the letters. Then, I use the sense of touch the code.
Ahmad	<i>“Mula-mula kena bayangkan dululah. Bismillah tu mula-mula huruf “ب” “س” “م” kemudian baru kita buat satu-satu. Contohnya huruf “ب” kodnya apa kemudian “س” kodnya apa dan seterusnya. Kena satu-satu. Tak boleh daripada kod tu apply terus pada kod. Kena daripada huruf baru buat kod.”</i>
Translated	First I imagine the letters of the verse. For example, <i>Bismillah</i> starts with the letters “ب” “س” “م” and so on. Then I create them one by one. For example, what is the code for the letter “ب” then what is the code for “س” and so on. One by one. I can apply the code to the letter.
Aqilah	<i>“Tak ada. Pernah guna masa belajar tapi tak guna untuk menghafal pula.”</i>
Translated	None. I used during the study but never used to memorise either.

According to Rahimah, she used teaching aids during T&L and outside the classroom to help the process of memorising the Braille codes of the Quran. In

addition, Rahimah used A4 paper as a tool to help her using Perkins Braille. This method of using A4 paper was practised outside of learning time in the classroom. This way was easy for Rahimah to remember the position of the cells while typing using Perkins Braille.

Rahimah	<i>“Pernah, semasa kelas dijalankan.” She added, “Kadang sempat main-main guna Board Braille cara kaedah pantulan.”</i>
Translated	I did, during class. Sometimes I played with the Braille Board using the reflection technique.
Rahimah	<i>“...ada masa nak exam typing saya dan kawan guna cara di bawah ni sebab tak ada Perkins Brailer kan dekat kolej. Saya akan tulis nombor pada kertas ‘6 5 4 Space 3 2 1’ kemudian cuba taip ala-ala ada Perkins Brailer sebab nak biasakan tangan ingat susunan dan kod.”</i>
Translated	There was a time when my friend and I used the method below because there was no Perkins Brailer in the college. I would write the numbers on the paper ‘6 5 4 Space 3 2 1’ then try typing as if there was a Perkins Brailer because I wanted to get my hands used to remembering the positions and codes.

Teaching aids were only used by research participants during the T&L process in the classroom. They were introduced by the lecturer and was used during the test at the end of the semester.

4.5.4 Positive impact

For the second theme, it is closely related to the style practised by the research participants can give a positive impact in the process of memorising the Braille Quran codes better.

Therefore, it is clear that the process of memorising Braille Quran codes is easier if students memorise based on the correct memorisation technique according to

the strength of their learning style. This is because students only have four months to master all the codes well before they take the test.

Nurul shared every student has a tendency to memorisation method are easier to practice. Following her experience during internship, there are also students who practice the Reflection method during the process of memorising the Braille Quran code. With this method, it has a positive impact on other students in learning all the codes and easy to memorise

Nurul	<p><i>“Ohh haa. Okey pertama, ni apa yang saya tengoklah. Waktu saya tolong Ustaz Azam untuk ajar Braille, adalah adik-adik yang tanya. Saya katalah kamu buat kaedah macam mana? Pastu dia katalah saya hafal-hafal macam tu saja. Saya suruh depa cari pastu depa tanya lagi. Saya kata lah. Macam saya, saya hafal buat pantulan. Huruf ni huruf ni. Pastu dia kata haa macam senang juga. Lepas itu ada seorang adik tu dia dari course QM kut, dia kata waktu dia nak exam dia kata haa saya guna macam tu (Pantulan). Waktu ada test Braille. Dia kata mudah hafal pantulan. Tak semua boleh macam yang kita boleh. Macam dia, ada yang kata okey tu alhamdulillah lah. Pastu kalau ikut yang saya membantu ke dak, alhamdulillah membantu juga. Cuma kalau dalam tempoh terdekat macam kita belajar Braille tu, kan sat kan. Macam dalam tempoh ada 4 bulan saja satu semester. Kita jadi macam ala sat sangat benda tu habis. Kita dan baru boleh al dah habis. Tengah-tengah test banyak kita masih slow lagi.”</i></p>
Translated	<p>Firstly, when I helped Ustaz Azam to teach Braille to student. I asked how did you make the method? He/She replied that I just memorised it. I said, I memorise by practising the reflection method. After that there was a student from the QM course, he/she said when did the Braille test he/she used that method (the reflection method). It was easy to memorise the reflections. Not all of us can do what we can do. For me, Alhamdulillah that method is helpful. It was only a short period of learning Braille, only 4 months in one semester.</p>

According to Rahimah, learning according to the strength of an individual's learning style will accommodate the memorisation because students will use the strength of their learning style either visually or audio or kinaesthetically during the learning process or memorisation.

Rahimah	<p><i>“Cara belajar saya read and write. Jadi untuk pembelajaran Braille pun saya guna read and write, kemudian hafal. Apabila melihat atau membaca sahaja, tidak dapat untuk mengekalkan ingatan saya terhadap hafalan kod, jadi selepas lihat, baca, saya perlu tulis kemudian saya hafal dan tulis semula hafalan kod Braille. Cara ini lebih membuatkan saya ingat. Kemudian, untuk memantapkan lagi ingatan, apabila berada di dalam makmal Braille saya dan rakan akan mengambil peluang menggunakan Board Braille dan Pocket Braille untuk praktis dan cuba mengingat hafalan kod yang telah dihafal. Jadi, dengan menggunakan kaedah-kaedah ini, hafalan kod Braille tersebut menjadi semakin mudah dan diingati.”</i></p>
Translated	<p>My learning style is read and write. So for Braille learning, I also use read and write, then memorise. Just seeing or reading is not enough to retain my memory of the memorised code, so after seeing, reading, I need to write then I memorise and rewrite the memorised Braille code. This method makes me remember more. Then, to strengthen the memory, when in the Braille laboratory, my friends and I will take the opportunity to use the Braille Board and Pocket Braille to be practical and try to remember the memorised code. So, by using these methods, memorising the Braille code becomes easier and more memorable.</p>

It can be concluded that the use of teaching aids is one of the tools to help strengthen code memorisation in addition to students memorising using visual style. However, the use of teaching aids is necessary as an exercise throughout the class in preparation for the test at the end of the semester.

4.6 Analysing the learning style of memorising Braille Quran codes

The last research question touches on how effective memorisation techniques are from the point of view of the research participants, namely Nurul, Naielah, Ahmad, Aqilah and Rahimah, based on the memorisation style practised by them during the process of memorising the Braille Quran codes. For the purpose of answering the questions of this research, the researcher provided specific questions closely related to the aspects of students' memorisation time and the period taken to memorise all the codes well. In addition, the researcher also asked a related question, "*Apakah nasihat atau motivasi bagi pelajar yang mengambil kursus QNR3013 pada masa hadapan?*"

As in the previous process, data from these questions were collected through interviews with students who obtained excellent marks in the QNR3013 course. Themes and sub-themes for the research objective of analysing the learning style of memorising Braille Quran codes are summarised in the following matrix table:

Category	Themes	Sub-themes
Analysing the learning style of memorising Braille Quran codes.	Time to memorise.	
	Duration of memorisation.	Repeat, take time, skills.
	Memorisation technique.	Reflection method, Digit method, Equate method
	Advice and hope.	

Table 7: The summary of themes and subthemes to analyse the learning style of memorising Braille Quran codes.

Based on Table 7, the research identified four themes and sub-themes based on the effectiveness of the memorisation style and the perspective of the research participants. All research participants had different memorisation times and periods according to the memorisation technique of the course offered. In addition, research participants shared constructive tips and advice to students who will take this course later.

In this research, the researcher found that these five FPQS students managed to reach the optimum level in the process of memorising the Braille Quran codes. They scored in the courses offered with each getting an A grade.

4.6.1 Time to memorise

The first theme for answering this third research question is time to memorise. The appropriate time for students to memorise varies according to the individual. Based on the results of interviews with research participants, the researcher found that the best time for Naielah to memorise the code is in the early morning before dawn from 3 am to 4 am. This is because it was easier for her to memorise in the early hours of the morning.

Naielah	<i>“Tidur awal pastu bangun 3 - 4 pagi. Memang kena pagi. Awal pagi sebelum subuh. Lagi senang ingat waktu tu kalau hafal waktu pagi macam sekarang lagi senang ingat. Memang senang ingat.”</i>
Translated	Early to bed must wake up at 3 to 4 in the morning. Early morning before dawn. It's easier to remember the time if you memorise it in the morning. It's easy to remember.

In contrast, Ahmad memorised the codes at the time before the tutorial class started.

Ahmad	<i>“Waktu nak masuk kelas. *ketawa. Maksudnya sebelum masuk kelas tu saya buat revision dululah. Ulangkaji sikit sebelum kita nak mula kelas tu.”</i>
Translated	Before entering the class, I make a revision first. Review it before I start the class.

As for Aqilah, she was more comfortable memorising at night.

Aqilah	<i>“Tak tentu. Kadang-kadang malam.”</i>
Translated	Sometimes at night.

Rahimah thought that, the best time to memorising the Braille Quran code is before class for the Braille code memorisation title even if you only have half of it memorised. This will make it easier for us during the tutorial class to follow the

teaching. After all, the notes have been given in advance before the class starts. Reviewing before class is better and helps us.

Rahimah	<i>“Bagi saya waktu yang sesuai untuk memulakan hafalan kod Braille Quran adalah sebelum kelas untuk tajuk hafalan kod Braille walaupun hafal separuh sahaja dulu. Hal ini akan memudahkan kita semasa dalam kelas tutorial untuk mengikuti pengajaran. Tak adalah waktu itu baru nak hafal satu-satu. Lagi pun, nota telah diberikan terlebih dahulu sebelum kelas bermula. Jadi, tidak ada masalah bagi pelajar untuk cuba hafal sebelum kelas bermula. Pembelajaran ataupun ulangkaji dahulu sebelum kelas lebih baik dan membantu kita.”</i>
Translated	For me, the best time to start memorising the Braille Quran code is before class, even if you only have half of it memorised. This will make it easier for students during tutorial classes to follow the teaching process. After all, the notes have been given in advance before the class starts. So, there is no problem for students to try to memorise before the class starts. Learning or reviewing before class is better and helps us.
Rahimah	<i>“Kalau saya sehari sebelum kelas or malam sebelum kelas saya akan ulangkaji dulu topik yang nak belajar tu.”</i>
Translated	For me, the day before class or the night before class, I will review the topic to be learnt.

In conclusion, it is better if the memorisation started before the class starts as a preparation for the learning session. This way, the learning process will be easier. If there are any questions, students can ask questions to the lecturer during the T&L session.

4.6.2 Duration of memorising

Duration of memorising is the second theme for this final research question. This theme shows that students' memorisation period is an important thing throughout the memorisation session. It is closely related to the students' achievement of mastering the Braille Quran codes as a whole. Students need time to master all the codes. This is due to the almost absence specific memorisation techniques based on the strength of the learning style that can be referred to by students to help the memorisation process. Based on the researcher's interviews with research participants, it was found that the memorisation period required is quite long, which was almost two months.

For Nurul, the memorisation period taken to master all the codes well and proficient in writing is one and a half months including her internship period with NGOs related to Braille learning. It was followed by the use of memorisation technique according to the strength of learning style practiced during the period, namely the method of Reflection.

Nurul	<p><i>“Nak kata lama tu tak lamalah. Waktu belajar Braille serius saya tak mahir mana pun tapi bila dah hujung-hujung last-last tu kita ingat-ingat macam tu saja kan. Pastu saya sambung intern bidang Braille, kita jadi kena ulangkaji benda tu, waktu... haa kiranya bulan pertama saya intern tu, saya tengok balik kaedah pantulan ni lepas tu dengan dapat kerja banyak dengan task yang untuk kita buat letak-letak baris apa semua ni kan pastu check balik yang kita dah taip betul ke tak. Haa daripada situ kiranya dalam tempoh sebulan setengah tu sebab Ustaz memang dok memang bagi saya ni memang Braille. Saya asyik print, taip. Print, taip haa. Dalam sebulan lebihlah macam tu.”</i></p>
Translated	<p>It wasn't long either. When I learnt Braille I wasn't very good but at the end I remembered. After that, I continued to intern in the Braille field, I got a review of Braille. The first month of my internship, I referenced the Reflection method and then got the task to put the lines. Then, I checked what had been typed. In that month and a half period, I specialised in Braille typing and printing. In a month and a half.</p>

For Naielah, the memorisation period taken is short. This is because the period taken by her in constructing the memorisation technique was quite long. Coupled with the method of rewriting the Braille Quran codes and self-training, at the same time she can memorise all the codes.

Naielah	<p><i>“.....waktu kita buat teknik ni pun agak lama juga. Masa tengah buat tu kita dah ingat. Rasa dalam 2 3 hari atau lebih cepat dari tu. Sebab lebih banyak pada gambaran just kena ingat sikit saja. Contoh macam love betul dengan love terbalik ni huruf dia apa. Sebab saya ingat saya hafal dia akan tulis balik apa yang saya ingat tu. Baru saya ingat tu lepas tu saya check balik lepas tu try buat latihan kendirilah masa tu. Kalau betul-betul puas hati baru macam aku betul-betul ingat method ni. Bukan hafal saja sebab saya hafal test buat latihan. Buat sendirilah yang tu bila puas hati baru saya consider ooo aku dah ingat benda ni.”</i></p>
Translated	<p>.....the time we made this technique was a bit long too. In the meantime, we remember it. I guess in 2 or 3 days or sooner than that. Because more on the picture just remember a little. After that I check again and try to make my own exercise. I memorise, test and practice. When I am satisfied, I consider that I have remembered all the Braille codes.</p>

Ahmad took about a week to master all the Braille Quran codes. Usually, Ahmad did his revision before starting the T&L tutorial session. The memorisation period taken by Rahimah is also the same as Ahmad where she took a week to memorise all the Braille Quran codes.

Ahmad	<p><i>“Ummm. Lama juga. Lebih kurang dalam seminggu kut. Kalau betul-betul fokus.”</i></p>
Translated	<p>It's been a while. More or less in a week. If really focus.</p>

Rahimah	<i>“Saya hafal sikit-sikit kod dia. Bukan sekaligus. Dalam seminggu kut. Tapi kalau hafal betul-betul sehari pun boleh ingat.”</i>
Translated	I memorise the code little by little. Not all at once. I memorised it in a week. But if you really memorise it, you can remember it in a day.

Accordingly, it can be concluded that in a short period of four months for each semester, students have to work harder to build their memorisation technique to achieve excellent marks. However, students did not need a long time to master all the codes because they have taken a long time in building their memorisation techniques.

4.6.3 Memorisation technique

The third theme is memorisation technique. It refers to the memorisation technique practised by students in memorising all the Braille Quran codes. In this context, the researcher asked the students to print out their respective memorisation techniques to be documented. Findings from the interviews were triangulated and evaluated according to the learning style of VAK.

The style of memorising the Braille Quran codes practised by Nurul was Visual where she will look at each Braille Quran code and then she will arrange the codes according to the method of reflection. The Braille Quran codes were arranged in a reflective form. For example, the code of the letter “ت” is dot 2 3 4 5. The code is reflected with the letter “ؤ” which is code 1 2 5 6. This memorisation technique took her 1 month 2 weeks to memorise all the Braille codes well. Figure IV-VII is an example of a reflected letter:

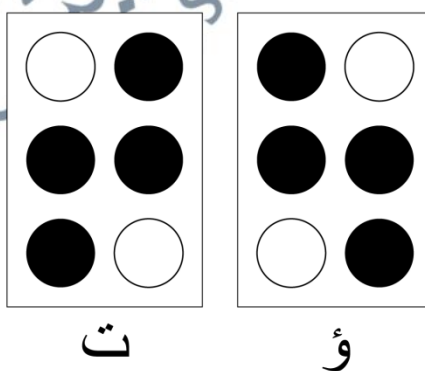


Figure IV-VIII: Letters that have a reflected code.

With this visual learning style and reflection memorisation technique, it helped Nurul score in the test at the end of the semester by obtaining an A grade with a score of 85%. Please refer to Appendix J.

Nurul	<p>“... kita nampak dia pantul. Kalau kita dah ingat dia satu saja, kita dah boleh ingat dah kawan dia satu lagi. Contoh macam huruf ‘ت’ dot 2 3 4 5 pantul dengan ‘ج’. Okey kalau kita dah ingat huruf ‘ت’ kita dah boleh ingat dah pantulan dia apa. Haa kiranya kita ingat ‘ت’ titik dia dekat mana, kita ingat saja huruf lawan dia ‘ج’ iaitu kod 1 2 5 6.”</p>
Translated	<p>... we look like a reflected form. If we remember one letter, we can remember another letter. For example the letter ‘ت’ dot 2 3 4 5 reflects with ‘ج’. When we remember the letter ‘ت’, we can remember what the reflection is. We remember the dot letter ‘ت’, we just remember the reflection letter ‘ج’ which is code 1 2 5 6.</p>

Naielah noted by rewriting the Braille Quran codes had accommodated and strengthened her memorisation. She took a long time to build her memorisation technique to make the memorisation process easier. By remembering the description of each Braille Quran code, the form method and the reflection method were practised as it is easier to remember apart from doing self-training as an important element to test the effectiveness of code memorisation. This method was arranged according to the form that has a reflection with another code for example the letter “ض” with the code 1 2 4 6. The code is reflected with the letter “ن” which is code 1 3 4 5 and the letter “ذ” which is code 2 3 4 6 is reflected by the letter “ز” which is code 1 3 5 6. In addition, this student remembered the reflection of these letters to the form of ‘love’. Figure IV-9 is an example of a letter that has reflections and the shape of ‘love’.

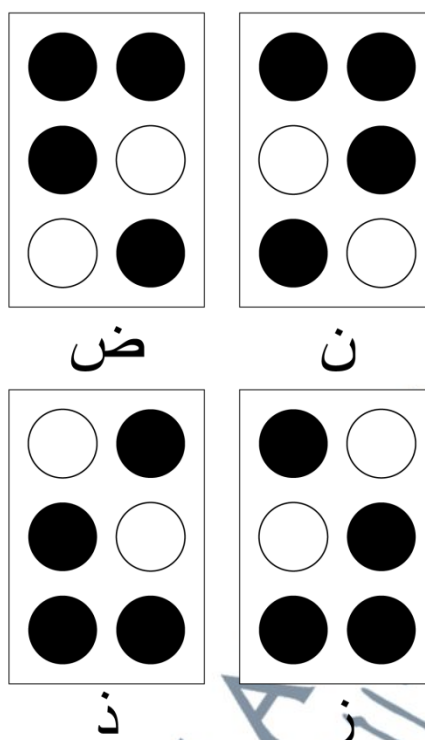


Figure IV-IX: Letters that have the shape of and the reflection of the shape of 'love'.

It is clear that the effectiveness of the visual learning style practised by this research participant helped her to get excellent marks and test grades, that is, she obtained an A grade with a score of 83%. Please refer to Appendix J.

Naielah	<p>“...saya memang apa-apa benda pun saya akan tulis balik sebab otak akan bergerak sekali dengan tangan. Memang akan tulislah. Sebab lebih banyak pada gambaran just kena ingat sikit saja. Contoh macam 'love' betul dengan 'love' terbalik ni huruf dia apa. Sebab saya ingat saya hafal dia akan tulis balik apa yang saya ingat tu. Baru saya ingat tu lepas tu saya check balik lepas tu try buat latihan kendirilah.”</p>
Translated	<p>...I will write anything back because my mind will move once with my hand. Indeed, I will write it down. Because more on the imagery so I just remember a little bit. For example, the correct 'love' shape with flipped 'love', what letter is it. Because I remember I memorise it, and I will write it back what I remember. Then I remember it, I check it back, and try to practice it.</p>

Ahmad is a research participant who will be looking at the cell shape and is less likely to apply the sense of touch because in his view, people who do not have sight problems find it difficult to use the sense of touch. The memorisation technique that was practised during the memorisation period was similar which was by remembering the alphabet codes that have similarities with the *hijaiyyah* codes. *Hijaiyyah* letter codes have no similarity with Roman letter codes will be arranged according to the technique of reflection. For examples:

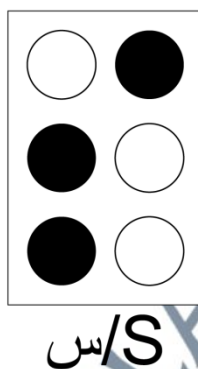


Figure IV-X: The code equated the letters of Roman with the letters of *hijaiyyah*.

By adopting this equated technique of Braille Quran codes with Braille alphabets code helped him to memorise well. He got an excellent mark of 87%. Please refer to Appendix J.

Ahmad	<p>“Kita yang normal ni memang lebih kepada penglihatanlah. Kemudian kita tengok bentuk tu. Kalau " tu dot 1. Mungkin deria rasa tu kuranglah. *ketawa.”</p> <p>“Ingat rumi dulu. Lepas tu baru Hijaiyyah sebab ada huruf rumi yang sama dengan huruf hijaiyyah. Macam ‘’ sama dengan huruf A. Tak jauh beza lah. Hafal ikut tulah. Cuma yang kod-kod lain macam ‘ث’ mungkin ada penambahan kaedah lain.”</p>
Translated	<p>For those of us who are normal, it's more about vision. Then we look at the shape. If the " tu dot 1. Maybe we don't have enough sense of touch. *laughs.</p> <p>Remember Rumi first. After that, it's Hijaiyyah because there are rumi letters that are the same as Hijaiyyah. Like " is the same as the letter A. Not much different. It's just that other codes like 'ث' may have other methods added.</p>

Aqilah will look at the Braille Quran codes that she wanted to memorise without rewriting the codes. She made a summary note as a reference for her memorisation. Sometimes she looks at the notes given by the lecturer. To facilitate the memorisation process, she was only guided by this note. She arranged the codes according to the method of equation of the *hijaiyyah* codes with the alphabet codes and the Digit method sequentially. The Braille Quran codes were arranged according to a code that has the same code as the alphabet. According to her, while for lines, reading symbols and letters that have no similarity with the alphabet letter codes, Aqilah arranged the Braille codes with the Digit method in which the codes were arranged according to the number of Braille dots starting from 1 dot, 2 dot and until 6 dot. (See appendix G).

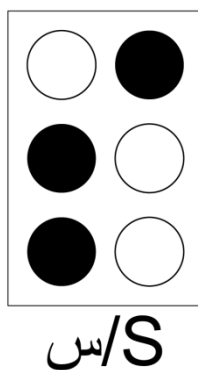


Figure IV-XI: The code equated to the letters of Roman with the letters of *hijaiyyah*.

This research participant constructed Equation method and Digit method. She got an excellent mark in this course which was grade A of 85%. See Appendix J.

Aqilah	<i>“Saya berpandukan nota yang saya buat sendiri, kadang-kadang saya tengok dekat nota lecturer bagi.”</i>
Translated	I rely on notes that I make myself, sometimes I look closely at the notes the lecturer shares.
Aqilah	<i>“Saya menghafal guna kaedah persamaan dan ikut turutan digit. Kaedah persamaan tu saya samakan huruf Rumi dengan Jawi, contoh kalau ‘/’ dengan A, B dengan ‘ب’. Ikat turutan pula untuk baris dan simbol-simbol, yang tu saya ikut turutan melalui bilangan titik Braille tu sendiri.”</i>
Translated	I memorise using the Equation method and Digit method sequentially. I equate Rumi letters with Jawi letters, for example '/' with A, B with 'ب'. I also participated for lines and symbols, which I participated in through the number of Braille dots themselves starting from 1 dot, 2 dot and so on.”

Rahimah memorised the Braille Quran codes with the help of teaching aids. This learning style was practised while in class and while in college after almost test time. When outside the tutorial class, Rahimah will write the numbers on the paper 6 5 4 space 3 2 1. Typing exercise like Perkins Brailleur to familiarise the hand with the

sequences the code. The Digit method was practised to make it easier for her to remember each position of the Braille Quran code. It is common knowledge that Braille code is a cell that has 6 dots. So, the code is arranged according to the number of dots in the cell starting from 1 dot followed by the next dot until 6 dot. For example, the letter “ا” code is 1, the letter “ك” code is 1+ 3, the line “َ” code is 1 3 6 while the letter “ة” code is 1 6.

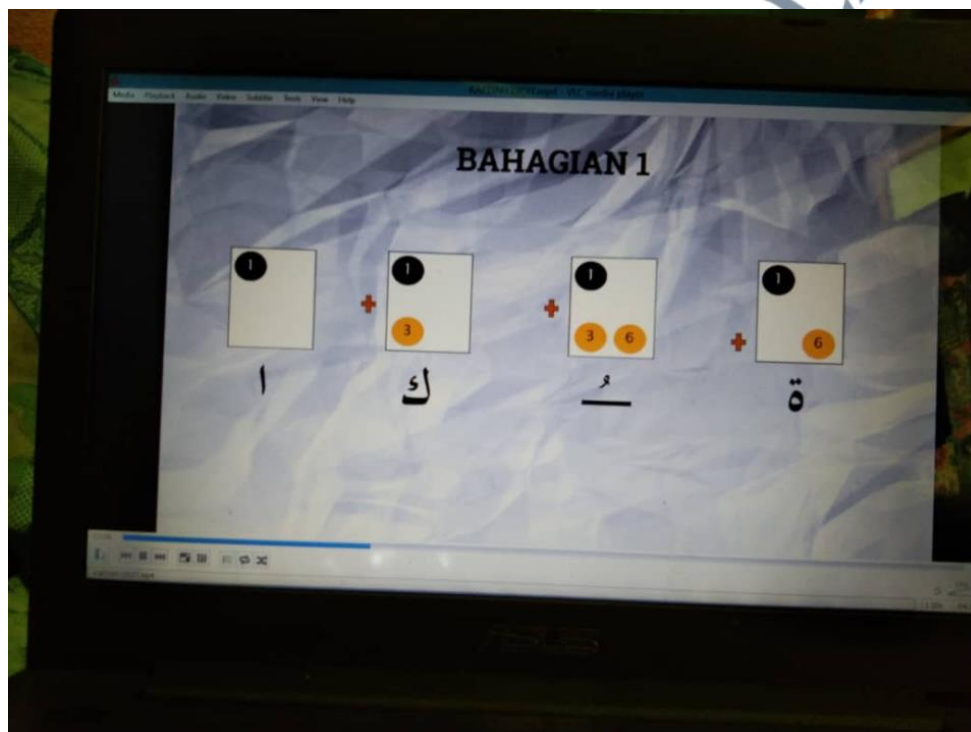


Figure IV-XII: An example of digit method used by Rahimah

By memorising using this method, the score obtained by the participants of this research was 88%. See Appendix J.

Rahimah	<p>“...masa nak exam typing saya dan kawan guna cara ni sebab tak ada Perkins Brailleur kan dekat kolej. Tulis nombor pada kertas 6 5 4 space 3 2 1. Cuba taip ala-ala ada Perkins Brailleur sebab nak biasakan tangan ingat susunan dan kod.”</p>
Translated	<p>My friends and I did my typing exam with this method because there was no Perkins Brailleur near the college. Write the numbers on the paper 6 5 4 space 3 2 1. Try typing as if there's a Perkins Brailleur because it doesn't make it easy for your hands to remember codes.</p>

Rahimah	<i>“Ia juga lebih buat saya ingat kod-kod Braille. Secara tak langsung kaedah nombor digunakan. Ataupun panggil dia kaedah digit”</i>
Translated	It also makes me remember Braille codes more. Indirectly the number method is used. Or call him the digit technique.
Rahimah	<i>“Kaedah nombor adalah kita ingat dan hafal menggunakan nombor. Contoh, kalau huruf ‘ﺞ’ 1 2 3. Nombor tu memang yang hafal terus ingat guna nombor. Lepas tu 1 2 3 + 6 jadi huruf lain pula. Macam tu.”</i>
Translated	The digit technique is that we remember and memorise using numbers. For example, if the letter 'ﺞ' is 1 2 3. I memorise and remember to use the number. After that 1 2 3 + 6 becomes another letter.

In conclusion, specific memorisation techniques according to the strength of students' learning styles play an important role in helping students memorise well. Thus, students did not take long to master the codes. In this context, the practice of learning style in memorisation of Braille Quran codes plays a role in the effectiveness of students' memorisation and mastery of reading and writing. The findings of triangulation from the interview data of the research participants can be concluded that most of the research participants practised memorisation with the help of the visual learning style. This can be seen in the memorisation technique built by the research participants that they practised memorisation techniques such as reflection method, digit method and equation method.

4.6.4 Advice and hope

The fourth theme is advice and hope on learning Braille Quran among the visually able especially for students who take the course QNR3013.

According to Nurul, learning Braille Quran is a new thing that needs to be accepted among students so that it is easy to remember. She added that students need

to be diligent in reviewing this course because Braille is a course that requires memorisation.

Nurul	<p><i>“Braille ni benda barulah bagi siapa yang masuk kan. Haa jadi bagi saya kita kena cuba dan kita kena terima kalau kita tak boleh terima macam mana benda tu dia nak masuk dalam diri kita. Macam mana kita nak ingat. Jadi bagi saya, kita kena ada penerimaan dengan Braille lagi supaya dia mudah untuk kita ingat. Satu lagi kita kena rajinlah, Sebab kalau kita tak rajin macam mana kita nak ingat. Dia kan hafalan kan. Macam bagi saya Braille ni dia hafalan, kalau kita lupa kod tu jadi kita tak ingatlah.”</i></p>
Translated	<p>Braille is a new thing for those who learn it. So for me we try and we accept. There must be acceptance with Braille so that it is easy for us to remember or memorise. Another thing is that we have to be diligent, because if we are not diligent how can we remember. It's memorised right. For me, Braille is memorised, if we forget the code, we won't remember it.</p>

This statement was supported by Naielah who thought that this Applications of Braille in Quranic and Sunnah Studies course is a new thing that students need to take into consideration. Students need to diligently explore and always practice reading or writing Braille Quran codes so that the memorisation process becomes easier.

Naielah	<p><i>“Kalau contoh macam kita belajar Braille... lagi pun memang benda baru untuk kita tapi tanamkan dalam diri satu sifat ingin tahu. Okey aku nak tahu apa, benda ni apa? Explore benda tu. Yang penting kena rajin. Contoh kita dah hafal benda tu, check betul-betul, study betul-betul lepas tu kita kena sentiasa buat latihan lepas hafal kod tu kan. Lepas tu buat latihan. Kalau kita ingat baru berhenti. Braille ni dia macam math tahu. Kita kena sentiasa buat. Kalau tak memang tak ingat. Lepas tu praktikkan. Mungkin kita susah nak jumpa buku-buku Braille tu, study saja benda-benda lain. Cuba explore. Atau pun buat latihan macam yang Ustaz bagi. Memang kena banyakkkan latihan kena rajin. Atas usaha kita sendiri. Benda ni lebih kepada kita ingat dan perasaan ingin tahu kita, kalau kita tak ingat, apa benda pun kita tak boleh buat.”</i></p>
Translated	<p>Learning Braille is new to us, but we need to instil in ourselves a sense of curiosity. Okay, what do I want to know, what is this thing? Explore the thing. The important thing is to be diligent. For example, if we've memorised the code, recheck it, learn the code, we can always do exercises to memorise the code. After that, practice. Braille is like maths. You have to keep doing it. If we don't, we don't remember. After that, practice. Maybe we find it hard to find Braille books, try to explore. Or even make an exercise like what Ustaz shared. Indeed, we need to practice a lot. We need to be diligent. On our own effort. It's more about our memory and our curiosity, if we don't remember, we can't make anything."</p>

Ahmad also advised that students should seize the opportunity to learn this Braille Application course because after all, USIM graduates have the added value in helping the visually impaired.

Ahmad	<p><i>“Kursus ni memang nak katanya tak semua orang akan dapat. Jadi rebutlah peluang yang ada untuk kita lebih memahami apa maksud Braille tu sendiri. Dan juga kita boleh menyampaikan apa yang kita ada kepada mereka terutamanya orang buta nilah. Mungkin... contohnya kita baca tulisan Braille yang terdapat kesalahan, mungkin kita tahu benda tu salah dan kita tegur dan sebagainya. Tu antara kelebihan kalau kita dapat belajar Braille nilah. So gunakanlah peluang yang ada. Sebab kalau ikutkan kajian, USIM lah satu-satunya yang tawarkan subjek ni. So student USIM memang ada value added daripada student universiti lain.”</i></p>
Translated	<p>This course is not for everyone. So seize the opportunity that exists for us to better understand what Braille means. And also we can convey what we have to them especially blind people. Maybe... for example we read Braille writing that has a mistake, maybe we know it's wrong and we reprimand it and so on. That's one of the advantages if we can learn Braille. So use the opportunities that are available. Because if you join the study, USIM is the only one that offers this subject. So USIM students do have added value than other university students.</p>

Aqilah suggested that students need to be prepared and calm in facing the final test so that they are more focused during the typing and reading test. Last minute setup is not recommended so that problems in terms of forgetting and exchanging codes can be avoided.

Aqilah	<p><i>“Nasihat saya adalah untuk bila hadapi exam, kena selalu bersedia dan jangan buat persediaan saat-saat akhir. Tak kira exam typing atau reading, sebab bila nak exam ni kan mesti ada perasaan nervous tu, so bila kita sehati dan dah relax kalau pejam mata sambil belajar dengan pelajaran Braille ni inshaAllah kita boleh buat yang terbaik masa exam dan boleh elak masalah-masalah yang tak diingini macam lupa ke tertukar ke haa macam tu.”</i></p>
Translated	<p>My advice is when facing an exam, always be ready and don't make preparations at the last moment. Whether it's a typing or reading exam, because when you take an exam, there must be a feeling of nervousness, so if we have memorised and relaxed with the Braille lessons, inshaAllah we can do our best during the exam and can avoid unwanted problems such as forgetting or switching codes.</p>

Rahimah also agreed that students are not encouraged to prepare in the final minute to avoid error in reading and typing Braille codes test. From her experience in taking the exams, it was found that students had problems typing the Braille Quran codes.

Rahimah	<p><i>“Nasihat saya ialah jangan hafal dan buat persediaan last minute untuk exam. Terutama bagi exam typing. Master betul-betul sebelum exam. Fokus dalam kelas Ustaz ajar. Sebab pengalaman saya jaga exam masa intern dulu kalau yang tak bersedia and last minute study tu akan mengalami banyak masalah dan buat banyak kesalahan masa exam typing.”</i></p>
Translated	<p>My advice is to not memorise and make last minute supplies for the exam. Especially for the typing exam. Master well before the exam. Focus during the class. Because my experience in taking care of the exam during the internship, if you are not ready and last minute study, you will have a lot of problems and make a lot of mistakes during the typing exam.</p>

Nurul hopes that Braille classes are further expanded as exposure to the community and added value especially to the USIM students. This is because not many universities offer courses related to Braille Quran learning, especially in Malaysia. Thus, the visually literate can read Braille in order to help people with special needs with vision problems. This was supported by Ahmad's statement by stating that the Applications of Braille in Quranic and Sunnah Studies course offered can be expanded so that the visually impaired can be assisted in seeking knowledge.

Nurul	<p><i>“Harapan saya kalau benda ni meluas, kiranya kita boleh luaskan harapan kelas-kelas Braille ni akan dibuat. Sebab tak semua U ada kan kelas-kelas Braille ni kan. Jadi dia bagi pendedahan. Walaupun kita bukan golongan yang akan baca benda tu tapi kalau benda tu ada, kita boleh baca benda tu dan boleh bantu bagi yang tak tahu. Haa macam tu lah. Sebagai tambahan untuk kita lah.”</i></p>
Translated	<p>I hope that if this thing becomes widespread, we can expand the hope that these Braille classes will be created. Because not all Universiti have Braille classes. So this is an exposure. Even though we are not the ones who will read Braille but if Braille exists, we can read and can help those who don't know. It's an added value for us.</p>
Ahmad	<p><i>“Harapannya. Terutamanya kursus Braille ni bukan tertumpu kepada orang buta sahaja. Tapi lebih meluas kepada orang yang tipikal supaya mereka yang tipikal ni dapat juga membantu golongan yang buta ni untuk menuntut ilmu. Maksudnya orang tipikal ni bukannya tak perlu belajar Braille, perlu juga belajar. Haa tulah. Harapannya supaya lebih meluaslah.”</i></p>
Translated	<p>The hope is that especially for the Braille course, it is not focused on blind people only. But more widespread to typical people so that they can also help the visually impaired to study. I mean, it's not that typical people don't need to learn Braille, they do. Hopefully it will be more widespread</p>

Naielah hoped that USIM will be the main leader in producing reading materials in Braille, especially books related to religion to help increase reading materials for the visually impaired.

Naielah	<p><i>“Bahan bacaan orang buta masih lagi kurang. Harapan, macam USIM peneraju utama yang mengeluarkan bahan bacaan. Dan siswa dan siswi adalah orang yang di sebalik tabir menerajui bahan-bahan mengajar, bukan sekadar untuk dewasa atau remaja sahaja tapi untuk golongan kanak-kanak. Contohnya buku cerita atau buku-buku agama.”</i> She added, <i>“...macam buku kisah Nabikah. Banyakkan sebab bahan bacaannya pun limited kalau tak silap saya. Dia tak macam bahan bacaan untuk orang normal. Kalau boleh biarlah seimbang. Harapannya, untuk orang normal banyak ni, untuk orang buta pun kena banyak tu. Haaa”</i></p>
Translated	<p>Reading materials for the blind are still lacking. My hope is that USIM will be the main developer of reading material for the blind people. And students are the ones who are behind the curtain of teaching materials, not just for adults or teenagers but for children as well. For example storybooks or religious books." She added, "...such as Prophet story books. Expand it because the reading material is limited. It's not like reading material for typical people. If possible, let it be balanced. Hopefully, for normal people there are many, for blind people there are also many.</p>

Rahimah hoped, there will be more students who have an interest in learning Braille Quran and can teach it to OKU visually impaired and hopefully this learning will grow so that OKU visually impaired no longer face difficulties in finding knowledge or teachers to learn the Quran."

Rahimah	<i>“Harapan saya agar lebih ramai mahasiswa-mahasiswi yang mempunyai minat berkaitan pembelajaran Braille Quran dan boleh mengajarkannya kepada OKU penglihatan dan semoga pembelajaran ini semakin berkembang jadi OKU penglihatan tidak lagi menghadapi kesulitan dalam mencari ilmu atau guru untuk belajar al-Quran.”</i>
Translated	My hope is that there will be more students who have an interest in learning Braille Quran and can teach it to people with visually impaired and hopefully this learning will further flourish so they have no longer face difficulties in finding knowledge or teachers to learn the Quran.

In summary, the Applications of Braille in Quranic and Sunnah Studies is a course that requires memorisation so that students can master the code well. To ensure that students' mastery is in good condition, preparations such as memorisation techniques and practice should be made as early as possible so that students can focus fully on reading and typing tests at the end of the semester. In addition, students can get guidance and tutoring from lecturers during T&L sessions.

The offering of this course is an added value available to USIM students that needs to be further expanded so that exposure can be given to the community and they will be more literate and knowledgeable in helping and accommodating the group of the visually impaired.

4.7 Conclusion

This chapter presents data findings obtained from semi-structured interviews, observations and document analysis. The reporting style in this chapter is presented narratively by showing diagrams and tables in order to facilitate the reader's understanding of the content of the findings of this research.

The researcher can conclude that all the data findings obtained in this chapter answer all research questions and achieve research objectives in the form of qualitative data. In the next chapter, the researcher will briefly present the summary of the research, discussion, implications of the research and suggestions for further research.