**Analysis of Student Interviews against Terms of Interest Extracted**

The next phase of analysis is about validating what has emerged from the initial set of categories or terms of Interest as extracted from student utterances in the interviews. This will be achieved by reverting back to the original interview transcripts and understanding whether each student answered the questions correctly or required a lot of prompting during the interview to get there. It will help us to gain insight into how their approach to answering the question was developed – for example did they successfully apply their learnings from class or did they need lots of prompting to recall it? By analysing each of these students further, it should provide further detail or validation on the initial pools of meaning extracted.

The table below summarises this analysis with a detailed discussion on each student further following the table.

**Table: An overview of Students performance with the Problems:**

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| --- | --- | --- | --- | --- | --- | --- |
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|  | **Student 11** | | | | | |
|  | **Approach Used** | **Answered Correctly 1st time** | **Required a lot of Prompting** | **Explained Answer Correctly** | **Explanation Correct After Prompting** | **Made Sense to Student** |
| **Question 4** | DEAD CLIC | Yes | No | No | Yes | "Lucky Guess" |
| **Question 8** | DEAD CLIC | Yes | No | Yes | N/A | "A little Bit" |
| **Question 7** | DEAD CLIC | Yes | No | Yes | N/A | "I wouldn’t be confident on my accounts" |
|  | **Student 3** | | | | | |
|  | **Approach Used** | **Answered Correctly 1st time** | **Required a lot of Prompting** | **Explained Answer Correctly** | **Explanation Correct After Prompting** | **Made Sense to Student** |
| **Question 4** | Accounts, Debit/Credit | No | Yes | No | No | "confused by wording" "May have skipped the question" |
| **Question 8** | DEAD CLIC | Yes | No | No - | N/A | " I always know that when the owner takes money in himself that it’s drawings"…"cash will always go with cash" |
| **Question 7** | Confused | No | Yes | No | Yes | "I’d probably just blank on it" |
|  | **Student 9** | | | | | |
|  | **Approach Used** | **Answered Correctly 1st time** | **Required a lot of Prompting** | **Explained Answer Correctly** | **Explanation Correct After Prompting** | **Made Sense to Student** |
| **Question 4** | Accounts, Debit/Credit | Yes | No | No | No | “I need two accounts” "two different words" "One has to go up and one has to come down" |
| **Question 8** | Accounts, Debit/Credit | No | No | No | No | "the credit side makes sense Only because the drawings is going on the debit side" |
| **Question 7** | Accounts, Debit/Credit | No | Average | No | Yes | "Although your bank is, you’re taking it out of the bank, your cash is increasing because it’s cash" |
|  | **Student 1** | | | | | |
|  | **Approach Used** | **Answered Correctly 1st time** | **Required a lot of Prompting** | **Explained Answer Correctly** | **Explanation Correct After Prompting** | **Made Sense to Student** |
| **Question 4** | Accounts, Debit/Credit | No | No | No | No | "from doing previous questions, I knew that you debit rent and credit cheque" |
| **Question 8** | Accounts, Debit/Credit | Yes | No | No | No | "You’re going to owe money to the cash account, so you credit it, and then because you’re getting the money, you’re debiting it so you’re increasing your drawings account" |
| **Question 7** | Accounts, Debit/Credit | Yes | No | Yes | N/A | "You’re taking money out of the bank so you’re crediting it and then you have cash for your business, so you’re debiting cash" |
|  | **Student 6** | | | | | |
|  | **Approach Used** | **Answered Correctly 1st time** | **Required a lot of Prompting** | **Explained Answer Correctly** | **Explanation Correct After Prompting** | **Made Sense to Student** |
| **Question 4** | DEAD CLIC | Yes | No | No | Yes | " I used to just put it there anyway and just hope for the best and just " |
| **Question 8** | Accounts, Debit/Credit | Yes | No | No | No | "debit the drawings because that’s the rule" |
| **Question 7** | Accounts, Debit/Credit | No | Yes | No | Yes | "Tricky Question" "The way its worded" |

**Student 11:**

This student got question 4 correct straight away by using DEAD CLIC but in their explanation of the answer, they did not follow the logic of DEAD CLIC meaning when explaining the use of this approach, it did not make sense when compared with the answer. When the student was provided with the supports explaining DEAD CLIC again, they remembered the logic behind it and then their answer made sense. In this case, their answer was correct but perhaps more due to doing multiple examples of it before then recalling the approach to solving the problem. As the student clarified themselves, it was a “lucky guess”

For Question 8, the student did get this correct (especially after the rules or DEAD CLIC process was clarified from the question before). They explained the answer correctly but interestingly said it only made a “little bit” of sense. Their correct answer was more due to them “following the formula or rules they were taught as opposed to why they were actually doing it”. They mentioned they had a good understanding of the rules rather than the logic behind them. To explain this, the student mentioned that they “don’t understand what a debit is” and “when someone says, “Credit,” I would say “I still owe them the money,” like, but “a debit wouldn’t mean anything to me”.

For Question 7 – the student followed the same approach by picking two accounts and trying to apply DEAD CLIC. Initially they got the two accounts correct but then questioned themselves straight away. They teased through it and got the correct debit and credit out. When asked whether they were confident in their answer, they stated if it was an exam, they would be because they would hope they had followed the rules but would not have been very confident that they had picked the right accounts.

**Outcome:**

This student performed quite strongly and does appear to have learned the key terms and approach. However, their ability to arrive at the correct answer was more down to their prior experience with practicing questions and as they said themselves a “lucky guess” then having a good understanding of why we debit and credit transactions. The overriding theme here was they were able to follow the approach or rules but they did not make complete sense to them.

**Student 3:**

Question 4 – This student went straight to identifying accounts and did so correctly but struggled with what to do next. When prompted, they realised they had to debit one and credit the other. They mentioned things like they “didn’t completely understand the question” and probably would “skip it” if in an exam. When the support was introduced the student stated that it would have made answering it a lot easier “with the DEAD CLIC, if I had thought of that which I had completely forgotten about, I would have figured it out a lot easier.” “That was probably one of the best things that helped us in the exam. Like, we all were writing it on the side of the pages and stuff.”

For Question 8, they got the answer correct, but their explanation indicated a lot of this was from memory and learning off than actually understanding. They made associations with the words they saw in the question which is what led them to answer it in the way they did. For example for Drawings “I always know that when the owner takes money in himself that it’s drawings, just, I learned that straight away” and “I did Accounting before, so I always associated drawings with the owner” and then for the other side of the account the word cash led them to know the other account was cash. By glancing at DEAD CLIC they knew to debit drawings and then “the other one had to be cash”

For Question 7 – the student immediately got one side correct in that they recognised the bank side of the transaction but even with a lot of further discussion, they did not get to the other side of it. When told that the other side was “Cash”, it immediately made sense to them. “you physically have the cash in your hand, then it makes sense that you put it into a cash account, even though it’s going into the business, but it would still be coming into the business as cash.”

**Outcome:**

This student appeared to have a level of understanding of the approach learned in class but did not have all the elements to it….for example, they knew DEAD CLIC but did not mention once the increasing/decreasing part in the process. They appeared to have come up with their own approach to solving these problems which was down to practicing past questions and then recognising words in the transaction and learning what to do with one side of the transaction which meant getting the other side out would be easier. For example Drawings – they always associated it with the owner and personal use and knew to debit it so the other side had to be credit and in this case the question mentioned cash so it was credit cash. They did mention their general confusion with debits and credits – “I always find it difficult to figure out because I know one thing goes in the credit and one thing goes in the debit, and then actually trying to think, “What goes where?” when you’re actually writing it down, it has just completely confused me always.” This confusion has probably led them to developing their own approach to try and overcome some of the issues in solving the problems.

**Student 9:**

For Question 4 the student got it correct straight away. Their logic identifying two accounts was by seeing the “two different words” on the question. They also knew there had to be “two accounts for every transaction”. They then discussed the logic of accounts increasing and decreasing but could not make the right connection with the answer, e.g. with rent “your rent is decreasing because it’s going down because you’re paying it so it’s going on the debit side” and while they had the correct terminology, they appeared confused by the rules “That one side is, that one has to go up, and one has to come down kind of.”

For Question 8, the student got it almost correct in that they used bank instead of cash for the credit side of the account. When asked about the correct answer, they stated they were only “kind of” confident in it. They got drawings straight away as “it’s the owner taking it out for his own use, so usually when I see that, I think drawings.” “If I see that written, like, “The owner took”….the student associated this with drawings. They thought the cash would have been stored away in the bank, hence why they chose Bank. They did explain it correctly “the drawings are increasing and then the cash is decreasing because the drawings are coming from the cash account.” But the answer did not make a whole lot of sense to them. They kept going back to “It has to be, like, going up on one side and coming down on the other” “I think just when I see drawings, it’s just the odd one out, so it’s kind of, it’s the easiest one to remember, I think.” and the credit side makes sense “ Only because the drawings is going on the debit side.”.

For Question 7 – They straight away got the bank side of the transaction and understood that “ You would credit it. Because it’s … The amount in the bank is decreasing.” With discussion, the student got that the other side was cash and was able to make logic of it “ Although your bank is, you’re taking it out of the bank, your cash is increasing because it’s cash.”. Although DEAD CLIC was discussed with this student, they did not follow it in terms of an approach to answering these questions. They did not use it during the module either.

**Outcome:**

This student again had a handle on some of the approach and terminology learned in class but could not make sense of it when answering the problem regardless of whether they got it correct. They did not explicitly use DEAD CLIC. They mentioned recognizing words in the question which led them to identify correct accounts. With the drawings question, it is obvious that they have simply learned what to do with drawings which then leads them to correct conclusion for the opposite side. This was apparent as they didn’t fully understand the answer even though they got it correct.

**Student 1:**

For Question 4, the student went straight into answering the debit and credit and stated debit rent and credit cheque. When asked to consider cheque, they immediately changed it to bank. On explaining this answer “ Because you’re paying your rent, so that will be a debit. You’re not, like, not in the minus and in your bank account because you’re taking money out of it. You would be crediting it.”. While the logic for the bank side was correct, when asked to explain the rent side further, they said “ from doing previous questions, I knew that you debit rent and credit cheque.” The student acknowledged that “ I know there is a rule, but I just can’t remember what it is.” DEAD CLIC was introduced which the student recognised but they said they did not really used it was learned it more by “ Just by repeating questions”

For question 8, the student got it correct straight away. They had a reasonable logic behind their answer in terms of accounts increasing and decreasing - “ Because the cash is coming from the business, so it’s leaving the business account so you’re going to be in credit to the to the cash … You’re going to owe money to the cash account, so you credit it, and then because you’re getting the money, you’re debiting it so you’re increasing your drawings account. “

For question 7, they did get the correct answer after initially choosing capital instead of cash but then quickly changed it to cash with no prompting. On explaining it, “I just do it logically, like. You’re taking money out of the bank so you’re crediting it and then you have cash for your business, so you’re debiting cash”

**Outcome:**

Some of the student’s answers were more from memory and practice than having a clear understanding of the logic to the double entry process. This student approached their learning by repeating questions and practice. They did have some of the terminology (increasing and decreasing for example) but interpreted it in their own way. When asked about DEAD CLIC a number of times, they stated that they “made sense of it in another way.” In explaining the last answer however, the logic was quite clear and correct. The construction or wording of this question did not put them off.

**Student 6:**

For question 4, the student got it correct straight away and mentioned that they used DEAD CLIC to answer it. However, the reasoning for answering it did not show a complete understanding of the approach or rules “ I mapped it out in my head, like, and then he was an expense which is a debit or rent was an expense which is a debit and then it automatically is the opposite then for the other one, isn’t it”. “ when you’re laying out your debit and credits and your T accounts, you can’t have two on the same side”. “ I found when I was doing the T accounts, the other one wouldn’t necessarily match up to CLIC, we’ll say, if the other one was DEAD so like, here now, rent is expense but bank isn’t, isn’t in liability, income, or capital so …”. When the student was prompted on increasing and decreasing, things made more sense, but there was also confusion similar to student 11 as to why rent was increasing instead of decreasing. “ I did find confusing the increasing and decreasing. Do you know, like, I would have said there now that their rent was decreasing because they paid it off,”.

For question 8- they got the accounts correct straight away but then when applying the debit and credit got confused. They appeared to be trying to recall it from memory “ you always debit the drawings, isn’t it or the credit? There was a rule there, wasn’t there, about the drawings?”. They did get the correct answer when talking through it aloud without much prompting. “ my perception of debit and credit and credit meaning that’s just money you don’t have or you owe money to, so you’d credit the cash account because the owner took out 6,000, and that’s how I got it. And debit the drawing because that’s the rule,”. The student explicitly stated they did not understand why they were debiting drawings but were following something they had learned off about it.

For question 7, the student felt it was a tricky question and got the bank part of it correct. They were going between capital and drawings for awhile on the other side. With a lot of discussion and prompting we got to the right answer. “ Because of cash, like, the money, having the money, they took out the money and that’s their cash account then. So it gives a place for that money to go on one side of the entry.” When discussing the answer, the student made reference again to it being a “tricky” question and interestingly referred to not having seen it before.

**Outcome:**

Again this student recalled the approach and rules learned in class but could not apply them fully. They had a level of understanding but then appeared to try to plug gaps to get out the full answer. They knew they had to get two sides to the transaction and once they had one out, then it was automatically opposite for the other. They mentioned they found parts of the approach confusing, especially the increasing and decreasing part. In the second question, again rather than trying to tease it out with the approach, they jumped to trying to remember what to do with drawings so they could get the other side out. This student made reference to needing an appropriate definition of what debit and credit means.