



**SHAPING SUCCESS ACTION
RESEARCH PROJECTS**

**FINAL REPORT ON THE SHAPING SUCCESS AR PROJECT –
MATHS STORIES**

City of Stoke on Trent Sixth Form College

City of Stoke on Trent Sixth Form College (2021) *Final Report on the Shaping Success AR Project – Maths Stories.*
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For further information regarding the Shaping Success Action Research programme and this project go to <https://ccpathways.co.uk/practitioner-research/otla-7/>.

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Final report - Maths Stories

City of Stoke on Trent Sixth Form College

This project identified and addressed aspects of motivation, confidence and attainment in resit learners tackling GCSE Maths.

We created opportunities for students and their parents to tell and reflect on their maths learner journeys. Their stories told how past experiences had, in the main, deeply and negatively affected their motivation, confidence and attainment. The stories and reflections revealed ways in which we could help them to succeed with their maths GCSE re-sit.

Summary

The original aim of the project was to go into the community and meet the parents/carers of our students on 'their side of the fence'. This was to form links and hopefully minimise the barrier that our college building can present to some families. However, we had to adapt to the circumstances of this academic year. This report focuses on the reconnaissance aspect of the action research process – exploring the situation in great detail, as the foundation for subsequent responsive activities.

We listened in depth to students' and their families' stories of their maths learning. We want to seize and celebrate this opportunity to make post 16 learning of maths safer, supported and successful.

Rationale

For many of our GCSE resit students, attendance at parents' evenings, home support for attendance issues and assessment feedback discussion with parents is minimal. Many families find sixth form college a daunting environment. Without all around background support for learners, it can be easy for them to lose track and disengage.

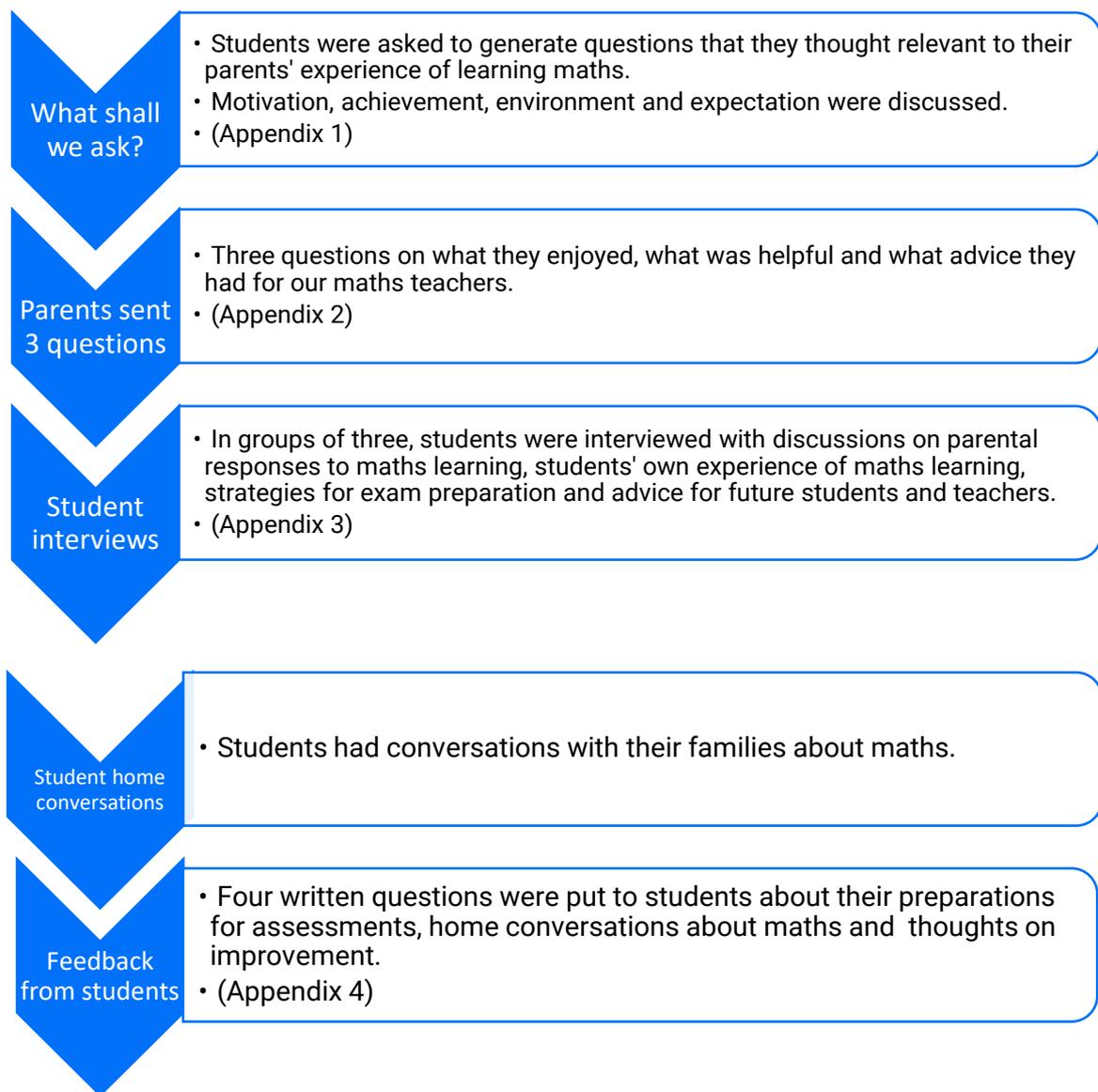
Our project focused on interviews, discussions and questionnaires with both students and parents. The themes investigated included students' feelings about their maths learning and attainment, experiences of online learning, maths 'legacy' attitudes and approaches to and preparation for assessments.

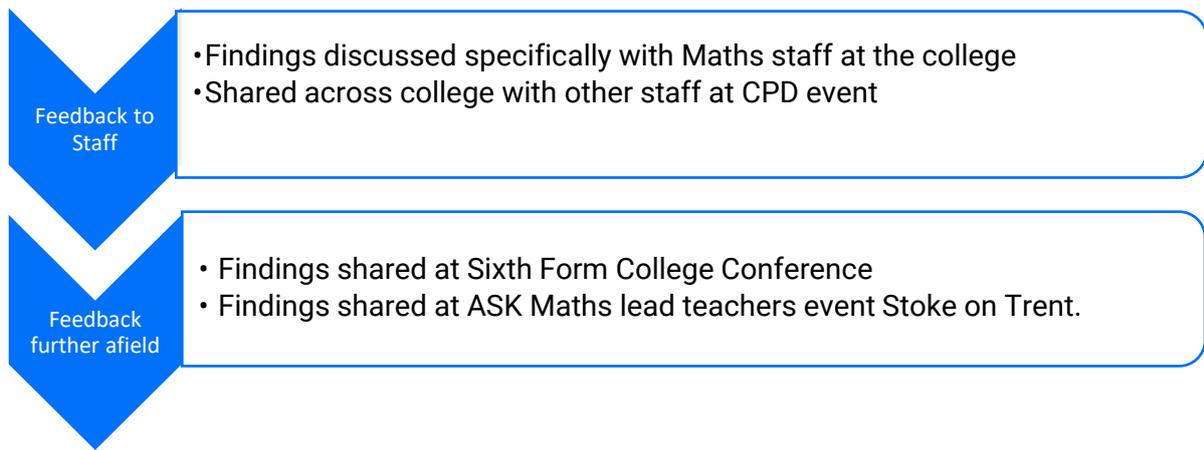
In the process of carrying out the discussions we identified key barriers to parental involvement and student progress that will be addressed. We also aimed to identify ways that we could support the students to become more effective in their studies.

"Perhaps the most interesting finding is the fact that the more parents and children talk to each other about meaningful subjects, the better students achieve; home conversation really matters

(Lucas, 2010 pg 3).

Approach





Professional learning: Evidence of changes in teaching, learning and assessment practices

Reflective practice and enquiry are embedded in our professional life in the college. Students are regularly asked for their responses in student surveys and questionnaires.

Designing and considering the questions used in our project afforded opportunities for discussions on cultural, religious and socio-economic matters effecting learning in maths.

The students' lead on the questions discussed gave more direction, relevance and weight to the project.

Three main publications were used in guiding our project:

- Engaging parents in Raising Achievement: Do they know they matter? (Goodall and Harris, 2007)
- The impact of parent engagement on learner success: Identifying barriers to learning (Lucas, 2010)
- A Guide to Tackling Maths Anxiety – Insights from the Power of Maths Roundtable.

All student names are anonymised. No other identifiers of individual students are used.

Evidence of improved collaboration and changes in organisational practices

Our planning, scheduling and schemes of work address all the findings of this work. Collaboration with parents is enhanced by progress coach liaison, exam preparation and specific timetabling for such and is already embedded in next year's scheme of work based on this project.

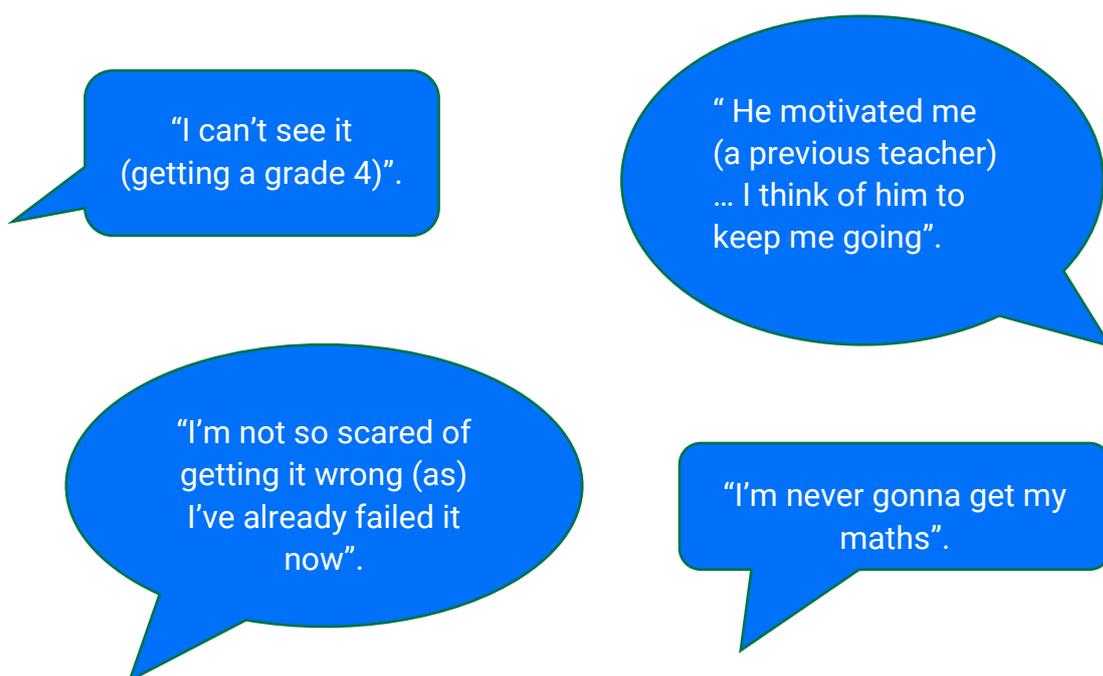
Meetings with the maths team and across the wider Level 3 foundation¹ teachers and support staff will include findings and reflection on this work.

Work has been presented to the [Sixth Form College Association national conference 2021](#).

We lead teachers will be sharing findings at ASK Maths (An opportunity area project across 3 colleges and work-based learner providers in Stoke on Trent/North Staffordshire) college staff and work-based learning tutors and teachers.

Evidence of improvement in learners' achievements, retention and progression

The four main themes of the interviews, discussions and questionnaires can be summarised in these student statements:



When Ellie made the statement that she was "Never gonna get my maths", she was making it to her classmates and to her sibling: How could she expect to surpass her mother's achievement in maths? Ellie was capable of achieving a Grade 4 in her GCSE but her crushing lack of confidence permeated every part of her learning in maths.

It's a powerful statement of intent that she got ready and into her lesson for 8:45am. What didn't keep her here? About 5 weeks after that statement Ellie left the college and left education. Phone calls to her mother and to Ellie herself to encourage her to stay were fruitless.

Other interviews with students revealed a similar pessimism about the results but they stayed.

¹ Level 3 Foundation is the name for our level 2 courses i.e. GCSE resit

From the beginning of the year we encountered the 'I can't see it' (success in maths). This is expressed in various forms from many of our students in resit maths and perhaps represents an even greater call for us to harness the glimmer of hope that gets our students in to the room for a lesson in the first place.

The need for an injection of support, trust and open communication is clear and, in every student, we saw an opportunity to begin helping students move on from feeling a failure.

For example, Mia felt failing maths was inevitable and catastrophic but later in the year she said: 'I enjoy maths now because I'm not so scared of getting it wrong if that makes sense? Because I've already failed it now, I've already had that feeling so now it's like I'm on the road to making things better'.

Learning from this project

This project, although much altered from its original concept, gave voice to students on their experience of learning. Reflecting on school experiences, home attitudes and teacher relationships gave students opportunities for building rapport, increasing confidence, and guiding practice. Some reflections were particularly relevant and have informed our planning for the next academic year.

Students really engaged with the interviews. They were articulate and willing to share their experiences of maths learning. Their reflections on their own preparation and feelings about learning were insightful.

Half of the replies about preparation for assessments and exams said they didn't know how to effectively prepare. A quarter of replies said that it was easier to revise for English and other subjects than for maths.

We have changed the structure of our scheme of work to allocate a third of all lessons to address these skill deficits: exam technique e.g., greater use of goal free questions; active revision methods e.g., identifying their own gaps and making targets; exam readiness and techniques to calm and prepare for an exam for anxious students.

A majority of students, who expressed an opinion of online lessons, said it was not effective for them at all. In March we received CPD from MEI (<https://mei.org.uk/>) to quality check and improve our provision of on-line lessons.

Most students went home and had conversations with their parents about their maths. I am going to continue using home conversations, working with students to develop the questions, as a part of our discussion about maths attitudes with my students.

I am also going to offer to go into colleagues' lessons and do a short session on how we feel about maths.

A small adaptation to the classroom conversations is to use the pronoun 'we' rather than 'you' when talking about needs, attitudes and even revision techniques.

We can present college maths as different. It is a fresh start, and to acknowledge and accept a differing path and timescale to achieving one's potential can be an important validation to a student that has had the 'bottom drop out'.

Getting to know and valuing students as individuals makes a difference. With a small teacher input the reward in attendance and engagement in students can be huge. Our GCSE resit students are receptive to a new approach. Many students mentioned teachers by name who they felt had given them support. The substance of that support was very much that the teacher listened, responded, and cared about their learning in maths.

References

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Appendix 1- Samples of student suggested questions for parents and carers

What's the best source to help revise?

How did you solve your math problem when struggling with it?
Did you achieve your goal at school?
Have you enjoyed Maths in the school?

Did you struggle with Maths, if so how did you overcome it?

Did you have a good maths teacher who helped you with any problems you had?
Did you do lots of revision at home to practice Maths?

What was your confidence like with Maths?

Questions -
◦ Did you care about maths growing up?
◦ Did you use maths as an adult?
◦ Did you struggle with maths?

What do you remember from maths?
What from maths do you still use?
How did you revise for the exams?
When/what year group, were you most comfortable with maths?

did you enjoy maths whilst learning?
did you do well in lessons but not as good in exams?
did you have a favourite way of learning maths?

~~Why did he~~
Why did he only do working out in his head and not write it down?

Appendix 2 - Samples of parent/carer survey

<p>Dear parent/carer</p> <p>Our year?/resit? students are beginning their revision sessions and we know they benefit from the support you provide at home.</p> <p>To help our teachers to continue to develop the best support possible for your children, please could you share your thoughts about learning maths:</p> <p>When you were at school, which maths lessons did you enjoy most? <i>I enjoyed lessons using pictures, objects and science experiments. Art for science shapes making patterns - how something fits together & where you find it in nature or modern world. E.g. honeycombs, slices of a cake for fractions, practical tangible lessons.</i></p> <p>Are there any maths tips that you found particularly helpful? <i>Being able to use your own method of calculation & showing working out. Tik Tok Videos e.g. @pinkpencilmath @aieyourexams @mathicallytutors /mathically.com</i></p> <p>As a parent or carer, what advice might you have for our maths teachers? <i>Check students understand the absolute base blocks of maths. Some basic primary school lessons have been misunderstood. Use science and art to aid explanation when you have dyscalculia a maths problem looks like a bowl of alphabet spaghetti in a bowl - where do you start? Every child learns differently. Help child understand their way of learning. Have all children had dyscalculia, ADHD, process delay tests in primary, or secondary school? Are S.E.N.C.O.s involved in lessons at all?</i></p> <p>Best wishes Martin Whalley</p>	<p>Dear parent/carer</p> <p>Our year?/resit? students are beginning their revision sessions and we know they benefit from the support you provide at home.</p> <p>To help our teachers to continue to develop the best support possible for your children, please could you share your thoughts about learning maths:</p> <p>When you were at school, which maths lessons did you enjoy most? <i>My brother most likely enjoyed pies and times/divide etc, and also fractions.</i></p> <p>Are there any maths tips that you found particularly helpful? <i>- Mathswatch - Eedi</i></p> <p>As a parent or carer, what advice might you have for our maths teachers? <i>- Make bingo lessons also - Maybe some quizzes.</i></p> <p>Thank you very much for your feedback. We hope that by working together we can help your child to perform to their full potential.</p> <p>Best wishes Martin Whalley</p>
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Appendix 3 - Transcripts of student interviews

Interview 1

Interviewer: Catherine Ream

Respondent: RES1: Ruth RES2: Lara RES3: Josie

INT: Okay, I'm just going to jot down your 3 names, So, just say your names out loud because I'll recognise them later.

RES1: Ruth.

INT: Ruth, that's great.

RES2: Lara.

INT: Thank you.

RES3: Josephine - Josie

INT: Josie—is Josie okay?

RES3: Yes.

INT: Okay, so, firstly, do you remember, some of you may have taken this home—this yellow thing to talk to whoever is at home with you, some of you, that's parents, sometimes it's grandparents or uncles or whatever, to talk to those people at home about their maths. Does that ring a bell—did you get this? No, okay.

So, one of the elements of my project is about the people that you live with or support you and their experience of maths. So, let's just—Josie, can I start with you and ask you, who is it you live with, and do you know anything about their experience of maths, or have you talked to them about it?

RES3: I live with my mum and dad and—obviously when they were at school, my parents didn't get any GCSE maths at all, but my dad was like—he works—where he had to use maths a lot. So, my dad is relatively good at maths so, he's been trying to help us learn with our maths, but my parents don't have any maths GCSEs at all.

INT: Right, do you know whether their experience—when they were at school was good with maths or not?

RES3: My dad wasn't really in school, but my mum—I don't think she really cared about maths.

INT: Okay, thanks that's really helpful to hear that. Lara, do you want to tell us a bit about who you live with, and do you know anything about them?

RES2: I live with my mum and she's really good at her maths, but her interpretation—like the layout is really different to what we do now.

INT: Right.

RES2: When I working out some stuff with her, her layouts and everything, her techniques were different completely.

INT: Right. So, you have talked about your maths learning with her, and has that been helpful to you?

RES2: Yes.

INT: That's interesting though, the changes because there have been some big changes hasn't there?

RES2: Mm-hmm.

INT: Ruth, do you want to talk about your experience?

RES1: Well, I live with my nan, she says that she didn't really learn a lot, but I think she may have gone back to do GCSEs, but I'm not sure if that was just English, we don't talk much about maths or anything.

INT: No, so, you don't go to her and say, "Oh, I can't do this problem, have you got any ideas?" or anything like that? Anyone else that you do ask about that at home—it's just in college, is it? Okay, great, that's really useful background. Josie, would you just say a little bit about your experience here in college with maths and how you feel about it and your motivation about it. And also, before you came here, were you in school before you came here?

RES3: Yes.

INT: Can you just say a little bit about that, please?

RES3: Obviously, last year we were quite cut off, so, obviously, Year 11, they didn't have to do any more work because obviously, we'd finished. So, obviously, for, say—6 or 7 months, I did no maths at all, so, I didn't have to work anything out or do anything. So, obviously, when I came to college, it was a bit stressful because I had to try to remember everything. In November, when I did my exams—my maths, I felt really disadvantaged because I didn't do maths for so long because there was no point for us to do it because obviously, they had all the work to mark. But obviously, I think after Christmas and then when we started online school, I think it was a lot easier

because I was at home, and I was more comfortable actually doing the work because I wasn't scared of getting the answers wrong in front of people. Apparently, I might have some sort of dyslexia or the dyscalculia one, and I think learning maths is really difficult. When we do tests, I hope that I've done well, but obviously, if I don't do well, I don't want anyone to find out that I didn't do well because it's really discouraging when someone goes, "Oh, I got a higher score than you." I think that definitely, I've become more confident since coming to college to redo maths because I don't feel like, when I was at school, I got the help that I needed for maths, but I feel like I have now when I've come to college.

INT: Okay, thank you, that's a great answer. Lara, how about you?

RES2: Well, I've been actually doing—like resitting maths for the past 3 years. I left high school in 2018. I really struggle with my maths, but since coming to college, I have actually gained some confidence about it. I've been diagnosed with dyslexia and dyspraxia but I'm also in the process of figuring out if I've got dyscalculia. It is hard but I'm getting used to knowing that I won't be as smart as everybody else.

INT: Right. Does having those things said now, about dyslexia and dyspraxia and possibly dyscalculia—does that help you in terms of your motivation with maths—how do you feel it affects that?

RES2: It does feel a bit intimidating because a lot of people won't know about it and when I try and work an answer out and everything and I get the wrong answer, I have had people mock me for not getting that answer, but they don't know the reason why. When I work out my maths, it's dead hard—I can get the answer but the working out is the bit I struggle with, so, it's kind of frustrating.

INT: In high school, was it different to how it is here, what can you tell me about that?

RES2: Yes because when I was in high school, I didn't know I had dyscalculia and everything, and I used to have loads of supply—so, I never actually had a real teacher. So, every time I went to a lesson, we were learning different things each lesson, we weren't carrying on and how best to best to understand it.

INT: Right, I see, so, you didn't have that continuity between teachers?

RES3: No.

INT: Ruth, what can you tell us about your experience here and your experience of learning before you were here?

RES1: I've always massively struggled with maths; I wasn't sure why I did. After I got the dyslexic diagnosis, they kind of put me into separate classes and whatnot, so, I got extra classes on top of it. Since I've come here, I didn't have that—I do have it now, but it isn't like—you don't have an option in it. I have an option to going to—before I didn't. I haven't really spotted an improvement a lot, so, it's just been the same. But my motivation is a lot more for whichever reason.

INT: What about your confidence with it—not changed?

RES1: No.

INT: No? that's interesting, isn't it. Let me just check, I'm trying to ask the same questions for everybody. So, two things in the next set of questions; what do you think of when you hear the word revision—that is my first part; what comes to your head when you hear the word revision? And then secondly, I want you to tell me, starting with Josie, how do you prepare for exams?

RES3: I think in November, when I was preparing, obviously, the November exams are the only exams I have ever sat, except for mock exams, but obviously, they were mocks I didn't really care about them. But when I came to my November ones, I think I just read through my book and things that we had done. I don't think any other—I hadn't done any other revision for it. But revision—when I think of it, it is seriously just looking through books on how to do it, and that is it. I'm not writing down anything because when I was in high school, no one taught me how to revise at all. They had revision study things, but never for maths, they were always for English or Science. But mine was the same as Lara, we had the top set—like set 1 and 2, always had a proper maths teacher, set 3 and set 4 didn't, we were always with like—substitute teachers, like an English teacher or a PE teacher, and obviously, they don't have a maths degree so, we were always doing different things. So, obviously, I didn't really have many things to revise from or that much help to revise.

[00:10:00]

INT: Okay, thank you. Lara, when you hear the word revision, what do you think?

RES2: Remembering, because whenever I spoke to people that were really good at maths, like friends in high school and everything, they were trying to teach me how to remember the stuff that is on the page and not just read through it, but that never seemed to help, because I'm still taking maths now.

INT: So, how do you prepare for exams, how have you prepared up to this point for your tests—your assessments?

RES2: Normally, I would try and make it into a song because I like listening to my music and I like doing some digital stuff. But recently, I've just been reading through it and making notes because that's what I've got time for.

INT: Okay, great, thank you. How about you, Ruth?

RES1: What was the first question?

INT: Well, two parts—when you hear the word revision, what do you think and how do you prepare for assessments?

RES1: So, with revision, I think right now, what I'm doing is, I'm getting an extra class and it's like booklets and I just print out all the booklets, so, whichever booklet that I get, and I aim to go through that. The last few booklets I haven't because I was [unclear 00:11:30] the entire thing—that's typical. But I try to do the booklets—so, again, do that and see what I know I can do and then go back over it and with the help, I'll go back over it and see how I can do that. But before, I've never revised, I've never done anything like [unclear 00:11:52] revise and that—there wasn't anything like that, it was just [unclear 00:11:57].

INT: That's really interesting actually. That's probably all I'm going to ask you formally as part of that, so, I'll stop

Interview 2

Interviewer: Catherine Ream

Respondent: RES1: Sarah RES2: Kayla RES3: Mia

INT: Okay, so this is our first set of interviews about research projects. So, one of the things we did is we sent a questionnaire home, did you all get this questionnaire to give to your parents, the yellow one? Do you know whether your parents looked at it or discussed it, Sarah—did they look at it—no? Okay, so, the main point of this was to ask about your parents' experience—you may not be with your parents—whoever you're with, your main supporter at home—their experience of maths. What we were trying to do in this project is look at how that affects your learning or how it affects the support that you feel you have from college or at home. Sarah, have you got any thoughts about that yourself, about what your parents—who is it you live with, my love?

RES1: My mum and dad.

INT: Your mum and dad, do you ever talk about maths with them?

RES1: No.

INT: Never, no. Do you know what they thought of school or maths in particular?

RES1: They didn't like it.

INT: They didn't like it, have they ever told you anything about that?

RES1: No.

INT: No. What has your experience been here of maths—Were you at school before here—do you want to say a little bit about that?

RES1: It was just bad.

INT: Because?

RES1: They just could teach properly or anything.

INT: Uh-huh, and how is it here?

RES1: It's good.

INT: It's good, what is different here?

RES1: Just the teachers and everything, like—they go through stuff.

INT: Right, okay. So, you would say your experience in school wasn't good at all?

RES1: No.

INT: Was there anything good about it?

RES1: Not really.

INT: Did you enjoy maths at primary school?

RES1: Not really.

INT: No, no—okay, well that is some good information. Mia, what about you—firstly, this questionnaire, did it get discussed at all?

RES2: No. Partly because I do know that my mum is not very good at maths either. So, sometimes I go—"Oh, mum, I really don't like maths, I just can't do it, it's just so hard." And she'll be like, "Mia, I'm the same, I'm just the same" so, yes.

INT: Do you feel like your mum achieved her potential in maths, do you know what I mean by that?

RES2: Do I feel like she achieved her potential? I don't know. I feel like the way that maths is taught here and how it's taught in school is a little bit different. I feel like the way that it is taught and the way that they approach it is a little bit different and I feel like, when you fail it, you feel like it's not so daunting as it would be if you were at school doing it—if you know what I mean.

INT: Tell me a bit more about that?

RES2: I don't know what to say. Like now, I enjoy maths now because I'm not so scared of getting it wrong if that makes sense. Because I've already failed it now, I've already had that feeling, so, now, it's just like on the road to making things better, do you know what I mean?

INT: I absolutely know what you mean, yes, you've put that really well.

RES2: I do enjoy maths here, it's just sometimes, it can be hard, but I do enjoy it.

INT: Thank you. Kayla—Kayla, did you discuss any of these questions—who is it you live with at home?

RES3: My mum.

INT: Right, did you discuss any of these?

RES3: No, we didn't but my mum passed maths when she was in high school.

INT: Right.

RES3: So, whenever I have trouble with my maths homework I always go down to her and be like, "Mum, can you help me" because my mum is quite good at maths, so, that's an advantage on my part really.

INT: Do you have many conversations about your experience of maths with her?

RES3: Well, she knows I've been here for 3 years now and I'm trying to pass maths, so, she knows that maths is like my weakest subject, ever. So, it's quite difficult, I'm used to just seeing like a 3 next to maths, which is hard to see because I'm actually doing alright with Martin now because he actually supports. When you send him an email, he responds really quickly, and he doesn't just leave you—hanging really.

INT: Yes. What are the main things, if I start with you Sarah, and I'll come back again. What are the main things you've done to prepare for your assessments that you're doing now?

RES1: I always try not to worry too much because when you worry, it just makes things worse. I always want to be prepared, so, I always make sure I've got the right equipment and I always make sure I revise as much as I can. But it's hard because I don't really know how to revise for maths in certain ways. I know that you have to write loads of stuff down but that's like where I struggled the most with how I revised, but I do try.

INT: Yes, great, thank you. Mia, what are the main ways that you've prepared for these assessments up to this point?

RES2: I always do try and make sure that I'm prepared, the same as Sarah said. But it's the same again with revising—how do you revise for maths? English is much easier to revise for than maths is, and I think that is probably why I do feel a little bit—I'll know it, when I'm doing it in a lesson and then obviously when it comes to assessments and you're sitting there—oh, my God— [unclear 00:06:02].

INT: Thank you. And Kayla, how do you prepare?

RES3: I do past papers and I make sure I sleep and eat and everything before doing them.

INT: Yes, so, you don't try and do that staying up really late studying before?

RES3: No.

INT: It doesn't really work, does it? So, when I say the word revise, this is probably the last question I'm going to say and then if you've got anymore. When I say the word revise—not particularly about maths but about anything, what do you think of when you hear the word revise—what is the first thought that comes to your mind?

RES3: Mind maps.

INT: Mind maps, is that what comes to your head—mind maps? What about you, Mia—revise?

RES2: Going over information.

INT: Going over information, right, thank you. And Kayla?

RES1: Mine is just a lot of notes.

INT: A lot of notes, yes. That's really interesting actually. One of the things I've been talking about to do with this project is—I never use the word revise about preparing for maths because I think of revise as meaning read somehow or going over. To me, it just means doing more maths, you know, it's just like doing more questions, that's all it means, it's preparing. So, just to finish up, I'm really grateful to you because the things you've said are going to be so useful. And as I said, I won't use your names or anything, but I will be writing up some of the things you've said to explore what we can do to carry on with good stuff, that you think does work and to really try and support people who come here, who want to get that GCSE. Is there anything else you would like to say, Sarah?

RES1: Not really.

INT: No, okay. Any thoughts about the maths here or what would you want to say to your high school teachers if you could?

RES1: I don't know.

INT: You don't know—okay, that's fine. Mia?

RES2: Nothing really.

INT: Yes, okay. And how about you, Sarah?

RES3: Just don't give up.

INT: Just don't give up, yes. So, one of the parents that responded said—When you were at school, which maths lessons did you enjoy most? “I enjoyed lessons using pictures and objects” so, like science experiments sort of thing in maths really. And—are there any particular things you found helpful? “Being able to use your own method for calculations and showing working out.” “TikTok videos” I did not know

there were TikTok videos about maths. “Pink Pencil Maths” have you heard of that? Me neither. “Pink Pencil Math, Ace your Exam and Mathically Tutors.” As a parent or carer, what advice might you have to maths teachers? And they say to us, “Check that the students understand the absolutely base blocks of maths.” And it says, “Some basic primary school lessons have been misunderstood.” “Use science and art to aid explanation when you have dyscalculia” do you know what dyscalculia is? Do you know what dyslexia is? Dyslexia is when you’ve got a block about certain elements of how words are—some people have that with numbers, it’s called dyscalculia. I think we all know; you can be as smart as anything with lots of things, but you get this frozen feeling about maths, you know, and it stops you being able to apply your normal level of ability and functionality to the maths, and that’s what that means really. “A maths problem looks like a bowl of alphabetti spaghetti.”

[00:10:00]

So, those are some of the thoughts there and I’ll stop that now.

Interview 3

Interviewer: Catherine Ream

Respondent: RES1: Emma RES2: Ruby RES3: Wiktoria

INT: Okay, great, thank you. Can I just write down your names, please?

RES1: Emma Dxxxxxx.

INT: Emma, thank you, I'll just put Emma D, okay.

RES2: Ruby.

INT: Ruby V, thanks, Ruby.

RES3: Wiktoria [unclear 00:00:14].

INT: Wiktoria—is that with a W?

RES3: Yes, WIKTORIA.

INT: Okay, thanks very much. I'm Catherine. So, firstly, I just wanted to see if you could tell me a little bit about how feel maths has been here, but also, how was maths before you were here? So, it doesn't matter whether this is your first year here or you've been here before. I want to just have a little bit of a flavour—Emma, how your experience of learning maths and taking exams in maths; okay, what can you tell me?

RES1: It's not been very good, to be honest. In high school, I didn't have very good teachers, it was always supply teachers, I didn't have a fixed teacher because I was in the bottom set. One of the teachers that I did have, she got fired because she pushed a student into a radiator. I came to this college, and she was in the college room, so, that's interesting.

INT: Mm-hmm.

RES1: I've just found that not many of the teachers here, I learned well from other than Martin and David, they've really helped me come along and I've failed like 6 or 7 times—I haven't come far other than with Martin and David, they've really helped me.

INT: Okay, great, thank you. Ruby, tell me about high school first, what was it like at high school?

RES2: I never used to get on with my teacher but, to me, it was because I was not really that interested, whereas now, I've realised the importance of getting it. So, yes, that wasn't too bad, but then since I've come here, also, last year was a bit—it was okay, but I wouldn't say he gave the support that Martin and David have given, so, that's hard.

INT: Right, okay. And your own feelings about maths in this time, have they improved, or have they stayed the same?

RES2: Oh, yes, definitely. It's much more positive than before.

INT: Okay, great, and Wiktoria?

RES3: In high school, I didn't get on with my teacher because they didn't really help me. Obviously, I'm from a different country and it is hard for me to understand some questions. And when I asked the teachers, they just said something—I don't even understand what they were on about in high school. Obviously, it's my first year here since Martin helped me now I literally got higher scores and higher scores all the time.

INT: Right. So, would you say you feel a lot more positive about your learning here?

RES3: Yes.

INT: So, some of the questions we were asking about your parents here—not about them, sorry, to them, to whoever it is—your parents or supporters at home. “When you were at school, which maths lessons did you enjoy the most or what did you find helpful and how did you prepare for exams, and what advice would you give?” So, firstly Emma, what is your understanding—who is it you live with?

RES1: My mum and dad.

INT: Right, do you know much about their feelings about maths?

RES1: Yes. My dad is dyslexic, so, he was just put in a room, so he never got taught anything. So, he has gone into retail and gone into bakery, he has never got any qualifications. My mum failed maths, never got maths.

INT: Right, so, what is their feelings about your journey with maths and your studying, do you know— do you talk about it with them at all?

RES1: Yes, we've had a lot of arguments about it because I've failed it like—6 or 7 times and they just want me to pass. I'm going to be the first to go to university hopefully if I pass—in my family. So, they just want me to do well.

INT: Yes, okay, that's great, thanks for that information. Ruby, how about you, do you know much about—who is it you live with, my love?

RES2: My mum and my dad?

INT: Right, do you know much about their feelings about maths or their experience?

RES2: My dad passed maths and my mum, I don't think did, but she has always encouraged me to get my maths, I don't know what else to say.

INT: Yes, that's fine, that's great. Wiktoria, how about you?

RES3: I don't know about my mum, I think she passed but I'm not sure, because she always wants me to pass, even though I've failed it 3 times now. She just wants me to try my best and do it.

INT: Yes, and go forward with it, okay. So, I'll come back this way, what are your main ways that you prepare for exams, Wiktoria?

RES3: Practice papers, I usually do that, and it works for me.

INT: Do you mark them or how do you get--?

RES3: I mark them, I send them to Martin, and he helps me when I come to college.

INT: Right, okay, great thank you. Ruby, what are your main ways of preparing for your maths exams?

RES2: I'd say the same—past papers, I've been going through a lot of the starter tasks because Martin said that may be helpful.

INT: Mm-hmm.

RES2: Yes, just going through past papers has really helped.

INT: Right, great, thank you. Emma?

RES1: Getting extra help at home. My best friend's dad, he's really good at maths, he's been helping me at home and then I've been doing extra 1-hour sessions every Tuesday with David, I've been doing past papers—anything I can really to pass this time.

INT: Right, do you feel like your—well a mixture of things, like, your motivation but also your confidence levels have changed over time, has it gone up and down or is it just going up—what do you think, Emma?

RES1: Well, every time I failed maths it just knocked me back a bit, but having teachers this year, I felt have been supportive and that has encouraged me more. I just realised that I really need to do it this time because I want to go to uni, and this is my last chance.

INT: Okay. By the way, it's not your last chance.

RES1: I know, I just really want to get on now, I'm already a year behind, I just want to get where I want to go.

INT: You're not a year behind.

RES1: I want to do my master's; I want to go and live abroad--

INT: I'm only saying this because I went to university later. I wasn't really super old, but I was like 20 something, you know, so, you can go to university when you're 50, 30, any age--there's not a last chance, I'm just saying that because that was my experience. Ruby, how about you, confidence, and motivation, how has that changed do you think over time, from school to here and your experience?

RES2: Yes, I think every time I failed it did knock my confidence quite a lot. But I think because I've realised it's the last year I need to just get my act together and get it. So, I don't know if it's my confidence has changed, I think my motivation for getting it has changed. I think I've just realised that even if I do feel underconfident with it, I've just got to force myself to get my mind in that place to get it.

INT: Right, okay, that's really interesting what you said there. Wiktoria, how about you, your motivation, your confidence?

RES3: I'll say the same as them two.

INT: That it is improving and what would you say to students next year, who are coming here who maybe haven't had a positive experience. We've also got this whole-- what's happened in the last year, which--gosh, none of have ever suffered that when we were at school, so, any thoughts of what you might say? I'll come back to Wiktoria to students next year about what you would say would be helpful to them?

RES3: I would just say try their hardest and stay positive, thinking that you will pass.

INT: Okay, and you, Ruby?

RES2: I'd probably say just make sure to not avoid it in the first year because obviously, I reckon a lot of people do that because I did that thinking, you know--I'll pass it, it'll go away, but it doesn't. So, if you face it early on instead of delaying it you've better chances of passing.

INT: Okay, that's great, thank you, and Emma?

RES1: The same really, just try from the get-go.

INT: Try from the get-go. And ask for help would say—is that something that you've had to learn to do is to ask for more help?

RES1: Not really.

INT: You've been good at asking for help all along, have you?

RES1: Well, I normally just do it myself because I've never found teachers to be that supportive, whenever I've asked I just haven't understood their methods necessarily. But now, that I've found teachers that have—that understand my methods as well, I can do that.

INT: Right, okay, great. Anything else any of you want to add or ask about this—no? So, it may be that next week I want to have another quick chat with you just to see how your revision has gone over the last week and where you're at, just to recap and come back if that's okay.

Interview 4

Interviewer: Catherine Ream

Respondent: RES1: Sajid RES2: Carl RES3: Mahrukh

INT: Great, thank you. So, just to start with, I can find out—Sajid, I'll do Sajid, Carl and then Mahrukh, just a little bit about where you're at with your maths, how you feel about maths here, and what it was like before you came to this college for you, your experience before that?

RES1: It's alright here, the classes are pretty good. Like I'm working quite well [unclear 00:00:32] productive to the lessons.

INT: And confidence, your own confidence, your own motivation?

RES1: Yes, I'm motivated to do something if I want, yes I'm quite confident.

INT: Okay, before you were here, were you at a school?

RES1: Yes, high school.

INT: What was your experience like of maths lessons there and learning?

RES1: The same really.

INT: So, okay?

RES1: Yes.

INT: Okay, great, thank you. Carl.

RES2: Yes, I'd say that the lessons here are a lot more structured and organised like my teachers are very specific—no kid doesn't feel like they don't know what they're doing sort of thing.

INT: Right, okay.

RES2: It's made me feel more confident in my ability, like, from high school, I was like—every lesson was getting disrupted or I wasn't getting what was being taught. I'm understanding a lot here.

INT: Right, and your own confidence level, has that changed?

RES2: Gone up since when I first came here.

INT: Great, and Mahrukh, what about you?

RES: I've noticed you've got to do things independently and by yourself, which in high school, it wasn't really the case, but it was kind of like-- you wouldn't really pay attention like that, as in now, you understand how important it is that you actually work hard.

INT: Mm-hmm. Do you feel like you have to take more responsibility now for it than before?

RES3: Yes.

INT: Do you enjoy maths at all?

RES3: No.

INT: Have you ever enjoyed maths.

RES3: Mm-mmm.

INT: Primary school—No, never? How about you, Carl have you ever enjoyed maths?

RES2: I enjoyed bits and pieces of it and whatnot, as an entire subject, I can't do it like-- thoroughly, there are certain parts where I'm like, right, I can get this easily.

INT: I see, okay. And Sajid?

RES1: I've never enjoyed maths.

INT: You've never enjoyed maths, okay. One of the things that we've done as part of this research project is we sent back home these yellow forms to ask you to—whether you live with your parents or whoever you live with as support; just to talk about their experience of maths. Now, we've had some back but I'm just wondering, Sajid, if you would be willing to tell me who it is you live with and what you know about their experience of maths?

RES1: I live with my mum and dad.

INT: Uh-huh.

RES1: I know they were quite good at maths—I mean, I asked them their experience of maths and high school and college, and they said they enjoyed it really.

INT: Right.

RES1: But I don't really like it that much.

INT: Say again?

RES1: I don't really like it that much.

INT: You don't, not as much. So, they have a positive experience would you say?

RES1: Yes, I think so.

INT: Okay, that's interesting, thank you, that's great. Carl, how about you have you had any conversations about that, or do you know much about--?

RES2: Yes, I've had conversations, with my mum and dad. My mum wasn't really a big fan of maths to begin with, she never really gelled with the subject either. But my dad, he really enjoyed it type of thing. He's always said he's had a good experience with maths [unclear 00:03:49] like, life, in terms of a good job.

INT: Yes, that's great. Mahrukh, are you happy to tell me a bit about--?

RES3: My mum, she's good at it, but my dad is a bit techy with it, he's like me, he doesn't really [unclear 00:04:07] to do it.

INT: He's a bit what with it?

RES3: Techy with it—like.

INT: I don't know what that word means, techy—go on—it's because I'm so old?

RES3: How could I describe it? He wouldn't be good at it as my mum would have been good at it.

INT: Right, okay. Do you think he's not as confident as your mum as well about it?

RES3: Yes.

INT: Yes, and do you know whether they had positive experiences when they were learning it and achieved their potential?

RES3: My mum did.

INT: Do you think your dad didn't?

RES3: I don't think so.

INT: You think that's what he'd say, do you? How about you, Carl, do you think they'd say they felt they had achieved their potential?

RES2: I'd say my dad would, but I don't think my mum would. She just didn't really enjoy it—when I've spoken to her, she didn't enjoy it as a subject, when she was at school.

INT: Yes. How about you, Sajid?

RES1: Yes, I would say they didn't enjoy the subject.

INT: Right, okay. We're nearly finished, I just wanted to ask you about how you—and I'll go back this way, so, Sajid, how do you prepare for exams, what sorts of things do you do and tell me a bit about your attitude about preparing for exams in maths?

RES1: I try to do past papers and that. Martin, sometimes he sets us work on Google Task so, I try to do that as well. I try to have a positive approach, I try my best to but, sometimes, I'll pass, sometimes I'll fail but I just try to do the work as best as I can really.

INT: If you can think of anything that you think the college could do to help you more-- does anything come to mind-- Or your teachers?

RES1: Maybe like more with Google Task I like online work, so, maybe more past papers as well.

INT: Right, okay, great. Carl, how about you, how do you prepare for exams and what do you think is helpful to you?

RES2: I mainly just find what topics are my worst—like devote quite a bit of time [unclear 00:06:16] or put in a bit of time towards what I'm stronger at [unclear 00:06:23] not stressing over the littlest things, like [unclear 00:06:30] I don't see the point of stressing over like—a slight gap—I mean mistakes are there to be made—make them and move on, that's all you can really say about it.

INT: Okay, that's interesting, thank you. And Mahrukh?

RES3: At first, I did past papers and then I let my mum mark it and then see what ones I got wrong, and then I'd go over them.

INT: Mm-hmm.

RES3: I usually go on Maths Student and just go on the topics that I've got wrong and go over them.

INT: Right, so, you don't mind looking at your weaker areas, sort of thing, that's great, thank you, it's good to hear that. So, one of the parents that got back to us said that the advice they gave to the teachers was to check students understand the absolute

base blocks of maths and some basic primary school lessons have been misunderstood. Use science and art and practical things to do maths. So, those are the sorts of things they've been saying, and this person also said there are TikTok videos, Pink Pencil Maths—Ace your Exams, and Mathically Tutors, I've never heard of that. Anything else that you've used, Mahrukh, or that you think is helpful towards your learning and preparing for exams?

RES3: That the website that Martin gave us when we were in lockdown—that was good.

INT: Right, what was that one called?

RES3: It was like the test paper thing, but it was online.

INT: Okay, I can find out, don't worry. How about you, Carl?

RES2: I'd probably say the same one that Mahrukh—the website was good for us going through past papers and seeing how many you can do.

INT: Right, okay, and Sajid?

RES1: Sometimes there's like Maths Genie or like Hegarty Maths.

INT: Hegarty Maths and Maths Genie? Great, yes. Any other thoughts you want to tell us, anything else you want to tell me about what we should do, what we shouldn't do, what is helpful?

RES3: Keep pestering us, just keep putting on in the classroom—

INT: Harass. When you hear the word revision, what do you think—what do you think, Carl when you hear the word revision?

RES2: I think just try and cram as much as you can before [unclear 00:08:57] not stressing yourself out for no reason.

INT: Okay, alright. And what about Mahrukh?

RES3: Listening.

INT: You think the same? So, is revision a good word for you or a bad word—positive or negative?

RES3: Bad.

INT: Negative would you say the same, Carl? And what about you, Sajid?

RES1: Yes, the same.

INT: So, if we use the word preparing for exams, is that not quite—is that a different?

RES3: Yes, because it looks like you're giving us a bit more time.

INT: Yes, okay, that's great. Anything else you want to ask me or add or anything—no? Can you imagine what it's going to be like seeing a 4 next to your name?

RES2: No.

INT: Can you see that-- opening an envelope and going—or even maybe opening an email now, it is, isn't it, and seeing that?

RES3: I feel like I'm improving but slowly, so, I don't think I'll get it—but I hope I do anyway.

INT: There are many ways up the mountain, some are straight, some are—you know, we go somewhere else on the way, don't we? I think it's important, I'm going to stop that now.

[Audio ends: 00:10:03]

Interview 5

Interviewer: Catherine Ream

Respondent: RES1: Bisma RES2: Ash RES3: Alex

INT: So, I just want to start by asking each of you to tell me a little bit about you and maths, so, a little bit about you and how maths has been at this college this year. But also, if you wouldn't mind just telling me a bit about before you came here, what it was like for you; are you happy to do that, Bisma?

RES1: Yes, maths was hard for me, I didn't understand it, but, I think Mick supported me first, and then I passed my Level 3 and then I came to Martin and Martin supported me a lot as well. I'm getting my head around it.

INT: Okay. Before you were at this college, you were at a school, were you, and did you enjoy maths there—never?

RES1: I never liked maths, now I do.

INT: You do now? In primary school, did you like maths?

RES1: I don't remember, I don't think so.

INT: Okay, right. Ash, what about you?

RES2: I've never liked maths.

INT: Say again?

RES2: I've never liked maths.

INT: Never?

RES2: I still don't.

INT: You still don't now. In primary, you don't remember doing anything then that you liked—No? Okay. So, that has stayed the same, has it? Has your experience of lessons changed between school and between college?

RES2: I prefer this to school.

INT: What is it that you prefer about this?

RES2: I don't know, it feels different.

INT: It feels different to you. Alex, how about you?

RES3: I enjoy it.

INT: You do enjoy it?

RES3: Yes. Back in primary, [unclear 00:01:46] I used to like maths and then [unclear 00:01:50] happened and I kind of slipped. I still enjoyed it but it was like—when it comes to exams I'm bad.

INT: Right. So, would you say for you, Alex, your experience of learning is very different from your experience of being tested about it?

RES1: Mine is.

INT: Is that the same for you as well, Bisma. So, learning is one thing, and you can enjoy that but then—

RES1: I panic when I go and do exams I forget everything.

INT: Right, okay. How about you, Ash, is it all just a bit the same, or do you feel like you don't do as well when you're tested on it?

RES2: [unclear 00:02:24].

INT: Right, so, something happens between learning and the test, okay, that's really interesting and helpful for me to hear you say that. So, one of the things that we asked was—we sent back these yellow forms and some filled them in and sent them

back. I don't know who you live with, whether it's parents, grandparents or somebody else, but you all live with somebody at home. Have you had a conversation about maths with them, either to do with these questions or generally? What about you, Bisma?

RES1: No.

INT: No, have you talked about maths—who is it you live with?

RES1: My mum.

INT: Have you talked about maths at all with your mum—not at all-- no? Okay. How about you, Ash—no conversation at home about it at all? Alex?

RES3: I've talked but not about—

INT: Not about these—what sorts of things have you talked about with them?

RES3: I think we talked about the exams—how I did.

INT: About the exams, right, okay. So, what do you—coming back to you, Bisma, what do you know about your mum's experience of maths, anything at all—when she was learning?

RES1: She was good at maths, she used to teach maths.

INT: Did she? Okay. So, would you think from that, that she has a positive experience of it?

RES1: Yes.

INT: Which is different to your experience?

RES1: Yes, she's good at it, I'm not.

INT: Well, that's what you're saying, I'm not agreeing but I'm just saying that you have a different attitude, would you say about it?

RES1: Yes.

INT: Okay. Ash, for you—who is it you live with?

RES2: My mum.

INT: Your mum. Do you know anything about her experience of school and maths in particular?—No—okay. Do you know for your--?

RES3: I know my dad did pretty good, my mum didn't.

INT: Right, okay. So, if we were to ask your parents these questions about how do you think—what should we do to support you—what could we change to improve your experience? Do you know what they would say or do you what you would say—if I start with you, Alex, what would you say this college could do more of to improve your experience of learning here?

RES3: I don't know.

INT: You don't know? Is there something that has worked for you here?

RES3: I think it's just the teachers because Martin is pretty good at explaining things when it comes to different--

RES1: It's the environment, they don't treat you like kids, they treat you maturely, so, it just gives you more confidence.

INT: Uh-huh, okay. And for you, Ash, is that your experience—they do treat you a bit more grown-up—has that improved your confidence?

RES2: Not really.

INT: Not really. So, would you say your confidence was still quite low?

RES2: Yes.

INT: Yes. Alex, is your confidence a bit higher than it has been in the past?

RES3: Yes.

INT: And Bisma, yes—okay. So, coming towards the end, just to ask you, Alex, how do you prepare for exams?

RES3: I usually revise.

INT: Right okay. For you, Ash?

RES2: [unclear 00:06:03].

INT: Yes, okay. And Bisma, how do you prepare for exams?

RES1: I do past papers and if I don't understand it, I'll go onto the Corbett Maths and watch videos.

INT: Uh-huh.

RES1: Or MathsWatch.

INT: Right, okay, great. Is there anything else you would like to—what would you like to say—for you Ash, what would you like to say to your maths teachers from high school—anything?

RES2: No.

INT: Nothing—no. You Alex?

RES3: No.

RES1: Not understanding.

INT: Not understanding you?

RES1: Mm-hmm.

INT: What you needed? Yes, okay. Do you think, if you've had an experience of not achieving your goal in maths, say, getting a grade that wasn't the grade you wanted, can you tell me anything about how that felt, Ash?

RES2: Normal.

INT: That feels normal, okay. Can you imagine seeing the grade that you do want?

RES2: No.

INT: You can't imagine that? How about you Bisma?

RES1: I can.

INT: You can, yes. And you, Alex?

RES3: Yes, I can.

INT: Yes, okay. So, that is really interesting is whether you can foresee it and stuff. One of the things I'm interested in, till now, it's just been—I had a boy last time, but I had a boy and two girls and now I've got a girl and two boys—is whether it's different for girls than boys, this experience. I wonder if it might be in some way—I don't know. Do you have any thoughts about that—do you, Bisma—do you, Ash? No, okay—and you? No. These are things to think about. What might happen, is next week I might want to talk to you again, just briefly, if you're willing to, just to find out what you've done over the last week to prepare for your final exam.

RES1: I think it depends on the teachers in the past as well if they lowered your confidence or not by how the support they gave you because when I came here, the teachers gave me a lot of support and they would individually come and talk to me. I think that boosted my confidence and I'm starting to do a little bit better in my exams. I've gone up a grade, I was a 2 but last year, in November, I got a Grade 3 and I think it boosted it up more.

INT: That's great, wonderful. Okay, I really appreciate that.

[Audio ends: 00:08:41]

Interview 6

Interviewer: Catherine Ream

Respondent: RES1: Lorraine RES2: Rashid

INT: So, I'm doing a research project which is about how we learn maths, how we feel about maths, and our experience of learning maths. One of the things I need to do is to talk to students about how, firstly, my first question for you, is how do you feel about maths now, in the college, and how you've learned here, and previously, to being in the college, wherever you were—in school or wherever you were? So, do you want to go first, Lorraine, what can you tell me about you feel about maths now?

RES1: I feel more like I'm confident in passing because last year, I didn't have much support, whereas now, there are loads of questions that Martin can provide us and exams and stuff like that.

INT: Okay. Before you came to this college, were you in school?

RES1: College.

INT: In college, and what was your experience like in a different college—was it?

RES1: Yes.

INT: Was your experience there positive?

RES1: Yes.

INT: And back to when you were at school, how was it then—can you remember?

RES1: It's a bit hard.

INT: Do you mean it's hard to remember or it's hard to think about?

RES1: Both.

INT: Is it?

RES1: Yes. I think because there was such a big class and I was in the class with naughty people, it was hard for the teacher to learn and provide us with good content.

INT: Right, I see, that's interesting, thank you. Rashid, for you, tell me about you feel about maths here and prior to here—your experience of it?

RES2: Firstly, I am doing GCSE here in the United Kingdom for the first time, it is very good for me and a very pleasant experience for me.

INT: Great.

RES2: I learned a lot of maths, a lot of new things, and there is no difficulty for me in this college.

INT: Okay. Before you were here, were you studying in the school, in Pakistan?

RES2: Yes.

INT: And how was your experience of that—confident—enjoyed it, or not?

RES2: Yes.

INT: Yes, okay, right, thank you. Okay, one of the elements of this project is that we are asking people— we're looking a little bit about the support you have at home and whoever it is you live with. For some people, it's their parents or just their mum, or sometimes it's an aunt or whoever it is you live with, do you know much, Lorraine, about their experience of maths?

RES1: It's been overall a positive and very enjoyable.

INT: Really, who is it you live with?

RES1: Parents.

INT: Right, and they both have a positive experience of maths, do they?

RES1: Yes.

INT: Did they achieve their potential as far as you know with their maths learning?

RES1: Yes.

INT: How much do you talk about your experience of learning maths with them?

RES1: Lots, like every day.

INT: Do you?

RES1: Yes.

INT: Right, so, it's really something that is talked about a lot in your home.

RES1: Yes.

INT: Rashid, for you, who is it you live with?

RES2: Parents.

INT: Do you know much about their experience of maths?

RES2: No.

INT: You don't?

RES2: Because, in our country, there is—in the ancient times, when my mum and dad was like my age, they were not good at school, they just—

INT: Right, so, when they were at school—when they were your age, they didn't have formal school, would you say—do you know formal means that every day you go?

RES2: Yes.

INT: So, how did they learn, do you know—how did they learn or where did they learn?

RES2: They go to school, but for some years, not like now, people go schools, colleges till 25 age, you know, but they go, I think 14 and 15.

INT: And then finished, right, okay. So, do you know if they achieved their potential with maths—do you know what potential means? Potential, how can we explain potential, Lorraine?

RES1: Like where you want to get to.

INT: Yes, so, if you want to get a GCSE in maths, and you get it, that is your potential if you could do it. So, if you can achieve your potential—potential means I can do as good as I can do and get something to show that. So, do you know that about your parents, whether they did or didn't, or just very different? – you don't know, okay.

So, can I just ask you because I know we're coming up to the break and I don't want to keep you? Lorraine, how do you prepare for maths exams?

RES1: I use a lot of online math websites like Corbett Maths is one--

INT: So, doing papers and questions, would you say?

RES: Yes.

INT: And for you, Rashid?

RES2: I do past papers.

INT: You do past papers, yes, you find that helpful. When you hear the word revision, what do you think—what does that word mean to you, the word revision?

RES1: Spending a lot of your time, like going over the questions.

INT: Right, yes. And for you, Rashid?

RES2: Yes, that is what [unclear 00:06:21].

INT: Right. So, just to finish off now, do you feel like your confidence has improved, and do you feel that there is anything that you could tell us, as teachers here, at the college, or even, if you wanted to send a message back to high school teachers, what could you tell us?

RES1: Maybe have more one-to-one [unclear 00:06:54] for pupils to see how they like and feel—how they like and feel within the class as a whole.

INT: Yes, okay. So, just getting to know them almost rather than talking about the maths?

RES1: Yes.

INT: Okay, that's really useful, thank you. And for you, Rashid, anything you would like to tell your teachers now about what works for you or what you would like more of?

RES2: [unclear 00:07:30].

INT: Okay, great. Well, thanks so much, it's been really helpful. I might want to have another chat with you next week just to see what you've done this week and see if you can update me about your preparation for your final paper; is that okay?

RES1: Yes.

INT: Great, so, you're free to go, let me just ask you, Rashid; do you have any time today that you would like to meet with me and do any maths? Because normally, we've done it now, haven't we?

RES2: Yes.

INT: Thanks so much, Lorraine.

RES1: Thank you.

INT: Do you have a lesson now?

RES2: Yes, I have a lesson now.

[Audio ends: 00:08:0]

Interview 7

Interviewer: Catherine Ream

Respondent: RES1: Szymon RES2: Rhys RES3: Meighan

INT: I'm just going to jot down your names so that I've got that down here when I listen to it again. So, Szymon?

RES1: Yes.

INT: Rhys/Reece—Is it with an Y Rhys?

RES2: Y.

INT: Y, sorry. And Meighan, okay. Did any of you take this yellow form home to talk to the people at home about their experience of maths—No?

RES3: I haven't seen it before.

INT: You've never seen it before? Okay, well, some classes didn't get it actually but basically, what this project is about—it's about trying to support, through parents, or whoever is at home with you—your maths learning. Now, obviously, we had a lot of disruption this year, not least me being off sick for 5 months. So, my first question is about whoever it is you live with; for some, it's mum and dad, or mum or whatever, or grandma. Do you know anything about their experience of maths? Can I start with you, Meighan—who do you live with?

RES3: My family.

INT: Right, do you know anything about—is it mum and dad?

RES3: No, just my mum.

INT: Your mum—do you know anything about her experience of learning maths?

RES3: I know it wasn't her favourite subject at school, she said she preferred English and so, she wasn't very confident in that.

INT: She wasn't confident?

RES3: No.

INT: Would you say she is now—confident enough or does she not need much maths in her life?

RES3: No, she doesn't do maths.

INT: Do you talk to her about maths much?

RES3: Sometimes, like when I need help or revision or something, I'll ask her, but she's a cleaner, so, she's doesn't really—

INT: She doesn't need it so much but there will be some areas where she does need it, you know. How about you, Rhys?

RES2: In school [unclear 00:02:04] he used to do it all in his head instead of writing it down.

INT: Sorry, say that again?

RES2: So, in school, he used to do it all in his head instead of writing it down.

INT: Who—your dad this is?

RES2: Yes, my dad.

INT: Right, okay. Do you know if he achieved his potential in maths, did he get whatever he wanted to get to with his maths or did he feel like he didn't—do you know?

RES2: Yes, I think he did well.

INT: You think he did well. Do you talk about your maths much with your dad?

RES2: Not really, but I know he needs it in his job.

INT: Right, does he know much about your learning of maths, do you talk about what you're doing with him?

RES2: Yes, sometimes.

INT: You do a bit, yes, okay. How about you, Szymon?

RES1: My mum is very clever at maths but my dad, I think he failed.

INT: Right, okay. Do you know much about how they learned at school and what they did?

RES1: I don't ask those questions.

INT: No. Do they know much about your learning?

RES1: No.

INT: So, it isn't something that you would go--to your mum and dad?

RES1: If I had a problem, I'd go to my mum.

INT: You would? Right, okay. Just to go back again, can you tell me a little bit about how you feel about your maths learning here, in college and before college, were you at school?

RES1: Yes.

INT: And was it the same as when you were at school or is it different here, what are the changes?

RES1: I think it's better here because I concentrate more. [unclear 00:03:34] I have to concentrate more on my maths than I did before.

INT: Do you enjoy maths?

RES1: No.

INT: Did you ever enjoy maths?

RES1: No.

INT: Primary school? It was never a subject that you enjoyed--no? okay, do you know why?

RES1: I don't know I just don't like it.

INT: Okay. How about you, Rhys--firstly, the differences between here and your experience at school?

RES2: At school, well, I wasn't very good at it. You get distracted a lot because my mates were in the same class, so it was just talk all the time with them. I can't really remember, to be honest, it was two years ago.

INT: How does that compare with here?

RES2: There aren't as many people so, [unclear 00:04:28] to talk.

INT: Right, and do you feel that you enjoy it more now, or do you still not enjoy it?

RES2: No, I've never liked it.

INT: Not even back in primary school?

RES2: The only subject I really like is PE class, it's the only subject I've really liked.

INT: Right, but there are bits of maths in PE, isn't there?

RES2: Well, in the sports, only in football.

INT: Right.

RES2: Only football and basketball.

INT: There's a fair bit in all sports, I think. If you gave me a sport, I'd find you the maths in it, I promise you.

RES2: Oh, yes, but I don't think about it when I'm playing.

INT: Yes, okay. How about you, Meighan?

RES3: Mine has been much the same as these two.

INT: Right, so, you haven't particularly enjoyed maths, would you say?

RES3: No.

INT: What do you think—when you hear the word revision, what do you think of when you hear the word revision? Starting with you, Meighan.

RES3: Flashcards, and notes, and stuff.

INT: Okay, great, what about you, Rhys, what do you think of when you hear the word revision?

RES2: Going over stuff, different subjects and topics, and stuff.

INT: Mm-hmm. And you, Szymon?

RES1: I usually have my notes on my computer, so, if I need to revise, I just go on my computer and revise.

INT: Right. So, you're reading—will you write them down?

RES1: Yes.

INT: Right, okay. Just one last thing really. So, for you, Szymon, how do you prepare for assessments and exams for maths?

RES1: For maths? Before the test or assignment, maybe two days, I would go over my notes and then just before the test I would go over the notes again, just to get it in my head so I can go in for the test.

INT: Okay, right. And for you, Rhys, how do you prepare?

RES2: I don't really prepare; I just go into it and do it.

INT: Okay. Have you ever prepared for an exam in maths before?

RES2: Not for any exam.

INT: Not for any exam?

RES2: No.

INT: Okay. Do you know why?

RES2: I just can't do it, partly, I don't know how to and part, I get distracted.

INT: Right, okay, thank you for your answer. Meighan, how do you prepare for an exam?

RES3: Maths is the only subject I do that is like proper assignments and stuff. I do really creative subjects. So, the questions they put—like in the classroom, like last week, I think, but two weeks ago, I just did those and learn how to some of the stuff I didn't do before.

INT: Right, okay. Is there anything else you can tell me to help me understand about you're learning, any of you—Szymon?

RES1: No, not really.

INT: What is your favourite subject?

RES1: It used to be PE, but I don't do it now, so, public service.

INT: Public services? Do you have Esther for that?

RES2: Yes.

INT: Yes. And yours is PE, sport?

RES2: Well, I don't do it so, now it's public services—the same.

INT: You both do it—are you in the same class for public services?

RES2: Yes.

INT: So, you do know somebody who can distract you then?

RES2: I know but we sit at a different table.

INT: Are you quite well-behaved?

RES2: Yes.

INT: Good, or else Esther would be right on you. What is your favourite subject, Meighan?

RES3: Photography.

INT: Is it, do you have Patrick for that?

RES3: Yes.

INT: Great. Well, thanks so much for your time, I'll press pause on that.

[Audio ends: 00:08:10]

Interview 8

Interviewer: Catherine Ream

Respondent: RES1: David RES2: Evan RES3: Paul

INT: Just say your names for me, please?

RES1: David XXXXXXX.

INT: David. I'll just use first names, thank you, David.

RES2: Evan.

INT: Thank you, Evan.

RES3: Paul.

INT: Paul, great..

INT: So, as I say, I'm Catherine. You haven't seen these yellow forms or taken them home to parents, have you? No, okay. So, these forms were asking parents questions about when you were at school, which maths lessons did you enjoy the most, are there any maths tips that you found helpful, and as a parent, what advice might you have for our maths teachers or students? So, if you wouldn't mind, my first question is going to be—I'll start with David and if all three of you can answer for me, in turn. Do you know much—well, who you live with—for some of us, that's parents, or it might be aunts, uncles, whoever you live with. Do you know much about their experience of learning maths, David?

RES1: I don't think they got their GCSEs.

INT: You don't think they did—who is it you live with?

RES1: My mum and dad.

INT: Your mum and dad, did you ever talk about maths with them?

RES1: My dad does help me; he can do like simple maths—algebra.

INT: Yes, okay. So, do you think they liked maths or didn't like maths at school—do you know much about that?

RES1: I don't think they liked school very often.

INT: At all—no? Okay. Do you talk to them much about your experience of maths?

RES1: Yes.

INT: You do?

RES1: Yes, they're dead set on me passing my maths.

INT: They're set on you passing it? Right, so, you're set on passing it, are you?

RES1: Yes.

INT: Okay. So, it is something that you talk about at home?

RES1: Yes.

INT: Okay, how about you, Evan?

RES2: What was the question?

INT: Just do this for me, Evan, just because you've got lovely eyes and I can't see them—go on. There he is, hello.

RES2: Hello.

INT: Who do you live with at home, Evan?

RES2: My mum and stepdad.

INT: Right, do you know much about their maths at all?

RES2: They both failed.

INT: You know that do you?

RES2: Yes.

INT: And they just took it at school, or did they do it afterwards at college anywhere?

RES2: My mum did it at college, I don't know about my stepdad.

INT: Right. Has she ever talked about it with you?

RES2: Just about how she hated it and I should have passed so; I wouldn't have had to deal with it as well.

INT: Right, okay. So, she didn't have a good experience of it, would you say?

RES2: I reckon it was a good experience, she was just being like me, and she didn't like school and college and all that.

INT: Right, okay, thank you. Paul?

RES3: Well, I live with my dad and my step mum.

INT: Yes.

RES3: And I don't actually know if they passed.

INT: Right.

RES3: But I don't think they did.

INT: Do you know anything about whether they liked it?

RES3: Probably not. My dad says something like-- I didn't like it in school, but you just need to do it.

INT: Right, okay. Just coming back, I'll start with you, and we'll go back that way, can you tell me, are there any differences between your experience of learning maths in college and your experience when you are at school?

RES3: 100%, it's more laidback in college, you know what I mean, it's better in college.

INT: Because?

RES3: It's just more laidback. I don't know how to explain it.

RES2: You can't speak unformal to a teacher.

RES3: I can.

INT: Yes, you can, this is fine, you can say it in any way you like.

RES3: It easier. I don't know, it's like--the teachers actually teach. No offence to my teachers in high school but they weren't the best, do you know what I mean.

INT: Right.

RES3: So, it's like—

RES1: Well, I'm not being funny half of the lessons, you'd be throwing bottles and pens around.

RES3: Well, yeah, exactly, and that's another thing, I've grown up a bit as well so, it's a bit easier.

RES2: Still the same.

INT: Okay. So, your high school experience was a bit disrupted because--?

RES3: Yes, and there was a lot more misbehaving as well in lessons, and it wasn't just me, I used to misbehave a lot but there was a lot more, everyone was doing it.

INT: Right, okay, great. What about you, Evan, how was your experience in school compared with now?

RES2: It's more comfortable here.

INT: Explain that.

RES2: Whereas in high school, if you didn't get it, you wouldn't want to say that you didn't get it and you wouldn't want to put your hand up. But here, you could put your hand up, and then you understand it, they help you understand.

INT: Right, so, it's easy to ask for help here, is it?

RES2: Yes.

INT: Do you know why?

RES2: I feel like they care more, whereas, in school, they were just like—it's up to you. Whereas here, they're trying to help you pass because they know how important it is that you pass this year now. Whereas before, you had 5 years to pass, if you didn't understand something that you learned in Year 7, they were probably like—well, it's not our fault. Whereas here, they're trying to get you passed because they know you need to pass it.

INT: Right, okay, and David, for you, the difference between high school?

RES1: Yes, the teachers help a lot more because they're kind of like—they treat you like an adult here where they'd be like—you're like a kid, so, you won't really want to ask for help.

INT: I see, yes.

RES1: [unclear 00:05:39].

INT: So, it was harder to ask for help in high school was it, you think?

RES1: Yes.

INT: Okay, that's interesting. If I say the word revision—okay now. Can you say some words for me so I've got something I can write down? If I say revision, you think, what?

RES1: The morning off.

RES2: Homework.

RES1: I'm not allowed to say that—

INT: Is it a swear word?

RES1: Yes.

INT: What does it begin with?

RES1: An S.

INT: And S, how many letters does it have?

RES1: Four.

INT: Okay, right, I've got that then, okay. So, you say you have a negative feeling towards just the word revision, do you?

RES1: Yes, definitely.

INT: What does it mean to you, is it almost painful or is it just you don't want to do it?

RES1: It's painful.

INT: Is it painful?

RES1: Yes. And I don't want to do it—it's both, I guess.

INT: Right.

RES3: I don't like revising for maths.

INT: Say again?

RES3: I can't revise for maths.

INT: How do you revise for maths?

RES3: It's like you needed the teacher to go through it because all the others are like--crap videos [unclear 00:06:58].

INT: Right. How about you, Evan, what is your experience of revision?

RES2: I'm alright with it.

INT: You don't mind revision?

RES2: I don't mind it. I wouldn't purposely go out of my way to do it.

INT: Go on, do this, so I can see who I'm talking to.

RES2: I wouldn't purposely go out of my way to do it, but I'm happy to do it, I don't mind it, it's not that bad.

INT: Right, so, is revision different to preparing for an exam, or does it mean the same thing?

RES3: I'd say different.

INT: What did you say, Paul?

RES3: I'd say different.

INT: Different.

RES3: Preparing for an exam, is most of the time in lessons and even though you're in—it's better doing revision in lessons than it is outside of lessons.

INT: Right.

RES3: To me, if you're doing revision in lessons, that's preparing for the exams, when you're learning at home, to me, that's revision.

INT: Right, I see, so, it's more independent if you like. What about you, David—the same thing, or different?

RES1: I think revision is kind of like you provide your own topics, like a different way. I did classics and it feels a lot easier to revise the classics than maths.

INT: Right, because?

RES1: There are just so many different [unclear 00:08:21], there's algebra, there is the [unclear 00:08:24] and that.

INT: Yes, there are many different parts to maths, aren't there? How about you, Evan?

RES2: I say, they're the same thing, but I agree with what Paul is saying about preparation for an exam is more lesson-based as well, whereas revision is, you go home and do it.

INT: Right, I see, okay. Just to wrap up really, is there anything that you would like the college, or the teachers here or the students next year—that you could say that you think might be helpful—to your teachers here?

RES2: Attend lessons.

INT: Are you saying that to me?

RES2: Yes, you as well, but I'm saying it to the students that come next.

INT: Right.

RES2: Because the amount of lessons I've had to get on time for now and attend properly, just because my attendance went all the way to 60, so, now I have to get it all the way back up to 80, so, I have no spare time. And if my parents need me to pick up Evie or something, I can't.

INT: So, do you know why you weren't attending lessons so much?

RES2: At the start, it was because I had to go home and pick up Evie from school. Like I said to you one time, that I had to go pick her up. And then when it came to online lessons, obviously, I just didn't want to turn up, because I didn't want to sit there on the screen, because I knew I'd fall asleep, so, I just left it.

INT: So, the online lessons didn't work very well for you?

RES2: The ones I attended, I was alright with, but it was like—like on a Monday, I have maths first, and then I have a 4-hour gap and then English, I don't want to sit there for an hour out of my spare time, just to listen to a screen.

[00:10:00]

INT: Yes.

RES1: In my opinion, I think the online lessons were terrible. The thing was—

RES2: Oh, yes, the maths ones were—

RES3: It's like shapes that you try and measure.

RES1: Yes, number 1, it's hard, number 2, I didn't do it. I'd sign in and put myself on mute and then put the laptop and then go back to bed, wake up. Half the time I would wake up and I'm the only one in the lesson. I did literally do that, and it was crap because you just don't do anything.

RES2: That's the only reason the online didn't work because they can't expect you to focus on the lesson whilst I'm lying in my bed.

RES1: And times where I was awake I would be playing on my Xbox or watching TV, watching a film and I literally did no work in any subjects, they just didn't work.

INT: Okay, well, thank you for your input.

[Audio ends: 00:10:55]

Interview 9

Interviewer: Catherine Ream

Respondent: RES1: Marc RES2: Zahoor

INT: Okay, thank you, so, just say your names because then on the tape, it's easier for me to be able to—

RES1: Marc XXXXXX.

INT: Marc, thank you, Marc, and--

RES2: Zahoor.

INT: Zahoor, right. So, first question, really, and it will take about 8 minutes, that's all. We sent a questionnaire home, I don't know if you took this questionnaire, for parents or for family members to ask them about their experience of maths, did you get one of these?

RES1: No, I didn't get one.

INT: So, if you can, just tell me what you know about the people you live with, parents or family members, or whoever—what do you know about their experience of maths? Do you want to tell me, Zahoor, for you first of all?

RES2: My family—maths is seen as important to them, and they've always said if you can do maths you can do anything.

INT: Right.

RES2: My dad, he wasn't that good at maths, or my step mum, she's alright at maths. I've got a little brother who is very, very good at maths, they take maths very seriously. They say if you can do maths you can do anything.

INT: Right. And do you know what their experience of school was like, your dad and your step mum?

RES2: My dad, he had dyslexia, so, he struggled a bit with maths, but my step mum, she was okay. She took BTEC and she did pretty well, college and school.

INT: Do you talk to them much about the maths you do here?

RES2: No, not really, I just keep it quiet.

INT: You just get on with it—how about you, Marc?

RES1: I'd say, the same, really, everyone I live with is kind of—they're really good at it.

INT: Are they?

RES1: Yes.

INT: Who is it you live with?

RES1: My mum, my dad, my sister.

INT: Right.

RES1: They find it quite easy.

INT: They're quite confident would you say, and they had a good experience?

RES1: I don't think they did really, I think they just got it on their own, I don't think their teaching helped them.

INT: Okay.

RES1: They say all the time they didn't really like their teachers at school.

INT: Yes, but they achieved their potential, do you think?

RES1: Yes, I think so. My mum and my sister graduated from uni now.

INT: Right, great. And can I just ask you, starting with Zahoor, the difference between your feelings about maths now and school, is it the same, or do you feel differently now than when you were learning in school?

RES2: I think with maths, I've never really got it, to be honest. It's one of those subjects—everyone has that subject [unclear 00:02:37] sometimes, they may not be the best, but with me, what it is, I just want to get that grade. So, whenever I go home I try and revise on different topics. I think from school till now, I don't think a lot has changed, even though I have pushed myself.

INT: Has your motivation changed?

RES2: Motivation, it goes up and down for maths because obviously, we're doing other subjects with BTECs, sometimes I can find it a bit hard to—I'm finding it pressure right now, because we've got 3 weeks left and then you've got teachers giving you

assignments back and you're thinking in your head, or you've got a maths exam. It's a bit harder because I'm fasting as well now.

INT: Yes, of course.

RES2: I've never really—When I was in Year 8, before I moved to Stoke—I used to live in Derby, I had one teacher, his name was Robert Matthew, and he pushed me quite a lot. So, when I was in Year 8, that's when I loved it because I had a teacher like him who motivated me, not just in maths but in other subjects, like rugby—I used to train with him in the gym at my local—at my old school [unclear 00:03:42] College. So, he motivated me so, whenever I do maths now, I just think of him, when I'm on my own revising I'm like, oh, I can't be bothered but I think—do you know what, if he saw me today, he would want me to keep going. I remember in Year 8 I had an exam and I worked so hard just to get that Grade 5 and I was well-chuffed. But I think that's what keeps me going really.

INT: Right. How about you, Marc?

RES1: I'd say it's changed, I'm probably a bit more confident in myself. At high school, we didn't really have a stable maths teacher, we were swapped and changed each year, or every couple of months, so we didn't really have a set maths teacher, because everyone has different techniques, so, it was just a bit confusing.

INT: I see. So, you think your confidence has gone up a bit?

RES1: I think I'm better now than I was because I think I'm a bit more grown-up now.

INT: So, are you pretty happy at this college with how your maths has gone?

RES2: Yes, I'm just getting on with it really, I just want to get that Grade 4.

INT: And you Marc?

RES1: Yes.

INT: When I say the word revision, what do you think of—Marc?

RES1: I don't really do.

INT: You're pulling a bit of a face like it's not a good word.

RES1: It is but it's sometimes, you just don't have the motivation to sometimes.

INT: Okay.

RES2: I think maths, it's different to other subjects, so, with maths it's not more about revising, it's about practicing because, with maths, there is always a right answer. Compared to English, you don't have to have a right answer, but you just have to back it up. Whereas maths, there is always that right answer. So, I think with maths it's just practicing questions unlike other subjects where you might be having Flashcards where you have to memorise certain things.

INT: Yes.

RES2: But with maths, it's about practicing.

INT: Well, you've said exactly what I come to talk about was—is there a difference between revision and preparing for an exam and that is something that we're trying to find out from people, how do they prepare for exams, how do you prepare?

RES2: Personally, me, if it was for maths, what I would do is get my revision book out and look at the different topics and then I'd say, okay, I'm not going to do numbers, maybe, because I'm good at that. I might do algebra, for example, maybe go on YouTube, watch a video, look at some questions, and have a go at some on my own. If I don't understand, I'd watch another video or contact the teacher, that's what I do.

INT: Right, yes. And for you, Marc?

RES1: Just looking at past papers or an overall so, I kind of know what is on there so I can revise that and obviously, what I'm not really good at so, I kind of just--

RES2: I did past papers before but then I thought that's not the best way because you're [unclear 00:06:36] topics, because once you master a topic, then when you come to do the exam you'll be alright. Because the exam papers it's like, you've got so many questions and your mind is everywhere, do you know what I mean?

INT: Yes.

RES2: Okay, you're going to—one question might be about algebra, the next one might be on ratio, then your mind goes everywhere.

INT: Yes it chops and changes.

RES2: If you focus on one, once you can tick that off, that you're good at that, then move onto the next one.

INT: Have you been preparing for these assessments?

RES2: Yes.

INT: Just to finish up, is there anything else that you would like teachers to know, or to tell teachers, either high school teachers or teachers here, that you think make us better at our job—either of you?

RES1: I think maybe sometimes teachers spending a bit more time on students—or trying to find how different students work if you know what I mean. Because a teacher may explain something on the board but it's good to maybe go—I'm not saying teachers don't do this, but obviously, go to the students and see how they're struggling, but to identify maybe—they might do a question on the board and each student might see it differently. So, maybe showing them different ways of how to do it. Some people might struggle with it, some people might do it in their head and just get it, so, maybe find different ways how to tackle a question.

INT: Okay. Anything from you, Marc?

RES1: No.

INT: Well, thank you, I'm going to stop that.

[Audio ends: 00:08:0]

Appendix 4 - Samples of student questionnaire

Questionnaire on Maths learning: Name: _____

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

- Have revision booklets, look through old past papers.
- Make sure to go home and do revision.

- Are you happy with the preparation you have done?

- Please tell me about the conversation you have had with your parents or carers about their maths education.

- = have always struggled to do maths ever since primary, in highschool was always thrown into cover classrooms till ^{end of} year 10-11.

- Is there anything that you think would help you further with preparing for maths assessments?

- group catchup on certain topics everyone is keeping on, in focus.
- More online learning.

Questionnaire on Maths learning: Name: [REDACTED]

- How have you prepared for your maths assessments? Yes

Please tell me what you have done, where you've done it and for roughly how long?

revise every wednesday
for 45 mins

- Are you happy with the preparation you have done?

Very

- Please tell me about the conversation you have had with your parents or carers about their maths education. They hated it

- Is there anything that you think would help you further with preparing for maths assessments?

No, I'm good

online: It did NOT work at all, gave me a gap in my education. Should have

Questionnaire on Maths learning: Name: _____

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

Yes, I have done extra work. Why I usually went through past papers. Which was really helpful from me.

- Are you happy with the preparation you have done?

Somewhat happy. I feel like I could do more.

- Please tell me about the conversation you have had with your parents or carers about their maths education.

Educational were told very hard. Parents didn't have easy means of education. Just give lots of work and that work was not example in easier manners.

- Is there anything that you think would help you further with preparing for maths assessments?

Not really. I think the teachers and work they give me were all I needed to pass the maths.

Questionnaire on Maths learning: Name [REDACTED] _____

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

medred math - 30 min - home

- Are you happy with the preparation you have done?

yes

- Please tell me about the conversation you have had with your parents or carers about their maths education.

that they do have any maths qualifications

- Is there anything that you think would help you further with preparing for maths assessments?

doing more tests.

Questionnaire on Maths learning: Name: [REDACTED]

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

I have extra lesson a 1 to 1
about 1 hour - 1 hour 10 min
I would do practice sheets at home

- Are you happy with the preparation you have done?

Yes but I would like to do more

- Please tell me about the conversation you have had with your parents or carers about their maths education.

My mum left school at 15 as there was no GCSE's. She went back to school when she was older for once a week at a night school to do maths and English. She scored really high in both GCSE's

- Is there anything that you think would help you further with preparing for maths assessments?

maybe more 1 to 1 but that would impact my other subjects.

I really disliked online learning all aspects of it. I struggled with it massively. I much prefer to In school learning, I don't struggle with lack of motivation.

Questionnaire on Maths learning: Name: _____

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

I've made notes in my book a day or two roughly looked through my notes in the morning again looked and revised.

- Are you happy with the preparation you have done?

Yes

- Please tell me about the conversation you have had with your parents or carers about their maths education.

I do talk about maths with my mum more, we discussed different problems and she would help me out, other than that I don't ask her about her education.

- Is there anything that you think would help you further with preparing for maths assessments?

Probably ~~manage~~ manage my time more so I have time to revise more.

Questionnaire on Maths learning: Name: [REDACTED]

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

Sometimes I do Practice Papers, or I look through my book and just go through it.

- Are you happy with the preparation you have done?

a little

- Please tell me about the conversation you have had with your parents or carers about their maths education.

my mum didn't like maths at all, she preferred english

- Is there anything that you think would help you further with preparing for maths assessments?

If I do more Practice Papers/questions

* online learning is way harder, I prefer one to one, ~~in~~ classroom in the

Questionnaire on Maths learning: Name: [REDACTED]

- How have you prepared for your maths assessments?

Please tell me what you have done, where you've done it and for roughly how long?

Past papers throughout the year. Extra two hour support sessions on Monday's with David. Extra support sessions at home from tutor.

- Are you happy with the preparation you have done?

YES.

- Please tell me about the conversation you have had with your parents or carers about their maths education.

My mother hates maths and failed. My dad is dyslexic and was left in a room and not taught anything so he also failed maths.

- Is there anything that you think would help you further with preparing for maths assessments?

No

Appendix 5 – The project team

Project Role	Name	Job Role
Project Lead	Catherine Ream	Maths teacher
Deputy Lead	Martin Whalley	Deputy Curriculum Manager
Project team	Michael Winfield Amelia Manning David Parry Dee Patel	Maths teachers
Project Mentor	Sarah Richards (ccConsultancy)	
Research Group Lead	Gail Lydon (ccConsultancy)	

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