

Sharing Attitudes to Maths

Overview

Many students are very anxious about returning to study of a maths related subject. It is important that they have an opportunity to share some of these feelings with you, the teacher, and with other students before the course starts. This way they will probably find they have a lot in common and can relax about learning with the group.

This activity should be conducted at the beginning of a new course.

For students it provides an opportunity to:

- Share their feelings and attitudes about maths with each other
- Compare their experiences about learning maths in the past
- Express their opinions of their numeracy strengths and weaknesses
- Establish numeracy learning goals

For teachers it provides an opportunity to:

- Explain that 'maths anxiety' is experienced by a lot of people
- Discuss prior maths' teaching methods as a possible cause of negative feelings about the subject
- Discuss alternative methods that will be used in this class
- Pinpoint areas of numeracy that students' see as learning priorities

Skills and Knowledge

- Feelings about mathematics and numeracy
- Common causes of negative feelings about maths
- Numeracy learning goals

Preparation and Materials

Read the Introductory Notes: *Building Positive Attitudes to Numeracy* which discuss some of the issues that are likely to be affecting adults returning to study mathematics or numeracy.

Photocopy Activity Sheet 1: *Maths and Me* (1 per student).

Suggested Procedure

The discussion revolves around the sentence starters in the Activity Sheet: *Maths and Me*. It can be done in several ways depending on students' levels of literacy and the size of the group.

Either:

- Students finish the sentences in writing on the page – rough notes are enough – then in small groups or whole class discussion, talk about what they have written. [It is then possible to collect and copy these after the discussion as a record of early feelings – a useful point of comparison if students improve during the course.]



- Students read the prompts themselves, think about their responses then discuss them.
- You use the sentence starters as verbal prompts and students talk about their responses question by question.

Introducing the the discussion

Explain:

- *Before we start this new numeracy class I want to talk a bit about numeracy and mathematics*
- *Often in adult classes people's feelings about maths affect how well they learn and how happy they are in the class*
- *So before we get started I want to explore some of this with you*
- *I also want you find out from you what you feel confident about, what you don't feel confident about, and what you most want to learn*

If the class is greater than 6 or 7, arrange students into random small groups.

If fewer than 8 students then it is preferable to all sit around a table together. You can then all participate in a single discussion. Use the suggestions below to assist you.

Remembering maths at school

Explain:

- *First I want you to think back to your school days*
- *I want you to spend a minute or two remembering how you felt in your school maths classes*
- *It might help if you close your eyes*

Using the Activity Sheet

If you are using the Activity Sheet: *Maths and Me*, distribute 1 per student.

Explain:

- *I want you to spend about 10 minutes on this*
- *Write whatever comes into your mind to finish the sentences*
- *Or if you don't want to write, just think about what you might say*

When they have had time to respond, ask:

- *Can you talk together about these in your small groups?*
- *You might want to compare - decide what's similar and what's different for each question*
- *Or you might just want to chat about each question*
- *Make sure everyone gets a chance to share their thoughts*

As students talk together, circulate amongst the groups and try to get a feel for some of the main issues for later discussion.

Allow the discussion to continue for as long as all the students seem engaged (usually about 20 mins).



Debriefing the discussion

Bring the groups together and ask each group to tell you some of the main things they talked about.

Some useful questions to assist the process:

- *Did you find that you had some things in common?*
- *What were they?*
- *Do others here feel similarly/differently?*
- *What did you feel about maths when you were at school?*
- *Do you think that affects how you feel about using maths today?*
- *Was what you learned about in maths classes useful to you?*

Draw on the content of the Introductory Notes: *Building Positive Attitudes to Numeracy*, to inform this discussion.

You should be able to reassure learners that your classes will be different from those at school because:

- *This is numeracy not just mathematics.*
- *Numeracy is about using maths that is relevant to the people in the class*
- *As your teacher I will use very different methods to teach than they did in school.*
- *I will try to make the classes interesting and fun*

This can be a good opportunity to introduce or discuss some of the methods you intend to use and explain that they are used with adults all over the country. For example, you might use hands on materials to make things clearer than they were at school, you will use games and puzzles as an enjoyable way to practise skills and learn new ideas...

Acknowledging students' strengths

An important part of this discussion and reflection process is to encourage students to find a positive starting point in their own mathematics skills as well as identifying those things they can't do.

Ask:

- *What are some of the things you feel you **can** do easily?*
- *Do you think there is a reason that you are better at this than other things?*
- *Do you use it often – what do you use it for?*

If students are particularly negative about their skills you may have to spend extra time encouraging this aspect of discussion. You could ask direct questions about money handling, such as giving change, or telling the time, or following recipes, until you find embedded skills that students take for granted - not realising they are using mathematical skills.

It is quite common for adults not to see mathematics in the things they can do themselves. They only recognise maths in the things that are too hard for them to do.



Exploring students learning goals

Finally, to assist you to understand your students' **learning priorities** ask about the skills they want to learn.

- *Are there some areas of maths that you really want to learn about in this class?*
- *Why is this important to you?*

Make a list of these as they are discussed and assure students you will use this to plan their program. You may have to negotiate around some of the less realistic learning goals, either at this point, or later in the course.

Extension and follow up activities

Use the list of skills that the students gave you and fill them in on Activity Sheet 2. You might also want to add in other core skills, such as using a calculator, shortcut multiplication by 10 or calculating simple percentages, that the students may not have mentioned.

Distribute the list to students at the next class and get them to rate their confidence with the skill by ticking the appropriate columns.

Collect, or take copies of, their individual sheets.

These will be a handy reference for you to:

- Discuss students' individual learning goals with them
- Understand how they see their strengths and weaknesses
- Plan a teaching program that prioritises students' needs
- Revisit at intervals in order to discuss progress with students.



Write whatever comes into your head to finish these sentences.

Maths makes me feel

.....

Maths at school was

.....

I'm good at

.....

I've never been able to

.....

I'd like to learn how to

.....



Name

Maths Skill	Can do	Need more practice	Can't do yet

