Tools

The development and evaluation of preferred learning styles assessments within the action research programme

Mary Huane, advanced skills teacher in drama at Islington Arts and Media School (until summer 2005)

During the first year of the programme, a traditional questionnaire format was used for the assessment of students' preferred learning styles. The assessment tool comprised 18 statements, to which pupils were asked to respond with 'Yes' (applicable to them) and 'No' (not applicable). Of the 18 statements, six each related to visual, auditory and kinaesthetic learning.

Although the assessments produced a range of useful data, evaluations undertaken within the programme schools and by the consultants indicated the need for a number of modifications:

- the appearance of the assessment tool as a test may have led some students to anticipate what their teachers wanted them to put
- increasing the number of statements might provide a greater range of variation and accuracy in the results
- the format might not have been sufficiently accessible to the wide age range of students in the programme schools
- the process of completing the assessments did not take different learning styles into account
- some pupils with literacy difficulties may have found the questionnaire too challenging, even when given assistance with the reading
- the implementation of the assessments may not have been consistent across classes and schools

As a result of these observations, a new format was introduced during the second year of the programme. The main changes were:

- increasing the number of statements from 18 to 36
- printing the statements on stickers, that students had to peel off and stick on a sheet as applicable
- producing more detailed guidance notes for the conduct of the assessments

These materials have been successfully used with students (from year 2 to year 11) and staff, and have been translated into a number of community languages by colleagues at Islington Arts & Media School.

Guidance notes for the assessment

The purpose of the assessment is to help students to become more aware of how they learn and how they can help themselves to learn more effectively through this awareness.

Give students a pack comprising:

- Two A4 sheets of stickers
- One A3 sheet with a picture of a brain on it
- One A3 sheet with a picture of a bin on in

These can be found in the back of this resource, and are also available to download from the Creative Partnerships website. You should use a photocopier to enlarge the Brain and Bin sheets to A3. There are two versions of the stickers, available in a standard Avery L7160 format. One version uses ear, hand and eye symbols to indicate visual, auditory or kinaesthetic preference. The other uses coloured circles and can be used as an alternative if students become too familiar with the meaning of the symbols.

Instruct students to stick their name sticker onto the brain sheet and write their name on it, and stick their tutor group sticker onto the brain sheet and write their tutor group on it.

Read each statement to the class. Students must decide if the statement applies to them. If it does they stick it on the brain sheet, if not they stick it on the bin sheet. They must only do the statements at the speed set by the teacher, and should not discuss them with their friends. When all stickers have been completed, students need to count how many eyes, ears or hands they have on the brain sheet, and write the totals on the appropriate sticker.

You should then ask each student for their visual (eyes), auditory (ears) and kinaesthetic (hands) totals. This data could be entered on to each student's record.



Explain to the students what each symbol means:

- ear is someone who has an auditory preference for learning
- hand is someone who has a kinaesthetic preference for learning
- eye is someone who has a visual preference for learning

60

How to use the assessment data

Tell the students this is only a rough guide, and it is possible for people to learn using more than one style and that styles can change.

Go through the top tips to help you study (found on page 63) with the students, and explain some of the tips may only be appropriate to use at home.

Begin a discussion with students on how knowing how they learn can change the way they work in class. Display the brain sheets in the students' form room, if possible, as a point of reference for students and to keep them aware of learning styles. Include in this display the top tips to help you study sheets.

Each student will have three scores, for their visual, auditory and kinaesthetic statements. As students were given the option of putting statements in the bin, it is likely that the totals of these scores will all be different. For example, in the table below student A put 20 statements in the bin, but student B only put five in the bin. The numbers have no value in the scoring system, they just show a student's preference.

Student	Visual	Auditory	Kinaesthetic
A	5	6	5
В	10	11	10
С	11	3	7
D	3	11	7

Example of assessment scores

Students A and B have the same learning style preferences. A higher selection of statements (student B) across does not mean they have a greater personal preference than the student with lower statement selection (student A). The relationships between the numbers for the individual are the key.

Student C has a more developed visual preference. For student D the exact opposite is true. However, we can also see that both students enjoy being actively engaged in activities to help them learn as both their kinaesthetic scores are quite high.

This data can help you and the student to make decisions about the approach they take to learning, and to understand how they can best revise and reinforce their knowledge.

Do bear in mind that people can develop their weaker learning styles and use their stronger learning styles to support them further.

Ideas to support visual, auditory and kinaesthetic learners

Developed by Nathalie Allexant, primary drama advanced skills teacher, Gallions Primary School, Newham

Visual

Use lots of visual prompts like pictures, posters, maps, cartoons, photographs and cue cards to support key concepts or words.

Create a visual reminder of the day's activities and display on the whiteboard.

Use lots of different graphic organisers.

Display positive messages around the classroom, with associated pictures and photographs.

Children can make posters of their understanding in class, and for homework.

Place key words around the room, and on flash cards on the tables.

Highlight key words in the learning objective in different colours.

Use visual prompts, costumes, and props for story writing, and to bring stories to life through storytelling.

Build visual descriptions about characters and ask children to create these characters using art materials.

Create group story maps which illustrate the sequence of a story.

Ask questions using visual recall and visual imagination; 'what did it look like? what would it look like?'

Make visual associations when recalling information.

Encourage spelling by asking the children to visualise the words, and then to break it down into different parts.

Encourage children to see the spelling in upper left field of vision with their eyes closed.

Teach and model visualisations.

Use and display class, group and individual memory maps.

Give children plenty of access to different coloured pens, paper, and whiteboards.

Regularly change the display table, so that children can access many different objects to support their project work.

Children can mark their own and other's work with different coloured pens, with each pen representing a different skill (e.g. verbs, adverbs etc).

Auditory

Monitor the sound level in the classroom, and decide, with the children, the appropriate noise level for the activity – make a 'decibel clock'.

Teach and model good listening, and play lots of listening games.

Display rules of good listening alongside a picture of children doing 'good listening'.

Play background music suitable to the activity or mood in the classroom.

Increase use of positive talk in the classroom and frequently use your voice to flag up key words.

Increase the amount of language activities based on key words or objectives for the week.

Have children talk through their memory maps and explain them to others.

Encourage children to talk with their partner about their idea before writing it down.

Use lots of singing, chanting, rapping and narrative poetry. Sing or rap times tables.

Use different voices for different characters when reading a story.

Give auditory references like, 'it sounded like...' and try to find auditory associations.

Use paired prediction before investigating or reading something, and encourage the children to say, 'and my evidence for this is...'

Encourage spelling by sounding the word out, using phonics, and breaking it down into syllables.

Use lots of different groupings for talk.

Have a listening centre in the classroom with books on tape or CDs, and a tape recorder.

Spend more time individually with these children and explain things in more detail.

Kinaesthetic

Build into each lesson a time for a brain break (Brain Gym) – a quick physical activity or a quiet time for relaxation or reflection.

Frequently move the children around the classroom for different activities; establish zones in the classroom for different subject areas.

Have a space in the classroom which is your Get up and Go area – free from tables and chairs.

Increase your use of open body language.

Before handwriting, get children to draw the letters in the air, on each other's backs, on palms of hands or even dance them.

Increase your use of drama, dance and PE.

Increase opportunities for learning through playful exploration, and through manipulating objects.

Use laminated letters and words constructing sentences and key words. Increase the use of jigsaws and games.

Use lots of toys and props to enhance story writing and telling.

Use kinaesthetic references when you give examples or tell stories, like 'it felt...'

Use lots of physical associations like mime, action and gesture – useful when learning punctuation.

When doing visualisations increase the use of descriptions of physical feelings.

Allow children to doodle and fiddle as long as they are not disrupting others.

Help children remember information by using shapes, colours and spaces. The children can then trace over these to help them with recall.

On the children's memory maps, ask them to walk through their ideas, using the whole room.

Use roleplay wherever possible as a quick Get up and Go activity.

Ask children to use their bodies to represent ideas or to symbolise a word or concept.

Ask children to pretend to be the people you are learning about; walk like them, talk like them and imagine their feelings.

Top tips to help you study Developed by Mary Huane, advanced skills tacher in drama at Islington Arts and Media School (until summer 2005)

64

If you are a kinaesthetic learner...

To memorise information, pace or walk around while reciting to yourself, or using flashcards or notes.

If you need to fidget, try doing so in a way that will not disturb others or endanger yourself or others. Try jigging your legs or feet, use hand or finger exercises, or handle a tennis ball.

You might not study best at a desk. Try lying on your stomach or back. Try studying while sitting in a comfortable chair or on cushions or a beanbag.

Studying with music in the background might help you.

Use coloured construction paper to cover your desk, your exercise books or decorate your study area. Choose your favourite colour, as this will help you focus. This technique is called colour grounding.

While studying take frequent breaks, but be sure to settle back down to work quickly. A reasonable time schedule would be 15-25 minutes of study time, then 3-5 minutes of break time.

When trying to memorise information, try closing your eyes and writing the information in the air or on a surface with your finger. Try to picture the words on your head as you are doing this. Try to hear words in your head too.

Later, when you try to remember this information, close your eyes and try to see it with your mind's eye and to hear it in your head.

If you are a visual learner...

Write things down that you want to remember; this will help you to remember them better.

Look at the person who is speaking, this will help you to focus.

Try and work in a quiet place, if necessary wear earmuffs or earplugs.

You may like to listen to soft music while you are working.

If you miss something a teacher says, or you don't quite understand it, ask them politely to repeat it.

Often you will learn best alone.

When researching or revising, take lots of notes and write down lots of detail.

Use colour to highlights main ideas in texts.

When trying to learn material for a test by writing out notes, cover your notes and then rewrite. Re-writing will help you to remember.

Before starting a task, set yourself a goal to achieve and write it down, place it in front of you and read it as you do your task.

Before reading a chapter of a book, preview it first by scanning the pictures, headings and so forth.

Try to sit yourself away from the window and the door and close to the front of the class.

Whenever you can make use of charts, maps, posters, films, videos, and computer software to study from and present your work.

66

If you are an auditory learner...

Study with a friend so that you can talk about the information and hear it too.

Recite out loud the information you want to remember several times.

Make your own recordings of important points you want to remember and listen to it repeatedly. This is especially useful when learning material for tests.

When reading, skim through and look at the pictures, chapter titles and other clues, then say out loud what you think this book could be about.

Make flashcards for material you want to learn and use them repeatedly, reading them out loud. Use different colours to aid your memory.

Read out loud when possible. You need to hear the words as you read them to understand them well. When doing maths calculations, use grid paper to help you set your sums out correctly and in their correct columns.

Use different colours and pictures in your notes, exercise books, and anywhere you record information. This will help you remember it.