

Personalised Strategies for Effective Study

Ginny Stacey

Introduction

Over the years I have been supporting dyslexic students, I have run many awareness workshops. Almost always I include an exercise that allows people to observe how they think while doing a particular task (Stacey 2005). In the discussions after the exercise it is obvious that people expect others to think the same way as they do and that it is unusual for people to compare the ways they have internalised information. If your mind is enabling you to solve the tasks you have to do, there is perhaps no incentive for most people to find out how it is working, you just use it.

In my experience, people with specific learning difficulties (SpLD) need to be very aware of how their minds work. Each of the categories of SpLD, dyslexia, dyspraxia, dyscalculia, ADHD to name the most familiar, affects learning in different ways. Even within one category there is a wide range of problems and solutions. It is no good saying to a dyslexic person: 'Dyslexia - you must like mind-maps.' We (I am dyslexic myself) cannot expect those around us to know all the accommodations that might be necessary for us to function well. We need to know what they are and be able to negotiate their implementation without undue burden being placed on others.

We need to have full recognition of how the SpLD we have affects our thinking and our interaction with people and the situation around us. We need to know how to get our minds to think well. We need to know what triggers the SpLD getting worse and what to do about it (even if that's accepting that 'you've hit a day when you will reverse everything you say' and simply letting people know that's how it is today). People around us need to recognise that we genuinely experience life differently, that we process information differently. Flexible accommodation across the differences would do much to reduce the effects of these learning disabilities.

The following vignettes illustrate work with different students; none of the names are the real ones. Some information about the students is given. I have listed the thinking preferences that emerged during the support; they are in the order of importance, with the most important first. Finally, I have commented on the implications of the thinking preferences. The students often become more confident as a result of knowing how their minds work, and then are able to do justice to themselves at university and later in the work place.

Vignette 1: Brigid, dyslexic undergraduate

Brigid had support for most of her undergraduate course. Her deep seated worry was that she could not recall information. She was doing a course that was mainly practical, but which included literacy based work. She had been identified as dyslexic as a child. When she started her degree course, she had already discovered that mind-maps work well for her.

At the end of her course, her thinking preferences profile was:

- she is self-referenced
- she needs a framework, schema, or structure for a topic
- she can use the 3 senses (visual, oral/aural, kinaesthetic) equally
- she likes practical work
- she can use linear formats for material she is understanding (ie not rote learning, then she needs to work spatially)

Being 'self-referenced' indicates that Brigid had to realise her own perspective on a topic in order to understand someone else's (eg, the tutor's). Without knowing her own perspective, she couldn't listen to lectures or retain information that she read. She used frameworks to actively think about the material she was reading; she had a definite plan for assessing what each paper was about, and each paragraph in the papers. She wrote more fluently when allowing her own perspective to be important, instead of trying to rephrase the ideas of others.

Most importantly, Brigid found that recalling information was not a problem when she understood it and stopped trying to learn it by rote. For instance, she found she could take part in discussions at the end of lectures, (without having to go away and work on the subject) and she knew that she was making significant contributions.

Vignette 2: Katherine, dyslexic undergraduate

Katherine's parents suspected that she was dyslexic when she was a child, but they did not want her labelled, so she was not assessed. They helped her with proof reading and she had speech therapy when she was young. During her first year at university, she fell behind with her work and her tutor put her in touch with an educational psychologist. She was finally assessed as dyslexic in the May of her first year. The support from her parents had given her a good level of confidence, albeit that she did not feel able to follow her instinct about working in different ways. She was reading psychology and physiology.

At the end of her course, her thinking preferences profile was:

- she likes to categorise information (after the style of the Naturalist Intelligence of Multiple Intelligence theory (Gardner 1999))
- she needs a framework to hold information together
- she uses the visual sense well, but not oral/aural or kinaesthetic
- she thinks logically, and likes to be systematic and efficient (Myers-Briggs, mental function 'thinking' (Lawrence 1993))
- she needs to be very well organised
- she is self-referenced
- she can use linear thinking

Katherine benefited from a mixture of exploring thinking preferences and systematic study skills work. She was able to apply skills learnt on one topic to the next. She was able to find the patterns inherent in her subjects and create systematic frameworks for herself. At the beginning of her third year we thought she probably didn't need any more support, and then she came across a major problem.

One of her third year options was still very experimental, with no widely recognised theory or model to explain the observed phenomena. Katherine could not 'get her head round it'. She tried for several weeks without mentioning her difficulties to her tutor or myself. She thought it was her fault that she was finding the subject difficult and that she was being slower than her peers to understand it. She was struggling to read and to write answers for tutorials; in effect her dyslexia had become bad again. She never questioned that something was missing in the subject that would help her to understand it. Once we looked at the subject and how she was approaching it, we could see that, as it was in an early stage of research, it lacked a systematic framework for the information. We had to generate a framework from the research processes, such as asking questions, doing experiments, finding some answers and then posing the next set of questions. When she applied this framework to the information, she could understand what was happening and she could learn it effectively. Her experience is typical of the way one can think one has the disability management under control and then in a new situation the old solutions don't work, the dyslexia gets worse until a different way of processing the information is found.

Vignette 3: Pat, ADD, dyslexic postgraduate

Pat is American. She was diagnosed as having ADD when in her mid twenties. She was prescribed *Aderall*, which worked well for her. However, the drug is not available in the UK and the nearest equivalent did not work so well for her. She has been re-assessed in the UK and the ADD diagnosis was confirmed. She struggles particularly with reading, with using her memory and maintaining her concentration.

The dominant features of her thinking preferences profile are:

- she needs to do in order to learn, ie she is a kinaesthetic learner
- it helps her to understand the material she is working with when she can set the ideas out on paper and use the relative positions to indicate relationships

The kinaesthetic aspect of her learning is very strong. For instance, she can readily see that she goes into far too much detail when she is reading and that quite often the information she is struggling to read has very little to do with her research. We have to work repeatedly on the way she reads papers in order for her to pay attention to only the information she needs and not everything else in the paper. We both read her papers and we compare how we are processing the content. It is only by working side by side, by discussing how we are assessing the information that Pat is able gradually to acquire the skills she needs. She is having to undo some well established bad habits. Her ADD makes matters worse because her mind uses the oldest most durable memory traces fast (see Jost's law in Baddeley, 1983); it is hard to slow down and let new processes be used.

Vignette 4: Keith, dyspraxic undergraduate

Keith was identified as dyspraxic at the age of 10. He had exam provisions at secondary school. His university tutor became worried about his ability to write essays and to solve problems in the time constraint of exams. His dyspraxia has minimal overlap with dyslexia.

The dominant features of his thinking preferences profile are:

- he needs a structure for his subjects and work
- he can use visual aids well
- work he has done himself in practicals is easier to understand and remember

Keith's major need is to sort out the framework of his subjects or any tasks that he has to do. Once he has a pattern to work with, he can make progress. He finds it quite difficult to appreciate parallels between one task and the next, so building skills in an abstract way doesn't happen: he doesn't see how to develop a framework for a new subject having just used one successfully for the last. When he deliberately spends a few minutes before, say, a lecture thinking over the subject, and almost switching his thinking on to that subject, he is able to understand more easily and to take useful lecture notes. Support work with him is a continual process of establishing the hierarchical structure that underpins his subjects and the processes of study.

Vignette 5: Matt, SpLD undergraduate

Matt decided to be assessed because he was having

difficulties during the first term at university. He was identified as having specific learning difficulties on account of an uneven WAIS profile in which processing speed was significantly low. It took some while for his support and provisions to be sorted out and it was not until the beginning of his second year that he had any help.

His thinking preference profile was:

- he uses linear notes
- being motivated about people helps his learning (Myers-Briggs 'feeling' mental function (Lawrence, 1993))
- he is self-referenced
- he uses frameworks for information and organisation, but doesn't generate them for himself
- he learns by doing
- he understands the theory and models of his subject in preference to the practical applications (Myers-Briggs 'intuiting' rather than 'sensing' (Lawrence, 1993))

Matt worked best when his various tasks were broken into subsections with linear notes for the different subsections; the tasks included organising his every day life as well as tutorial work. His preference for linear thinking was strong despite the evidence from the psychologist's assessment that he had good visual abilities which lead to recommendations to use spatial devices like mind-maps. He found reading and revision easier when he was actively searching for ideas that would interest a particular other person; during his exams, he recalled information because he remembered telling the other person. If he was not interested in a subject, he found it much harder to work on it and the problems of his disability increased. At the end of his course, he requested a memo outlining his progress and his thinking preferences so that future supervisors or employers could build on the insights from his support.

Study and everyday life

These vignettes have portrayed five students at university whose style of thinking needed to be taken into account in order to help them make progress with their studies. They would not have benefited from a common style of working and thinking. The approach of paying attention to the way individuals internalise information has been central to the support work I have done with students. Sometimes the lack of confidence and the emotional burden are so deep seated that much more than finding one's best way of thinking is needed to overcome the effects of the disability, but even in these cases recognising the ways you think best can help significantly.

With an SpLD, the way one thinks doesn't only affect study, it can affect many of the tasks of everyday living. Any new situation, new job, new house, new banking system, means information has to be learnt again. McLoughlin et al (1994) describe four levels of compensation for dyslexic people. People who have

reached the most advanced stage of compensation can find themselves operating back at level 2 when dealing with something that is new. Providing you recognise what is happening, and have the confidence to re-assess the situation and to develop other strategies to deal with it, you can then move back to the higher levels of compensation fairly quickly.

Conclusion

These vignettes show the importance of recognising that individual dyslexic /SpLD people think in different ways. They don't represent a final picture. The process continues as new situations require new solutions and then thinking preferences can become more clearly understood. Some students have been aware that they think in different ways: Katherine told me 'I wanted to do it like that, but I didn't dare'. Many of the disabling effects of specific learning difficulties and dyslexia can be neutralised when one:

- understands how one's mind works well
- knows how to get it to think that way
- knows how to keep it doing so

Ginny Stacey

Learning to play the classical guitar as an adult taught me how to use my dyslexic brain more effectively, which lead to being interested in how others think and resulted in setting up the dyslexia support at Oxford Brookes University over 13 years to 2004.

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