# What the left and right hemispheres of the brain do best

(People with dyslexic are typically thought of as being 'right brain dominant'.)

#### what the left brain does best . . .

Linear progression: looks at the 'particular' and thinks sequentially, step-by-step, a to b to c

Working with facts

Explaining with words – uses language to name,

describe, define

Remembering using language

Controlling emotions,

taking life seriously

Analysis - looks for cause and effect,

breaks things down

Logical reasoning – deductive, draws conclusions

through a logical progression from

the 'general' to the 'particular'

Structured activities

Organisation

Knows 'how'

Thinks in signs

# what the right brain does best . . .

Global approach: thinks holistically, looks to 'whole picture'.

Understands 'simultaneously' by making associations

Working with pictures

Explaining things visually – uses pictures,

shapes and colour

Remembering using images

Expressing emotions,

approaching life playfully

Synthesis – looks for inter-relationships

and links

Intuitive understanding – inductive, draws

conclusions from an intuitive basis and a variety of

sources

Fluid, open activities

**Improvisation** 

Discovers 'what'

Thinks in designs

### **Dyslexia difficulties in HE context:**

- Working Memory HE study places heavy burden on dyslexic learner's memory skills.
- Sequencing HE learner needs very good organisational skills dyslexic learner challenges:
- 1. Assignment deadlines
- 2. Research
- 3. Study preparation
- 4. Teaching/work placements

# **Dyslexia: some typical difficulties impacting on HE study**

Remembering information due to short-term memory difficulties.	Having to re-read material for it to make sense.	Organising oneself and one's time.
Working under time pressure. E.g. tackling a demanding assessment load.	Taking notes in lectures/classes.	Scanning visual information rapidly and accurately.
Planning and structuring writing.	Keeping track of tasks and multitasking e.g. prioritising deadlines.	Problems with working under timed conditions, leading to exam panic.
Mispronounces multi-syllabic words.	Has difficulty in 'seeing' errors e.g. proof-reading.	Consistently fails to express real understanding, ideas or vocabulary in written work.
Has persistent problems with sentence structure and punctuation.	Difficulty paying attention, easily distracted visually or auditorially.	Low self-esteem & confidence, particularly regarding academic work.

### Dyslexia: an opportunity to excel

**Example:** Alexander Faludy, 14yrs old, IQ of 178, the youngest person to win a place at Cambridge since Pitt the Younger. He is skilled at delivering verbal dissertations of enormous range and complexity, but can write only two (illegible) words a minute. In addition, Einstein, twice fired from early jobs for poor spelling, once explained: 'If I can't picture it, I can't understand it.'

### Dyslexia: some typical strengths and abilities

<ul> <li>Good visual and spatial skills in creative areas such as maths, engineering and the physical sciences.</li> </ul>	Ability to recognise patterns in information and to represent 3D images in work with computers.	<ul> <li>Special facility for mentally rearranging designs and info, contributing to creative and novel design, e.g. Leonardo da Vinci, Rodin and Einstein.</li> </ul>
<ul> <li>A more holistic way of viewing the world - aids problem solving.</li> </ul>	Rich colour memory and ability to use fast multi-sensory combinations.	Can have good social skills.
Ambitious – a need to achieve.	May have advanced critical thinking skills, developing 'new' knowledge rather than merely retaining the 'old'.	Can be very creative
May have good kinaesthetic skills.	Enthusiastic	May have advanced verbal skills

#### Different approaches to study which complement your dyslexia/dyspraxia learning style.

(Many of these examples are recommended in your E.P & Assessment of Needs reports).

Your dept can assist you in the following ways:

#### IN LECTURES

Tutors to provide copies of lecture notes and PowerPoint slides prior to lecture: supports weak note-taking and processing information.
 Advance copies enable you to successfully read, take notes and generally understand lectures.

#### **COURSEWORK**

- Tutors should help you prioritize essential texts in reading lists: supports you with dealing with the high volume of reading, and minimize time spent reading material which is peripheral to the subject.
- Wherever possible, tutors should provide you with copies of reading lists in advance of each semester: supports you planning reading and meeting assignment deadlines.
- When necessary, tutors should be sympathetic to requests for extensions to complete assignments, especially when you have a heavy deadline schedule. Speak to your Disability Tutor and subject tutors. Use your Assessment of Needs Report to support your request.

#### **APPROACHES YOU CAN ADOPT**

Using a Digital Recorder: supports short-term memory difficulties, and note-taking difficulties in lectures.
 Digital recorders are also very useful for recording personal key points, aiding memory and learning for revision.

- TextHELP Read and Write Gold: supports difficulties with proofreading, and written expression.
  - Read and Write can read your work aloud in a computer voice. This can help if you have difficulty reading your own work. It is useful for checking sentences for grammar and structure. It can also help you to gain understanding of what is written. The software is excellent because it is like having your own personal proof-reader. TextHelp Read and Write is also more effective than 'Microsoft Word' for proofreading because it has a dyslexia-friendly 'spell-checker, homophone, and dictionary tools!
- Using a flatbed scanner with TextHelp: supports you with the large amount of reading required for academic work.
   Using a flatbed scanner enables textual materials to be scanned and read aloud from the computer, whilst the reader follows the spoken words as they are highlighted on screen. TextHelp also enables you to save your work to an audio file to listen to the text away from the computer.
- Inspiration software: supports learners by providing a visual approach to academic study.
  The use of mind-maps, created via Inspiration software, helps you visually create effective and structured essay plans. Inspiration also provide you with an efficient means of reviewing a (visual) set of notes from lectures, helping you to summarize and learn lecture and seminar content.
  Inspiration software is also excellent tool for visually summarizing your revision material.
- Dragon Naturally Speaking: supports students with acute writing difficulties
   This application allows a user to word process documents using continuous speech input via an attached microphone.
- Using traditional methods highlighter pens: supports organization and understanding of written notes for assignments, research and revision.
  - Coloured pens or markers should be used to differentiate headings, sub-headings and highlight salient points within blocks of text. Furthermore, this method will be useful when reading any printed material, especially for revision purposes.
- Remember to take advantage of your support allowance: funds for frequently used reference/textbooks, photocopy allowance, and printing consumables budget. Just keep your receipts and send them off to your funding body.
- Metacognitive awareness this means adopting all the new multi-sensory learning techniques listed above.
- Finally, develop a more positive emotional response to your dyslexia: Celebrate and use your strengths and understand and support your weaknesses!