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# Hull and East Yorkshire

## Psychological Assessment Service LLP

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### PSYCHOLOGICAL ASSESSMENT REPORT

**Name:** Darren John Hunter **Date Seen:** 12/01/07  
**Address:** Redacted for web version **Date of Birth:** 30/03/77  
**Age:** 29

**Institution:** Hull College

**Course:** HNC Software Design and Development

**Year:** 1 (of 2 - part time)

**Assessor Name:** Laura Harper

The author of this report certifies that this assessment has been conducted and the report written in accordance with the SpLD Working Group 2005/DfES Guidelines for Assessment of SpLDs in Higher Education.

The author is a qualified psychologist with a BSc in Psychology awarded by the University of Hull in 1998. She has over five years experience of assessing adults and children with dyslexia and other specific learning difficulties.

The author is a consulting psychologist for the Hull and East Yorkshire Psychological Assessment Service Limited Liability Partnership (LLP).

## Summary

### Background

Darren reported a history of difficulties with literacy that have affected him since primary school. He does not think that he has been fully assessed for specific learning difficulties before but a screening test administered at Hull College in 1995 indicated that he was at risk of having dyslexia. Darren reported that he received small group literacy support throughout his formative education and was given extra time in his GCSE examinations.

### Intellectual Abilities

Darren was found to have overall abilities in the upper half of the average range, with well above average verbal skills and non-verbal abilities in the lower part of the average range.

### Pattern of Cognitive Strengths and Weaknesses

Darren has relative strengths in:

- verbal intellectual abilities

Darren has relative weaknesses in:

- auditory/verbal sequential short-term memory
- phonological processing speed
- phonological awareness
- oral comprehension short-term memory
- visual sequential short-term memory
- ability to combine visual search, visual working memory, speed of visual information processing and fine motor control in a coding task

Finally, during a pegboard task, Darren's fine motor skills and dexterity were found to be below average when using both his preferred right hand and his non-preferred left hand and there were also signs of possible anomalies in the development of his laterality or cerebral dominance.

### Attainment in Literacy

Darren's reading comprehension skills were found to be good for this level of study and his score on this test was at the level that would be expected from his well above average verbal intellectual abilities. However, during the reading comprehension task, his reading accuracy when reading short passages of text out loud was a little below average and his speed of reading longer passages silently was extremely slow. In addition, Darren's single word reading accuracy was revealed to be a statistically significant area of relative weakness and his phonic decoding skills were highly statistically significantly below the level that would be expected from his intelligence. Overall, Darren shows the typical dyslexic pattern of reading abilities, in which his reading comprehension is better than his single word reading accuracy, which in turn is superior to his phonic decoding abilities. Both of these latter areas of reading ability were poor for a student in higher education and will inevitably cause him difficulties with the required reading for his course particularly when, as is likely, the texts include a relatively high level of unfamiliar vocabulary. These reading difficulties will also hinder him in examinations which involve even a moderate amount of reading. Darren's pattern of reading abilities indicates that he supplements his more problematic word recognition and ability to decode unfamiliar words by making intelligent use of the context to work out the meaning of passages of text. Although his reading comprehension test result showed that this can be quite effective, it can also often lead

to the reader completely misunderstanding a section of text. Students who have these types of underlying weaknesses in their reading abilities frequently need to re-read text in order to try to minimise these misinterpretations of the meaning of the text.

Darren's spelling accuracy was found to be poor for this level of study and his score on this test represented a significant area of relative weakness for him. His free writing skills were also revealed to be well below the level that would be expected from his verbal intellectual abilities and oral communication skills. In particular, his writing lacked complexity in terms of vocabulary, sentence structuring and overall expression. Finally, although Darren's free writing speed was average for this level of study, his handwriting/copying speed was found to be below average. These tests indicated that Darren is likely to experience problems in writing (e.g. when taking lecture notes, producing written assignments and during essay-based examinations).

### **Diagnosis and Conclusions**

Darren's educational history, pattern of cognitive difficulties and relative weaknesses in various aspects of his literacy skills are consistent with a diagnosis of **moderate dyslexia**.

A number of Darren's difficulties were also consistent with a diagnosis of dyspraxia, i.e. his significant weakness in non-verbal/spatial reasoning, his weaknesses in visual sequential short-term memory and when combining visual search, visual working memory, speed of visual information processing and fine motor control in a coding task, his poorly-controlled handwriting, exceptionally slow reading of continuous text and below average fine motor speed and fine motor dexterity. Therefore, the conclusion from this assessment is that Darren has **dyslexia with dyspraxia**. His dyslexia was found to be of moderate severity and with the dyspraxia added to his profile of difficulties, overall his condition constitutes a **moderate to severe** disability in a higher education setting.

It is therefore recommended that every effort be made to instigate a suitable programme of support for Darren, following the recommendations given on pages 9 to 12 of this psychological report. The cognitive weaknesses that underlie his specific learning difficulties, together with his difficulties with literacy, will inevitably impact significantly on Darren's studying and organisational skills. For example, although his reading comprehension is good, he is likely to be slow and rather inaccurate when reading text and, as a result of his phonic decoding problems, he may also have difficulties when he is faced with unfamiliar vocabulary. In addition, his poor spelling and difficulties with written expression will affect his note-taking in lectures and will also mean that he has difficulties completing written exams, unless he is given extra time.

## **Background**

Darren was referred to the Hull and East Yorkshire Psychological Assessment Service by Hull College's Disability Services Department because of suspected specific learning difficulties.

In a questionnaire and interview with the psychologist, Darren reported experiencing difficulties with literacy that have affected him since primary school. He explained that he often has to reread passages of text several times as he forgets the sense of what he has read. Darren also finds it hard to express his ideas clearly on paper and this problem is made worse by his difficulties with grammar, punctuation and spelling. He also feels that his concentration skills are poor.

Darren described his health as being average and he explained that he suffers from allergies, hay fever, migraine and arthritis. He also currently has high blood pressure. Darren also explained that he is susceptible to periods of depression or low mood. He is not sure as to whether his hearing is satisfactory as he sometimes has to ask people to repeat what they have said. Despite having his eyesight properly corrected, he sometimes experiences symptoms of eyestrain when reading and he finds that white paper seems to glare and print becomes fuzzy or blurry.

Darren does not think that he has been fully assessed for specific learning difficulties before but a screening test administered at Hull College in 1995 indicated that he was at risk of having dyslexia. Darren reported that he received small group literacy support throughout his formative education and was given extra time in his GCSE examinations.

## **Test Conditions**

Darren was assessed in a quiet room in the University of Hull's Department of Psychology. There were no interruptions to the assessment. He was friendly and responsive during the assessment and did not seem to be worried or nervous in the testing situation. Darren did not appear to have any difficulties with attention or concentration. Darren tried hard at all times and showed good levels of persistence and concentration in tasks that he found difficult.

## **Test Results**

*Note: for details of test results, see Appendix.*

A number of psychological tests were administered to assess Darren's intellectual ability, his attainments in reading, writing and spelling, and also to identify any cognitive deficits or weaknesses that would be indicative of specific learning difficulties.

### ***INTELLECTUAL ABILITY***

The *Wechsler Adult Intelligence Scale - Third Edition (WAIS-III<sup>K</sup>)* was administered to Darren in order to assess his intellectual abilities. The Verbal Comprehension Index (VCI) provides an overall measure of verbal reasoning and understanding and is assessed by questions that are both asked and answered orally. The Vocabulary subtest assesses oral vocabulary knowledge, the Similarities subtest provides a measure of an individual's understanding of verbal concepts and the Information subtest assesses general knowledge. The Perceptual Organisation Index (POI) gives an overall measure of non-verbal skills and involves the use of pictures and patterns. Picture Completion assesses visual observation/memory skills, Block Design provides a measure of nonverbal/spatial reasoning and Matrix Reasoning assesses non-verbal/logical reasoning.

Darren attained a Verbal Comprehension Index score of 118, which was a well above average score that placed him at centile 88 (i.e. approximately 88% of individuals within Darren's age group would score below this level and 12% above). On the Perceptual Organisation Index, which provided a measure of his non-verbal intellectual abilities, Darren attained a score of 91. This was in the lower part of the average range,

at the 27<sup>th</sup> centile. Darren's scaled scores for the individual subtests of the *WAIS* Verbal Comprehension Index and the Perceptual Organisation Index are provided below.

The scaled scores shown below have a mean average of 10, with scores that range from 1 to 19. These scores are relative to the abilities of other individuals in Darren's age group.

<b>Verbal Comprehension Index</b>		<b>Perceptual Organisation Index</b>	
Vocabulary	14	Picture Completion	9
Similarities	14	Block Design	9
Information	12	Matrix Reasoning	8

These subtest and index scores indicate that Darren's overall intellectual abilities are in the upper half of the average range. However, there was a statistically significant 27-point difference between Darren's scores on the Verbal Comprehension and Perceptual Organisation indices. A difference of this size is unusual, as it would be expected in only 3.9% of cases.

## **TESTS OF COGNITIVE PROCESSING**

### **AUDITORY/VERBAL SEQUENTIAL SHORT-TERM MEMORY**

On the *WAIS-III* Digit Span Test, a test of auditory/verbal sequential short-term (or working) memory, in which Darren was asked to repeat strings of digits presented verbally, he obtained a well below average score (standard score 78-82, centile 7-12). This score was found to be a statistically significant area of weakness when compared with his overall intellectual abilities.

### **ORAL COMPREHENSION SHORT-TERM MEMORY**

On the *Wechsler Memory Scale - Third Edition (WMS-III<sup>UK</sup>)*, Darren's short-term memory ability for repeating short stories immediately after they had been read to him was low-average (Logical Memory test: standard score 88-92, centile 21-30). This score was found to represent a significant area of weakness when compared to his verbal intellectual abilities.

### **VISUAL SEQUENTIAL SHORT-TERM MEMORY**

The *WMS-III* Spatial Span test, which provides a measure of visual sequential short-term memory skills, was administered to Darren. On this test, in which he had to remember the order in which a number of blocks (from an array of ten) were tapped by the psychologist, Darren obtained a below average score (standard score 83-87, centile 13-19). This was revealed to be a statistically significant area of weakness when compared with his overall intellectual ability.

### **VISUAL INFORMATION PROCESSING SPEED**

Darren's ability to carry out a digit-symbol coding task at speed, which provides a measure of a combination of visual search, visual working memory, processing speed and fine motor control, was also below average (*WAIS-III<sup>UK</sup>* Digit Symbol-Coding test: standard score 83-87, centile 13-19). Again, this score was statistically significantly below the level that would be expected from his overall intellectual ability.

### **PHONOLOGICAL PROCESSING SPEED**

The *Comprehensive Test of Phonological Processing (CTOPP)* Rapid Object Naming subtest was also administered to Darren. On this test Darren was asked to name a sequence of pictures as quickly as he could. This provides a measure of phonological processing speed and requires efficient retrieval of phonological information from longterm memory and also involves speed of processing visual as well as verbal

information. On this test, Darren obtained a well below average score that placed him at centile 9. This was revealed to be a statistically significant weakness relative to his overall intellectual abilities.

#### PHONOLOGICAL AWARENESS

The *CTOPP* Blending Nonwords subtest was administered to Darren to assess his phonological awareness; that is, his awareness of the sound structure of spoken English. On this test, which required Darren to combine speech sounds to make 'nonwords', he obtained a below average score that placed him at centile 16. This was found to be a statistically significant weakness in comparison with his overall intellectual ability.

#### FINE MOTOR SKILLS

On a pegboard test, Darren obtained below average scores for fine motor speed and fine motor dexterity when using both his preferred right hand and his non-preferred left hand. His non-preferred left hand was somewhat faster than his preferred right hand for both tasks, which suggests the possibility of there being some anomalies in Darren's laterality or cerebral dominance, i.e. in most individuals one side of the brain becomes dominant over the other for most skilled motor and language tasks, whereas in individuals who are ambidextrous, or who are more adept at many tasks when using their non-preferred hands, there can be less differentiation between the two hemispheres of the brain than is usually the case. This difference in the way that the brain is organised can be associated with dyslexia and other difficulties in the learning of literacy skills.

#### **Summary of Testing of Cognitive Processing**

The above diagnostic testing revealed statistically significant weaknesses in Darren's auditory/verbal sequential short-term memory, phonological processing speed, phonological awareness, oral comprehension short-term memory, visual sequential short-term memory and ability to combine visual search, visual working memory, speed of visual information processing and fine motor control in a coding task. Finally, during a pegboard task, Darren's fine motor skills and dexterity were found to be below average when using both his preferred right hand and his non-preferred left hand and there were also signs of possible anomalies in the development of his laterality or cerebral dominance.

#### **ATTAINMENTS IN LITERACY**

##### SINGLE WORD READING ACCURACY

On the *Wechsler Individual Achievement Test — 2<sup>nd</sup> UK Edition (WIAT—II<sup>UK</sup>)* Word Reading test, in which Darren was asked to read out loud a list of unrelated words, he obtained a standard score of 82, which was below the average range at the 12<sup>th</sup> centile.

There was a highly significant 21-point discrepancy between this score and the result that would be predicted from his overall intellectual ability. A discrepancy of this magnitude is very unusual, being expected in only 3% of individuals. This indicated that Darren's single word reading skills were a statistically significant area of relative weakness.

Some of Darren's reading errors were due to faults in his phonic decoding in which he substituted or omitted letter sounds. He also made quite a lot of visual whole word substitution errors in which he misread test items as other words of somewhat similar appearance.

## TEXT READING AND READING COMPREHENSION

On the *WIAT—II* Reading Comprehension test, in which Darren had to read some sentences and passages of text and then answer a number of questions on each, he achieved a standard score of 114, which was above the average range at centile 82. However, during this test Darren's reading accuracy when reading short passages of text out loud was a little below average and his speed of reading longer passages silently was extremely slow.

## PHONIC ANALYSIS

On the *WIAT—II* Pseudoword Decoding test, Darren was asked to read a number of non-words, e.g. 'feep' and 'tigloder', which resemble English words and can only be decoded using the phonic rules of reading English that are usually taught or acquired as reading skills develop. On this test, Darren obtained a standard score of 70, which was a very low score at the 2<sup>nd</sup> centile.

There was a highly significant 33-point discrepancy between this score and the result that would be predicted from his overall intellectual ability. A discrepancy of this magnitude is extremely unusual, being expected in less than 1% of individuals. This indicated that Darren's phonic decoding skills were a highly statistically significant area of relative weakness.

Darren sometimes added, substituted or omitted letter sounds in his decoding attempts. He also displayed a lack of knowledge of the sounds associated with some letter digraphs.

## Summary of Reading Abilities

Darren's reading comprehension skills were found to be good for this level of study and his score on this test was at the level that would be expected from his well above average verbal intellectual abilities. However, during the reading comprehension task, his reading accuracy when reading short passages of text out loud was a little below average and his speed of reading longer passages silently was extremely slow. In addition, Darren's single word reading accuracy was revealed to be a statistically significant area of relative weakness and his phonic decoding skills were highly statistically significantly below the level that would be expected from his intelligence. Overall, Darren shows the typical dyslexic pattern of reading abilities, in which his reading comprehension is better than his single word reading accuracy, which in turn is superior to his phonic decoding abilities. Both of these latter areas of reading ability were poor for a student in higher education and will inevitably cause him difficulties with the required reading for his course particularly when, as is likely, the texts include a relatively high level of unfamiliar vocabulary. These reading difficulties will also hinder him in examinations which involve even a moderate amount of reading. Darren's pattern of reading abilities indicates that he supplements his more problematic word recognition and ability to decode unfamiliar words by making intelligent use of the context to work out the meaning of passages of text. Although his reading comprehension test result showed that this can be quite effective, it can also often lead to the reader completely misunderstanding a section of text. Students who have these types of underlying weaknesses in their reading abilities frequently need to re-read text in order to try to minimise these misinterpretations of the meaning of the text.

## WRITING

In a writing task in which Darren was asked to spend up to 15 minutes writing an account of his course and what led him to study this particular subject, he wrote at a speed of 21 words per minute (average for a student in higher education). Darren wrote in a very untidy, partly-cursive handwriting style that was difficult to read.

Darren's piece of writing covered the requested topic area adequately, but his written expression was very basic and he used a rather limited and repetitive vocabulary. In addition, his grammar was mostly satisfactory but he used very simple sentences and his punctuation was generally poor. He also displayed weak paragraphing skills, listing his points rather than trying to link related topics.

Overall, therefore, Darren's ability to express his ideas in writing was well below the level that would be expected based on his verbal intellectual ability and oral communication skills.

On the *Handwriting Speed Test*, in which he was required to copy a sentence as many times as possible in three minutes, Darren wrote at a speed of 34 words per minute. This copying speed was below average for a student in higher education.

## SPELLING

On the *WIAT—II* Spelling test, in which Darren was asked to spell single words after being presented with each of them individually and in a sentence, he obtained a standard score of 79, which was a low score that placed him at the 8<sup>th</sup> centile.

There was a highly significant 24-point discrepancy between this score and the result that would be predicted from his overall intellectual ability. A discrepancy of this magnitude is very unusual, being expected in only 1-2% of individuals. This indicated that Darren's spelling accuracy was a statistically significant area of relative weakness.

Quite a few of Darren's spelling errors in this test were reasonably sensible phonetic attempts although he occasionally added, omitted or substituted letter sounds in his spellings. He also occasionally displayed a difficulty with the spelling of homonyms.

Due to the nature of Darren's handwriting it was often very difficult to decipher individual letters. However, in the free writing task detailed above he appeared to make a lot of spelling errors which were similar to many of the mistakes that he made in the spelling test. These errors included: 'learn' spelt as 'learne', 'concepts' spelt as 'conceps', 'business' spelt as 'bissiness', 'theory' spelt as 'theory', 'see' spelt as 'sea', 'private' spelt as 'privat' and 'industry' spelt as 'indastry'.

## Summary of Spelling and Writing Abilities

Darren's spelling accuracy was found to be poor for this level of study and his score on this test represented a significant area of relative weakness for him. His free writing skills were also revealed to be well below the level that would be expected from his verbal intellectual abilities and oral communication skills. In particular, his writing lacked complexity in terms of vocabulary, sentence structuring and overall expression. Finally, although Darren's free writing speed was average for this level of study, his handwriting/copying speed was found to be below average. These tests indicated that Darren is likely to experience problems in writing (e.g. when taking lecture notes, producing written assignments and during essay-based examinations).

## OTHER RELEVANT INFORMATION

As can be seen from the background section of the report, Darren reported a degree of susceptibility to visual discomfort (also known as Meares-Irlen Syndrome) when reading. He also reported that he sometimes finds fluorescent lights and computer monitors to be visually irritating and unpleasant.

## Conclusions

Darren's profile of cognitive difficulties and his reported educational history are all consistent with a diagnosis of **moderate dyslexia**.



Testing of Darren's intellectual skills revealed him to have overall abilities in the upper half of the average range, with well above average verbal skills and non-verbal abilities in the lower part of the average range. Diagnostic testing showed that he has statistically significant weaknesses in auditory/verbal sequential short-term memory, phonological processing speed, phonological awareness, oral comprehension short-term memory, visual sequential short-term memory and ability to combine visual search, visual working memory, speed of visual information processing and fine motor control in a coding task. In addition, during a pegboard task, Darren's fine motor skills and dexterity were found to be below average when using both his preferred right hand and his non-preferred left hand and there were also signs of possible anomalies in the development of his laterality or cerebral dominance. Finally, he appeared to find the organisation of information problematic.

Darren has been able to compensate for his dyslexic difficulties to some extent and he is able to read for meaning at a good standard. However, he shows the typical dyslexic pattern of reading comprehension that is better than his single word reading accuracy, which in turn is superior to his phonic decoding abilities. Darren's poor phonic decoding skills will cause him significant problems when he is faced with unfamiliar words, as he inevitably will be during his course. This 'word attack' aspect of his literacy skills was found to be a highly statistically significant weakness and his single word reading accuracy was also significantly below the level that would be expected from his intellectual abilities. In addition, his spelling skills were revealed to be a significant area of relative weakness for him and his free writing was also well below the level that would be expected from his verbal intelligence. Finally, although Darren's free writing speed was satisfactory, his handwriting/copying speed was slow for this level of study. These difficulties are all entirely consistent with the cognitive weaknesses that underlie Darren's dyslexia.

A number of Darren's difficulties were also consistent with a diagnosis of dyspraxia, i.e. his significant weakness in non-verbal/spatial reasoning, his weaknesses in visual sequential short-term memory and when combining visual search, visual working memory, speed of visual information processing and fine motor control in a coding task, his poorly-controlled handwriting, exceptionally slow reading of continuous text and below average fine motor speed and fine motor dexterity. Therefore, the conclusion from this assessment is that Darren has **dyslexia with dyspraxia**. His dyslexia was found to be of moderate severity and with the dyspraxia added to his profile of difficulties, overall his condition constitutes a **moderate to severe** disability in a higher education setting.

### **Recommendations**

In view of the above findings, the following recommendations are made:

- 1) Darren should be entitled to special provision in written examinations, otherwise he will be unfairly disadvantaged in comparison with other candidates. This provision should take the form of:
  - extra time in written papers (20 minutes extra time in each hour is recommended), on papers in which Darren feels he needs this;
  - allowances should also be made for any spelling and grammatical errors or problems of essay and/or sentence construction that are apparent in his answers
- 2) Darren should contact his college's Disability Services and arrange for an appointment in which to discuss this report and its implications and also to complete an application to his Local Education Authority for a Disabled Students' Allowance. This will be used to purchase one-to-one tuition/learning support, suitable computer equipment and other technological aid as necessary. The computer programs and/or other technological aids will provide some of the

necessary support for him when producing written work, and will help him to access text and lecture material during his course and also to organise notes, written work and study activities. This report should be sent in support of such an application. It is our professional opinion that Darren needs such equipment and support to put

him on a comparable footing to other students and to be able to complete his course with an appropriate degree of success.

Following the granting of a Disabled Students' Allowance, Darren will need to attend an Access Centre (or equivalent organisation) where a full professional assessment of his computing and other technological needs can be carried out, taking into account Darren's specific learning difficulties and the particular requirements of his course. His college's Disability Services will be able to help Darren make the arrangements for this assessment at the appropriate time.

- 3) Darren is likely to experience difficulties with note-taking in lectures in the ordinary way and the resulting notes may not be a satisfactory aid to his memory and understanding. Therefore, it is recommended that all potential ways of supplementing his note-taking should be explored, including tape-recording of lectures, automatic provision of typed lecture notes and copies of all OHP transparencies to be used in lectures. If one is available, his lecturers and tutors should make sure that the lecture notes are available on the college network before the lecture. If this is not possible, lecture notes and copies of OHP transparencies should be prepared, ready to be given to Darren at the beginning of each lecture that he attends. It is to be hoped that his lecturers and tutors will give him as much assistance as possible in this respect.
- 4) Darren is a slow, inaccurate reader who experiences particular difficulties with phonic decoding of unfamiliar words and also suffers from visual discomfort. Therefore, it is recommended that his reading material should be carefully selected so that precious time and effort is not expended in reading only peripheral material. Consequently, all his lecturers and tutors should asterisk the essential and more important texts for him to concentrate on in the first instance.

Darren should also enquire about any extended library loan facilities and other support that may be available from his college's library for students with specific learning difficulties.

- 5) Darren reported a susceptibility to visual discomfort, that is, despite having his eyesight properly corrected, he sometimes experiences symptoms of eyestrain when reading and he finds that white paper seems to glare and print becomes fuzzy or blurry.

Visual discomfort is a medically recognised condition that has been widely researched by the Medical Research Council at Cambridge. The causes of the visual disturbances are pattern glare and/or rapid visual flicker that may be barely discernible to the eye, but are nevertheless registered by the brain. It is known that a significant proportion of individuals with dyslexia are particularly prone to visual discomfort and some non-dyslexic people are also susceptible to the condition, particularly those with a history of epilepsy or migraine.

It is now widely appreciated that the symptoms of visual discomfort can be alleviated by the use of appropriate coloured lenses and/or coloured filters when reading. For students whose courses require even a moderate amount of reading, visual discomfort is a major disability. Therefore, it is recommended that Darren should make an appropriate appointment to establish a suitable coloured filter for him to use when reading. If Darren finds a coloured filter to be helpful in reducing his symptoms of visual discomfort he might wish to be tested by an ophthalmologist or ophthalmic optician specialising in testing to reveal the optimum colour for tinted lenses. Parkhurst Opticians in Doncaster (110 The High Street, Bentley, Doncaster, DN5 OAT; Tel: 01302 87 44 33) and Specsavers in Sheffield (15 West Mall, Upper Mall Level, Crystal Peaks

Shopping Centre, Sheffield, S20 7PN; Tel: 0114 251 3111) are currently two of the nearest centres who specialise in this field. Visual discomfort is an integral part of Darren's profile of difficulties and, therefore, it would be appropriate for an application to be made for his LEA to pay (through the Disabled Students' Allowance) for the costs incurred in obtaining coloured filters and/or tinted lenses if these are issued.

- 6) Like many other people who suffer from visual discomfort, Darren can be hypersensitive to screen flicker on computer monitors and this may adversely affect his work. This screen flicker may be imperceptible to individuals who are not susceptible to visual discomfort, but will nevertheless be registered by the brain. In the case of someone who suffers from visual discomfort, flicker will disrupt activities such as reading from the screen. To avoid this mental disruption as much as possible, it is recommended that Darren uses a high frequency monitor to MRP II standard and which has been adjusted to a refresh rate of 85 Hz or higher. Alternatively, Darren should use a flatscreen TFT monitor whenever possible, as these types of monitor do not produce these unpleasant flicker effects.
- 7) Darren is likely to take longer than other students to carry out the research for essays and assessed work. Therefore it is recommended that excessively arduous deadlines are not placed on him, which would take valuable time away from his other studying activities or cause unnecessary stress. It may be appropriate for Darren to be permitted extra time in which to submit assessed work. He will need to negotiate with individual lecturers about submission dates if he feels that he needs additional time. (Extra time should be considered if Darren feels that he has not been given enough time to complete a piece of work to a satisfactory standard or, alternatively, because several essays are due to be handed in at once.)

It may also be necessary for Darren to ask his tutors to explain exactly what is required for written assignments and for him to be provided with support when proofreading draft copies of written coursework. When marking Darren's assessed assignments, allowances should be made for any difficulties with spelling, grammar and essay/sentence construction.

- 8) Darren could improve his spelling skills by using the Simultaneous Oral Spelling Technique to learn a few new spellings each week. This would be particularly useful for him to learn subject-specific vocabulary. To use the Simultaneous Oral Spelling Technique, Darren should first choose a few words that are either completely unfamiliar to him or which he has persistent difficulties in spelling correctly. He should then write out the first word correctly and look at it carefully while saying it out loud. Then he should write the word out three times, saying the letter names (i.e. 'ay', 'bee', 'see', 'dee', etc.) out aloud as he writes it. If this procedure is carried out carefully for each new word every night and morning for seven days, Darren should be able to learn to spell several new words each week.

Some trial and error will be needed for Darren to decide on the optimum number of words that he should learn each week. He must not be too optimistic in this, as a few words learnt very thoroughly is much better than a greater number learnt more superficially and then forgotten in a relatively short time.

- 9) Some teaching input from a suitably qualified and experienced tutor should greatly improve Darren's study skills and organisational abilities. It is recommended that up to 60 hours of such tuition should be made available for Darren in each academic year for the duration of his course. Although this teaching should, in general, be given at evenly spread out intervals, sympathetic consideration should be given if Darren feels he needs support in a more concentrated form at times (e.g. during revision for examinations or when writing a dissertation). Alternatively, if it is also convenient for his tutor, study skills sessions could be scheduled when Darren has more free time (e.g. towards the beginning of each semester).

To supplement this individual tuition, Darren should be encouraged to attend a support group for dyslexic students, if one is available at his college (i.e. 30 hours of group support per year for the duration of his course).

- 10) Some self-help activities would also be very useful in improving Darren's study skills. A number of study skills books have been produced which contain information about various strategies that should improve Darren's study skills and organisation. A range of these books are available including *'The Study Skills Handbook' (2<sup>nd</sup> edition)* by S. Cottrell (Palgrave, 2003) and *'The Student's Guide to Writing: Grammar, punctuation and spelling' (2<sup>nd</sup> edition)* by S. Peck and M. Coyle (Palgrave, 2005), which are particularly recommended.
- 11) Under the provisions of the Disability Discrimination Act (1995) all employers are required to make reasonable adjustments to allow for their employees' disabilities. This applies both to the employment and the opportunities for promotion for disabled employees (see DDA 1995, Part II Employment, Section 4, Paragraphs 2b, 2c and 2d; Section 6, Paragraphs 1a, 2b and 3h). Therefore, Darren's future employers will need to understand his particular problems and how they affect the efficient and effective production of paperwork. In addition, he will probably need to be provided with additional support (including appropriate computer software and other technological aids) to enable him to largely overcome his specific learning difficulties.

Darren and his employers should contact Access to Work, which is part of the Department for Work and Pensions. Access to Work provides advice and practical support for individuals with specific learning difficulties in the workplace including paying a grant, through Jobcentre Plus, towards any extra employment costs incurred by purchasing additional technological aids.

We would be happy to be consulted further regarding this psychological assessment, or to discuss suitable provision with Darren.

The author of this report certifies that this assessment has been conducted and the report written in accordance with the SpLD Working Group 2005/DfES Guidelines for Assessment of SpLDs in Higher Education.

**Name:** Laura Harper BSc

**Signature:** \_\_\_\_\_

**Date:** 26/02/07

### **Recommended Further Reading**

*Dyslexia in Adults: Education and employment* by G. Reid and J. Kirk (Wiley, 2001).

*Dyslexia at College (2<sup>nd</sup> edition)* by D. Gilroy and T. Miles (Routledge, 1996). *Dyslexia in the Workplace* by D. Bartlett and S. Moody (Whurr, 2000).

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## APPENDIX: TEST RESULTS FOR DARREN HUNTER (d.o.b. 30/03/77)

NOTE: All test results have been converted to centile scores and standard scores for comparison purposes.

Gentile scores (sometimes called 'percentile scores') place the individual on a 'ladder' of attainment which has equal steps from 1 to 99, with centile 1 representing the lowest scoring 1% of the population on that test and centile 99 the highest 1%.

Standard scores have a normal distribution, with a mean (average) of 100 and standard deviation of 15. 50% of people will obtain standard scores between 90 and 110, which is regarded as the "average range".

<b>INTELLIGENCE</b>		
<i>Wechsler Adult Intelligence Scale (WAIS-M<sup>K</sup>)</i>	Centile score	Standard score
Verbal Comprehension Index:	88	118
Perceptual Organisation Index:	27	91
<b>DIAGNOSTIC TESTS</b>		
<b>Auditory/Verbal Memory</b>		
WA/S-III"" Digit Span Test:	7-12	78-82
<i>Wechsler Memory Scales (WMS-III"")</i> Logical Memory Test:	21-30	88-92
<b>Visual Memory</b>		
<i>WMS-III""</i> : Spatial Span Test:	13-19	83-87
<b>Visual Information Processing Speed</b>		
<i>WAIS-III""</i> : Digit Symbol-Coding Test:	13-19	83-87
<b>Phonological Processing</b>		
<i>Comprehensive Test of Phonological Processing (CTOPP)</i> Blending Nonwords:	16	(85)
<i>CTOPP</i> Rapid Object Naming:	9	(80)
<b>BASIC SKILLS TESTS</b>		
<b>Reading</b>		
<i>Wechsler Individual Attainment Tests (WIAT-II)</i> Word Reading:	12	82
<i>WIAT-II</i> Reading Comprehension:	82	114
<i>WIAT-II</i> Pseudoword Decoding:	2	70
<b>Spelling</b>		
<i>WIAT-II</i> Spelling:	8	79
<b>Writing</b>		
See report for discussion and analysis of Darren's free writing skills.		
Free Writing Speed:	21 words per minute (average)	
<i>Handwriting Speed Test</i> :	34 words per minute (below average)	