# The Greenwich Education report on using TTRS with visually impaired children

A report from the Peripatetic Service for the Visually Impaired. Greenwich Education.

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# Introduction:

As a teacher of visually impaired children, I recognise the importance for all pupils to acquire specific skills such as touch-typing,to enable them to access the curriculum as effectively as possible.

Throughout the years I have used a selection of touch-typing schemes. These have tended to be on an individual basis and depended on the motivation and available time of class teachers/support staff. Due to pressure of time it was difficult for the Visual Impairment Service (VIS) to monitor the progress of individuals and to provide appropriate support. These understandable limitations led to a poor success rate.

I was introduced to the Touch-type, Read and Spell (TTRS) course by the Head of the Greenwich Professional Development Centre (PDC) and in November a Pilot using this program began. The PDC generously provided free use of the Information Technology Suite.

The Pilot involved attendance for one session a week at the PDC between 4.15 pm and 5.15pm. All the children attending had no previous touch-typing skills.

# Suitability of the Touch-type Read and Spell course for the visually impaired children.

Since using the TTRS course I have become aware of the large number of advantages for visually impaired children.

- Access for all visually impaired children.
- A multi-sensory approach
- Access through speech
- A choice of different fonts

- A choice of background/font/indicating finger colour
- · Immediate self-correction of errors, and feedback of results
- A clear graphical representation of scores
- A planned program
- Instructions can be repeated
- A focus on positive achievements
- Able to work at own pace

As the children progressed through the course I noticed specific improvements in the following areas:-

- Raised literacy skills
- Improved listening skills
- Ability to work independently
- Improved motivation
- Improved self-esteem

#### Criteria for selection.

For the pilot all children had to be transported to the PDC by the parent/carer. The parent/carer had to remain with their child throughout the hour session and to be committed to the pilot. This obviously restricted the opportunity for learning for children without transport.

If Touch-type, Read and Spell (TTRS) is introduced as an extra-curricular activity within the borough for all visually impaired children then the difficulties with transport will have to be addressed.

# The children involved.

All the children are in an integrated setting: 8-10 years old.

Aaron

- Retinal detachment of right eye: no useful vision.
- Retinal detachment left eye: restricted visual field.
- High myopia
- A degree of photophobia
- Difficulties interacting with other members of the group
- Initially did not want to be singled out

# Chris

- Monocular vision
- Reduced visual acuity in dominant eye
- Night blindness: being investigated
- Low self esteem
- Poor literacy skills
- Difficulties staying on task
- Poor concentration
- Poor listening skills
- Easily frustrated
- Not prepared for delayed gratification

# Robert

- Ocular motor apraxia
- Reduced visual acuity
- Hypermetropia
- Pain in the area of the neck: possibly due to exaggerated compensatory head movement
- Difficulties remaining on task
- Poor concentration
- Easily frustrated
- Not prepared for delayed gratification

# Toby O

- Anopthalmia
- A high achiever

Toby W

- Ptosis
- Nystagmus
- Strabismus
- · Visual perception difficulties
- Dyspraxia
- Low self-esteem
- Easily frustrated
- Subject to fatigue due to dyspraxia
- Difficulties interacting with other members of the group
- Poor concentration span

# Progress.

To date the children have attended twenty sessions and due to the high level of commitment from both the children and the parent/carers, the children have made remarkable progress.

Initially the children required a high level of adult input and experienced feelings of frustration as their fingers struggled to hit the correct keys and then return to the home keys. Some children felt they would never achieve success, but slowly progress has been made and today the sessions could be compared to an 'A' level study group! The children are all highly motivated, working independently, developing their touch-typing skills and are keen to achieve a high score.

# Individual progress

#### Aaron

Aaron for the most part is able to use the keyboard whilst looking at the screen, and is developing accurate finger skills. He now understands the value of attending the course and does not feel awkward about being singled out from his peers.

Aaron consistently achieves 100% scores and is highly motivated. His touch-typing skills have transferred to both the home and school environment.

Aaron is beginning to socialize with a child on the neighboring computer.

# Aaron's comments

"I've learnt how to type properly and get fast."

# Parent/carer's comments

"I am very happy with the progress Aaron has made with his Touch-type, Read and Spell course. He is becoming quite skilled at using the keyboard with accuracy of 100% without looking at the keyboard. A valuable course."

#### Chris

During Chris's nineteenth touch-typing session he finally achieved a 100% score. This was an amazing result for a child who experiences difficulties with delayed gratification. Throughout the sessions he has always been the first to arrive and generally remains on task for one and a quarter hours; this a child who experiences difficulties remaining on task!

Chris's literacy skills have developed and due to improved self-esteem he now offers support to other children in his class with spelling difficulties. Listening skills have noticeably improved during dictation. Feelings of frustration due to fingering errors are beginning to be managed appropriately and Chris is able to use his fingers correctly. Touch typing skills are now transferring to both the home and school setting.

Chris's class teacher has noticed an improvement with regard to concentration span and behaviour within the classroom setting.

#### Chris's comments

"It's fun. My reading and spelling have got better."

#### Parent/carer's comments

"Christopher's reading writing and spelling have improved since he started the course, also he is now able to sit in one place and concentrate for longer periods of time. Chris loves the course and looks forward to it every week."

#### Robert

Robert has missed a number of sessions due to neck pain; this is being investigated and as a result his ability to stay on task as he struggles to make himself comfortable. An exaggerated compensatory head movement may be contributing to his discomfort.

Robert is developing appropriate fingering and is learning to cope with his frustrations when he uses an incorrect key. He is very keen to achieve a 100% score, responds well to praise and his listening skills have improved during dictation.

Once Robert's physical difficulties have been addressed I feel sure he will achieve his 100% score!

#### Robert's comments

"I have learnt spellings and I am getting better at touch-typing."

# Parent/carer's comments

"Robert enjoys coming to computers, it has improved his concentration and his spelling. He is trying very hard to achieve 100%. His head movement does not seem to be so bad due to his concentration."

#### Toby O

Toby has acquired a high degree of independence and confidence, only requiring adult input with complex words and new fingering on the keyboard. He also needs to be told his final score. Toby consistently scores 100% and, as a result, is highly motivated. Expectations are high and Toby has learnt that if a score of less than 100% is achieved, that is perfectly acceptable. His listening skills have noticeably improved and he is able to isolate sounds more effectively.

Difficulties with fingering at the start have improved and Toby has developed the flexibility to move his fingers appropriately and to return them to the home keys. Touch typing skills have transferred to the home setting.

#### Toby's comments

"I can touch-type now and I get 100%. I like touch-typing."

#### Parent/carer's comments

"Toby really looks forward to attending the course and likes to aim for 100%. He gains a great sense of achievement. The course has made him independent and he is using the computer at home to do his home-work, and using the computer independently to print out his work."

#### Toby W

Initially Toby experienced difficulties remaining on task at the end of a long school day, due to general fatigue and feelings of frustration. At first he struggled to complete two modules, but nowadays Toby generally completes eight modules at each session. If Toby is feeling particularly tired, he has to walk around the room between modules before returning refreshed and able to continue.

Toby is now highly motivated, has improved self-esteem and concentration span, and is able to work independently. Dictation was not popular with Toby, but with developing listening skills, his scores have improved and recently he scored 100% Toby is learning to manage his feelings when he feels overtired.

Toby has developed appropriate fingering and his touch-typing skills have successfully transferred to the home setting.

Toby is beginning to socialize with a child on a neighboring computer.

#### Toby's comments

"It has helped my fingers a lot because I can write better."

#### Parent/carer's comments

"Toby is greatly motivated by the instant feedback system on this typing course. He is greatly motivated to achieve high scores - even aiming for 100% each session. He has generally become 'au fait with the use of a word-processor."

# The development of the touch-typing group.

There have been a number of advantages arising from the weekly sessions that have benefited all the individuals involved.

It has given the children the opportunity to:-

- improved literacy skills
- meet other visually impaired children
- develop new friendships
- discuss experiences
- improve social skills
- learn a skill that can be used to improve performance
- improve self-esteem
- have quality time with their parent/carer
- increase computer efficiency and considered
- increase awareness of other visual impairments

It has given the Parent/carers The opportunity to:-

- meet with other parents and liaise with them
- spend quality time with their child and to share their successes
- observe their child in a classroom setting within a group
- discuss concerns with the VIS teacher

Visual Impairment Service The weekly sessions have enabled the VIS teacher to:-

- develop an ongoing relationship with both parent/carer and the child
- · monitor individual children's progress weekly
- develop a clearer picture of each individual's needs within the classroom/group setting
- work in partnership with parent/caregiverrs
- · discuss individual issues with parent/caregivers
- provide information/suggestions and to seek comment from a wider audience
- enjoy the successes of the children

#### **Conclusions.**

Access to the Touch-type, Read and Spell course has enabled this small group of visually impaired children to improve their literacy skills and to begin to develop touch-typing skills that are being used both at home and within the classroom setting.

Improved confidence and self-esteem has contributed to a positive attitude in other areas of learning and is making a good contribution to their attainment and progress.

This success story has only been possible due to the generosity of Philip ALexandre who is the National Course Director for the Touch-type, Read and Spell course, the Greenwich PDC, the amazing commitment from the parents/caregivers and the total enthusiasm from the children themselves.

The project ends in July, but hopefully additional funds will be forthcoming to enable the children to complete the touch-typing course and to become competent kymograph users. I envisage the course being available to all visually impaired children within the borough who would be able to gain benefit from it.