Coping Strategies and Assistive Technology

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BDA Young Achiever of the Year, 2010
Please ask questions!
Background

- Dyslexic
- Age 15:
  - Reading speed: 7y3m; Spelling: 8½-9y
- Support & coping strategies
- Graduated in 2009
- BDA Young Achiever of the Year, 2010
- AbilityNet Technology4Good Awards finalist
Overview

- Personal perspective
- Assistive technology as coping strategies
- Some of my strategies
  - Organisation
  - Reading
  - Spelling
- Developing, adapting and sharing strategies
Why Coping Strategies?

- Specific learning difficulty
- Important to work on key skills
- But don't let higher level skills get left behind
Example - Analysing a Poem

Read

Comprehend

Consider themes

Form opinions

Plan essay

Write essay
Example - Analysing a Poem

Someone reads aloud → Read → Comprehend → Consider themes → Form opinions → Plan essay → Write essay

Scan and use text-to-speech
Why Coping Strategies?

- What's important in:
  - Education?
  - The workplace?
- Individual
  - Strengths and weaknesses
Assistive Technology

- Stress
- Worry

- Independence
- Confidence

Individual Coping Strategies
Organisation

- Lists
- Smartphone
- Small notebook
- Dictaphone
Organisation

• My problems
  • Forgot what I was thinking
  • Where and when
  • Irrelevant thoughts

• What I needed
  • Store irrelevant thoughts
  • Be told where to be and when
  • Quick to input to system
Small notebook

- Collecting ideas
- Timetable, lunchtime activities, what to bring etc.
- Benefits
  - Less overloaded
  - Focus on tasks
  - Check back later
Dictaphone

- I didn't like it (personal opinion)
  - Conspicuous
  - Personal thoughts
  - Harder to organise
    - Notebook: cross out, highlight, draw arrows etc.
Smartphone

• Similar to notebook, but better
  • Always with me & alarm reminders

• Tips
  • Sort to-dos by urgency / importance
  • Sync with laptop – visualise day/week/month
  • Automatic backups
  • QWERTY keyboard
    - Predictive text doesn't work unless you can spell
Reading
Reading

• My problems
  • Reading speed
  • → Poor comprehension
  • Almost everything relied on reading

• What I needed
  • Access written information
  • Independence
  • Improve reading
People Reading to Me

- Traditional strategy
- Not a primary strategy
  - Slow, embarrassing and a burden
- Occasional (e.g. film subtitles)
- Please don't paraphrase
  - (except with permission)
Text-to-Speech

• My most important strategy
• I can read anything
• Developed my own tool
  • At the time, TTS software couldn't read from all applications
• Reading rude sentences!
Spelling
Spelling

• My problems
  • Trying to focus on content
    - Fleeting thoughts
    - Distracted by spelling
    - Ideas couldn't flow
  • Overwhelmed by mistakes
    - Spell-checking was disheartening
    - Which ones to learn?
Spelling

Flow of ideas

Write ideas down
Spelling

Spelling mistake

Think about spelling

Try to correct spelling

Flow of ideas

Write ideas down
Spelling

• What I needed

  • The writing process - focus on flow of ideas
    – Without worrying about spelling
  • Reduce workload
    – Spend less time spell-checking
  • Focus learning of spelling
    – Identify my most frequent mistakes
    – Working on spelling in my own time (i.e. not while trying to write)
Failed Strategies

• Trying to **Ignore** Spelling
  • Turning off red underline
  • Still distracted
    – I knew I was making mistakes
• Spell-check afterwards
  – Long & disheartening
• Spelling didn't improve
  – Which mistakes should I focus on?
Failed Strategies

- **AutoCorrect**
  - Automatically corrected spelling as I typed
  - Less distraction & fewer words to spell-check
  - Spelling didn't improve
    - I didn't know which mistakes I was making
- What about email, online forms, mind mapping?
No Solution!

• Me at age 15
  • Frustrated while writing
  • Spelling wasn't improving
  • Experience using assistive software and coping strategies

• So ...
  • I developed my own assistive software
6 years of hard work later …
[demo]
Global AutoCorrect

- How it helped me
  - Composition
    - Fewer red underlines
  - Reducing workload
    - Less time spell-checking
  - Learning spelling
    - I knew which words to work on
- My best coping strategy yet!
Global AutoCorrect

- Released in 2009
- Now sold in the UK and internationally
  - Students
  - Workplace
  - Schools
  - Further & Higher Education
- T4G awards 2012: TECHNOLOGY4GOOD FINALIST
Coping strategies

- Specialist / Mainstream
- Simple / Complex
- Discreet / Overt
- Wacky / Common sense
Conclusions

Develop

Adapt

Share

Keep up the good work!