The language learning processes of students with specific learning difficulties

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Dyslexia is like a 100 meter track race. In my lane I have hurdles but no one else does and it is unfair that I am the only one with hurdles. It’s hard. It’s like starting out, the gun shoots and then I take off and start running like my other classmates. Because we have all had the same education how to run, I hit the first hurdle and fall flat on my face. My parents and teachers are yelling at me at the sidelines, Try harder. The other kids are making it down the track. Okay, pulling myself up, I try running faster and fall even harder after hitting the next hurdle. Then someone takes the time to show me how to run hurdles. I can now catch up with my classmates. The key is that I have to do it differently, the way that works best for me.
RULADA
Six key elements of teaching language learners with SpLDs

1. **Recognize**
2. **Understand**
3. **Learning strategies**
4. **Accommodate**
5. **Differentiate**
6. **Apply multisensory techniques**

Use of multiple languages
What type of SpLDs are there?

- Dyslexia and reading comprehension problems
- Dyscalculia (numeracy problems)
- Attention Deficit and Hyperactivity Disorder
- Dyspraxia (fine and gross motor coordination)
- Dysgraphia (handwriting, spelling, writing)
- Specific learning difficulties

ADHD & Autism spectrum disorders
Specific learning difficulties

- SpLDs overlap.
- SpLDs are placed on a continuum: there are no clear cut-off points.
- SpLDs have different degrees of severity.
Strengths related to dyslexia/SpLDs

- Holistic thinking
- Creativity
- Originality
- Spatial knowledge
- Problem-solving
- Peripheral vision
Common beliefs about learning difficulties

- Are there more children with learning difficulties now than there were 30 years ago?
- Are learning difficulties more common among boys than girls?
- Can learning difficulties be inherited?
- Can learning difficulties be cured?
- Is dyslexia a visual problem?
- Is it possible to have dyslexia only in English but not in German?
Common beliefs about learning difficulties

• Are there more children with learning difficulties now than there were 30 years ago?  No
• Are learning difficulties more common among boys than girls?  No
• Can learning difficulties be inherited?  Yes
• Can learning difficulties be cured?  No
• Is dyslexia a visual problem?  No
• Is it possible to have dyslexia only in English but not in German?  No
Observable signs of SpLDs

- Socio-cultural and educational factors
- Cognitive-psychological difficulties
- Neuro-biological causes
Cognitive causes of SpLDs

- Short-term memory
- Speed of processing
- Executive functions (attention)
- Phonological processing problems
- Visual memory and motor co-ordination
First language skills are foundations of L2 learning.

Second language learning processes

SpLDs

L2 learning difficulties

• Not every student with an SpLD will necessarily have difficulties in L2 learning.
• Not everyone who is struggling to learn an L2 has an SpLD.
First language predictors of L2 reading performance of Slovenian learners of English (Kormos et al., 2018)

Predictors of L2 reading

The reading difficulties of young dyslexic L2 learners

Percentage of dyslexic and non-dyslexic students in reading categories- Slovenian language learners (Kormos et al., 2018)
The listening difficulties of young dyslexic L2 learners

Percentage of dyslexic and non-dyslexic students in listening categories- Slovenian language learners (Kormos et al., 2018)
Multi-modal reading performance of young dyslexic L2 learners

Percentage of dyslexic and non-dyslexic students in reading- while listening categories- (Kormos et al., 2018)
Issues in assessing SpLDs in multilingual contexts

- When can we assess SpLDs?
- What level of L2 proficiency is needed for assessment?
- What level of literacy is needed for assessment?
- Can we use monolingual tests?
- Can we use monolingual norms?
When can we assess SpLDs?
As early as possible

What level of L2 proficiency is needed for assessment?
No need to wait until L2 proficiency develops

What level of literacy is needed for assessment?
Low level of literacy is not an obstacle.

Can we use monolingual tests?
Yes, but bilingual or language independent tests are better.

Can we use monolingual norms?
No.

Geva and Wiener (2014)
Causes of learning difficulties

SpLDs
Cognitive causes of SpLDs

- Short-term memory
- Speed of processing
- Executive functions (attention)
- Phonological processing problems
- Visual memory and motor co-ordination
Assessing underlying cognitive causes of reading-related SpLDs

- short-term memory tasks: digit span, non-word repetition
- rapid automated naming tasks (letters, words, digits, colours)
- phonological awareness tasks
- tests of attentional processing e.g. Stroop task
Observational methods: Multilingual reading

Word-level reading
- Slow pace
- Inaccurate word recognition
- Difficulties pronouncing words while reading
- Difficulties inferring meaning of unknown words

Text level reading
- Difficulties understanding key and detailed information
- Difficulty inferring implicit meaning
- Paying attention to meaning while reading aloud

1. Ask students to read aloud – observe errors and speed in different languages
2. Check reading comprehension in first and second language
From Geva & Ndlovu, 2008

One day, dolphins ran to a village, and people got skud and gravi winfin. The people rox and spurs at the ellefinns. The ellefinns got skud and ran the people. Sum ur, the ellefinns run a way and sum people run a way and mur. Dreels step runing and trd docke and hupt and. The ellefinns run daek to and hupt the ellefinns.
Observational methods: Multilingual writing

Word-level writing
- Slow pace
- Inaccurate spelling

Text level writing
- Difficulties organizing ideas
- Coherence
- Accuracy
- Proofreading and revision

Observe the process of writing and the frequency and type of errors in free writing and in dictation in different languages.
Observational methods: Multilingual listening and speaking

**Listening**
- Distinguishing similar sounding words
- Paying attention
- Remembering information
- Understanding implied meaning

**Speaking**
- Pronouncing words
- Accuracy
- Coherence of ideas

1. Read a story – ask comprehension questions
2. Give a series of instruction – how much they remember
Difficulties with words

Memorizing words
• Learning form-meaning links
• Learning other information related to words (e.g. spelling, pronunciation, grammatical information)

Using words
• Difficulty retrieving words
• Mixing up words

1. Ask students to repeat words, numbers, colours back to you – forward and backwards
2. Ask students to name colours, numbers, picture quickly
3. Ask them to list as many words starting with a particular sound as possible within a minute
Helpful multilingual assessment tools
The effect of language learning difficulties on affective factors

- Lower investment
- Motivation and self-esteem deteriorate
- Cognitive challenges in language learning
Is successful language acquisition possible for learners with SpLDs?

Yes!!!
'Everyone is a genius. But if you judge a fish on its ability to climb a tree, it will live its whole life believing that it is stupid' (Kelly, 2004: 82).
Key elements of inclusive language teaching
Learning strategies – Self-regulation of learning

Planning the learning process
- What?
- When?
- Where?
- How?

Regulating attention
- Pomodoro technique

Regulating feelings and motivation
- Visualizing success
- Rewarding success
- Mistakes and failures are part of the learning process

Self-evaluation
- Testing oneself
- Diary, journal
Memory techniques

• Mnemonics – Big Elephants Can Always Understand Small Elephants
• Keyword method
• Chunking
• Rhyme
• Drawing, tracing, moving
• Colours
• Visualization
• Mind-maps
• Other techniques here: http://www.beatingdyslexia.com/memory-improvement-techniques.html
Reading strategies

- Activate background knowledge based on the title, sub-titles, headings, visuals
- Use prediction and visualization
- Monitor comprehension, make inferences
- Reread
- Subvocal reading
- Reading while listening (text to speech software)
- Annotate text, highlight, notes, charts, mind- and concept maps
Writing strategies

Plan (brainstorm, mindmap, outline, record)

Use models

Write and expand

Edit: SCOPE - Spelling, cohesion, order of words, punctuation, expresses completeness of thought
What can we Accommodate/adjust?

Accommodations
What can we accommodate?

Classroom management (groupwork, pairwork)

Environment (Light, temperature, seating arrangements)

Pacing (slow down, revise, recycle)

Level of support (teacher, peers)

Presentation and access to material (multiple channels, handouts)
Differentiate

Content

Process

Product

Environment
Differentiation within tasks

- Students complete only odd-numbered questions or specifically selected items
- Teacher provides responses to several items and the student completes the rest.
- Divide a worksheet into sections and student does a specific section only
Differentiation across tasks or task types

- Students listen to a text instead of/while reading it
- Students underline, match, select possible answers rather than writing down the answer
- Choice of presentation mode (e.g. spoken, written)
Multi-sensory teaching methods

Using multiple sensory channels
Components of multi-sensory teaching

- Highly structured (from simple to complex)
- Small, cumulative steps
- Direct, explicit teaching
- Frequent revision, practice
Multi-modality

- facilitates accurate word recognition and the retrieval of semantic information,
- frees up working memory resources for higher level text comprehension,
- text is processed in both visual and auditory working memory

<table>
<thead>
<tr>
<th>aids comprehension (Liu &amp; Todd, 2014)</th>
<th>helps remember more information (Kozan, et. al, 2015)</th>
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<tbody>
<tr>
<td>beneficial for L2 speakers with dyslexia – if text is difficult (Kosak-Babuder et al., 2017)</td>
<td>assists vocabulary acquisition (Brown et al., 2008)</td>
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- Read-aloud
- Sub-titles
- Text-to-speech software
- Visualization
- Avoiding sensory overload
Explicit teaching and awareness raising

Incidental learning is slow and requires a lot of exposure

Attentional resources are strongly linked to working memory capacity (Indrarathne & Kormos, 2017)

Dyslexic students have difficulties with implicit learning especially if the material is complex

Important role of guided attention and discovery (Indrarathne et al., 2018)

- Phonological and orthographic awareness training
- Morphological awareness
- Syntactic awareness
- Textual awareness (macro & micro-structure) both in L1 and L2 if possible
Key elements of inclusive teaching in multilingual classes
More resources

Teaching Languages to Students with Specific Learning Differences
Judit Kormos and Anne Margaret Smith

About the project:

Dyslexia is a specific learning difficulty that has an effect not only on literacy skills in students’ own language, but also on foreign language learning. In order to ensure that students are successfully endowed with the necessary level of foreign language competence, they need additional support.

Foreign language teachers often lack sufficient understanding of the nature of dyslexia and the difficulties it causes in foreign language learning, and are not familiar with the relevant teaching techniques and methods to cater to the learning processes of dyslexic students. Therefore the preparation of teacher training materials for the target groups of language learners is timely and highly needed.
References


