

EXAMINING THE ESSAY-WRITING STRATEGIES OF HIGHER EDUCATION STUDENTS WITH DEVELOPMENTAL LANGUAGE DISORDERS AND TYPICALLY DEVELOPING CONTROLS



Bogi Perelmutter, Karla K. McGregor

University of Iowa, Department of Communication Sciences & Disorders, Word Learning Lab

Abstract

The amount of higher education students with developmental language disorders (DLD) is increasing, yet little is known about the academic strategies they use to compensate for their disability. This exploratory mixed methods study examined essay-writing strategies in this population, compared to typically developing (TD) controls. Participants (n = 29) were instructed to write a short essay on the topic of academic success, and were interviewed about the strategies and planning they used. Interview transcripts were analyzed using both qualitative and quantitative methods. The amount of common strategies was similar in both groups (Cohen's $d = 0.082$), with a difference in their content: the DLD group relied more on technology, but less on social connections. Uncommon strategies were more frequently used in the DLD group (Cohen's $d = 0.633$). Uncommon strategies in the TD group were more related to writing technique, and in the DLD group more to increased support.

What is developmental language disorder (DLD)?

- Impairment of language with no general cognitive impairment
- Also known as specific language impairment
- Categorized under the general umbrella of "specific learning disability" in post-secondary settings

Why this age group?

- DLD research has traditionally focused on schoolchildren, not adults
- Specific learning disability is currently the most common disability group among incoming US college students

We know **very little** about how students with DLD adapt to higher education

Speech sample

"It, it's a waste of time for me now that I have a laptop, to write like this, and then type it into the computer, so I write like kind of a... It's not really a... aw, crap... outline, it's, it's more of just like 'first paragraph, talk about this, this and this. Second paragraph, this thing.'"

- College student participant with DLD

Our sample characteristics

- 15 participants in the DLD and 14 in the control groups
- Matched on gender and school type (public university, community college)
- Recruited from our lab's participant registry
- Previously screened in the lab for DLD (1)

Process

Prompt:
"Tell us a story about an academic success you had that made you feel proud of yourself"
→ 15 minute (timed) written essay
Participants could use their usual tools, devices

Mini-interview:
"Describe your writing process, what went through your head as you were working on this task"

Data analysis

- Transcribe interviews
- Mark strategies mentioned in the text
- Create superordinate categories for strategies
- RQDA + SPSS. Syntactic complexity: LCA by Xiaofei Lu and Haiyang Ai

Categories of strategies

- **Planning** (n = 12)
e.g., "Write down many ideas"
- **Writing** (n = 15)
e.g., "Write in fragments, then reorder"
- **Editing** (n = 9)
e.g., "Revise based on teacher's notes"
- **People** (n = 13)
e.g., "Ask roommate for help"
- **Disability** (n = 2)
e.g., "Ask for disability-related help"
- **Technology** (n = 3)
e.g., "Use spellcheck on laptop"

Frequent strategies (quali.)

- The DLD group relied more on technology (both AT and general-purpose technology)
- ...but less on social connections
 - Social connections the DLD group mentioned were more *convenience / proximity-related* (e.g., roommates, family members)
 - even when those were not qualified to help!

Contact

- BP: bogi-perelmutter@uiowa.edu
- KKM: karla-mcgregor@uiowa.edu

Idiosyncratic strategies

- The DLD group mentioned more strategies that *increase self-support / scaffolding* (e.g., printing out the essay and writing further notes on the printout)
- The TD group mentioned more specific '*writing tricks*' (e.g., starting the essay with a catchy first sentence)

Quantitative comparison

Bimodal distribution, **2 groups of strategies:**

- Mentioned by many students → frequent
- Mentioned by 1-2 students → idiosyncratic

Comparing DLD and TD groups:

- Both groups mentioned a similar number of frequent strategies (Hedges' $g = 0.08$)
- The DLD group mentioned more idiosyncratic strategies (Hedges' $g = 0.63$)

Idiosyncratic strategies more likely unique to the DLD group

- Lexical complexity similar in both groups
- Syntactic complexity less in DLD group ($g = 0.2-0.5$ depending on metric)
- Syntactic complexity positively correlated with more idiosyncratic strategies...
- ...and negatively with more frequent strategies, in both the TD and DLD subgroups. ($0.3-0.4$ depending on metric)

Conclusions

Adult students with DLD are successful not only because they study more; **they also approach academic tasks differently**

- They use some strategies frequent among students and adjust them to their needs
- They also use more and more heterogenous individualized strategies
- Idiosyncratic strategies are likely a compensatory mechanism in DLD, not maladaptive

Adults with DLD have persistent *literacy* and *social* difficulties - separately (2, 3)

Our results: **Social and writing difficulties interact** → *support / intervention target!*

Citations

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