Designing data-driven learning material for English writing: A pilot study reflection

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In this talk:
• Introduction of DDL
• Introduction of pilot study
• Reflection of pilot study
• DDL material (re)design procedures
• Principles of DDL material design
• Position of material design in DDL
What is DDL?

• A series of exploratory learning activities via searching the corpus (Johns, 1990).
• “(A) a corpus that contains thousands of authentic text samples can greatly enhance a learner’s exposure to naturally occurring language and offer a vast linguistic resource” (Quinn, 2015, p.165).

Key points from the literature

• DDL-mediated error correction in second language writing is one of its most frequent applications (Chen & Flowerdew, 2018).
• DDL well reflects a series of SLA theories (O’Keeffe, 2020).
• Two DDL approaches for error correction can be found in the literature: indirect DDL approach and direct DDL approach (Leńko-Szymańska & Boulton, 2015).
• DDL effectiveness can be limited by learning environments with prescribed syllabus (Bridle, 2019).
• Students’ attitudes towards DDL (Crosthwaite, 2017; Yoon & Hirvela, 2004).
Pilot study overview

Purpose—Investigating DDL-mediated error correction
- Outcome
- Process
- User perceptions

Writing
Revision (with track)

Round 1
Typical material

Round 2
DDL

Round 3
Typical material
DDL

Questionnaire and Interview

- DDL mediation not only helped students achieve a satisfying outcome of error correction, but also encouraged students to utilise a series of cognitive strategies for inductively discovering or recalling the appropriate language use;
- DDL users held mixed opinions on DDL-mediated error correction practice.
Reflection
Voices from different aspects

We want to learn more language knowledge via DDL material beyond our own errors!

I want to provide DDL material for more error types, but I don’t have enough time.

DDL material focused on limited error types may prevent students from consulting for multiple purposes.

Material design framework
Jolly & Bolitho (2010)

<table>
<thead>
<tr>
<th>IDENTIFICATION</th>
<th>EXPLORATION</th>
<th>CONTEXTUAL REALISATION</th>
<th>PEDAGOGICAL REALISATION</th>
<th>PHYSICAL PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>by teacher or learner(s) of a problem to solve by the creation of materials</td>
<td>of the area of immediate concern, in terms of language, what meanings, what function, etc.</td>
<td>of materials, the finding of suitable ideas, contexts for which to use materials</td>
<td>of materials, the finding of appropriate exercises and activities AND the writing of appropriate instructions for use</td>
<td>of materials, involving consideration of layout, type size, visuals, reproduction, tape length, etc.</td>
</tr>
</tbody>
</table>

GUSE in the classroom
Material design Contextualisation

• Target audience?
• Language?
• DDL approach?
• Choice of corpora?
• Structure?

Material design Examples

PEDAGOGICAL REALISATION of materials by the fitness of appropriate exercises and activities AND the writing of appropriate instructions for use.

2.2 A phrase of measurement takes a singular verb. The following example can be found in British National Corpus (BNC), showing how they can agree with the environment present. It is useful to “feet”. Here it is discussing the amount of heat, not the temperature.

Example

What is more, if we look farther afield, it is significant that 1.15 windblown into insignificance.

Practically all the land above 1,000 feet falls into this category and a great deal of it is so poorly drained that only the sourest peaty soils are found.

When you are on the ground looking at 160 feet looks very high, when you are 160 feet looking down it looks twice the height.

Microlights take a bit of getting used to (1,000 feet looks an awfully long way down), but they are marvellous viewing platforms.

How many feet does the tide rise down at this dock?
Material design Examples

Exercise 3 Learning another rule from a corpus
Observe the following sentences found in BAWE and discuss if subject-verb agreement rules of phrase "there be" with your classmates.

First, let’s see the first group of sentences:

- "... although there are some problems with this idea as...
- "... argument that there are at least two different of reality...
- "... there is no great evidence of this among other personal...
- "... customer...
- "... is a logical contradiction to the crime of regulation of its...

Then, let’s look at the second group of sentences:

- "... there is no document to agree that...
- "... the major difference was that there were a factor for the multiplier used...
- "... There...
- "... woman and men in the group, and...

Lastly, observe the third group of sentences:

- "... There is little individuality and few personal characteristics...
- "... Although there is much discretion and great complexities surrounding...
- "... It also means that there is greater centralization and tall organizational pyramids within...

- What can you conclude from these examples about subject-verb agreement of "there be"?
- Is the rule you found in this exercise similar to any of the subject-verb agreement rules you learnt above? If yes, please name them in detail.

Material design Behind the examples

- Learners are exposed to a rich, meaningful and comprehensible input.
- Materials support but also challenge the learners.
- Learners benefit from noticing salient features of the input and discovering.
- Combined with delayed writing exercise, learners can gradually and dynamically benefit from DDL material for communicative purposes.
DDL material design: Positioning

1 Introductory
- DDL-mediated error correction

2 Transitioning
- DDL-mediated error correction
- DDL-informed material

3 Ultimate
- DDL-mediated error correction
- DDL-informed material
- DDL training

DDL training
Students and teachers

Online DDL Course: Improving writing through corpora: Data-driven learning?

https://learning.edge.edx.org/course/course-v1:UQx+HASS0653N_7120_SLATx+2021_S1/home
References


Thank you!

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(Noah)