Vietnamese English-majors' perceptions and intention to use a web-based tool for data-driven learning (DDL) purpose

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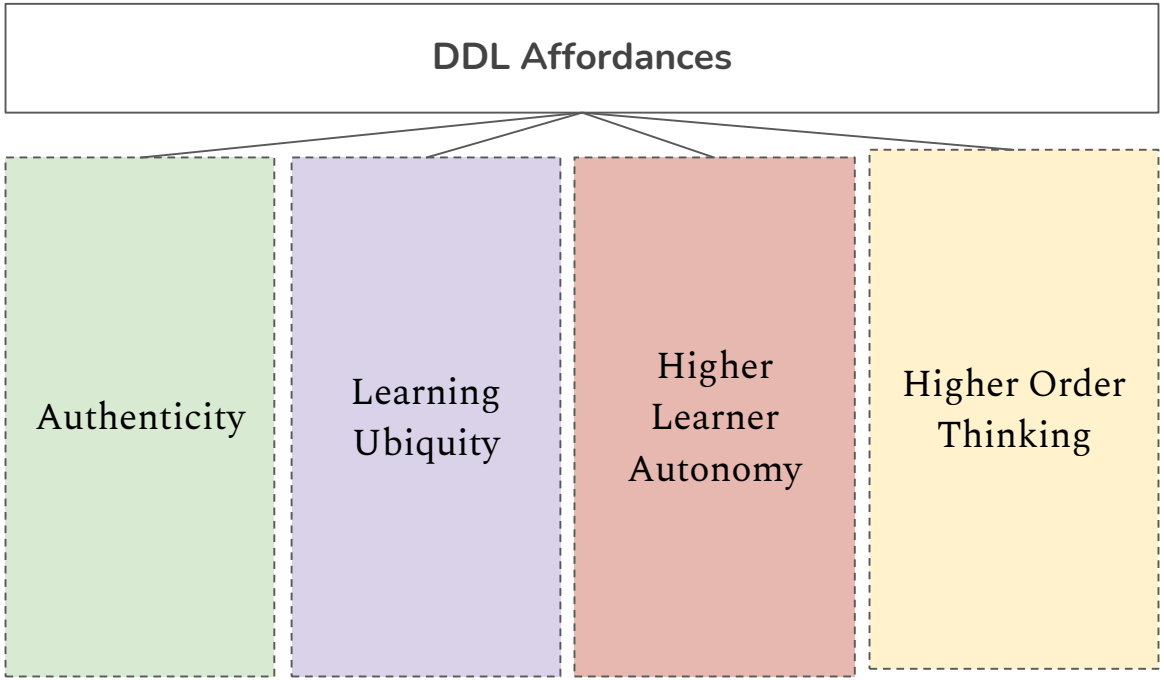
Outline

1. Introduction
2. Gaps & Purposes of the Study
3. Literature
4. Methodology
5. Findings
6. Conclusions

Introduction

Data-Driven Learning (DDL)

A student-centered inductive method of language learning, in which learners explore words in their real-life contextual usage. (Hadley & Charles, 2017, p. 131)



Previous Research on DDL in EFL context

No	Authors	Purposes	Findings
1	Lin & Lee, 2015	-Examine six EFL teachers' experiences of DDL approach	-Teachers found DDL **innovative** and effective for *grammar* teaching -DDL **motivated** passive learners -**Challenges**: technical difficulties, appropriate materials & workload
2	Luo, 2016	-Examine the effect of DDL on EFL learners' writing ability	-Participants' **positive perception** of DDL: improving *writing* accuracy, acquisition of linguistic features - **DDL constraints**: being time-consuming, learners' learning preference (i.e., direct vs implicit answer), the ability to generalise concordance results
3	Xu et al, 2019	-Explore whether corpus-aided DDL can help EFL learners improve their analytical reading ability	-DDL-aided instruction effectively supported learners' **learning needs** as well as **improving** their *reading* capacity

Table 1. Comparison between traditional DDL software and LambNLP

	Common DDL Software	**LambNLP**
Corpus	Fixed	Flexible
Installation	Yes	No
Subscription fee	Varied	No
Function	Single	Multiple

LambNLP
NOT just a
concordancer!

Table 2. Comparison between traditional DDL software and LambNLP

	Common DDL Software	**LambNLP**
Single word extraction	✓	✓
Phrase extraction	✕	✓
Topic extraction	✕	✓
Text readability	✕	✓

Introduction (Cont.)

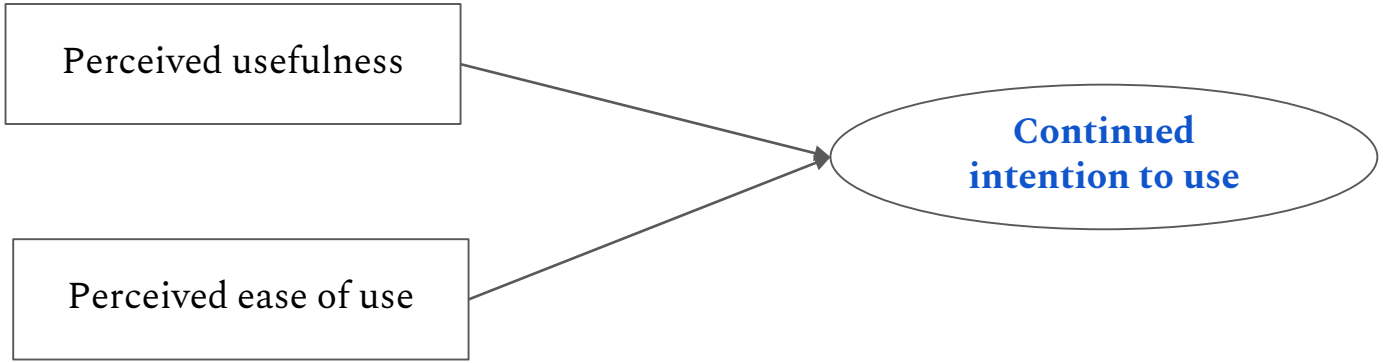


Figure 1. The Technology Acceptance Model (Davis, 1989; Davis et al, 1989)

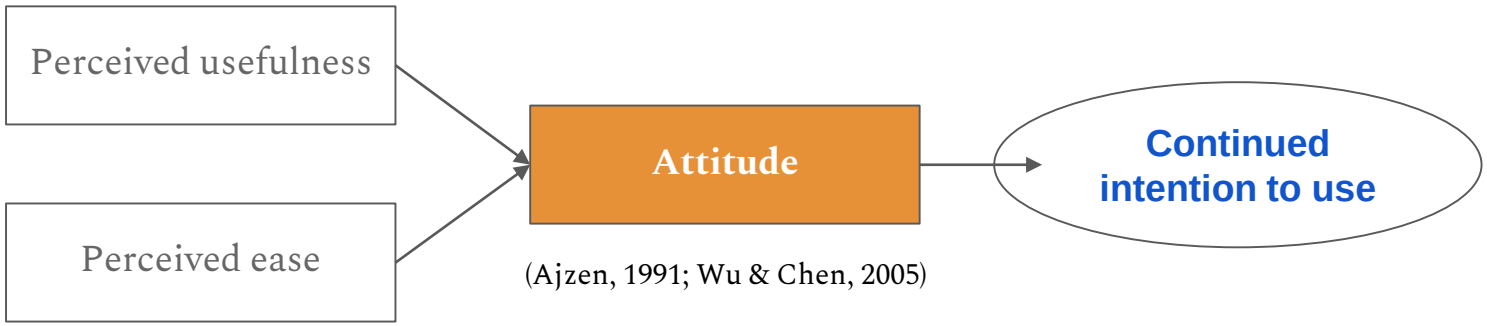
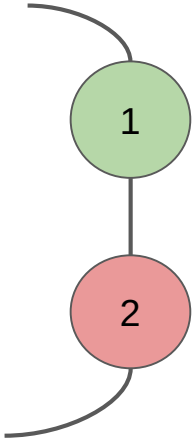


Figure 2. A conceptual model of students' continued intention to use LambNLP in this study

Purposes:



1. Examine learners' perception of LambNLP as a web-based DDL tool for their language learning purpose

2. Explore how learners' perceptions and attitude may associate with their continued intention to use such a DDL tool

Research Questions:

(1) To what extent do the participants **perceive** LambNLP to be useful and easy to use for their English learning purpose?

(2) What is the interplay among these perceptual variables and their **continued intention to use**?

Methodology

1. Participants: English-major students at Dalat University, Vietnam
2. LambNLP Development: see Cong-Lem, 2020
   [Step 1] Developing LambNLP web app: *keyword, keyphrase extraction, text readability*
   [Step 2] Providing tutorials to participants
   [Step 3] Students accessing LambNLP for language learning purposes
3. Instruments
   - An adapted questionnaire (Wu & Chen, 2005): (a) **perceived usefulness**, (b) **perceived ease of use**, (c) **attitude**, and (d) **continued intention to use**
   - Likert scale: Totally disagree -> totally agree (1-7)
4. Procedure
   [1] Questionnaire made available online with Google Form
   [2] Participants allowed to complete it within one week
5. Data Analysis:
   Descriptive statistics & bivariate correlations

Findings

[1] What are the English-major students' perception of LambNLP for language learning?

Variables	M	SD	Min	Max	Range
Perceived Usefulness	**4.86**	.40	4.0	5.5	1.5
Perceived Ease of Use	4.82	.46	3.5	6.0	2.5
Attitude	4.75	.36	3.75	5.25	1.5
Continued Intention to Use	4.72	.48	3.33	5.66	2.3

1: Strongly Disagree, 2: Moderately Disagree, 3: Somewhat Disagree,
***4**: Neutral, **5**: Somewhat Agree, **6**: Moderately Agree,*
7: Strongly Agree

Findings

[2] Interplay between Perceptions and Intention to Use

Variables	PU	EOU	ATT
PU	-		
EOU	.41*	-	
ATT	.48*	.41	-
INT	**.72****	.39	**.72****

Notes. *PU = Perceived Usefulness; EOU = Perceived Ease of Use; ATT = Attitude; INT = Continued Intention to Use.*

Conclusions

Overall:

- ➢ English-major student participants had a relatively **positive** perception of LambNLP and showed **intention to continue** using it in the future.
- ➢ **Attitude** and **perceived usefulness** are strongly related to continued intention to use

Implications:

- Though future improvements needed, LambNLP, with its advantageous features, has been **welcomed** by participants.
- DDL is can be performed both as searching from a database or allowing students to **actively explore their own text/corpus**.
- L2/EFL educators should make use of online web-based technology such as LambNLP to make DDL **ubiquitous** to learners, thus **enhancing** language learning process.

Conclusions (Cont.)

Limitations:

- Limited number of participants
- Conducted in a short time;

Future Directions:

- DDL and L2 acquisition
- DDL and students' L2 motivation
- Specific features of DDL app that enhances students' perception and continued intention to use

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Thank you for your attention!

Q & A Session

For research collaboration on LambNLP or simply trying it out, feel free to contact me at lambnlp@gmail.com or ngoconglem@monash.edu

LambNLP new features:

- *word concordancing*
- *text analytics comparison*
- *evaluating IELTS writing Task 1 & Task 2*