

Investigating Data-Driven Learning in EFL Writing Error Correction

CUE ESP Symposium 2019

Fangzhou Zhu

Department of Linguistics and English Language (LAEL), Lancaster University, UK

f.zhu@lancaster.ac.uk

Linguistics and English Language



Abstract

This research aims to investigate whether data-driven learning (DDL) will facilitate the error correction of four types of most frequent lexicogrammatical errors in Chinese students' English writing. The research will also examine whether DDL can be applied successfully in error correction without manipulating teacher and student's common practice (feedback and uptake). The perception of the DDL application will be heard from both students and teachers at the end of the research.

This poster mainly illustrates the theories behind this research and the innovative design of the experiment.

Theoretical Background

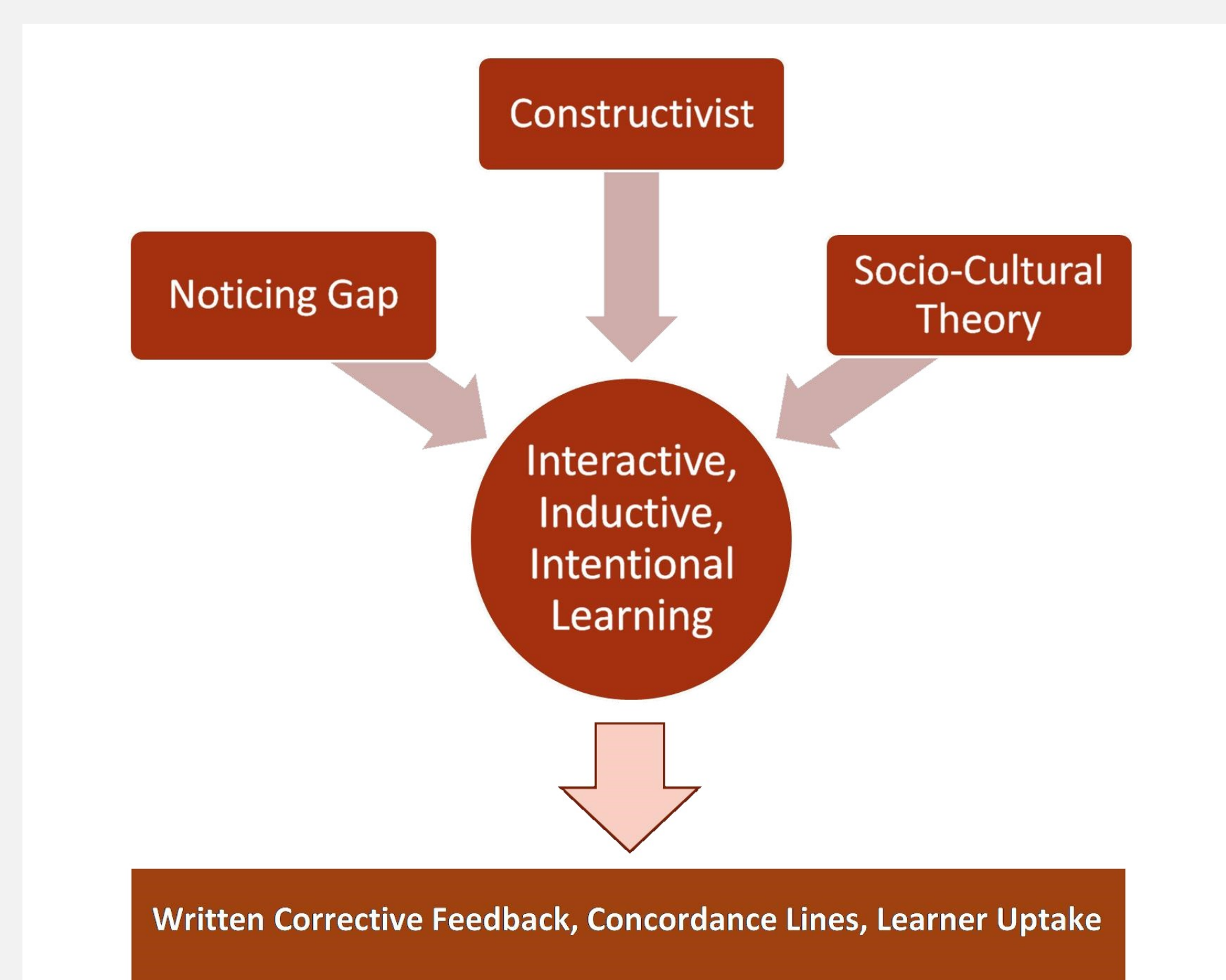


Figure: Overview of Theoretical Background

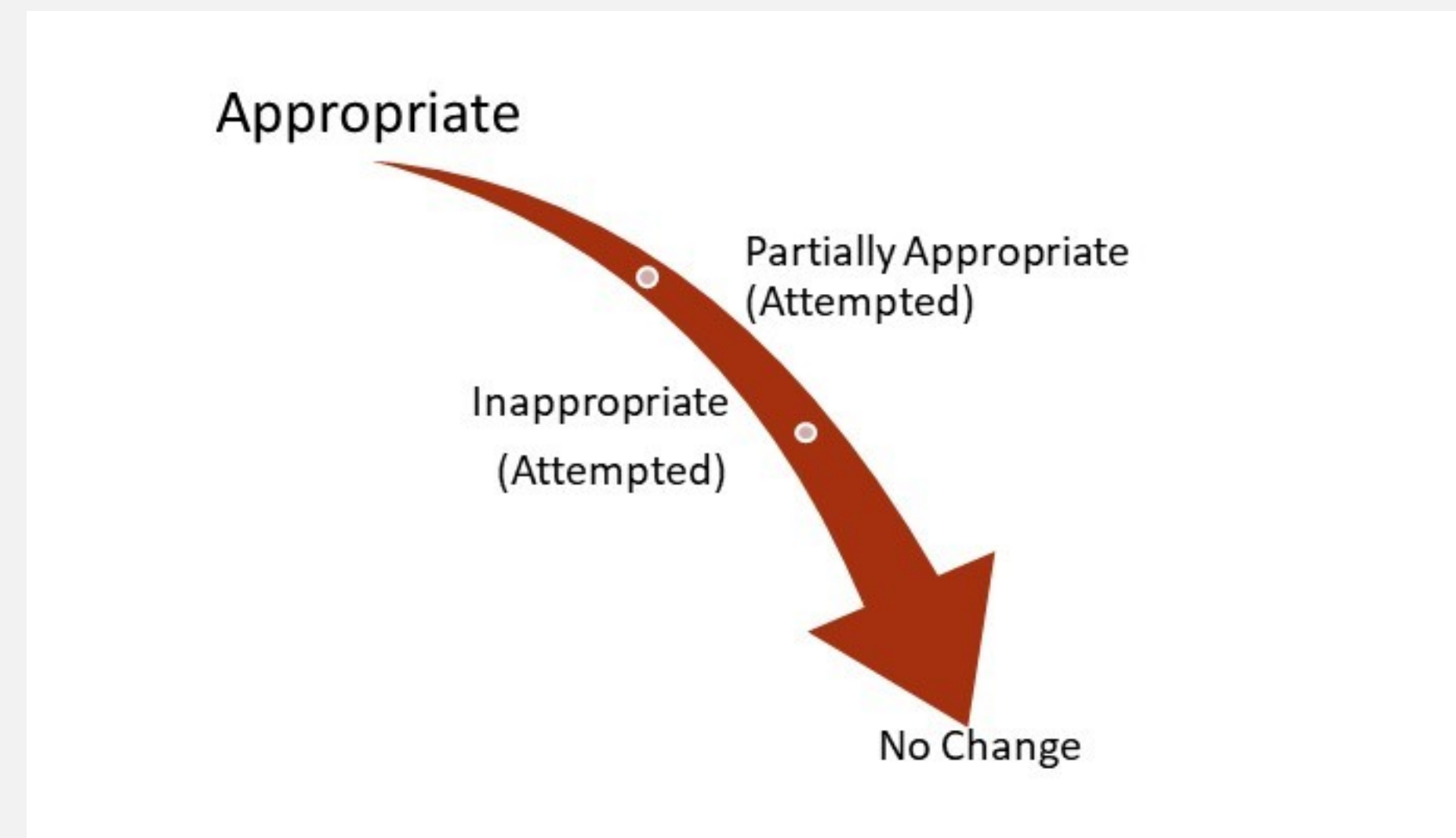


Figure: Types of Learner Uptake (Error Correction)

1	violated the rules	is equivalent to violating goal posts by hitting a foot, so	violated the rules	is always to seek an advantage. In mid-course, however,
2	violated the rules	employees and to his employee's clients, and had therefore	violated the rules	300-5. The most recent challenge to the validity and scope of
3	violated the rules	center of the act that is, whether or not it	violated some rules	and in part on what other people do about it."
4	violated the rules	can not "become" virtually innocent at the end without	violated the rules	of the genre and the story's own premise. Yet it
5	violated the rules	preliminary inquiry into whether Henry Frank (Dun... Massachusetts) had	violated these rules	in pursuing the careers of male politicians who he later held as

Figure: Example of DDL Material on the Usage of "violate the rule"

Research Questions

- (1) To what extent do the students use DDL material when they correct the four types of errors (article, preposition, verb and word choice)?
- (2) Compared to traditional consulting resources, does DDL material show higher correction rate on four types of errors?
- (3) If so, does the combination of DDL and traditional resources can further help students reduce four types of errors and learn appropriate usage?
- (4) What is the relationship between feedback, DDL and error correction?
- (5) What is the student's perception of DDL application in written error correction?
- (6) What is the teacher's perception of DDL application in written error correction?

Participants

Participants are second-year English major students in a Chinese university. They are going to prepare for an English language proficiency test called "Test for English Major— Band 4" (TEM-4), in which the writing task is considered as a difficult part.

Before the experiment, they have no prior knowledge of language corpora and they will receive a brief instruction on it.

Experiment Design

The experiment is composed of three rounds of writing. In each round, there are two writing cycles, each of which includes one week of writing, one week of giving feedback and one week of revision.

Round 1	Treatment
Cycle 1.1	Typical Teacher Feedback + Typical Consulting Resources
Cycle 1.2	Typical Teacher Feedback + Typical Consulting Resources

Table: Round 1 Arrangement

Round 1 is the common practice that teachers and students do in their daily EFL writing teaching and learning. It will tell us how successfully students can correct the four types of errors based on the typical environment. It can also be considered as the statistics for the comparison with the following up rounds of writing.

Round 2	Group A (Preposition and Word Choice)	Group B (Article and Verb)
Cycle 2.1	Typical Teacher Feedback + DDL Material Only	Typical Teacher Feedback + Typical Consulting Resources
Cycle 2.2	Typical Teacher Feedback + Typical Consulting Resources	Typical Teacher Feedback + DDL Material Only

Table: Round 2 Arrangement

Round 2 is designed to investigate if DDL material only can work with teacher's feedback and help students reduce four types of errors in their English writings.

Round 3	Group A (Preposition and Word Choice)	Group B (Article and Verb)
Cycle 3.1	Typical Teacher Feedback + DDL Material + Typical Consulting Resources	Typical Teacher Feedback + Typical Consulting Resources
Cycle 3.2	Typical Teacher Feedback + Typical Consulting Resources	Typical Teacher Feedback + DDL Material + Typical Consulting Resources

Table: Round 3 Arrangement

Round 3 mainly explores that if students are free to choose the available consulting resources, including DDL material, what they will refer to and how successfully they correct the target errors.

The research adopts the method that each group of students is an experiment group for two types of error, and the control group for the other two. Compared to the design using individual experiment/control group, it can benefit more students and avoid to bring the experiment group the absolute advantages.

Questionnaire

After the experiment, the students are asked to complete a questionnaire, where their perception of using DDL in English writing will be examined. Those who show strong preference and rejection of DDL material in their error correction stage will be selected for further analysis.

Interview

The interview is prepared for both selected students and their English writing course teacher. **For the selected students:** Stimulated recall on the process of interpreting feedback, attempting to consult available resources and making decision of target error correction.

For the teacher: Semi-structured interview on the attitude of integrating DDL application in the current writing teaching and learning environment (opportunities and challenges)

Tracking Sheet of Error Correction

In this research, the tracking sheet for recording students' practice on four types of errors is specially designed. There are features including but not limited to the record of error identification, resources of consulting from students and the judgement of error correction by the teacher.



Figure: Features of Tracking Sheet

Current Stage of Research

The whole research is still under careful design. By the end of this month (September, 2019), the following steps shall be finished:

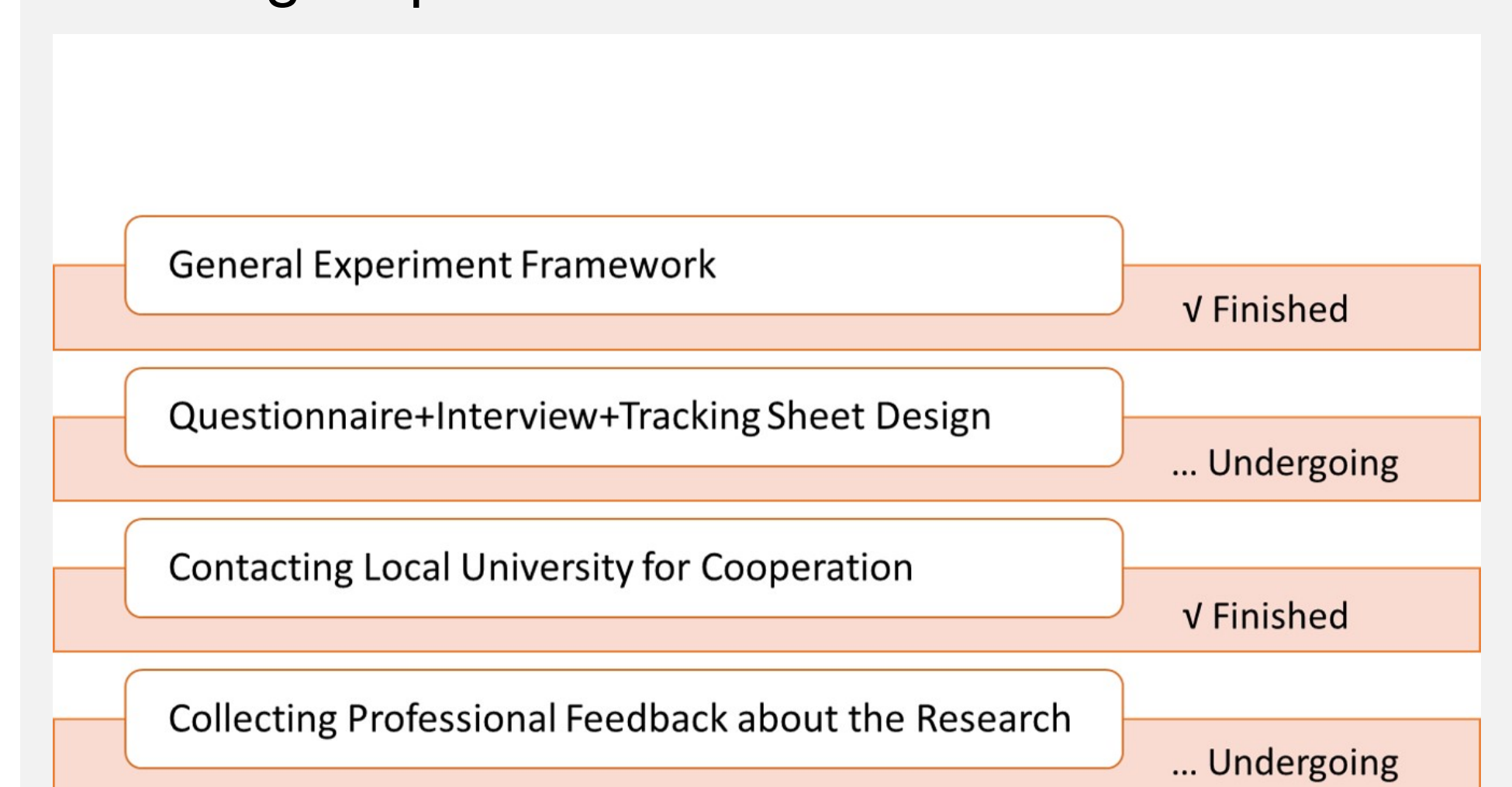


Figure: Current Progress of the Research

Acknowledgement

- 1 Department of Linguistics and English Language, Lancaster University, UK
- 2 School of Foreign Languages, Jiangsu University, Zhenjiang, China
- 3 LaTeX and www.overleaf.com