Open Research Practicesから考えてみる

より「質」の高い英語教育研究を目指して

第52回 中部地区英語教育学会 岐阜大会
英語教育研究法セミナー
2023年6月24日

講師　鈴木祐一（神奈川大学）

6/24/2023

本ワークショップの目的

対象：日本の英語教育における
　　量的な実証研究を行っている・行いたい大学院生／研究者

目的：英語教育研究および論文の「質」について考える

方法：レクチャー（鈴木の研究経験の共有）
　　＋ワークショップ（国内学術誌の論文のミニサーベイ）

Agenda

1. 実証的・量的な研究の目的
2. 研究・追試研究の例
3. 英語教育研究・論文の「質」を高める（1）
4. 英語教育研究・論文の「質」を高める（2）
5. 質を高めるアプローチとしてのOpen Research Practice

数値化データなどをもとに、客観的で一般化された知見を生み出す

量的研究

1. 英語指導・学習に関する事象の全体的な特徴や傾向について明らかにする
2. 英語指導・学習に関する個人差の影響について明らかにする

質的研究

1. 文脈を考慮しながら、現象を深く捉える
2. 文脈を考慮しながら、参加者の変容を深く捉える
3. 研究参加者の視点から経験の意味や認識を深く捉える

浦野他 (2016)

特に量的な実証的アプローチが主流 (Mizumoto et al., 2014)

全国英語教育学会 JASELE

A Systematic Review of Published Articles in *ARELE* 1–24:

Focusing on Their Themes, Methods, and Outcomes

Atsushi MIZUMOTO
Kansai University
Ken URANO
Hokkai-Gakuen University
Hiroaki MAEDA
Institute for Foreign Language Research and Education, Hiroshima University

実証研究のうち量的研究は、８２．６％

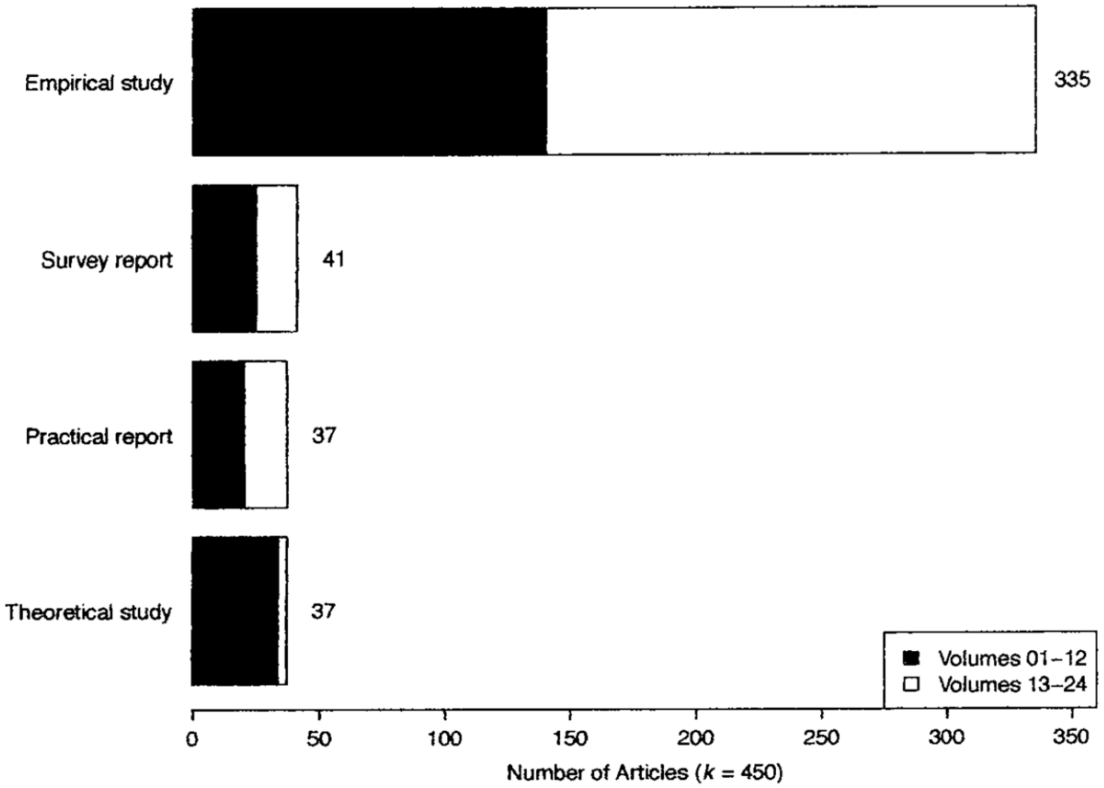

Figure 3. Research types of *ARELE* articles.

心理学・第二言語習得研究などの関連分野の影響を受けている

全国英語教育学会 JASELE

研究関心・対象

- 1990年代では「指導」に焦点が当たっていたが、2000年代からは「学習」へ焦点が当たっている
- 英語習得・心理言語学が多い
- リーディング、語彙指導が増えている

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1. 実証的・量的な研究の目的

2 **研究・追試研究の例**

3. 英語教育研究・論文の「質」を高める（1）

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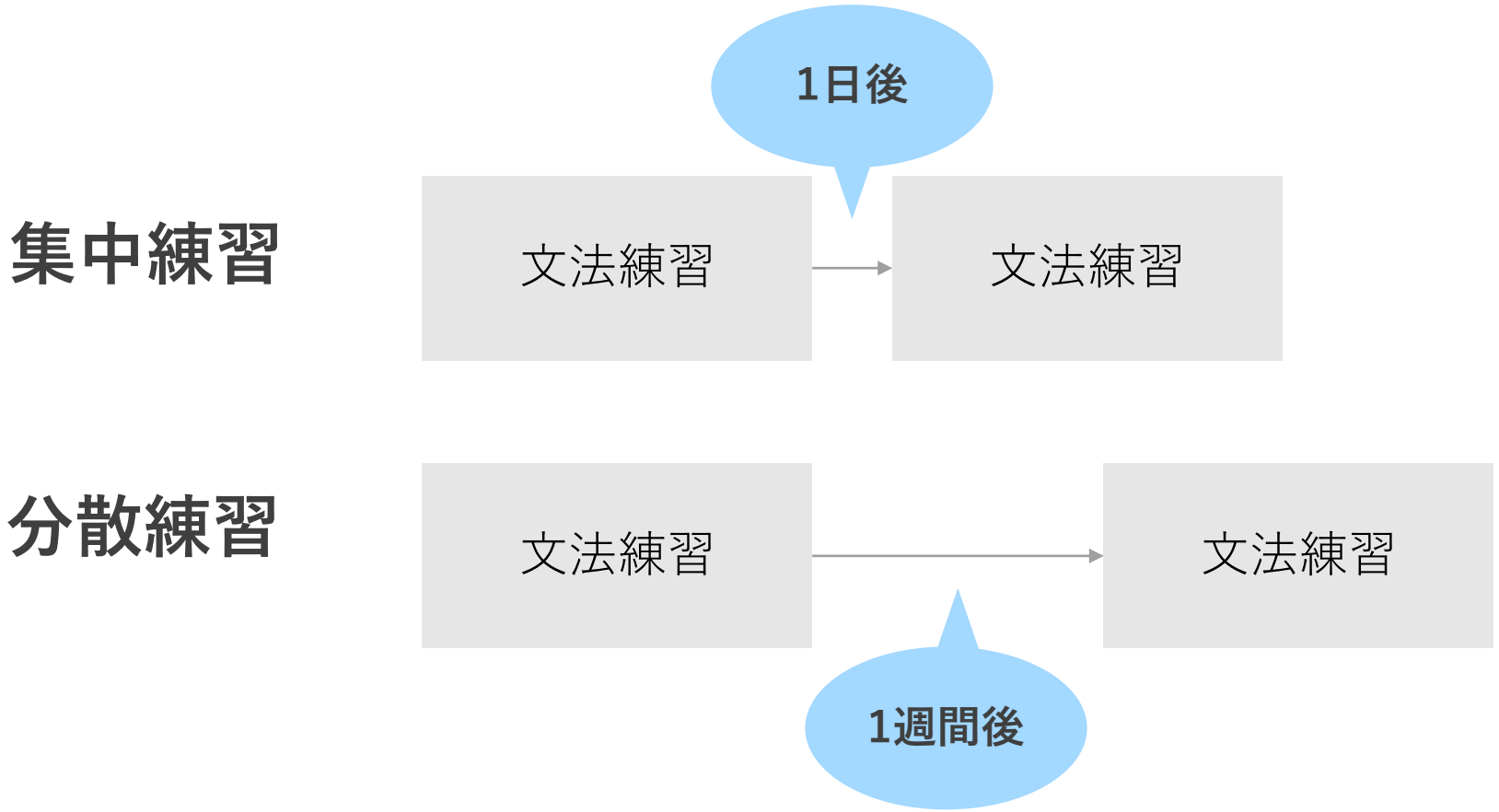
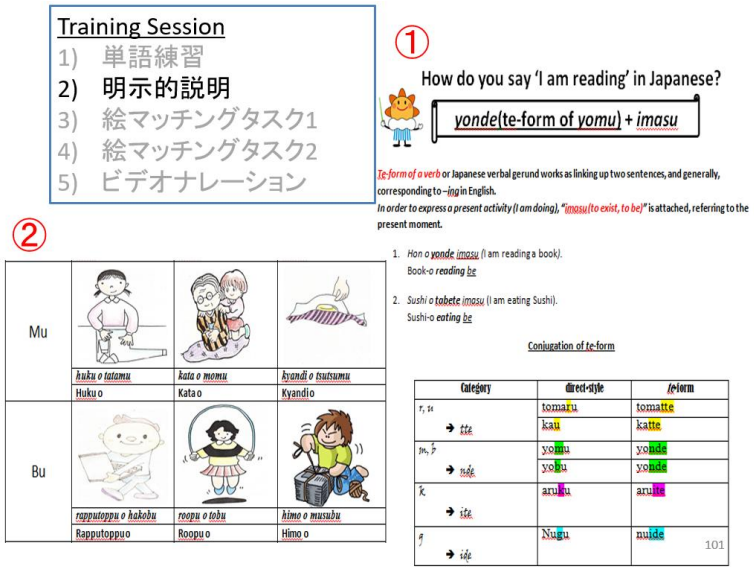
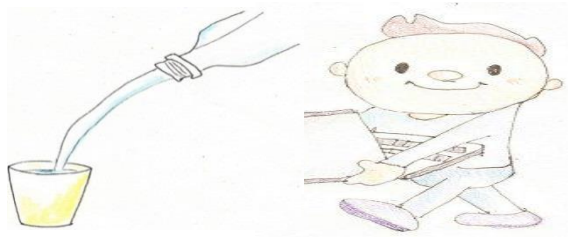
効果的な繰り返し英語練習のタイミングは？



外国語学習者の文法習得（特に流暢さの発達）にとって、集中練習と分散練習には大きな差がない

	Time 1		Time 2		Time 3		Time 4
1-day ISI	Test + Training Session 1	→ 1 day	Training Session 2 + Test	→ 7 days	Test	→ 21 days	Test
7-day ISI		→ 7 days					





Suzuki, Y., & DeKeyser, R. M. (2017). Effects of distributed practice on the proceduralization of morphology. *Language Teaching Research, 21*(2), 166-188.

この論文の裏話

落とされて続けて3年以上

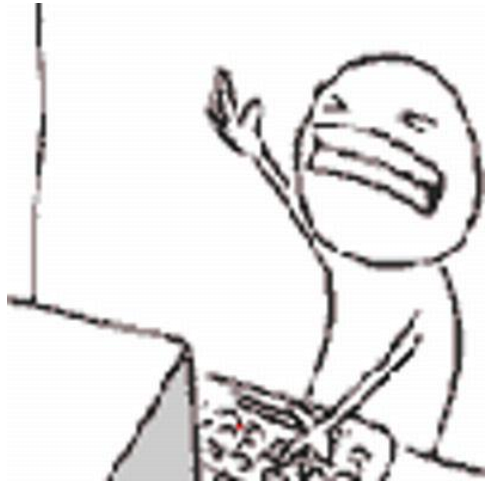
- 博士課程のときの最初の研究(Qualifying Paper)
- 4つのジャーナルで落とされる(SSLA→LL→AL→MLJ→**LTR採択!**)
- 書き直しは10回以上。
- （博士号取得してから）採択された。

落とされた理由

先行研究とは真逆の結果だった

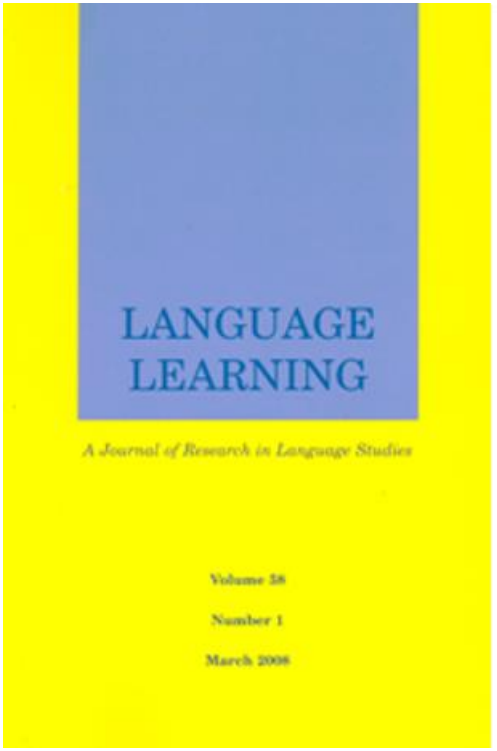
先行研究では、練習回数が2日だけではなく、4日間だった。

➔追試したらどうなるのか？



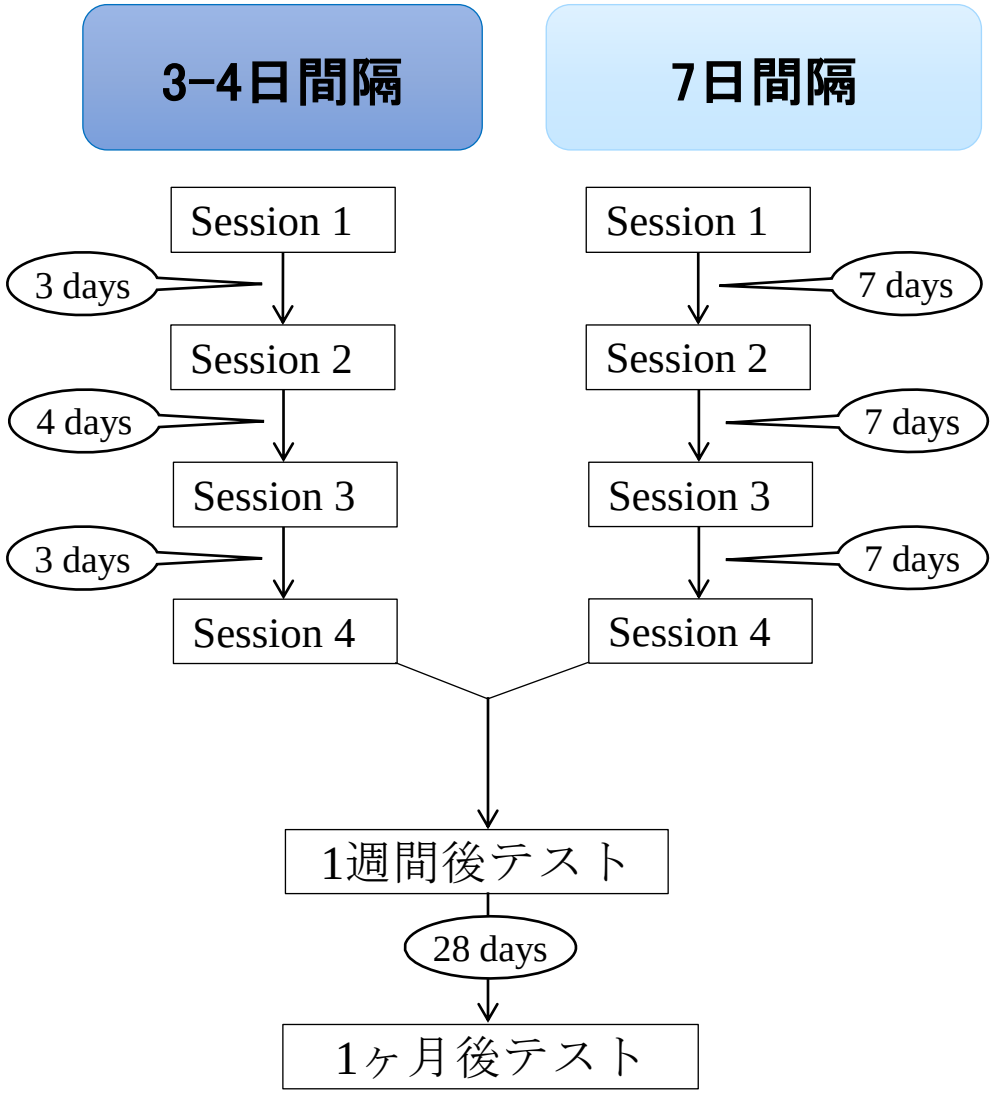
日本に帰国後、追試を行った

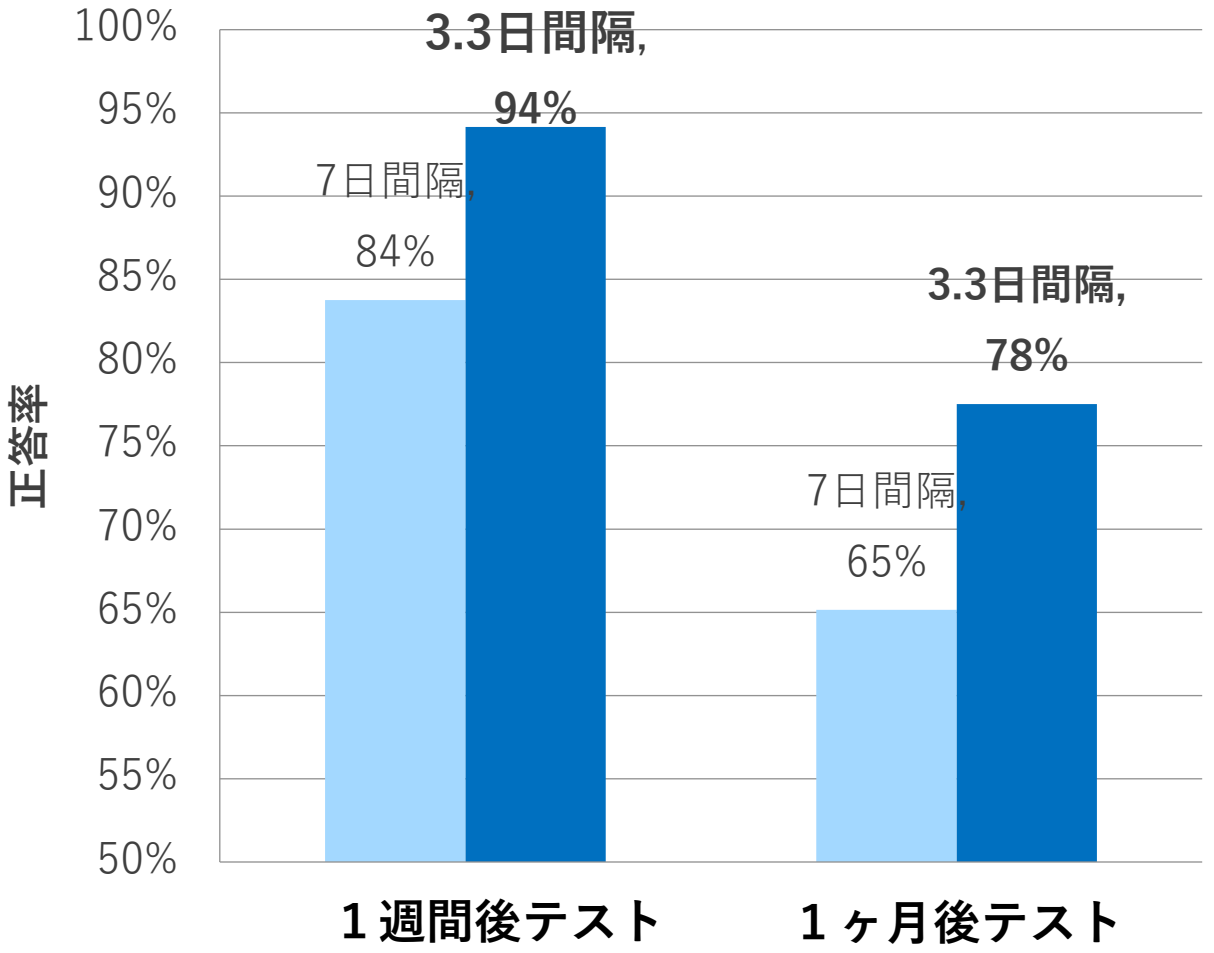
Suzuki, Y. (2017). The optimal distribution of practice for the acquisition of L2 morphology: **A conceptual replication and extension.** *Language Learning*, 67, 512–545.



- 日本人大学生60名
- “スプラン語”の動詞の進行形

追試のデザインと結果


3–4日間隔
7日間隔
Session 1
3 days
Session 2
4 days
Session 3
3 days
Session 4
Session 1
7 days
Session 2
7 days
Session 3
7 days
Session 4
1週間後テスト
28 days
1ヶ月後テスト


100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
正答率
3.3日間隔,
94%
7日間隔,
84%
3.3日間隔,
78%
7日間隔,
65%
1週間後テスト
1ヶ月後テスト

分散学習の研究はARELEでも出版されている

全国英語教育学会 JASELE

2020年（ARELE Vol.31）

- 学術奨励賞　金山幸平.　Is Expanding Spacing More Effective than Equal Spacing for L2 Vocabulary Learning?

量的研究の成果をまとめる

メタ分析

- 論文を書き、投稿して、採択されたら、そこで終わりではない
- 外国語学習に関する全体像について把握することに有効

分散学習の効果についてのメタ分析 (Kim & Webb, 2022)

- 間隔を空ける分散学習は、習得にどれくらい役立つのか？
- 48のL2研究の成果を統合➔（特に語彙習得おける）分散学習の効果を確認

Kim, S. K., & Webb, S. (2022). The effects of spaced practice on second language learning: A meta-analysis. *Language Learning*, 72(1), 269-319.

どのように論文で必要な情報が報告されているか?

2つの主要L2国際学術誌の場合 (Plonsky, 2013)

Language Learning & Studies in Second Language Acquisition
1990-2010年まで

- 以下の項目は研究データを評価する上で重要な指標だが、必ずしも論文内に報告されていなかった。

- Sample size
- Mean, SD
- Effect size **(26%)**
- Confidence interval **(5%)**
- *p* value (p = .XXと数値記入は**49%**)
- Reliability (inter-rater reliability, instrument reliability) **28%** (Derrick, 2016)
- Statistical assumptions checked **17%** (Hu & Plonsky, 2021)

※検定力も不十分(cf., Mizumoto et al., 2014)

量的研究の成果を統合するには、論文報告の“質”を高める必要性

Plonsky (2023, AAAL Plenary)

The “methodological turn” in applied linguistics

(Byrnes, 2013, p. 825)

- Don’t just take my word for it!

The Modern Language Journal

Notes from the Editor

HEIDI BYRNES

I am writing these notes as the editorial office is preparing the index for volume 97 of *The Modern Language Journal*. It is an appropriate time to look over all the articles published over the past year in the entire volume. What is striking to me is the range of theoretical frameworks the authors have invoked: cognitive psychology with

tell our publics that we know—and not only how we do it.

At first sight one might take this “methodological turn” to be yet another marker of the fact that, as the saying goes, “we live in interesting times” and that those interesting times are upon us with considerable force in applied linguistics.

“methodological issues …demand a kind of professional scrutiny that goes directly to the core of what we do and what we know…” → “meta-science” (Ioannidis et al., 2015; Marsden & Plonsky, 2019)

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英語教育の実証研究・論文を調べてみよう！

1. 3-4人一組になる
2. 自分が持っている国内学術誌論文
   (CELES, ARELE)から、
   コーディングする論文を１本選ぶ

・量的研究

・比較的新しいもの

（できれば、教育場面での実証研究の論文）

コーディング
研究目的と結果概要（一言で説明）

1. Sample size
2. Mean
3. SD
4. p = .XX.
   (APA 7thではp < .001のときのみ不等号OK)
5. Effect size
6. Confidence interval
7. Reliability
   (inter-rater reliability/instrument reliability)
8. Statistical assumptions checked

時間配分：10分調べて、10分共有

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GeneralizabilityとParticularaizability

Generalizaiblity（一般化）とは

英語指導・学習に関する事柄の**全体的な特徴や傾向**

例）分散学習の一連の研究成果をまとめると

一般化（大）　：学習機会の間に時間を空ける分散学習によって、英語力の定着が高まる。

一般化（中）　：語彙学習において、分散学習は語彙知識の定着が高まる。

一般化（中）　：文法知識の流暢さを高めるには、集中的に練習させることが効果的である。

➔特定の学習者集団ではなく、
様々な教育環境などに当てはまりやすい知見としてまとめる

Clarke (1994); Spada (2019)

GeneralizabilityとParticularaizability

Particularizability（特定化）とは

特定の英語指導・学習コンテクストに起こった事象・経験について詳しく説明して、別の英語教師の指導に役立てる

どのような説明が役立つか？

- 学校・指導コンテクスト（例: 受験指導が重視されているか？）
- 実験参加者（例：生徒の実験課題への取り組み度合い）
- 研究者の役割について
- 使った教材（実例があるか？、そのまま授業で使える情報があるか？）
- 使ったテスト（実例があるか？、そのまま授業で使える情報があるか？）

Clarke (1994); Spada (2019)

読者自身の状況を振り返りながら、
どう関連するか、どう活かせるかを考えやすくなる。

特に日本の国内英語教育論文ジャーナル（ARELE, CELESなど）では

日本の英語指導・学習に関する知見をまとめるときに役立つ

例）CELESでは、Written corrective feedbackやExtensive readingの研究が多く投稿されている。

Particulraziability➔日本の高校生を対象に行ったWCFやERの効果は？
進学校や学力困難校での実施の違いは？実際に使った教材は？

グループ活動②

Particulraziabilityの観点から、論文を読み直してみよう！

コーディング

1. 学校・指導コンテクスト（例: 受験指導が重視されているか？週に何回の英語授業を受けている？）
2. 実験参加者（例：英語力、生徒の実験課題への取り組み度合い）
3. 研究者の役割について
4. 使った教材（実例があるか？、そのまま授業で使える情報があるか？）
5. 使ったテスト（実例があるか？、そのまま授業で使える情報があるか？）

Bonus:日本の英語教育を考える上で、報告してもらいたい情報には他に何があるか考えてみよう

国際誌での例：Ammar & Spada (2006)

SSLA, **28**, 543–574. Printed in the United States of America.
DOI: 10.1017/S0272263106060268

ONE SIZE FITS ALL?

Recasts, Prompts, and L2 Learning

Ahlem Ammar
Université de Montréal

Nina Spada
University of Toronto

カナダ・ケベック州における小学6年生へ英語教育

口頭訂正フィードバックのリキャストとプロンプトの違いが、
どのように代名詞(his/her)の習得にどう影響するかを検証

Methodology

Research context. The study was conducted in intensive English as a second language (ESL) programs in Montreal. Intensive ESL programs are offered in French language schools at either grade 5 or grade 6. Although there are different models of intensive ESL (Collins, Halter, Lightbown, & Spada, 1999), the most popular is the 5-month/5-month model. In this model, students study English all day, every day for 5 months of the school year. The remaining 5 months are devoted to the regular curriculum subjects (i.e., math, science, etc.) taught in French. During the ESL portion of the school year, students receive communicative instruction with an emphasis on meaning rather than form. In accordance with the Ministry of Education of Quebec's (MEQ) guidelines for ESL instruction that were in effect when the experimental programs were developed, intensive teachers emphasize fluency through activities that primarily target listening and speaking. This is sometimes done at the expense of the development of reading and writing skills and, especially, grammatical accuracy (Lightbown & Spada, 1994).

Schools. The study was conducted in three classes in three primary schools in the Montreal area. These were selected after conducting preliminary observations in six intensive ESL classes in six schools. The goal of this observation was twofold: (a) to determine the extent to which the teachers' communicative orientations were comparable and (b) to determine the way in which the teachers provided CF.

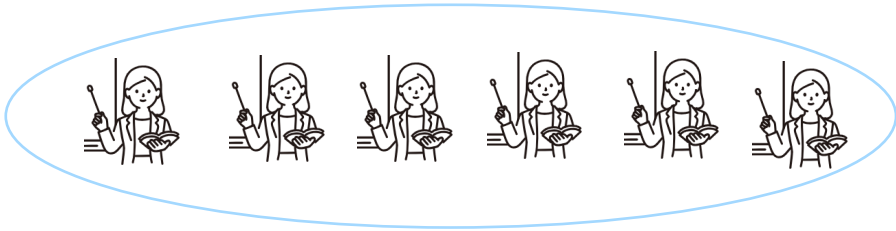
The observer (the first author) used Part A of the communicative orientation of language teaching (COLT) observation scheme (Spada & Fröhlich, 1995) to achieve the first goal. COLT has been used to describe the instructional practices and procedures in approximately 50 intensive ESL classrooms as well as in many other L2 and foreign language classrooms. The results have indicated that the scheme effectively distinguishes between more or less communicatively oriented classrooms and characterizes these differences along several dimensions (e.g., activity type, participant organization, content [form/meaning], student modality). Using COLT Part A, 3 hr of classroom instruction from each teacher were observed and coded in real time by the researcher sitting at the back of the class. The results indicated that the six teachers had comparable teaching styles; that is, there was virtually no explicit instruction with regard to form and there was a clear emphasis on the expression of meaning via oral communicative activities. Although all teachers reported that some

reading activities were done each week, these were not observed during the researcher's visits. These findings are consistent with those observed in other intensive ESL classrooms.

To determine whether and how teachers provided CF, a category was added to Part A of the COLT scheme to distinguish between the two types of feedback of particular interest to the study—namely recasts and prompts. All other techniques were grouped under the category "other." Another category ("ignore") was included to keep a record of the errors to which teachers did not react (see Appendix A). These data were collected during the same 3-hr period during which the COLT Part A categories were coded.[6]

The coding of the CF moves on the part of the teachers in the six classes revealed that five of them reacted to most of their students' oral errors, and one teacher ignored virtually all of them. The CF behaviors of the teachers were observed during different activities in each class. Among the five who provided CF, one teacher responded only with recasts, two used a variety of techniques, with prompts being the most frequent (i.e., between 40% and 50%),[7] the fourth teacher did not use one particular technique more than another, and the last teacher provided explicit correction most of the time. Based on these findings, three teachers were selected to participate in the present study: the recaster (T1), one of the prompters (T2), and the teacher who ignored her students' errors (T3). All three teachers were either native speakers of French or French/English bilinguals. These teachers were assigned to two experimental groups (recasts vs. prompts) and a control group.

６名の普段の訂正フィードバックの与え方を観察



Care was taken to assign teachers to the treatment conditions that were similar to and compatible with their normal CF behavior. This was done to avoid any salience that might be added to the treatments if teachers were asked to teach in a way that differed from their habitual teaching style. This was particularly important for the recast and control conditions.[8]

６名の普段の訂正フィードバックの与え方を観察

Recast重視

Prompt重視

訂正フィードバックしない

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研究手法、ツール、データを公開することで、研究の質を高めていく

LANGUAGE LEARNING
A Journal of Research in Language Studies
Language Learning ISSN 0023-8333

CONCEPTUAL REVIEW ARTICLE

(Why) Are Open Research Practices the Future for the Study of Language Learning?

Emma Marsden [a] and Kara Morgan-Short [b]

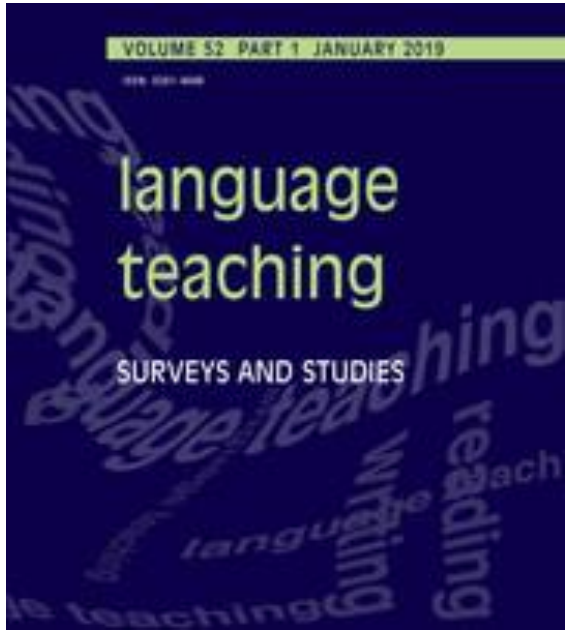
[a]University of York [b]University of Illinois Chicago

Open Research Practiceの３つのメリット

①追試	✓ 他の人が追試をしやすくなり、英語教育研究全体の研究が進みやすくなる
②事前登録	✓ データを取る前に研究手法の査読を行うことで、研究の質が高まる
③成果の発信	✓ 学会に関係する人だけではなく、成果をより広く社会へ公表できる

Marsden et al. (2018)
1973年-2015年までのジャーナル論文(LL, MLJ, SSLA, AP, FLA)
追試だと確実に判断できる研究論文の割合

0.7 % (35本/5000本)



研究マテリアルを共有しよう

IRIS is a free, searchable, up- and downloadable collection of datasets and instruments, materials, and stimuli that are used to elicit data for research into first, second, and foreign languages.

Filter your results

Search query:

grammar

○ All records | ◉ Records with materials

Type of Material

Select...

Author of Publication

Suzuki, Yuichi ×

General Research Area

Select...

Linguistic Feature

Select...

Language being used/learned

Search results for "grammar"

These search results may contain some records which hold information about materials but IRIS does not (yet) hold the materials themselves. If you need these materials, we recommend that you contact the author(s) of the research.

Results 1 - 10 of 13

Results per page 10 Sort by Publication date

Current filters: Contains Files: Yes × Creators: Suzuki, Yuichi × or Clear all filters ×

Stimuli list (for rule application test) - consonant-ending-stem verbs and novel verbs

References for publications: Suzuki & DeKeyser (2015)
General Research Area(s): unknown
Type of material: Grammar test / Morphosyntax test; Instructional / Intervention / Teaching / Training materials
Language being used/learned: Japanese

View more details/download

Picture-sentence completion task

References for publications: Suzuki & DeKeyser (2015)
General Research Area(s): unknown
Type of material: Grammar test / Morphosyntax test; Picture description
Language being used/learned: Japanese

View more details/download

LANGUAGE LEARNING
A Journal of Research in Language Studies
Language Learning ISSN 0023-8333

REGISTERED REPORT

Costs and Benefits of Spacing for Second Language Vocabulary Learning: Does Relearning Override the Positive and Negative Effects of Spacing?

Tatsuya Nakata [a], Yuichi Suzuki [b], and Xuehong (Stella) He [c]

[a]Rikkyo University [b]Kanagawa University [c]Nagoya University of Commerce and Business

データ収集の前に、論文投稿して質を高めることができる

1 Stage 1 manuscript

- ✓ 序論、仮説、研究手法、分析計画の原稿を提出。
- ✓ 提出した原稿は査読を受け、査読に通るとin-principle acceptanceとなる。

2 データ収集

- ✓ データ収集と分析を開始する。
- ✓ Stage 1 manuscriptに記載した内容から逸脱することは許されず、変更が必要な場合は事前にEditorの許可を得る必要がある。

3 Stage 2 manuscript

- ✓ Stage 1 manuscriptに結果、考察、結論を追加した原稿を提出。
- ✓ Stage 1と同じ査読者からの査読に通るとregistered reportとして出版される。
- ✓ Stage 1にない追加分析は、明記すれば追加可能。

研究論文の成果を、研究者以外の人たちへも伝える

OASIS
Open Accessible Summaries In Language Studies

OASIS summaries are one-page descriptions of research articles on language learning, language teaching, and multilingualism that have been published in peer-reviewed journals listed on the Social Science Citation Index or the Arts and Humanities Citation Index.

Supporting journals

OASIS aims to be a sustainable resource. A crucial part of our sustainability strategy is involving international peer-reviewed journals in the initiative. The following journals are requiring all their authors to write OASIS summaries:

- Language Learning
- Studies in Second Language Acquisition
- TESOL Quarterly
- The Modern Language Journal

The following journals request and strongly encourage authors of accepted articles to write a summary of their work:

- Innovation in Language Learning and Teaching (opt out policy)
- Language Teaching Research (opt out policy)
- International Review of Applied Linguistics in Language Teaching
- Journal of Language, Identity, and Education
- Language Awareness
- Language Testing
- ReCALL
- System

The following journals invite authors to write a summary (some via letters to authors; some on the journal website):

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- Foreign Language Annals
- Language and Education
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スピーキングタスクの繰り返し練習 x
学習者のエンゲージメントと認知的判断

Hanzawa, K., & Suzuki, Y. (2023). How do learners perceive task repetition? Distributed practice effects on engagement and metacognitive judgment. *The Modern Language Journal, Early View*, 1-28.

研究の概要とその重要性

繰り返し練習の効果は認められつつあるが、教師は繰り返しへの否定的な印象を持っていることが少なからずある

研究者が行ったこと

大学生への一般英語授業で、6コマ漫画を活用したスピーキングの繰り返し練習を行った

研究者が明らかにしたこと

- 学習者は4－5回まで繰り返すことで自分のスピーキング能力が伸びると感じた
- 90分の授業中に、30分間を空けただけでも、繰り返し練習への効果を感じやすく、エンゲージメントも高まった。

どういう示唆があるか

タスクの種類、繰り返し方、学習者の特性によって、繰り返し練習は肯定的に捉えられる

Hanzawa, K. & Suzuki, Y. (2023). Foreign language learners' perception of speaking task repetition: Distributed practice effects on emotional engagement and metacognitive judgement. *Modern Language Journal, 107, 2.* https://doi.org/10.1111/modl.12843

How do students perceive task repetition practice and does it relate to their L2 development?

What this research was about and why it is important

Despite the accumulating evidence confirming the benefits of task repetition, some teachers are reluctant to use it in their classrooms for fear of its negative impact on learners' perception of the task. Focusing on metacognitive judgment (i.e., learners' judgment of the repetition task effectiveness) and emotional engagement (i.e., learners' affective reactions during task performance), this study probed into the perception and the fluency development of 64 Japanese learners of English who engaged in the individual repetition task six times under one of three repetition schedules (massed, short-spaced, and long-spaced condition). The results revealed that while task repetition was perceived as an effective and engaging activity by all three groups, the spacing involved higher perceived effectiveness and emotional engagement as well as a more accurate judgment of their L2 fluency development.

What the researchers did

- The study sample comprised 64 first-year Japanese learners of English in three intact classes.
- The participants engaged in an individual/monologue (rather than paired) speaking task six times under one of three repetition schedules: massed condition (performing the same task six times consecutively), a short-spaced condition (performing the task three times in the beginning and at the end of a class hour), or a long-spaced condition (performing the task six times over a two-week period, three times per week).
- Immediately after the intervention, the participants completed a questionnaire focusing on two dimensions of learners' perception toward task repetition (emotional engagement and metacognitive judgement).
- Learners' fluency gain scores (i.e., mean length of run) during the repetition task were measured to examine the relationship between learners' perception (emotional engagement and metacognitive judgment) and their fluency development.

What the researchers found

- Regardless of the repetition schedule, all study participants found task repetition beneficial, with 4–5 performances perceived as the most effective.
- The spaced groups (i.e., short-spaced and long-spaced groups), however, found a larger number of repetitions useful than the massed group.
- Principle component analysis revealed that the learners' emotional engagement was divided into "enjoyment" and "concentration." The spaced groups reported higher enjoyment and concentration than the massed group.
- The results of the relationship between fluency gains and the learners' perception revealed that the metacognitive judgment was related to the fluency gains in the short-spaced group only. For the massed group, metacognitive judgment was correlated with enjoyment, but not fluency gains. The finding suggests that while the short-spaced group made accurate metacognitive judgement of their fluency gains, learners in the massed practice condition overestimated their fluency gains, possibly due to enjoyment and illusion of high competence.

Things to consider

- Despite the potential negative concern raised by some teachers, the students in the current study perceived task repetition practice to be effective even in the individual narration task involving six performances.
- It is important to note that the practice schedule may influence learners' perception during task repetition practice as well as ongoing fluency development.
- Specifically, short interval (inserting a gap within a class) seems more optimal than long interval (inserting a week-long gap), which can lead to not only higher perceived effectiveness and emotional engagement but also accurate judgment of the learners' improvement.
- In order to implement the task repetition practice successfully, however, types of task repetition and learner characteristics (including educational settings) may need to be considered (e.g., the current Japanese participants might have considered repetition more acceptable practice).

Material, data, open access article: Materials are available from https://www.iris-database.org/
How to cite this summary: Hanzawa, K. (2023). How do students perceive task repetition task and does it relate to their L2 development? *OASIS Summary* of Hanzawa & Suzuki (2023) in *The Modern Language Journal*. https://oasis-database.org

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「Open SciencePracticesはこれからの L2研究の心得」

1. 研究コミュニティで協力することにより、**より効率的かつ効果的な研究が可能**となる。
2. 他の研究者も実験のマテリアルを確認できるため、**研究に対する信頼性**が高まる。
3. 自分の研究マテリアルを公開することで、他の研究者がそれを**再利用**して、**追試実験**などの研究を進めやすくなる。

将来の研究者にとっても
「Open SciencePracticesは研究の心得」

時間がかかるため、大学院生には難しいが、、、

- 自分の研究について批判的かつ詳細に検討できる
- 追試では、どの要因を変えるか変えないか、理論的な側面などから検討する必要がある
- 事前登録では、先に方法論から分析まで検討する
- フィールド・学会が、Open researchにインセンティブを与える必要があると提言

(Hui et al., 2023)

より「質」の高い英語教育研究を目指して

Open Research Practicesから考えてみる

神奈川大学　鈴木祐一

@YSuzuki_SLAer

実証的・量的な研究目的は、全体的な特徴や傾向をつかむことにある。

英語教育研究論文の「質」を高める前提条件としての統計値の報告。

英語指導条件などについて詳しい情報があると、量的な研究の解釈に役立つ。

Open Research Practicesは、研究分野全体の信頼性・推進力を高める。