COGNITIVE LEARNER ENGAGEMENT COMPARED BETWEEN EFL COURSE DELIVERY MODES

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Abstract: The quasi-experimental classroom study reported in this paper compared the effectiveness of three adult EFL course delivery modes – face-to-face group classes, one-to-one private tutoring and online self-study – by analysing learners' cognitive engagement, understood as the level of participation, involvement and effort of learners in each mode as they completed the same language tasks. The study was conducted within a Vygotskian sociocultural theoretical framework in which language serves as a mediational tool in dyadic interaction and also as a means of cognitive self-regulation in inner speech during independent study.

Data included the transcribed talk of learner-learner and learner-teacher dyads, and think-aloud protocols produced by online self-study learners. These were analysed both quantitatively and qualitatively for the presence of Language-Related Episodes (LREs), instances in which learners talk about the language they are producing and other- or self-correct. Each LRE was then further analysed for evidence of limited cognitive engagement, where linguistic preferences were stated without further deliberation, or elaborate cognitive engagement, where there was evidence of a cognitive self-regulation strategy.

Results suggest that elaborate cognitive engagement, evidenced in episodes where participants notice and reflect on language forms, test hypotheses, generate rules or options from which to choose, and seek or provide justifications, occurs to a similar extent in face-to-face group classes, one-to-one private tutoring and online self-study. Task design appears to affect cognitive engagement, with most instances of engagement in the form-focussed passage editing task being elaborate rather than limited, while a greater prevalence of limited engagement was observed in the meaning-focussed written composition. Slightly less limited engagement was observed in one-to-one tuition, where teachers tended to "add" elaborate engagement to episodes which would otherwise have displayed limited engagement only.

That elaborate engagement characterised LREs to a similar extent between teacher-learner and learner-learner dyads suggests that a teacher is not required in dyadic interaction for elaborate cognitive engagement to occur. Learners in student-student dyads in group classes talk to test hypotheses and generate options and justifications, although their dialogue tends to be less

interrogative of each other than teacher-learner talk. This finding adds to the considerable body of work that supports peer interaction as an opportunity for learners to experiment with language and debate form and meaning. Learners studying in group classes therefore appear to benefit from cognitive engagement that is quantitively, albeit not qualitatively, comparable to private tuition contexts.

In peer-peer interaction, the prominence of LREs characterised by limited engagement in one learner and elaborate engagement in the other suggests it is unnecessary for both participants to be elaborately engaged for episodes to be languaged and resolved. This suggests that dyadic interaction that is asymmetrical in terms of cognitive engagement is not necessarily a problem for teachers to address. While asymmetric interaction has been previously observed in the literature in one-to-one tuition, and also in the higher proportion of teacher-engaged episodes in the one-to-one mode in the present study, the finding that asymmetricity in cognitive engagement is also a feature of learner pairwork is a novel contribution of the present study to the engagement literature.

Pedagogical implications and possible directions for future research are proposed.

Keywords: EFL, engagement, delivery modes, languaging, LREs, SCT.

1 – Introduction

This paper reports on a study comparing the cognitive engagement of learners in three different adult English as a Foreign Language (EFL) course delivery modes: online self-study, face-to-face group classes, and face-to-face one-to-one tuition. Specifically, it observes cognitive engagement, "a state of heightened attention and involvement" (Philp & Duchesne 2016: 52) that "requires energy and effort" and "drives learning" (Christenson, Reschly & Wylie 2012: 817), in self-study learners performing language tasks alone on a computer, compared with learner-teacher dyads performing the same tasks together in private one-to-one tuition contexts, and learner-learner dyads performing the same tasks in face-to-face group EFL classes.

While many private sector educational providers offer EFL courses in the three modes under examination, little research has examined the differences between them in terms of learner engagement. Previous research comparing the effectiveness of delivery modes for learning indicates that online students demonstrate slightly better educational outcomes than students learning the same material in face-to-face classrooms (US Department of Education 2009 and Zhao 2002 provide meta-analyses), but little of this research has focussed on language

education in general or learner engagement in particular. Increased demand for access to asynchronous online language learning platforms by learners who for geographical, financial or other reasons are unable to attend face-to-face classes necessitates a closer examination of the cognitive processes that occur when learners do tasks alone, such as those occurring in inner and private speech (Vygotsky 1978, 1987) and self-scaffolding (Bickhard 2005; Holton & Clark 2006; Knouzi *et al* 2009). This need is more pressing than ever within the context of the Covid-19 pandemic, which has forced many EFL teachers to move their activities online, either completely or within a hybrid or flipped (Vitta & Al-Hoorie 2020) classroom model in which learners spend some time attending classes face-to-face and the remainder studying at home. While some of the home component may involve synchronous online learning through Zoom or similar technologies, many learners are now expected to do more language tasks alone, without the peer collaboration that characterises face-to-face communicative classrooms.

The study compares the three delivery modes by observing cognitive engagement in learners' Language-Related Episodes (LREs), instances in which "students talk about the language they are producing, question their language use, or other- or self-correct" (Swain 1998: 70). LREs, which are claimed to positively impact language learning (Gass & Mackey 2007; Kim & McDonough 2011; Gilabert & Barón 2013), provide evidence of learners' languaging, the "process of making meaning and shaping knowledge and experience through language" (Swain 2006: 98) rooted in a Vygotskian sociocultural framework (1978, 1987). LREs may be characterised by elaborate cognitive engagement, in which there is evidence of a metacognitive self-regulation strategy, or limited engagement, where LREs are resolved, or otherwise, without further deliberation (Storch 1998).

2 – Literature Review

No published studies have examined differences in cognitive engagement in LREs between group language classes, one-to-one classes and individual online self-study. LREs themselves, however, have been employed as a unit of analysis to explore other dimensions in language development, such as the effects of student groupings (Donato 1994; Storch 2007; Kim 2008; Basterrechea & García Mayo 2013), proficiency levels (Leeser 2004; Watanabe & Swain 2007; Kim & McDonough 2008) and task designs (Storch 1998) on interaction, collaboration, output and learning. While these studies have explored LRE occurrence and resolution, the qualitative differences in learners' level of participation or involvement within episodes – that is, their level of engagement – have been studied to a far lesser extent. Thus far, most of the work on learner engagement has taken place outside of Applied Linguistics.

In their seminal paper, Fredricks *et al* (2004) identified three types of learner engagement: i) behavioural, relating to students' participation in both academic and social / extracurricular activities; ii) emotional, referring to learners' positive

or negative affective responses to teachers and peers; and iii) cognitive, which "incorporates thoughtfulness and willingness to exert the effort necessary to comprehend complex ideas and master difficult skills" (p 60). While recent research (e.g. Christenson *et al*., 2012; Philp & Duchesne 2016; Lambert, Philp & Nakamura 2017) demonstrates that the three types play interdependent roles, the focus of analysis in the present study, given its interest in languaging events at the task level, is cognitive engagement.

Fredricks *et al*'s (2004) understanding of cognitive engagement draws on definitions of psychological investment in task completion (Connell & Wellborn, 1991; Newmann, Wehlage & Lamborn 1992; Wehlage, Rutter, Smith, Lesko & Fernandez 1989), which emphasize learners' desire to go further than task requirements and a preference for challenge. Specific observable learner behaviours that demonstrate cognitive engagement relate to self-regulated learning strategies – metacognitive strategies learners use to plan, monitor and assess thinking. These include rehearsing, summarising and elaborating in order to remember, organize and understand (Corno & Madinach 1983; Weinstein & Mayer 1986); remaining on task and avoiding distractions (Pintrich & De Groot 1990); creating connections between concepts and ideas (Weinstein & Mayer 1986); completing peer utterances and making gestures and facial expressions (Helme & Clarke 2001); comparing, asking questions and drawing inferences (Svalberg 2009); and providing interactive support (Baralt *et al* 2016).

While engagement is still a relatively under-explored construct in Applied Linguistics, the related construct of noticing has a much longer history within language classroom research. Leow (1997), for example, analysed think-aloud protocols to observe learners' depth of noticing, operationalised as verbal or written corrections of form. Some noticing was simple, with learners stating or repeating the linguistic item, whereas other noticing was elaborate, with verbalisation of some aspect of the noticing process, for instance a morphological rule. Immediate post-tests suggested that elaborate noticing, compared to simple noticing, led to better receptive knowledge and slightly more accurate productive ability.

Further evidence that depth of noticing affects language development was provided by Qi and Lapkin (2001) in their examination of think-aloud protocols produced by learners as they compared their original written composition to a researcher-reformulated version. Noticing was either perfunctory, where learners simply stated the difference they had noticed, or substantive, where learners stated differences and discussed linguistic reasons changes had been made. Items subject to substantive noticing were more often remembered and incorporated into a subsequent rewrite than items that had been noticed perfunctorily.

One of the first studies to observe engagement, and thus go beyond notions of simple or substantive noticing in LREs, was Storch (2008). In her observations of ESL learner dyads performing a text reconstruction task, she defined elaborate engagement in LREs as deliberation over language items, seeking and providing confirmation and

explanations, and suggesting alternatives. This was compared to limited engagement, in which learners simply stated a linguistic item without further deliberation. Within limited engagement, Storch distinguished between limited engagement in one learner only, for example where one learner made a suggestion and the other did not respond, or simply made a phatic utterance such as "OK" or "yeah" (from which it is not possible to determine level of engagement), and engagement in which both participants engaged in a limited way with the item topicalised in the LRE. While a large proportion of LREs were resolved with elaborate engagement, almost a third were resolved with limited engagement observed in one learner.

Cognitive engagement was also identified by Lambert *et al* (2017) in their comparison of learner-generated and teacher-generated content in narrative tasks completed by Japanese learners. Engagement was measured by identifying the number of clauses that expanded on semantic content (e.g. suggestions, reasons and opinions) and also the number of moves evidencing negotiation of meaning. While the study did not consider the effect of differences in engagement on learning, a key finding was that learners who were more cognitively engaged also appeared more affectively engaged. The authors draw on Swain's (2013) discussion of the inseparability of cognition and emotion by highlighting that increased affective engagement may be associated with increased memorability of learning opportunities.

To summarise, learners' Language-Related Episodes as they complete tasks are characterised by different levels of cognitive engagement, and these appear to have the potential to affect language development, with associations found between increased engagement and better learning outcomes. Cognitive engagement has not, however, been compared between course delivery modes, and this is a gap the present study aims to fill by attempting to answer the following research question:

> How does learners' cognitive engagement in LREs differ between three EFL course delivery modes: i) face-to-face group classes (in learner-learner dyads); ii) one-to-one private tuition contexts (in learner-teacher dyads); and iii) online self-study (individually)?

3 – Materials and Methods

3.1 – Participants

Participants were 60 adult L1 Spanish learners studying with a private language school in Spain. 30 of these learners were observed in 15 student-student dyads in group classes (while group language classes also contain small group, individual and whole class interaction, pairwork was chosen for the purposes of data collection in the present study as it is one of the most common interactions pattern in communicative adult EFL group classrooms). 15 participants were one-to-one private tuition students working in 15 student-teacher dyads. The remaining 15 participants were individual learners who were following the same course material

as the face-to-face learners, but as online self-study, with no input from teachers or peers. All participants had a CEF B2 level of English, as demonstrated by an institutional progress test taken two months prior to the study.

3.2 – Data collection instruments

All participants completed the same two tasks. Task 1 was a language-focussed passage editing task (Appendix A) consisting of an email to a university admissions officer that learners had to edit, as it had been written in informal language rather than a more appropriate formal register. A passage editing task was chosen as it draws learners' attention to a range of language forms (Storch 1997) and leads to discussions about language choices and hypothesis testing (García Mayo 2002). The text was seeded with a total of 30 errors and inappropriacies relating to forms studied in the course. Task 2 was a written composition (Appendix B) in which learners wrote a short opinion piece for a newspaper about whether smoking should be banned outright. A written composition was chosen as it effectively elicits metatalk, being both communication- and form-focussed (Swain & Lapkin 1995).

Participants in learner-learner dyads in the group class and learner-teacher dyads in the one-to-one classes talked together to complete the tasks during regular class time, and were audio recorded. Individual self-study participants completed the tasks alone at home, thinking aloud as they worked, and audio recorded themselves. Self-study learners were shown a video model of a think-aloud protocol prior to completing the tasks.

3.3 – Data analytical methods

Learner talk was transcribed for subsequent identification of LREs and instances of limited and elaborate cognitive engagement. Following Swain's (1998) definition, any part of the participant's speech in which s/he talked about an aspect of the language s/he was producing, including self-or other-correction, was identified as an LRE. Following Storch (2008), cognitive engagement within each LRE was coded as elaborate or limited. Limited engagement was in evidence when a linguistic item was stated without further deliberation, including when there was some phatic utterance such as "OK" or "yeah" but no further evidence of engagement. LREs were categorised as demonstrating elaborate engagement when there was evidence of a metacognitive self-regulation strategy such as elaborating on linguistic choices made (e.g. by seeking and / or providing justifications, noticing, and reflecting on forms), generating options from which to choose, creating connections (e.g. by hypothesis testing or generating rules), and attempting to go further than the requirements of the task. In learner-learner and learner-teacher dyads, elaborate engagement was identified in participant 1 only, participant 2 only or both participants.

Where data regarding LREs and cognitive engagement appeared normally distributed, a one-way ANOVA was run to determine whether the mean responses

in the three modes differed significantly at the $p < .05$ significance level. Where data did not appear normally distributed, a Kruskal-Wallis H test was performed instead of ANOVA. Where the ANOVA or Kruskal- Wallis test indicated that the mean response differed significantly at the $p < .05$ level, unpaired *t*-tests (for normally distributed data) or Mann-Whitney U tests (for non-normally distributed data) were performed to determine whether differences between pairs of modes (group – one-to-one; group – individual; one-to-one – individual) were significant. Tests were two-tailed since there was no directional hypothesis, and unpaired since data for each condition came from different groups, given the study's between-subjects design. In order to mitigate the multiplication of risk caused by repeated *t*- and U tests when pairwise comparisons were made between modes, a Bonferroni correction was applied of α/m, that is the alpha level (.05) divided by the number of hypotheses (two), resulting in and alpha level of .025 for *t*- and U tests.

4 – Results and Discussion.

Table 1 presents the total and mean numbers of LREs in group, one-to-one and individual modes, for passage editing (PE) and written composition (WC) tasks.

Table 1

Number of LREs in group, one-to-one and individual modes

		LREs	M	SD	Kurtosis	Skew
Passage Editing	Group (n = 15)	406	27.1	7.9	-1.0	0.4
	One-to-one (n = 15)	359	23.9	8.7	-0.1	0.4
	Individual (n = 15)	235	15.7	4.4	3.5	1.6
Written Composition	Group (n = 15)	234	15.6	7.9	0.2	0.4
	One-to-one (n = 15)	172	11.5	6.2	-0.6	0.4
	Individual (n = 15)	129	8.6	4.1	-0.2	0.3

A one-way ANOVA indicated a significant difference between modes in LRE numbers at the $p < .05$ level in PE, $F(2, 42) = 9.04$, $p = .00054$, and WC, $F(2, 42) = 4.75$, $p = .014$. In PE, post-hoc comparisons using independent-samples *t*-tests revealed a significantly higher number of LREs at the $p < .025$ level in group than individual, $t(28) = 4.48$, $p = .00012$, a significantly higher number in one-to-one than individual, $t(28) = 3.04$, $p = .0050$, but no significant difference between group and one-to-one, $t(28) = 1.03$, $p = .31$. In WC, post-hoc comparisons using independent-samples *t*-tests revealed a significantly higher number of LREs at the $p < .025$ level in group than individual, $t(28) = 3.04$, $p = .0051$, but no significant differences between group and one-to-one, $t(28) = 1.60$, $p = .12$, or between one-to-one and individual, $t(28) = 1.50$, $p = .15$. Therefore, no significant differences were found in numbers of LREs between learner-learner and learner-teacher dyads, but individuals produced significantly fewer LREs than learner-learner dyads in WC, and significantly fewer LREs than both learner-learner and learner-teacher dyads in PE.

LREs were subsequently analysed for evidence of elaborate or limited cognitive engagement. Table 2 presents the numbers of LREs characterised by each engagement type, and presents these as a proportion of total LREs in each mode and task.

4.1 – Limited engagement

In PE, a Kruskal-Wallis H test revealed a significant difference between modes in proportions of LREs characterised by limited engagement at the $p < .05$ level, $\chi^2(2) = 10.35$, $p = .0057$. Post-hoc comparison using the Mann-Whitney U-test revealed a significantly higher proportion of limited engagement LREs in group than one-to-one at the $p < .025$ level, $U(28) = 30.5$, $z = 3.38$, $p = .00072$, but no significant difference between group and individual, $U(28) = 62$, $z = 2.07$ $p = .039$, or between one-to-one and individual, $U(28) = 111.5$, $z = 0.021$ $p = .98$. In WC, a Kruskal-Wallis H test revealed a significant difference between modes at the $p < .05$ level, $\chi^2(2) = 10.63$, $p = .0049$. Post-hoc comparison using the Mann-Whitney U-test revealed a significantly higher proportion of limited engagement LREs in individual than one-to-one at the $p < .025$ level, $U(28) = 39.5$, $z = 3.01$, $p = .0026$, but no significant difference between group and one-to-one, $U(28) = 69$, $z = 1.78$, $p = .075$, or between group and individual, $U(28) = 67.5$, $z = 1.85$, $p = .064$.

Table 2
Cognitive engagement in LREs in group, one-to-one and individual modes
** percentage of total LREs in each mode and task*

			LREs	%*	M
Limited engagement	Passage Editing	Group (n = 15)	177	43.6%	11.8
		One-to-one (n = 15)	117	32.6%	7.8
		Individual (n = 15)	84	35.7%	5.6
	Written Composition	Group (n = 15)	144	61.5%	9.6
		One-to-one (n = 15)	95	55.2%	6.3
		Individual (n = 15)	94	72.9%	6.3
Elaborate engagement	Passage Editing	Group (n = 15)	126	31.0%	8.4
		One-to-one (n = 15)	131	36.5%	8.7
		Individual (n = 15)	151	64.3%	10.1
	Written Composition	Group (n = 15)	54	23.1%	3.6
		One-to-one (n = 15)	32	18.6%	2.1
		Individual (n = 15)	35	27.1%	2.3
Elaborate + limited engagement	Passage Editing	Group (n = 15)	103	25.4%	6.9
		One-to-one (n = 15)	111	47.4%	7.4
	Written Composition	Group (n = 15)	34	14.5%	2.3
		One-to-one (n = 15)	45	26.2%	3.0

Of the six pairwise comparisons made between the three modes across the two tasks, then, there were two statistically significant differences in limited engagement: a higher proportion of limited engagement in group than one-to-one in PE, and a higher proportion in individual than one-to-one in WC. The other four pairwise comparisons produced non-significant differences. It can therefore be claimed that, on the whole, limited engagement characterised LREs to a similar extent across the three modes, with slightly less limited engagement observed in one-to-one. It is also noteworthy that the proportions of limited engagement episodes were lower in form-focussed PE, which forced learners to focus on linguistic features and correct errors, than in the more meaning-focussed WC.

A qualitative analysis of one-to-one episodes reveals possible reasons for there being less limited engagement in one-to-one interaction. There was a tendency towards interactions in which the teacher sought justifications for corrections made by the learner, and the learner responded using metalanguage; hence, elaborate engagement in both participants. One example of such interaction occurred between Oscar and his teacher, in which Oscar initiated and correctly resolved a grammatical LRE. Oscar was already moving on to subsequent forms, without having elaborately engaged in the episode, when the teacher interrupted to elicit metalanguage from Oscar regarding the correction. This seeking of metalanguage constituted the start of the teacher's elaborate engagement, which concluded in his paraphrasing comment at the end of the LRE. Oscar's elaborate engagement was evident in his ability to justify the correction by naming the structure. It seems likely that had the teacher not elicited it, the metalanguage would not otherwise have been spontaneously produced by Oscar, and his engagement would have remained limited:

Teacher	Then if I	
Oscar	If I would come to study with you, how much… if I came	
Teacher	Very good, yeah…	
Oscar	Came to study with you, how much would I need to pay in total	
Teacher	Yeah why, why, why is it came	
Oscar	Came because it's the… the second	conditional
Teacher		very good
Oscar	To clause the present simple or the past simple	
Teacher	Exactly so the clause with if you need the past simple not would you can't have if would, good	

Teacher engagement therefore often consisted of seeking justifications to check learners' understanding; learner engagement, on the other hand, often consisted of providing rather than seeking justifications, in response to the teacher's use of questions. This marked a qualitative difference with learner-learner episodes in group mode, in which both learners tended to provide justifications rather than seek them. The following exchange between Guillermo and Giuliana, for instance,

was characterised by elaborate engagement in both learners, who discussed and justified their responses to the expression *which reminds me*:

Giuliana	Yes, these languages in your university, which reminds me
Guillermo	No, it's not remind
Giuliana	No no
Guillermo	Which
Giuliana	Remind me... *me recuerda* [it reminds me] remind me, erm, because it's plural languages, it's plural so is it's remind me
Guillermo	No
	Because remind me er is you say remind me something, I forgot to close the door
Giuliana	Remind
	me that I go to the bakery or something like that
Guillermo	So doesn't make sense here we can say in another, in another way
Giuliana	*Me recuerda*, [it reminds me] which reminds me

4.2 – Elaborate Engagement

In PE, a Kruskal-Wallis H test revealed a significant difference between modes in proportions of LREs characterised by elaborate engagement at the $p < .05$ level, $\chi^2(2) = 21.31$, $p = .0001$. Post-hoc comparison using the Mann-Whitney U-test revealed a significantly higher proportion of elaborate engagement LREs at the $p < .025$ level in individual than group, $U(28) = 12.5$, $z = 4.13$, $p = .000010$, a significantly higher proportion in individual than one-to-one, $U(28) = 21.5$, $z = 3.75$, $p = .00018$, but no significant difference between group and one-to-one $U(28) = 102.5$, $z = 0.39$, $p = .70$. In WC, a Kruskal-Wallis H test revealed no significant difference between modes at the $p < .05$ level, $\chi^2(2) = 3.43$, $p = .18$.

In PE, therefore, individuals produced a significantly higher proportion of LREs characterised by elaborate engagement (64% of their total LREs) than group (31%) or one-to-one (37%). Many of these instances of individual elaborate engagement took the form of a justification for a correction based on the degree of formality of the expression in the passage, as demonstrated in Irene's PE protocol:

> Irene: which reminds me, could you, because can is quite informal so could you, give me...

Similarly, Ingrid justified an alternative for the phrase *study with you* based on her perception of the informality of register:

> Ingrid: I think in this sentence is "if I would come to study with you, how much would I need to pay in total", it's, is not a correct form, because it's very informal to say to speak with the university so I think it's better if we put for example if I would come to study in your university

It is important to remember, however, that the significantly higher percentage of elaborate engagement LREs in the individual mode is most likely a result of there being no elaborate + limited engagement option for individuals. In group and one-to-one modes, conversely, elaborate + limited engagement accounted for over a quarter of LREs. For this reason, the Limited Engagement data in 5.1 provides a more valid basis for comparison between individual and dyadic modes.

The lack of statistically significant differences in elaborate engagement between learner-learner and learner-teacher dyads suggests that dyadic interaction, whatever the identity of the interlocutors, is not only a context in which languaging occurs to a broadly similar extent, but also in which language can be discussed in an elaborate way by both participants.

4.3 – Elaborate + Limited Engagement.

In PE, a Mann-Whitney U test revealed no significant difference between group and one-to-one modes in the proportion of episodes characterised by elaborate engagement in one participant and limited engagement in the other at the $p < .05$ level, $U(28) = 77$, $z = 1.45$, $p = .15$. In WC, however, the Mann-Whitney U tests revealed a significantly higher proportion of episodes characterised by elaborate engagement in one participant and limited engagement in the other in one-to-one than group at the $p < .05$ level, $U(28) = 46.5$, $z = 2.72$, $p = .0065$.

The presence of elaborate + limited LREs in dyadic interaction suggests that it is unnecessary for both participants to be elaborately engaged for an episode to be languaged and resolved. In the following exchange, for example, Gianfranco demonstrated elaborate engagement by producing metalanguage, and by considering register as a justification for avoiding contracted forms. Gilberto participated in the exchange, but in a way that demonstrated limited engagement only:

Gianfranco	I don't know… this really cool, it'll be… not as an apostrophe, so, that is, it must be written as it will be really cool
Gilberto	Yes?
Gianfranco	Yes, if it is formal
Gilberto	OK…

If one learner demonstrates elaborate engagement by providing a justification or generating options, the other learner may feel it is unnecessary to say more about the episode in a way that would constitute elaborate engagement, but is nonetheless participating actively in the episode. In such a case, it would seem unnecessary for a teacher to insist on more elaborate engagement from the learner showing limited engagement, as the episode has been collaboratively resolved in a cognitively engaged manner.

5 – Conclusions

The results of this study indicate that elaborate cognitive engagement, evidenced in episodes in which participants notice and reflect on language forms, test hypotheses, generate rules or options from which to choose, and seek and / or provide justifications, occurs in group, one-to-one and individual online modes. In a form-focussed task such as passage editing, most instances of engagement were elaborate rather than limited, while in the meaning-focussed written composition there was a greater prevalence of limited engagement. On the whole, limited engagement characterised LREs to a similar extent across the three modes, with slightly less limited engagement observed in one-to-one, where teachers tended to add engagement to episodes which would otherwise have been limited.

Elaborate engagement characterised LREs to a similar extent between teacher-learner and learner-learner dyads, indicating that a teacher is not required in dyadic interaction for cognitive engagement to occur. Learners in student-student dyads talk to test hypotheses and generate options and justifications, although their dialogue tends to be less interrogative of each other than teacher-learner talk. This finding adds to the considerable body of work (Philp *et al* 2014 provides a review) that supports peer interaction as an opportunity for learners to experiment with language and debate form and meaning. Regarding implications for delivery modes, learners choosing group classes appear to benefit from cognitive engagement that is quantitively, albeit not qualitatively, comparable to more costly private tuition contexts.

In peer-peer interaction, the prominence of LREs characterised by limited engagement in one learner and elaborate engagement in the other suggests it is unnecessary for both participants to be elaborately engaged for episodes to be languaged and resolved. While asymmetric interaction has been observed in one-to-one tuition in the literature (e.g. Chi *et al* 2001) and also in the higher proportion of teacher-engaged episodes in one-to-one in the present study, that asymmetricity in cognitive engagement is also a feature of learner pairwork is a novel finding of the present research. A pedagogical implication is that teachers need not insist on equal participation in dyads, as it appears normal for one learner to take a less engaged role, and for most LREs to be resolved anyway.

Further pedagogical recommendations include encouraging learners to seek justifications from each other, in the way teachers elicit justifications from learners, rather than merely providing them, as this would increase the amount of elaborate cognitive engagement in learner-learner dyads. Furthermore, it appears important that teachers provide form-focussed language tasks in addition to more open, freer productive tasks, as the language-related passage editing task in the present study appeared more closely related to the production of LREs characterised by elaborate engagement than the written composition.

As the present study did not observe learning gains associated with episodes, future research could usefully focus on possible associations between elaborate cognitive engagement and learning outcomes.

6 – References

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7 – APPENDICES

7.1 – Appendix A: Passage Editing Task

Read this email from a student to a University in the UK, and correct any problems / errors.

Remember to consider the full range of possible errors. These may include:

- **Grammar**
- **Vocabulary**
- **Spelling**
- **Punctuation**
- **Style (formal / informal)**
-

Hi Mrs Horowitz,

Just writing to say thanks a MILLION for your email about language formation in your university. The language learning is really important for students here in spain, not just English but other languages too, at my country it is imposible to find good courses in Chinese or the Russian, although it depends of the place, so it'll be really cool to study these languages in your university. Which reminds me, can you give me an aproximate cost of the courses? If I would come to study with you, how much would I need to pay in total? If I pay a deposit now, how much time shall I have to pay the rest of the money? I'm sure the formation will be BRILLIANT, I'm really looking forward to studying in the uk, but apart from the studies, time for making leisure activities is also a priority for me. There were something in your email about what students can do in their free time at the weekends – if I give you a buzz on the phone number you put in your email, are there a chance you can tell me more?

Bye for now and see you soon!

Andy

P.S. Any recommendations for good places on the city to visit at night-time? We really want to take full advantage of our time in England!

7.2 – Appendix B: Written Composition

Write a letter to your local newspaper giving your opinion about this topic:

"Should we ban smoking everywhere – even at home?"

You might want to include comments about the following:

- Health issues related to smoking
- The importance of individual freedom
- Taxes on cigarettes
- Plus any ideas of your own.

First, make notes and decide which ideas will go into each paragraph. Then write your letter, and try to give emphasis to your opinions. Finally, read and check your letter for mistakes.