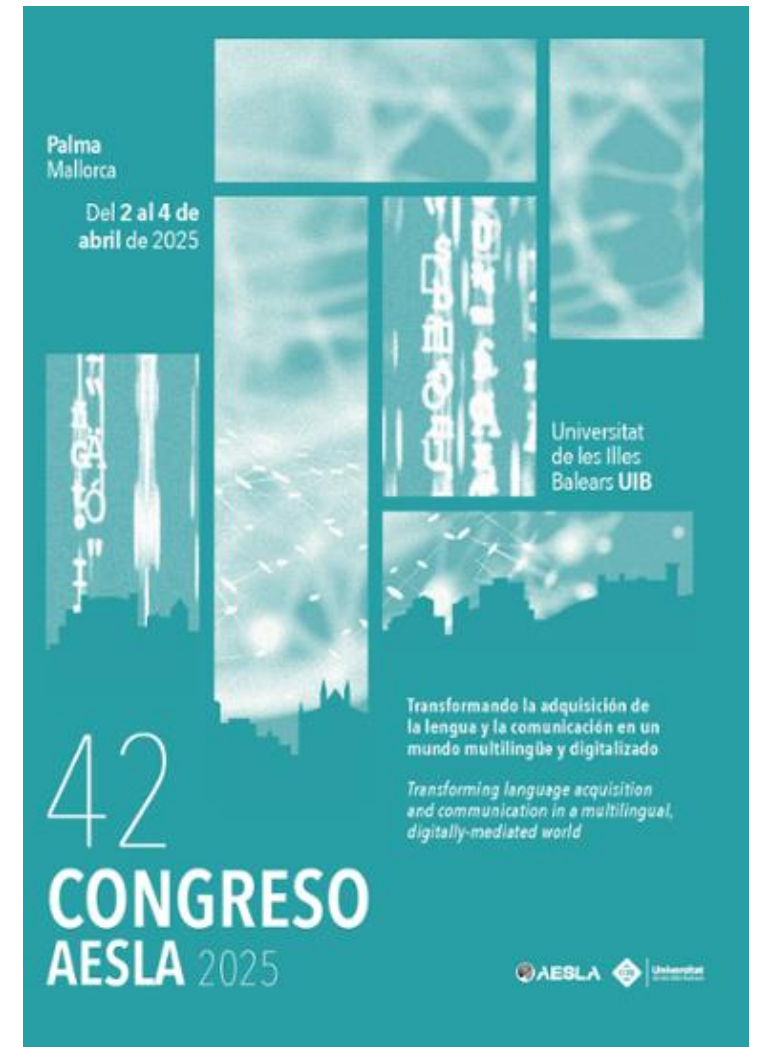


Feedback provision through WhatsApp: The effects of feedback type on EFL grammar learning

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Grammar learning

Mixed results regarding perception of grammar learning / teaching:

- One of the most **difficult areas** to acquire (DeKeyser, 2005)
- Seen as **tedious** by FL learners (Al-Mekhlafi & Nagaratman, 2011; Andrews, 2003; Jean & Simard, 2011)
- Can even be the cause of **withdrawal** from FL classes (Vakili & Mohammed, 2020)

However:

- Better grammar learning if **contextualised** (Morelli, 2003)
- More **innovative** ways of teaching grammar should be considered (Pawlak, 2021)
- Use of **instant messaging applications** (Tragant et al., 2022) have been shown to promote grammar development (Murphy et al., 2023)

WhatsApp for language learning purposes

- WhatsApp used as a platform for (Syairofi et al., 2023):
 - Doing learning tasks and activities mediated by teacher
 - Exchanging didactic materials
 - Q&A
 - Discussion and collaborative learning among students
 - Peer assessment
- Reported benefits of WhatsApp for language learning include (Alamer & Al Khateeb, 2023; Kartal, 2019; Syairofi et al., 2023):
 - Increased levels of learners' motivation
 - Reduced learning anxiety
 - Increased engagement in the learning process
 - More extramural practice and higher flexibility
 - Increased interaction among / between students and teacher

Learners' views of WhatsApp

Learners' views gathered through questionnaires, semi-structured interviews or focus groups' discussions:

- Overall, **positive attitudes** towards the use of WhatsApp for language learning purposes (Abubakar, 2021; Mistar & Embi, 2016; Rambe & Bere, 2013)
- WhatsApp valued very positively for learning **vocabulary**, practicing **speaking** and **extramural practice opportunities** (Khan, 2021)
- Increased opportunities to practice **reading** and **writing** as well as labelled as an **innovative approach** (Alqahtani et al., 2018; Tümen Akyıldız & Çelik, 2021)

But...

- **Grammar** found to be one of the most **challenging** skills to learn through WhatsApp and participants generally **preferred classroom learning to WhatsApp learning** (Ali & Bin-Hady, 2019)
- Feeling of being **constantly observed** and **assessed** by the teacher or more proficient peers (García-Gómez, 2022)
- Some see it as a mere **extension of the classroom** context, possibly due to the presence of the teacher (Lamy & Zourou, 2013)

WhatsApp as a tool to provide feedback

- Useful tool to give feedback to primary school students. Preference for **visual feedback** at **lower primary** levels and **written text at upper levels** (Soria et al., 2020)
- Seen as an **effective** and **timely** tool to provide feedback among university students, but **little sense of belonging** to the WhatsApp group and preference for **video-based synchronous feedback** (Sugianto et al., 2021)
- **Grammar-based feedback** through WhatsApp beneficial for L2 oral production (Weissheimer et al., 2018)
- Seen as an effective platform to give **written and oral corrective feedback** in longitudinal studies (Andújar, 2020; Green, 2021):
 - Preference for more **explicit feedback** through MIM applications, in line with previous research

Feedback preferences & efficacy

- Feedback plays a crucial role when learning **grammar** (Valezy & Spada, 2006)
- **Explicit corrective feedback** particularly effective for grammar learning (Ellis et al., 2006).
- **Explicit written corrective feedback** more valued than other types of feedback (Karim & Nassaji, 2015; Tasdemir et al., 2018; Zhang et al., 2021)
 - **Easier** for learners to **identify the mistake** and **understand** why it is not totally accurate.
 - **Metalinguistic explanations** can significantly enhance **both implicit and explicit** knowledge
- More **explicit feedback** tends to be the most highly rated:
 - Explicit correction > Reformulations > Elicitations > Repetitions > Clarification requests (Lee, 2013)
 - On WhatsApp, satisfaction with feedback type (+ feeling of learning): Metalinguistic explanations > Repetition prompts > Reformulation (Gesa et al., 2024)

Feedback timing

- How learning occurs supports the superiority of immediate feedback over delayed feedback (Li, 2020).
- **Immediate feedback:** effective for tasks requiring quick corrections and for learners at lower proficiency levels (Li et al., 2025).
 - From a behaviourist perspective, immediate feedback helps reinforce correct forms and prevents the consolidation of errors (Li et al., 2025).
 - From an interactionist perspective, feedback should be provided during interaction to allow learners to make an immediate comparison between the erroneous and correct forms while engaged in a communicative task (Long, 2015).
- **During-task** feedback through WhatsApp **more beneficial than post-task feedback**, due to its immediacy and better recall by learners (Murphy et al., 2023)
- **Delayed feedback:** after a task or at a later stage; can be beneficial for promoting deeper processing and long-term retention. It allows learners to reflect on their errors and self-correct (Li et al., 2025).

Research question

What are the effects of three almost-immediate feedback types on EFL grammar learning in an extramural practice on WhatsApp?

Participants ($N = 91$)

Mean age: 19.55 years old (SD = 1.83)

Catalan / Spanish bilinguals (98.2%)

Pre-intermediate learners of English (B1 level on average)

- Four groups (intact classes):
 - Metalinguistic explanations ($n = 25$)
 - Reformulations ($n = 25$)
 - Repetition prompts ($n = 15$)
 - No extramural practice (CG) ($n = 25$)

97.3% use WhatsApp daily

- 35.7% use it 30-60 minutes / day
- 39.3% use it 1-2 hours / day
- 22.3% use it 3-4 hours / day

87.6% had never used WhatsApp for learning FLs

- To practice speaking (2.5%), class diary (2.4%), reading club (1.5%), grammar learning (2.7%)

Instruments



Coursebook (Norris, 2021)

- *be / get used to; less / the least + adj.; so / such*
- Presentation – Practice – Production (PPP) (Larsen-Freeman, 2003) or JiTT approach (Novak, 2011)

Grammaticality Judgement Test (adapted from Nassaji, 2000)

- 4 practice items + 72 test items:
 - 48 target items (16 / structure; half correct, half incorrect)
 - 24 distractors (half correct, half incorrect)
- Implicit (6 seconds / item; no possibility to go back)
- Explicit (25 minutes for all 72 items; possibility to revise the answers)
 - “Please indicate if the following sentences (practice and test items) are grammatically accurate or not” + Error correction (explicit only)

Instructions

Please indicate if the following sentences (practice and test items) are grammatically accurate or not. If you think they are grammatically accurate, please select 'YES' in the answer sheet. If you think they are not grammatically accurate, please select 'NO' in the answer sheet.

You will only see each sentence for a few seconds, and you will hear a beep sound when a new sentence appears.

You must answer all the questions, please do not leave any sentence unanswered.

Sample items

- 15. You are not used to play tennis.
- 16. I need to go to the work in ten minutes.
- 38. Asian cultures are so fascinating to explore.

GJT implicit

GJT explicit

TEST ITEMS

11. Novels are less entertaining than comics * (1 Point)

Yes ✓

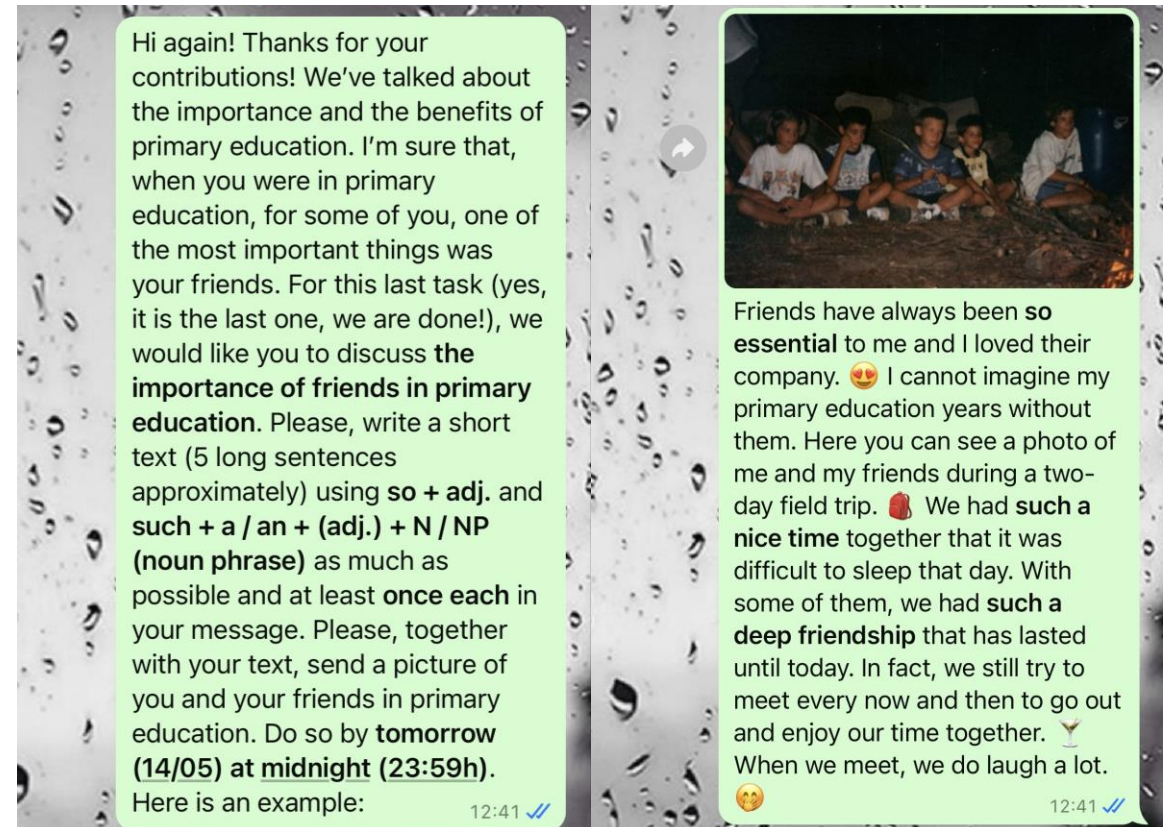
No

12. Please provide the correct version. *

Enter your answer

WhatsApp activities

- Seven **WhatsApp activities** (one ice-breaker + two per structure)
 - Short text using the target structures and photo sharing on some occasions
 - Activities X.2 asked participants to respond to some of their classmates' previous contributions
 - Examples always provided by the teacher

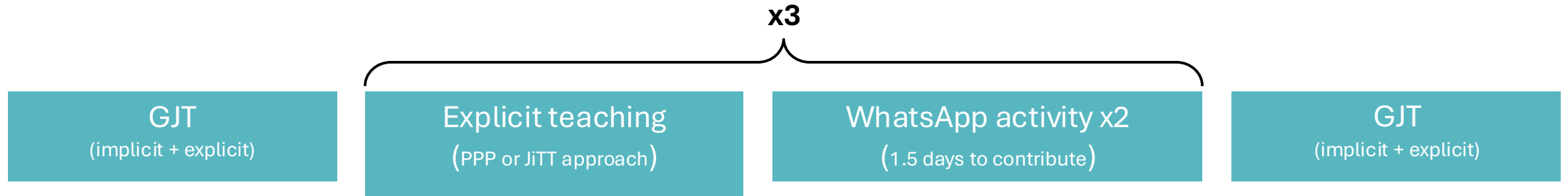


Hi again! Thanks for your contributions! We've talked about the importance and the benefits of primary education. I'm sure that, when you were in primary education, for some of you, one of the most important things was your friends. For this last task (yes, it is the last one, we are done!), we would like you to discuss **the importance of friends in primary education**. Please, write a short text (5 long sentences approximately) using **so + adj.** and **such + a / an + (adj.) + N / NP (noun phrase)** as much as possible and at least **once each** in your message. Please, together with your text, send a picture of you and your friends in primary education. Do so by **tomorrow (14/05) at midnight (23:59h)**. Here is an example:

Friends have always been **so essential** to me and I loved their company. 😊 I cannot imagine my primary education years without them. Here you can see a photo of me and my friends during a two-day field trip. 📸 We had **such a nice time** together that it was difficult to sleep that day. With some of them, we had **such a deep friendship** that has lasted until today. In fact, we still try to meet every now and then to go out and enjoy our time together. 🙌 When we meet, we do laugh a lot.

12:41 ✓

Procedure



- GJT implicit version → at the beginning of the class
 - Questionnaire administered in-between (only at post-test time; regular class at pre-test time)
 - GJT explicit version → at the end of the class
-
- WhatsApp groups of 10-12 students each (classes were divided into 2-3 groups for logistic reasons)
 - Feedback given on the target structures only (unless very basic serious mistakes spotted)
 - Positive reinforcement when error-free contributions were made
 - Feedback given almost immediately (hours or even minutes after the contribution) + invitation to "Try again" if errors were made, and/ or positive reinforcement (also if error solved)
 - The feedback in activities X.1 could be interpreted as **interim feedback** (before the second part of the task is proposed) (Li et al., under review)

Procedure: Metalinguistic explanations

Until the last years of the 80s, Spanish teachers were used to smoking during the lessons. Actually, all the teachers have got used to not smoking after a law that was established i...

When I was a kid, there was a teacher (the English one) who was used to smoke in the school bathroom in class's breaks. Nowadays, doing this in class is inadmissible and I reckon that people who smoke and want to be future teachers should get used to respect the class time.

16:13

When I was a kid, there was a teacher (the English one) who was used to smoke in the school bathroom in class's breaks. Nowadays, doing this in class is inadmissible and I rec...

Hahahahaha What a teacher! 🚭🚭 Much healthier environment nowadays! 😊
Hope you don't smoke in front of your future students!

Regarding the text, remember be / get used to are followed by an -ing if we require a verb following the structure. Can you try again? 🙏

16:37 ✓

When I was a kid, there was a teacher (the English one) who was used to smoking in the school bathroom in class's breaks. Nowadays, doing this in class is inadmissible and I reckon that people who smoke and want to be future teachers should get used to respecting the class time.

16:39

When I was a kid, there was a teacher (the English one) who was used to smoking in the school bathroom in class's breaks. Nowadays, doing this in class is inadmissible...

Good good good!!! 🍷🍷

16:41 ✓

Procedure: Reformulations

I totally I agree with you, one day my grandfather told me that, he was not used to having the class decorated like in my class. Nowadays, I think that it's a good form to show the parents if they go, what their child do in their classes. 23:27

19/3/2024

I totally I agree with you, one day my grandfather told me that, he was not used to having the class decorated like in my class. Nowadays, I think that it's a good form t...

It's true, back then the classes where black and white. Now we are used to have the classes with all type of decorations, and work done by the students. Also nowadays we are used to more dynamic classes than before. 0:13

It's true! Currently we can get used to talk about this topics (sexuality, death,self-esteem) feeling freely because the society has been developing a comfortable spa...

So you mean that we can get used to talking about these topics. I see... 😞 Try again! 😞

(In addition, remember this + singular / these + plural) 7:10 ✓

It's true, back then the classes where black and white. Now we are used to have the classes with all type of decorations, and work done by the students....

Were they black and white or were the photos of them black and white?! That said yeah, now we are usedto having classrooms with all types of decorations. Is that what you mean? 😞 Try again! 😞 7:13 ✓

Procedure

Repetition prompts

The screenshot displays a chat interface with two original messages and three corresponding repetition prompts. The original messages are in white bubbles, and the prompts are in green bubbles. The background features a faint pattern of school-related icons.

Original Message 1:
Friends are so important to being a happy child at primary school. I remember that I was always happy going to school because there were my friends. We had such a good moments that I remember it sometimes. Anyway, we had such a movigs that I had to meet people in 4 cities. 8:18

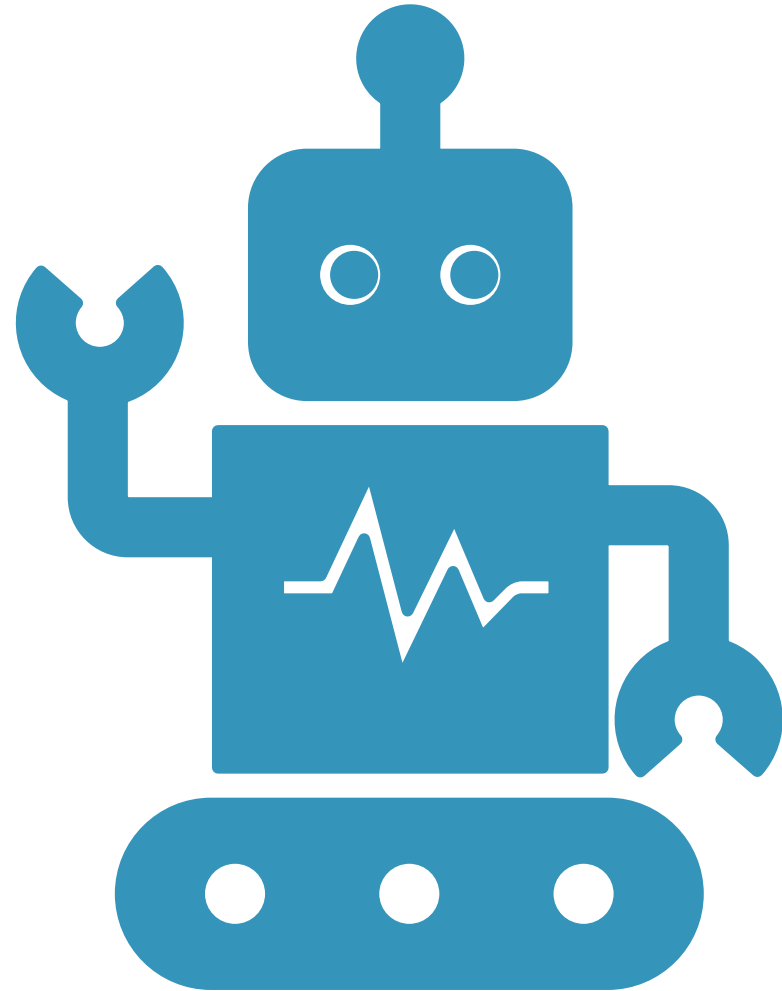
Original Message 2:
When we are young friends are always one of the most important things we have. I remember when one of my best friends and I were playing together at PE that we were so happy. Also i have such a good memories celebrating my birthday at school with all my friends and classmates. 8:38

Repetition Prompt 1:
Friends are so important to being a happy child at primary school. I remember that I was always happy going to school because there were my friends. We had such a good moments that I remember it sometimes. Anyway, we had such a movigs that I had to meet people in 4 cities. 8:54 ✓

Repetition Prompt 2:
Friends are so important to being a happy child at primary school. I remember that I was always happy going to school because there were my friends. We had such a good moments that I remember it sometimes. Anyway, we had such a movigs that I had to meet people in 4 cities. 8:55 ✓

Repetition Prompt 3:
When we are young friends are always one of the most important things we have. I remember when one of my best friends and I were playing together at PE that we were so happy. Also i have such a good memories celebrating my birthday at school with all my friends and classmates. 8:55 ✓

Control
group...



Results: implicit GJT

	GJT implicit Pre-test (48 items)		GJT implicit Post-test (48 items)		Sig. (<i>p</i>)	Effect size
	M	SD	M	SD		
Metalinguistic explanations	26.92	4.41	29.92	5.35	.005	.630
Reformulations	26.85	3.82	27.19	6.22	.017	.062
Repetition prompts	27.67	5.22	29.07	3.62	.352	.249
Control group	24.60	2.47	27.92	4.55	<.001	.794
All	26.38	4.05	28.45	5.21	<.001	.407

Results: explicit GJT

	GJT explicit Pre-test (48 items)		GJT explicit Post-test (48 items)		Sig. (<i>p</i>)	Effect size
	M	SD	M	SD		
Metalinguistic explanations	27.72	5.51	33.20	7.08	.007	.871
Reformulations	27.08	4.10	31.88	6.50	.075	.759
Repetition prompts	26.80	4.96	29.73	4.71	.703	.454
Control group	25.79	3.83	27.75	5.08	.006	.447
All	26.87	4.59	30.79	6.34	<.001	.657

One-way ANCOVA

Timed implicit GJT

- Controlling for pre-test / group $\rightarrow F(1, 3) = 1.480, p = .226$

Untimed explicit GJT

- Controlling for pre-test / group $\rightarrow F(1, 3) = 2.955, p = .037$
- Metalinguistic > control group $\rightarrow p = .045$

Discussion

- Metalinguistic explanations: significant differences at lower levels of proficiency → Need for clear(er) feedback (Ellis et al., 2006)
- Control group: no extra practice but no potential confusion either from not so explicit types of feedback as are repetition prompts or reformulations (Ellis et al., 2006)
- Untimed GJT: explicit learning (metalinguistic > CG) → extra exposure + extra reflection on language; declarative knowledge obtained through instruction (Skill Acquisition Theory: DeKeyser, 2015)
- Timed GJT: no significant differences → low proficiency level, knowledge not automatized yet, extra practice needed for all students (DeKeyser, 2015)
- Immediate feedback during task performance → beneficial for all groups overall (Murphy et al., 2023; but no differences between immediate and delayed in Murphy & Tragant, 2025)

Discussion

Besides “**learning more**”...

Metalinguistic explanations group consistently expressed better views than the other two groups:

- Straightforward explanation as to why they had made a mistake
- Easier to grasp the nature of the mistakes and, hence, easier to correct, also corroborated by the highest feeling of learning
- In line with previous research on written corrective feedback (Karim & Nassaji, 2015; Tasdemir et al., 2018; Zhang et al., 2021); now also applicable to MIM contexts
- **Control group:** more traditional type of teaching approach → missed practice opportunities, yet more convenient than receiving more complex (confusing?) feedback types

Conclusions & pedagogical implications

Effectiveness of immediate explicit feedback in informal learning activities at pre-intermediate proficiency level

Engaging activity yet lack of natural interaction except for the required in X.2 & emojis

Given the gains pre-/post-, possible use of external help

Some students might have performed “properly” and received no feedback, yet they were exposed to the feedback addressed to others too

Thank you!

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Instruments

- Final **questionnaire** administered online during class time
- Questions inquiring about:
 - Background information
 - Satisfaction with feedback
 - Feedback preferences
 - Feeling of learning
 - Engagement with feedback
 - Error correction
 - Satisfaction with WhatsApp as a language learning tool
 - Satisfaction with the intervention *per se*
 - Recommendation and future participation
 - Use of AI or external help during the intervention

