PRONUNCIATION DEVELOPMENT IN THE EFL CLASSROOM: THE CASE OF *FLOWCHASE*

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1. INTRODUCTION

Nowadays, it is very common to find English as a foreign language (EFL) courses the planning of which is highly dependent on a coursebook. In connection with this, many regular coursebooks on the market devote very few pages to pronunciation. In addition, if they do, they usually provide drilling exercises which are meant to be monitored by the teacher. Consequently, students play hardly any active role in their pronunciation practice. At its turn, this competence tends to be underdeveloped in comparison to other skills, like grammar or reading comprehension, on which EFL courses generally focus.

One alternative to further practice pronunciation is to introduce apps such as *Flowchase* (Broisson & Guérit, 2020), which can be used not only in class but also extramurally, as they provide feedback on pronunciation, thus probably fostering EFL learners' autonomy and agency (Calvo Benzies, 2017; Gkonou, 2014), regardless of the actual level of improvement achieved as a result of this additional practice. Indeed, customized feedback on pronunciation impacts accurate phoneme production (Cucchiarini et al., 2009), although some issues concerning artificial intelligence (AI) feedback remain (Rogerson-Revell, 2021). In addition, time on task also appears to show positive correlations with learning (Godwin et al., 2021). In sum, some degree of improvement,

even if minimal, is to be expected, thanks to this additional practice and personalized feedback. It remains to be seen, though, if pronunciation apps such as *Flowchase*, aimed at practicing production (i.e., being able to pronounce sounds and words accurately), also have some effect on learners' receptive skills (i.e., being capable of identifying accurate and inaccurate pronunciation). Indeed, pronunciation involves both productive and receptive competence, with the latter tending to be more easily mastered than the former (Richards, 2015).

Flowchase, as mentioned above, was primarily designed to practice productive skills. However, prior to be able to pronounce specific phonemes, it is primal that learners can decode incoming acoustic signals, that is, that they optimize their receptive skills (Flege, 1995). Students seem to be more aware of their strengths and weaknesses at the productive level, though. Also, to be able to show accuracy in the self-perception of one's oral skills, metalinguistic awareness is needed, particularly when it comes to receptive competence. While productive skills can be recorded, and replayed for double-checking, one's receptive skills are more difficult to measure objectively, as one's self-perception comes into play, and it could be easily and positively biased. Consequently, explicit instruction and immediate feedback become essential, especially in learners' receptive pronunciation skills (Wallace & Lima, 2018).

However, in the EFL classroom, time and resources are limited. Hence, it is virtually impossible to provide immediate feedback in large regular groups and explicit instruction on all skills. In these circumstances, technology supplying further guided practice might of course help in this direction. In this respect, previous studies integrating *Flowchase* and explicit focus on pronunciation showed that this double approach led to a significant impact on secondary school EFL learners' accurate pronunciation (Cordier, 2022). However, it remains unknown whether learners consider *Flowchase* a good resource for learning English pronunciation, and if such views impact any possible pronunciation development as a result of interacting with the target app.

2. OBJECTIVES AND RESEARCH QUESTIONS

Based on what has been expounded in the preceding section and the need to foster pronunciation development in the language classroom, the objective of the present study is threefold: on the one hand, it aims at analysing whether a technological application like *Flowchase*, together with in-class pronunciation learning activities, contribute to the development of English pronunciation. On the other hand, the study is also aimed at grasping participants' views about the project and at contrasting whether these views are aligned with any potential improvement in pronunciation development. Hence, the present chapter seeks to answer the following research questions (RQ):

- RQ1: To what extent does autonomous pronunciation practice through *Flowchase*, supplemented with in-class learning activities, lead to receptive pronunciation development?
- RQ2: What are EFL learners' views about pronunciation practice through *Flowchase* together with in-class learning activities?
- RQ3: To what extent do learners' views about *Flowchase* practice determine their pronunciation development?

3. METHODOLOGY

In order to answer these three RQs, a mixed-methods between-group study was set up: a quantitative approach was adopted through the administration of pronunciation pre- and post-tests, whereas a more qualitative approach was also implemented with the critical reflection task.

3.1. PARTICIPANTS

A total of 32 EFL learners participated in the study, who were at their turn pooled from two intact university classrooms. All of them were Catalan / Spanish learners of English enrolled in the Primary Education degree. They were taking the compulsory course on "English for Teaching Purposes", which is taught during the second semester of the first year and it is a six-credit course. Participants were, on average, 19 years

old at the time data were collected and, according to the *Oxford Placement Test* (Allan, 2004) –which was administered at the beginning of the course as a levels test–, the average level was A2-B1, with some students reaching the B2 level.

One intact class (*n*=19) was allocated to the experimental group (EG) and the other class (*n*=13) was assigned to the control group (CG). Both groups followed the same syllabus revolving around a textbook (see section 3.2.1), the difference between the two groups being that the EG interacted with *Flowchase* extramurally and did explicit pronunciation practice in class, while the CG did not receive explicit instruction on how to foster their English pronunciation. Both groups, though, did complete the pronunciation pre- and post-tests to assess any gains in their receptive pronunciation competence.

3.2. Instruments

Different instruments were used: some were specifically designed for the purpose of the study, while others were coursebooks or already existing materials, not originally devised for research aims.

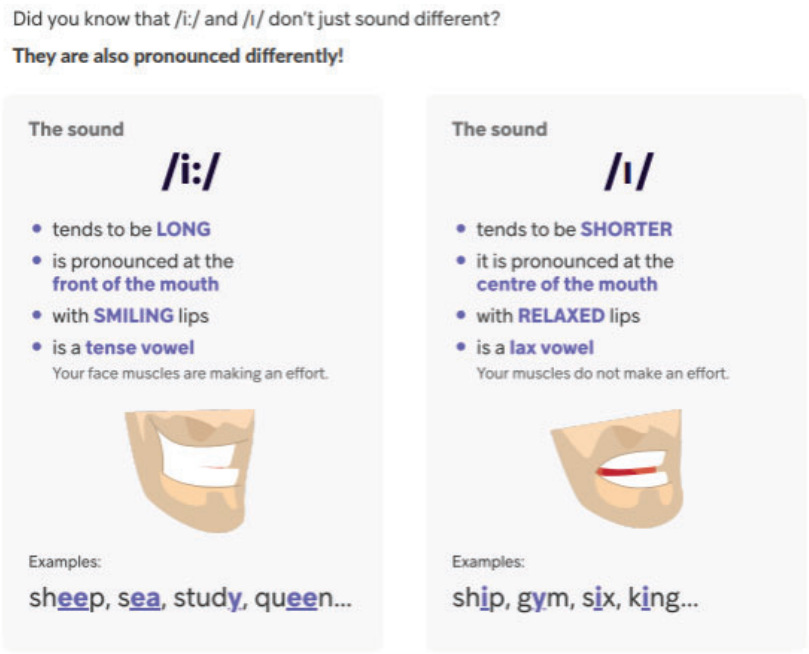
3.2.1. Textbook

The textbook that was used in the present study was *Straight to First* (Norris, 2016), which is meant to prepare students for taking the First Certificate Exam and it is thus aimed at the B2 level, a bit above the average proficiency level of the participants. It is a traditional textbook which is mainly grammar-focused and it counts with many exam-like exercises to practice for the First Certificate Exam. However, although such exam has a speaking part in which pronunciation is one of the criteria taken into account, there was no clear focus on pronunciation in the textbook, and this had to be provided by the teacher if deemed necessary. Hence, seeing that pronunciation was not fostered in the textbook, alternative ways of practicing it were needed.

3.2.2. Flowchase

As has been pointed out, *Flowchase* is a technological app, available from Google Play Store and App Store, which aims at improving EFL learners' pronunciation skills. It is divided into five units targeting both segmental and suprasegmental features: focus words (i.e., words that are pronounced louder than others), word stress, the contrast between /iː/ and /ɪ/, '-ed' ending (targeting the phonemes /t/, /d/ and /ɪd/), and the contrast between /ɔː/ and /əʊ/. However, for the purpose of the study, we focused on segmental features and three units were completed only: the two vowel contrasts and the '-ed' ending unit.

FIGURE 1. *Example of a tutorial available on Flowchase*



Source: Flowchase.app

In each of these units, app users are exposed to a series of tutorials giving theoretical information about the target feature, instances of words containing the target phonemes, and demonstrations of how lips should be placed at the moment of articulation (see an example in Figure 1). These tutorials helped to understand what students were practicing and

why some aspects of pronunciation were more relevant than others. At the end of each tutorial, there was a quiz for students to check what they had understood from the lesson.

Apart from the above-mentioned tutorials, the app also had some practice activities, both listening and speaking, which participants could attempt multiple times. On the one hand, listening tasks were designed to help app users to notice the differences between given phonemes. They had to listen to the recordings and do some exercises (e.g., multiple-choice questions, selecting the right pronunciation for a given word, spotting the odd one out, etc.) to verify their understanding. On the other hand, all speaking activities followed the same format and consisted in imitating the target-like pronunciation of the words or phrases that the app presented. Participants had to record themselves uttering the target structure and their recording was analysed by the app, which gave immediate feedback on the learners' productions. This feedback consisted in both congratulating the students on the words or phonemes that were accurately pronounced or, in contrast, pointing out where the pronunciation mistake was. In the latter case, app users could compare their production with the target one, and could then rerecord their speech sample until they got positive feedback.

3.2.3. In-class pronunciation practice

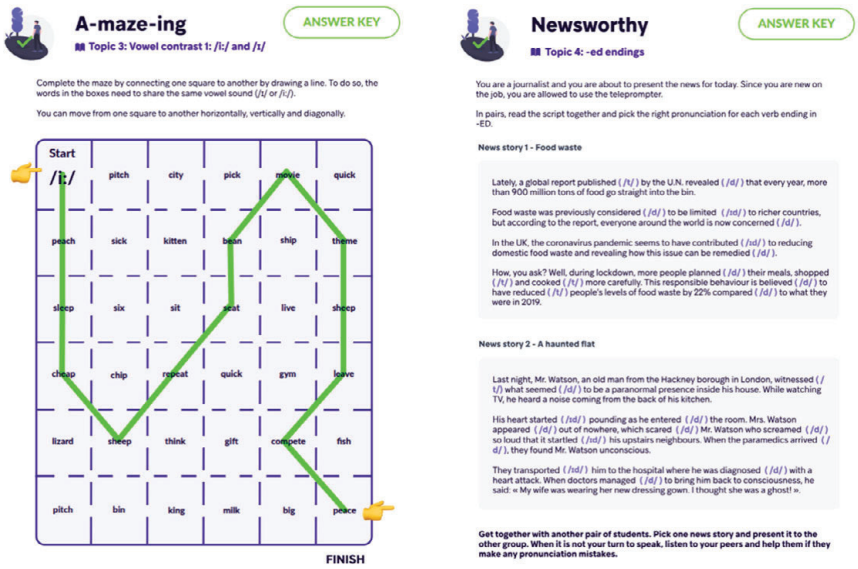
Autonomous practice through *Flowchase* was supplemented by in-class activities aimed at consolidating the contents presumably acquired through the app. These in-class activities were of different nature, but all of them contained extra practice with the target phonemes, and were designed to make students improve their receptive pronunciation skills (i.e., they did not involve much production of isolated words or phrases). Among others, the range of activities included (see Figure 2 for two examples of in-class activities):

- Live Kahoot! quizzes in which learners had to match words containing the target phonemes with their correct pronunciation.
- Pronunciation mazes in which participants had to connect adjacent words with the same phonemes.

– Activities that required students to phonetically transcribe target sounds.

– Cracking-the-code activities during which participants had to select the words that were pronounced with the target phonemes.

FIGURE 2. *Examples of in-class pronunciation activities*



Source: Flowchase.app

3.2.4. Pronunciation pre- and post-test

The pre- and the post-test were identical so that pronunciation gains could be computed. There was a total of 72 items: 28 target words (TW) and 44 distractors. All TWs were found in the app and in the in-class activities, and targeted all the phonemes that students had worked on. There were four TWs per each phoneme or combination of phonemes (/iː/, /ɪ/, /t/, /d/, /ɪd/, /ɔː/ and /əʊ/). Out of these 28 TWs, half of them were correctly pronounced by an English native speaker whereas, in the remaining half, the target sound was mispronounced. Forty-four distractors were also added so that learners could not identify the TWs at pre-test time; these distractors did not contain any of the target phonemes, and half were mispronounced while the other half were not.

The pre- and post-test assessed participants' receptive pronunciation skills and, more specifically, aural form recognition. Learners had to listen to an audio file reading out loud the TWs and distractors, and then decide if the word was correctly pronounced or not. If they thought the item was pronounced accurately, they had to check the 'YES' box, whereas, if they thought the opposite, they had to check the 'NO' box. All items were read out loud once only, they were numbered so that participants did not get lost during testing, and there was a five-second interval between items; hence, the test lasted eight minutes and 54 seconds in total.

3.2.5. Critical reflection task

The EG participants, those that had interacted with *Flowchase* and done the in-class activities, also completed a critical reflection task at the end of the project. In this task, they were asked to answer questions about:

- Perceived difficulty of the target sounds (i.e., which one they had found to be the easiest or the most difficult)
- Their opinion about *Flowchase*
- Usefulness of the app and the in-class pronunciation activities
- Feeling of learning through comparing the scores they thought they had obtained in the pre- and in the post-test
- Comparison with previous and present pronunciation teaching approaches

Learners were asked to write an essay answering all these questions, which needed to be between 140 and 190 words long, although more words were allowed if participants felt they needed more space to address all the questions.

3.3. Procedure

The study took place throughout eight weeks, and it started halfway through the academic semester, once students were familiar with course dynamics and the practitioner. At the beginning of the study, the two

groups (CG and EG) did the pronunciation pre-test, with the teacher in charge of administering and invigilating it. It was collected immediately afterwards and scored by the researchers, without letting students know about their answers. In that same session, EG participants were introduced to *Flowchase* and instructions for the project were provided. All questions that students had were answered and they were told that participation in this project would count as part of their final grade, so that they felt more involved in the activities.

In the following six weeks, students were asked to interact with *Flowchase* at home, fostering their language learning autonomy. They were instructed to work on a given phoneme each week and to do the activities that *Flowchase* had designed targeting that sound (note, though, that for time constraints each unit in *Flowchase* was done over two weeks). They did so at their own pace, but the course practitioner had access to their *Flowchase* logs and could verify that all participants were doing the activities as instructed; however, she could not monitor the degree of involvement in such activities. EG participants were given one week to read the tutorials and do the *Flowchase* activities, which approximately took them half an hour. At the beginning of next week's class, the teacher did two in-class activities, which were done individually or in small groups and lasted approximately 30 minutes, too. These were corrected immediately afterwards, and the teacher addressed all the questions that participants had regarding the target sounds. One week after the end of the last unit (i.e., during the eighth week of the study), all participants (CG and EG) did the pronunciation post-test, using the same audio file that was used in the pre-test. In that same session, the EG was also given around 45 minutes to do and hand in the critical reflection task.

On a different note, it is important to remember that, throughout the study, both the CG and the EG continued working with the textbook. Since the coursebook did not have any pronunciation section and the teacher did not engage in any pronunciation-related practice besides *Flowchase* and the in-class learning activities, the CG did not explicitly interact with pronunciation during the project.

3.4. Data scoring and analysis

For the purpose of the present study, data from the pre- and post-tests and the critical reflection task were analysed. The in-class activities and *Flowchase* logs were not taken into consideration, as the former were not devised to be part of the assessment process, and the teacher did not have much control over the latter. Regarding the pre- and post-tests, only the 28 TWs were analysed (i.e., those words appearing in the app) whereas distractors were not scored in any way. The pre- and the post-test scoring procedure was the same: one point was awarded for each correct answer (i.e., an affirmative answer to correctly pronounced TWs and a negative answer to mispronounced TWs), since correctly identifying a mispronounced word also shows some degree of knowledge; no points were deducted for incorrect responses. Then, the total number of correct answers was computed (the maximum score being 28) and, afterwards, relative gains in pronunciation development were calculated applying the formula shown in Graph 1:

GRAPH 1. *Relative gains formula*

$$\text{Relative gains for participants} = \frac{N \text{ of TWs learned}}{N \text{ of items tested} - N \text{ of TWs known}} \times 100$$

Source: The authors

where: '*N* of TWs learned' was the number of TWs that were identified correctly in the post-test but not in the pre-test; '*N* of TWs known' being the number of TWs correctly identified in both the pre- and the post-test; and '*N* of items tested' was always 28.

Relative gains were used in the analysis since they are a more fine-grained measure of development, as they control for the number of items already known at pre-test time and thus take into account the room for improvement each participant has. In order to answer RQ1, the pre- and post-tests scores of both groups were compared across testing times using Wilcoxon signed-rank tests, since data were not normally distributed and the sample was reduced. Then, relative gains were compared between groups using a Mann-Whitney *U* test, given that

there was a small number of participants in each group –data, though, were normally distributed.

As regards RQs 2 and 3, involving the critical reflection task, EG participants' essays were analysed *ad hoc*, and quotes were extracted to represent the main points verbalized by EFL learners (RQ2). Moreover, the essays were classified as expressing a positive, negative or mixed view of the project. Then, to address RQ3, relative gains were compared depending on EFL learners' views of the project; to do so, a Kruskal-Wallis test was used.

4. RESULTS

As for RQ1, Table 1 shows the descriptive statistics of pre- and post-tests, divided by group. As can be seen, the scores of both groups were higher in the post-test than in the pre-test. A pair of Wilcoxon signed-rank tests showed that the EG experienced a significant improvement from the beginning to the end of the intervention (Z=128.5, p=.002) whereas the CG did not make such a significant improvement (Z=50.5, p=.113).

TABLE 1. *Descriptive statistics of pre- and post-tests, divided by group*

Group	Pre-test				Post-test			
	M	SD	Min.	Max.	M	SD	Min.	Max.
EG	16.47	3.27	12	22	18.47	2.76	15	24
CG	15.69	3.35	13	22	16.85	2.67	14	23

Note: The maximum score in the pre- and post-test was 28.
Note 2: EG = Experimental group | CG = Control group

Source: The authors

When relative gains were compared across groups, it was seen that they did not differ significantly, according to the results of a Mann-Whitney U test (U=86.5, z=25.99, p=.150). However, the EG got higher relative gains at the descriptive level (see Table 2 for the descriptive statistics).

TABLE 2. *Descriptive statistics of relative gains, divided by group.*

Group	Relative gains				
	M	SD	Min.	Max.	95% CI
EG	13.68	14.55	-15.38	35.71	[6.67, 20.69]
CG	5.90	18.08	-33.33	43.75	[-5.02, 16.83]
Note: Relative gains are shown in percentages. Note 2: EG = Experimental group | CG = Control group					

Source: The authors

Regarding RQ2, the EG learners' critical reflection tasks were analysed, and quotes extracted and categorised. Participants' reflections were grouped into four main categories. First, there were those participants who pointed out the usefulness of *Flowchase*:

> The app helps you to put into practice the oral aspects that are previously worked on, and this has made my pronunciation significantly better.
>
> Consequently, has *Flowchase* helped me to improve my pronunciation? Absolutely yes! This app is a tool to devote time every week and work without realizing it.
>
> To sum up, after retaking the test we did at the beginning of the course, I think *Flowchase* is a very useful application for learning how to pronounce correctly.
>
> Class activities have helped me to improve my pronunciation, but not as effectively as the *Flowchase* app.

Similarly, the in-class pronunciation activities were also thought to promote pronunciation development:

> I have to say that the exercises we did in class, like Kahoot! and exercises in pairs, reinforced the things that we had learned through *Flowchase*.
>
> I would like to add that working on *Flowchase* topics in class has helped me to practice more and to solve doubts with my English teacher.
>
> Overall, the exercises done in class were the ones which helped me to learn more, as they were more real, and I had direct access to the teacher; more than those in the app.

However, it is also true that some students did not feel that enthusiastic about the project. Some commented that *Flowchase* presented technical problems that hindered learning:

> *Flowchase* can be a good option to improve your pronunciation, but sometimes this app has problems and can make you angry.
>
> Sometimes, when I said something wrong or any word or sentence that did not match what the application was asking me to say, it [*Flowchase*] counted it as good.
>
> I found the exercises in the app useful, but you have to be careful because sometimes you did not say anything, and it [*Flowchase*] counted it as good.

In connection with this, there were some EG learners that did not like the project and felt skeptical about *Flowchase*:

> *Flowchase* has helped me to learn less pronunciation, because my teacher, if I pronounced something wrong, corrected me in a better way than what the app did, and did not make me repeat the same phrase many times.
>
> Personally, I always prefer someone real than a machine because teachers are closer to their students. In my case, I have learned more pronunciation with my teachers than with apps.
>
> In my opinion, this pronunciation app has not helped me enough. Sometimes, it was fun, but other times the app did not work well. Actually, when I finished all the units, I did not feel any big change in my pronunciation.

Finally, focusing on RQ3, the opinions given through the critical reflection task were classified according to whether they expressed a positive, negative or mixed view of the project. There were nine students (47.4%) who had a positive view, whereas four (21%) only pointed out negative reasons, and the remaining six (31.6%) expressed mixed views. Then, their relative gains were compared (see Table 3 for the descriptive statistics), and a Kruskal-Wallis test revealed no significant differences depending on EG participants' views [$H(2)=1.112$, $p=.573$]. Moreover, pairwise comparisons did not reveal any differences between pairs of groups (all *p*s between.890 and 1).

TABLE 3. *Descriptive statistics of relative gains, divided by Flowchase view.*

View	Relative gains				
	M	**SD**	**Min.**	**Max.**	**95% CI**
Positive	10.35	10.31	-9.09	25	[2.42, 18.28]
Negative	13.42	25.19	-15.38	35.71	[-26.66, 53.50]
Mixed	18.85	12.61	0	33.33	[5.62, 32.09]
Note: Relative gains are shown in percentages.					

Source: The authors

5. DISCUSSION

The present study was aimed at developing EFL learners' pronunciation through the use of an innovative approach like the *Flowchase* app, together with in-class pronunciation practice. The results showed that there were significant differences between the beginning and the end of the intervention in the EG, but not in the CG, which was somehow expected. In this respect, the EG focused explicitly on the target skill and spent more time on the task, which has been typically shown to lead to more learning (Godwin et al., 2021). EG participants were involved in pronunciation practice and were given personalized immediate feedback on how good or bad their pronunciation was, all of which are thought to promote learning. Similarly, they did the in-class activities and got feedback by the course practitioner, both of which sought to consolidate the knowledge presumably acquired during the at-home study week. Hence, all these activities were specifically designed to gauge some kind of improvement in learners' pronunciation, so it is not surprising that their scores in the post-test were significantly higher than in the pre-test. In contrast, the CG did not receive extra practice and was not exposed to pronunciation activities (the coursebook was mainly grammar-oriented, did not have a section on pronunciation and the course practitioner did not focus on this skill either), so there was no reason to expect that they would improve at the end of the intervention. Still, at the descriptive level, the scores from both groups were higher in the post-test as compared to the pre-test. This would be somehow surprising regarding the CG, but could be explained by the test effect: it might be that, when completing the pre-test, students from

both groups were confused by mispronounced words, especially if they had some degree of metalinguistic awareness and were familiar with the correct pronunciation. Then, it may be that they paid more attention to these weirdly pronounced words and looked them up at home.

However, when the relative gains were compared across groups, no significant differences were observed. This first shows that the combination of *Flowchase* autonomous practice plus in-class activities was not as beneficial as expected, contradicting previous studies on the subject matter (Cordier, 2022). The lack of significant differences between groups could be explained by a set of factors. To start, as the students themselves pointed out, the app presented some technical problems and the feedback it provided was not always accurate, which has been identified as one of the main drawbacks of AI-generated feedback (Cucchiarini et al., 2009). It could thus be the case that participants in the EG learned in the wrong way, that is, that they thought some mispronounced words were actually well-pronounced because the app gave them the wrong feedback. In the same line, they also pointed out that the app failed to provide any feedback in some cases and it even crashed from time to time. Hence, this could discourage students from interacting more profoundly with the app and make an extra effort to learn. In connection with this, it was not possible to monitor what student did at-home with *Flowchase*, since researchers and teachers had access to students' logs, but such logs did not provide reliable information about the way EG participants had interacted with the app. To continue, another reason why EG learners did not make the most out of the project could be the little time that was actually devoted to pronunciation learning. Although, as has been pointed out, explicit attention was devoted to the target skill, at-home pronunciation practice only lasted half an hour per week approximately, while the in-class activities lasted roughly the same. Hence, EG participants spent around 60 minutes per week (for a total of six hours) working on pronunciation, and this may not be enough to grasp some kind of improvement on the post-test, since pronunciation development tends to be rather slow (Lee et al., 2015). Last but not least, it is also possible that the test could not capture more development since there was a partial mismatch between testing and

practice activities. Most exercises that participants did through the app were productive, as they asked learners to imitate target sounds, words or phrases, whereas the test was only aimed at assessing receptive skills (i.e., aural form recognition), which were not explicitly practiced during the project. In fact, none of the in-class activities or *Flowchase* tasks resembled the test, and EG learners were not explicitly trained on the task. Consequently, had a productive test (e.g., an elicited imitation task) been used, higher gains could have been probably grasped.

In contrast to these more neutral results, EG participants were quite enthusiastic about the project and *Flowchase* (i.e., 79% of EG participants had either positive or mixed views about the app). They mostly claimed that the project was a good way to improve their pronunciation, although they were probably unaware of the actual empirical results found in RQ1. However, it should be borne in mind that their feeling of learning was partially matched with actual results, since EG's scores in the post-test were significantly higher than those in the pre-test, showing some degree of awareness. It could be that they found the app innovative since pronunciation is barely tackled in the teaching of EFL in Spain, and this was a novel experience for most of them, if not all. However, in relation to the app itself, participants were also aware of the technical problems it presented and how these hindered pronunciation learning, mainly pointing out the provision of inaccurate feedback. As a result, some claimed that the in-class activities were those that truly assisted them in developing their pronunciation. In connection with this, it could be that these learners relied a lot on the course practitioner and saw her as an expert and guide. As they were low-proficient learners – with an A2-B1 level–, they may have needed more guidance than what the app provided and really valued the figure of the teacher, from whom they could learn more easily, since this is the way they have been taught EFL during their school years. Finally, it could also be that Flowchase promoted learners' agency and autonomous learning, more than their metalinguistic awareness (Calvo Benzies, 2017; Gkonou, 2014).

As regards the third and last RQ, we did not find any significant differences between relative gains depending on EG participants' views of the project and the app. First, we need to bear in mind that the sample

was very much reduced, and it is quite difficult to find significant differences with such a small sample, unless they are very notorious. Further, this shows that learners interacted with the app and the in-class activities in a similar way, regardless of their opinions. In addition, since the critical reflection task was addressed to the same course practitioner who carried out the project, it may be that learners were more reluctant to express their concerns about the project and their views were thus positively biased, so more data using *Flowchase* would need to be collected to corroborate these enthusiastic views. Something that deserves further attention is the fact that those EG participants who put forward some negative reasons (i.e., those that were labelled as having a negative or mixed view) were the ones that obtained higher relative gains. This could be explained by the fact that they might have been more aware of accurate pronunciation of TWs, and could thus spot app-provided inaccurate feedback more straightforwardly, leading to a more reluctant use of the app.

6. CONCLUSIONS

The present study has shown that pronunciation can be indeed trained in the EFL classroom through autonomous practice and in-class activities. However, the approach that was chosen was not as beneficial as expected, since significant differences between groups failed to be found. This contrasted with the rather positive views learners had of the experience, although they were also aware of some of the flaws the intervention presented. In this respect, alternative ways of developing pronunciation would need to be assessed in prospective studies, so that students make the most out of their instruction time, which tends to be rather limited.

That said, the study presents some limitations, which need to be acknowledged. First, as has been pointed out, the app's technical problems could have hindered pronunciation development and the learners' commitment to and motivation with the task. Second, better tests which fully match practice and assessment should be developed, so as to be able to capture learners' true improvement, if any. In addition, it could

have been a better idea to collect EG learners' views through an anonymous questionnaire, rather than a reflection task addressed to the same teacher who had taught the course. Last, a replication study with a bigger sample would be needed to (dis)confirm the present results. In this respect, in future studies, it would be informative to include more experimental conditions to further assess what it is that leads to pronunciation development (i.e., *Flowchase* practice, in-class activities or none). Similarly, the use of receptive and productive (e.g., elicited imitation tasks) tests would also assist in evaluating progress. Finally, using more refined versions of *Flowchase* and incorporating peer- and self-evaluation of one's or others' pronunciation might also help to develop learners' metalinguistic awareness and, possibly, their pronunciation skills.

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