Teaching Englishturn-taking and pausing tactics:a practical trend for the promotion of students’ performance in foreign classes

Abstract

The effective use of a language fosters successful connections among individuals worldwide, as it enables mutual understanding. This study pursues to measure the effect of teaching on the performance of Sudanese EFL students producing turn-taking and unfilled pauses as decisive temporal cues in everyday conversations. Specifically, the study seeks to provide evidence regarding the efficacy of training in enhancing the application of conversational strategies in the students' natural speech. The study employed a communicative language teaching approach, which prioritizes constant practice and proficient speaking skills as fundamental principles for learners. Data was collected through pre-and post-tests allowing for an evaluation of the students' performance in producing turns and pauses in their speech before and after the training. Moreover, native English speakers participated in the same tests related to turn-taking and pausing for comparative analysis. The results indicated that Sudanese English students benefited from training that improved their capacity to produce adjacent unfilled turn-taking in their speech. Notably, students showed more significant progress in initiating turn-taking than in responding with the second turn. Furthermore, the students generated longer pauses which likely due to their slower speaking pace in natural conversation. Increased engagement in authentic conversations is essential for enhancing the proficient use of appropriate turns and accurate pauses in their oral communication.

Keywords: Constant practice, turn taking, pausing duration. Unfilled pauses

1. **Introduction**

Verbal communication skills are fundamental components of intelligible natural speech. These skills serve as crucial properties for effective communication, enabling learners to establish connections with individuals across the globe. Successful interactions foster positive relationships and enhance social and diplomatic ties among participants. Turn-taking is a crucial element of conversation, wherein participants alternate between the roles of speaker and hearer, thereby fostering a dynamic exchange of ideas (Lu et al., 2022). As dialogue unfolds, both parties utilize various functional words that influence the interaction's progression (Ehret et al., 2023). The essence of turn-taking lies in a speaker's awareness of when their turn concludes, allowing another participant to begin speaking. This mechanism is essential for maintaining the flow of conversation and facilitating the exchange of thoughts (Dozie et al., 2023). Weingartová et al. (2014) note that the syntactic and semantic structures of turns enable listeners to predict the conclusion of a speaker's turn allowing for seamless transitions. Additionally, turn-taking carries prosodic significance. In conversational exchanges, speakers and listeners employ turn-taking expressions to convey requests, commands, offers, questions, exclamations, gratitude, and enthusiasm, among other sentiments. However, learner ofEnglish as a foreign language (EFL) frequently encounter problem in utilizing these expressions effectively. Many learners struggle with the manipulation of turns, leading to misuse, overuse, confusion, or an inability to select appropriate expressions for maintaining conversation (Kendrick, Holler, & Levinson, 2023). Furthermore, adjacent turns represent the most common exchanges between interlocutors, categorized into pairs where the first turn is typically initiated by the speaker and the second by the listener. For instance, in conversational contexts, participants engage in various functions such as asking/answering, greeting, offering/requesting, and apologizing. A comprehensive understanding of the grammatical structures associated with turn-taking is essential for EFL students, as it enables them to apply these expressions appropriately within the correct contexts. The formal application of turn-taking structures in oral interactions is often less prevalent, as participants may tend to transition from simpler structures to more complex forms. Students ought to understand the various types of conversational turns and their appropriate applications in different contexts (Ziembowicz 2021). Young (2015) explicitly instructed students on the use of prefabricated lexical chunks to enhance the model of formulaic competence within communicative competence. In this context, students were encouraged to learn functional phrases aimed at improving their interactional competency in taking turns. The findings indicated that students utilized an integration framework of turns, continuously collaborating to establish a shared framework for conversational elements such as questions and eye contact.

Definition of pauses***:*** Llisterri (2021), Laver (1994) and Duez (1982) characterize silent, empty, or unfilled pauses by analyzing the amplitude of the speech signal. Typically, a silent pause is recognized by the lack of significant amplitude in the speech signal or the oscillographic representation. Pascual, Soler & Salas (2023) explain that in conversation and natural speech a pause refers to moments of silence created by a speaker, often utilized to contemplate or formulate their next statement. Duez( 1982) Silent pause: any interval of the oscillographic trace where the amplitude is indistinguishable from that of the background noise. In some cases, it includes the closure of the subsequent stop consonant, but is never shorter than a minimum duration taken to be equal to the average duration of an intervocalic stop (produced by the given speaker) increased by four standard deviations. These threshold values range from 180 to 250 msec, depending on the speaker.

Types and duration of pauses: research on pausing typically categorizes pauses into two distinct types: filled and unfilled pauses. Filled pauses are characterized by the use of mid-central vowels or unstressed schwa sounds, such as [ə], along with variations like interjections (e.g., "əm" and "er"). In contrast, unfilled pauses denote silent intervals that speakers employ as a strategy to organize their thoughts while speaking. Llisterri (2021) found that most research on silent pauses employs specific thresholds, particularly for brief pauses, primarily for practical considerations. Pauses shorter than 200 ms are challenging to differentiate from occlusives (unreleased stops or the closure of the following stop consonant), and accounting for them necessitates considerable manual effort. Nonetheless, silent pauses as brief as 60 ms fall within the range of the silent portion of occlusives. The presence of very short pauses has been acknowledged since at least 60 ms, although there is an implicit assumption that they are infrequent and primarily serve physiological and respiratory functions. Despite the absence of large-scale studies confirming that they lack structural or syntactic significance. Laver (1994) defines a silent pause within a speaking turn as any silence lasting 200 ms or longer. This minimum threshold is established because the silence associated with the closure phase of a voiceless stop segment can occasionally extend to approximately 180 ms, depending on the overall speech rate. Hunt (2023) and Hoffman (2019) found that pause duration of unfilled pauses is generally accepted to range from 200 to 400 milliseconds, with an optimal measurement threshold between 250 and 300 milliseconds. Spontaneous speech tends to exhibit a higher frequency of unfilled pauses, which are typically shorter in duration. Notably, pauses exceeding 400 milliseconds are often interpreted as indicators of a disruption in fluency.

Acoustic analysis of pauses: acoustic analysis of pausing tactic and acoustic timing is crucial for understanding turn-taking in conversations. Mismanagement of these elements can lead to misunderstandings hindering effective interaction between speakers. In scenarios marked by high competition, urgency, or disagreement, both speakers and hearers must navigate local transition points, such as pauses to facilitate turn-taking. In these contexts, a new opportunity for turn-taking emerges, prompting interlocutors to adjust their contributions to the ongoing dialogue, which may involve utilizing adjacency pairs or relinquishing their turn entirely (Kendrick, Holler, & Levinson, 2023 and Wang et al. 2023).Coulange, S. Tsuneo Kato. T. (2023) also found that the duration at which such an interruption is considered a pause varies significantly across studies, typically ranging from 100 to 400 milliseconds. This study aims to measure the challenges learners encounter when employing speaking strategies such as turn-taking and pauses for communicative purposes in EFL classrooms in Sudan. Specifically, it seeks to examine the effect of training on enhancing learners' performance.

1. **Methods used**

The study employed an experimental design conduct of measurement that involved administering pretests and posttests. Participants completed identical test versions to establish a baseline measurement reflecting their prior knowledge. Following the pretest, the participants received intervention which finished in 10 weeks prior to the posttest.

1. **Participants**

The study encompassed 32 university students pursuing a bachelor's degree in English language. At the sixth semester, these students were engaged in foundational aspects of English, including listening, reading, writing, and speaking. Their interaction with native English speakers was minimal, highlighting a significant lack of exposure to authentic language use. Nevertheless, they gained some level of familiarity with native English through recorded listening exercises incorporated into their Bachelor of Arts curriculum.

1. **Teaching phases**

The study adopted the communicative language teaching approach. Communicative teaching bases on the theory of communicative approach. The approach is interested in developing proficiency and fluency in language usage along with appropriateness to various social and contexts where language knowledge is required (Qasserras, 2023). Interestingly CLT emphasizes constant practice and skilful speaking abilities as the major principles for students.In this study the involvement of the communicative teaching is intended to develop the students through its efficient activities role-playing of various everyday situations and asking/ answering, etc.Thus, theactivities of CLT greatly fit different situations where students can learn the usage of turn taking and pausing tactics in a natural speech.

*Training and teaching material:*Participants were taught to converse in English using turn taking phrases in different contexts. Training extended for 10 weeks in which students learnt how to turn takings to apologize, offer, request, command and express exclamation and learn how to produce acoustically acceptable pause duration, etc. Moreover, shift from controlled tofree practice develop confidence using language in real situations. The purpose was to see how students learn the functions of these phrases using them correctly and appropriately in their oral communications.

1. **Testing material, testing process and scoring procedures**

*The testing material*: test material encompassed two primary domains: (i) the utilization of adjacent turn-taking within interactions and (ii) the acoustic examination of the duration of unfilled pauses produced by the students. These pauses are regarded as significant temporal indicators that function in conjunction with turns in authentic speech. The test items exclusively featured adjacent turn pairs in both the pretest and posttest, albeit with distinct materials utilized in each assessment.

*Testing procedure:* In terms of the testing procedure, students were instructed to carefully read the test instructions prior to each assessment. Following this, they were required to meticulously review the printed conversations to ensure comprehension. Subsequently, they filled in the blank spaces with the appropriate turn phrases selected from a list of four options. To enhance the authenticity of the test, the layout was designed to resemble natural speech, drawing from conversational contexts.

*Scoring procedure*: the test includes If student answered all questions correctly he gets a full answer of 20 marks.

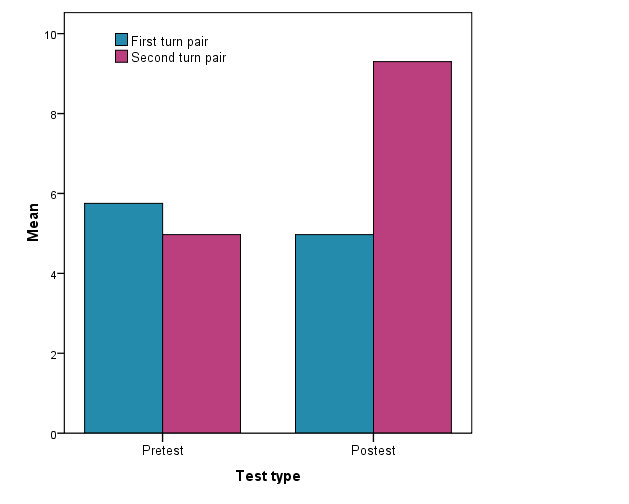
1. **Acoustic analysis of pauses**

The study focused on the measuring the unfilled pauses that occur between spoken utterances. These pauses were identified and annotated on a text grid in Praat software, which is designed for this purpose where users can read, analyze, and extract the duration of pauses from wave files (Boersma &Weenink, 2022; Öktem et al., 2021). The wave files included recordings of conversations between Sudanese learners of English and a native English speaker. The recordings took place outdoors rather than in a language laboratory to ensure that the sound quality reflected is natural speech. The objective of this study was to evaluate the accuracy of pause durations used by Sudanese speakers in comparison to those of a native English speaker, thereby assessing the naturalness of their speech patterns.

1. **Results and Discussion**

**8.1 Results of adjacent turn taking pairs**

Figure (1):adjacent pair of turn taking produced by students broken by pretests and posttest



As figure (1) shows students exhibit higher overall mean scores concerning adjacent turn-taking, which encompasses first turn taking pair produced by the speaker and second turn taking pair generated by the hearer. In the pretest, the total correct score for the first turn pair is recorded at 5.75, while the second turn pair scores is4.97. In contrast, the posttest results show an increase in total mean correct scores, with students achieving 9.09 for first turns and 9.30 for second turns. Notably, the individual scores of students in the pretest varied from 1 to 7, corresponding to 1% to 35% for both first and second turn-taking tasks. Conversely, in the posttest, individual scoresimproved significantly, ranging from 7 to 12, which correspond to 35% to 70%. These findings indicate that the students benefited from the training. Despite this progress, the average performance of students in the posttest suggests that students could attain even higher scores with additional training.

* 1. **Analysis of Between, Within and Breath Pause Duration**

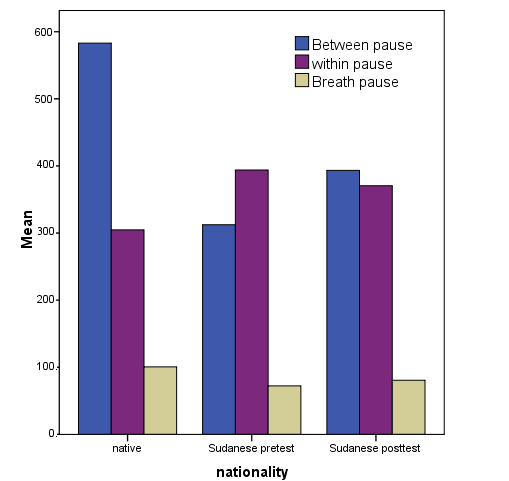
In this section a comparison of total mean duration of unfilled pauses (Between, Within and Breath pauses) produced by 32 Sudanese students and 2 native English speakers in the same spoken discourse.

Figure (2): Total mean of pause duration of 32 Sudanese students and 2 native English speakers (a control group). Pause duration of Sudanese are broken by pre and post tests

Figure (2) shows the total mean duration of between, within, and breath pauses produced by Sudanese students of English during the pre- and post-tests. Specifically, the students exhibited lower mean durations in the pre-test, measuring 0.312 ms, 0.394 ms, and 0.720 ms, compared to 0.383 ms, 0.370 ms, and 0.810 ms in the post-test for the three types of pauses, respectively. The results indicate that the students achieved a relatively acceptable mean duration for between and breath pauses in the post-test, as the duration for the between pause (0.394 ms) approaches the optimal threshold of 400-600 ms. Similarly, the mean duration for breath pauses falls within the acceptable range of 90-180 ms, although the overall mean score for this type of pauses remains notably high. In contrast, native English speakers demonstrate optimal pause durations ranging from 400 to 600 ms, with values of 0.300 ms and 0.100 msfor between, within, and breath pauses, respectively. These findings suggest that the students benefited from the training they received, as evidenced by their relatively shorter pauses in the pre-test; however, their pauses still fall slightly short of the native optimal duration (400-600 ms). Additionally, there is a statistically significant positive correlation regarding the mean durationof between groups, with a p-value of (0.01) for between pause type and (0.05) for within pause type. However, there is no significant between group difference between the means of breath pauses; p-value ( 0.22) exceeding the proposed value (0.05). The correlation suggests a consistent pattern in the students' performance regarding the production of between pauses. The data suggests that students may require additional practice to enhance their pause production duration, thereby achieving a more natural speech. The tendency of students to shorten pause duration cannot be attributed to the influence of the learners' first language, as Arab learners are familiar to the property of lengthening (Eren, Kılıç, and Bad (2020 and Ali 2011).

1. **Conclusions and recommendations**

The aforementioned findings indicate that students appear to gain advantages from training that enhances their ability to produce English adjacent turn-taking in their natural speech. Nevertheless, when examining the production of first and second turn-taking pairs, it is evident that students demonstrated greater development in generating the first turn-taking than in the second turn pair.

Students appear to gain advantage from training that improves their ability to produce various types of pauses; however, the duration of these pauses often falls below the optimal threshold, particularly concerning the *duration between pauses*. This shortfall is likely a result of inadequate practice. Consequently, it is important for students to engage in additional practice to achieve a more acceptable duration of pauses.

Teachers should select an interesting and commonly used form of language as effective material. A form of language that is easy to learn and easy to teach finds correspondence from students.

1. **Further studies**

More research is requiredto address the teaching of turn taking and temporal cues in earlier stages of education such at these primary school. At these stages pupils enjoy active memory if they are exposed to good instructions.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

Answer = I declare it that no AI used such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

Option 2:

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Answer = In fact I rarely use them for grammar check.

Details of the AI usage are given below:

1. Grammar check

2.

3.

References

Ali, E. M. T. (2011). Speech intelligibility problems of Sudanese learners of English An experimental approach - Published by LOT Trans 10 3512 JK Utrecht e-mail: xxxx@uu.nl The Netherlands http://www.lotschool.nl C

Boersma, P., &Weenink, D. (2022). Doing phonetics by computer (Version 6.2.14) [Computer program]. Praat. <http://www.praat.org/>

Coulange, S. Tsuneo Kato. T. (2023) Pause position analysis in spontaneous speech for L2 English fluency assessment. 2023 Autumn Meeting of the Acoustic Society of Japan, the Acoustic Society of Japan, Sep 2023, Nagoya, Japon, Japan. ffhal-04253964

Dozie, C. P., Ekwuribe, C. F., &Ajileye, M. O. (2023). Turns, turn-taking, and or interruptions! apragmatic approach to discourse. International Journal of Scientific Research in Education, 16(4),439-446   
.

Ehret, J., Bönsch, A., Nossol, P., Ermert, C. A., Mohanathasan, C., Schlittmeier, S. J., Fels, J., &

Kuhlen, T. W. (2023). Who's next?: Integrating Non-Verbal Turn-Taking Cues for Embodied Conversational Agents. In International Conference on Intelligent Virtual Agents (pp. 23rd ACM International Conference on Intelligent Virtual Agents)

Eren O. Kılıç, M and Bad ,E. (2020) Read Speech Habits: Pause Patterns from a Cross linguistic Perspective: *The Reading Ma:ix: An International Online Journal Volume 20, Number 1,*

Hoffman, G. (2019). Evaluating Fluency in Human–Robot Collaboration. IEEE Transactions on Human-Machine Systems, 49, 209-2

Hunt, A. (2023) Pausing in American English: Documenting Native English Speakers' Pausing Patterns Brigham Young University

Kendrick, K. H., Holler, J., & Levinson, S. (2023). Turn-taking in human face-to-face interaction is multimodal: gaze direction and manual gestures aid the coordination of turn transitions. Philosophical Transactions of the Royal Society B, 378.

Lu, B.-R., Hu, Y., Cheng, H., Smith, N. A., & Ostendorf, M. (2022). Unsupervised Learning of Hierarchical Conversation Structure. In Conference on Empirical Methods in Natural Language Processing (pp. 5657-5670).

Pascual, M., Soler, O., & Salas, N. (2023). In a split second: Handwriting pauses in typical and struggling writers. Frontiers in Psychology, 13.

Qasserras, L. (2023). Systematic Review of Communicative Language Teaching (CLT) in Language Education: A Balanced Perspective. *European Journal of Education and Pedagogy* Vol 4|Issue (6)

Wang, Y., Liang, L., Zhang, Z., Xu, X., Liu, R., Fang, H., Zhang, R., Wei, Y., Liu, Z., Zhu, R., Zhang, X., & Wang, F. (2023). Fast and accurate assessment of depression based on voice acoustic features: a cross-sectional and longitudinal study. Frontiers in Psychiatry, 14

Weingartová, L. Churaňová, E. and Šturm, P (2014) transitions, pauses and overlaps:Temporal characteristics of turn-taking in Czech

Young D. (2015) A Conversation Analysis of the Acquisition and Use of Turn-taking Practices in an English Discussion Class

Ziembowicz, K., Roszczyńska-Kurasińska, M., Rychwalska, A., & Nowak, A. (2021). Predicting conflict-prone disputes using the structure of turn-taking: the case of Wikipedia. Information, Communication & Society, 25, 1987-2005. <https://doi.org/10.1080/1369118X.2021.1893875>

[Llisterri](https://joaquimllisterri.cat/home.html)J. (2021)  Methodological issues in the study of suprasegmentals**Departament de FilologiaEspanyola-** [**UniversitatAutònoma de Barcelona**](https://www.uab.cat/)

Duez, D. (1982). Silent and non-silent pauses in three speech styles. *Language and Speech, 25*(1), 11–28. <https://doi.org/10.1177/002383098202500102>

Campione, E., &Véronis, J. (2002). A large-scale multilingual study of pause duration. *Speech Prosody 2002*. Aix-en-Provence, France, 11-13 April 2002 (pp. 199–202). ISCA

Duez, D. (1982). Silent and non-silent pauses in three speech styles. *Language and Speech, 25*(1), 11–28. <https://doi.org/10.1177/002383098202500102>

Laver, J. (1994). [*Principles of phonetics*](https://books.google.es/books?id=KQMiFZPkDkYC). Cambridge University Press. <https://doi.org/10.1017/CBO9781139166621>

Duez, D. (1997). Acoustic markers of political power. *Journal of Psycholinguistic Research, 26*(6), 641–654. <https://doi.org/10.1023/A:1025008124631>

Table 1-ANOVA outcome

| ANOVA | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Sum of Squares | Df | Mean Square | F | Sig. |
| Between | Between Groups | 64545.688 | 2 | 32272.844 | 18.643 | .001 |
| Within Groups | 13848.857 | 8 | 1731.107 |  |  |
| Total | 78394.545 | 10 |  |  |  |
| Within | Between Groups | 6843.515 | 2 | 3421.757 | 4.322 | .053 |
| Within Groups | 6334.076 | 8 | 791.760 |  |  |
| Total | 13177.591 | 10 |  |  |  |
| Resp | Between Groups | 702.149 | 2 | 351.075 | 1.841 | .220 |
| Within Groups | 1525.623 | 8 | 190.703 |  |  |
| Total | 2227.772 | 10 |  |  |  |