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# Group Work in Zoom Breakout Rooms to Enhance English-Speaking Self-efficacy for Active Learning Activities

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**Abstract**

*The study aimed at analyzing the effectiveness of assigning students to work in groups using Zoom breakout rooms to enhance their speaking self-efficacy to participate in active learning activities in an online learning context. Thirty-six students of Diploma 3 of the Accounting Program attending English for Accounting course were purposively selected as the respondents of the study. The data were collected using a three-part questionnaire distributed electronically using Google Forms. The validity and reliability of the questionnaire were measured using Pearson correlation and Cronbach Alpha. The students reported that their sources of English-speaking self-efficacy were enhanced as they had opportunities to develop both mastery and vicarious experience of English speaking, received social persuasion in the form of encouragement and motivation from one another, and experienced lower speaking anxiety. The teaching strategy enhanced the students' English-speaking self-efficacy to participate in active learning activities to a moderate level. From being quiet and passive, they gradually transformed into active learners who could ask questions, chair discussions, answer questions, defend arguments, etc. It can be concluded that a group work in Zoom breakout rooms facilitated active learning activities as the students experienced opportunities to enhance English-speaking self-efficacy. There was a significant positive correlation between the use of group work in Zoom breakout rooms and students' self-efficacy to participate in active learning*

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*activities. Implications and limitations of this current study are presented, and suggestions for further studies are offered.*

**Keywords:** Active learning activities, group work, speaking self-efficacy, Zoom breakout rooms.

## 1. INTRODUCTION

Teaching online during the Covid-19 pandemic posed teachers with incredible pedagogical challenges as many students experienced online learning fatigue (Ebner & Greenberg, 2020). Students' attention and commitment to learning, engagement, and attendance decreased (Hollister et al., 2022; Ubu et al., 2021). Considering this, coupled with their reflection on the failure to have well-engaged online classes in the previous semesters due to a lack of student-student interactions, the authors, who were also serving as the lecturers of the classes, changed the online learning platform to Zoom videoconferencing application. Studies found that Zoom has become one of the most preferred online learning platforms (Agustina, 2021; Correia et al., 2020; Sakkir et al., 2020). Besides being easy to use, a feature that attracts teachers and students to using Zoom is its breakout rooms (hereafter "BRs"). It allows its host to split participants into small groups in different rooms so that students would have more significant opportunities for student-student interactions, collaborations, and discussions (Naik & Govindu, 2022). Working in small groups increases students' participation and enhances their learning experiences, leading to better academic performance (Cavinato et al., 2021).

Despite a large body of research investigating the uses of Zoom application for online learning and its benefits across disciplines (Correia et al., 2020; Sharmin & Zhang, 2022; Venton & Pompano, 2021) and in ELT (English Language Teaching) in particular, there is a paucity in the studies on the use of Zoom to enhance self-efficacy. In the ELT context, the use of Zoom and its BRs was responded positively by students (Bamidele, 2021), increased learners' interactions and engagement (Kohnke & Moorhouse, 2022), increased attendance and speaking participation (Lee, 2021; Nisa et al., 2021), and developed creativity (Putri & Yosintha, 2022). However, its effects on students' speaking self-efficacy are relatively unexplored. This study aimed to fill the gap in the area by focusing on the effects of using Zoom BRs to enhance English-speaking self-efficacy among students to participate in active learning activities. The result of this research is significant because self-efficacy affects students' performance (Mills et al., 2007; Pajares, 2008; Verešová & Foglová, 2018), efforts, perseverance, and emotional reactions to a particular task (Ferrell & Barbera, 2015; Zulkosky, 2009).

Facilitating students to actively participate in group work (hereafter "GW") in BRs potentially enhances their mastery experience as the main source of speaking self-efficacy. More intense interactions in small GW will also serve as vicarious experience as students can have more peer models for their speaking development. In addition to the two other sources of self-efficacy, i.e. social persuasion and affective states (Bandura, 1997; Schunk & DiBenedetto, 2021; Usher & Pajares, 2008), these mastery and vicarious experience potentially enhance students' self-efficacy. Relevant to these propositions, three research questions were set to guide this study.

- How did GW in Zoom BRs enhance students' sources of speaking self-efficacy information of mastery experience, vicarious experience, social persuasion, and speaking anxiety?
- How was the students' speaking self-efficacy to participate in active learning activities after having GW in Zoom BRs?
- Was there any correlation between GW in Zoom BRs and students' English-speaking self-efficacy to participate in active learning activities?

Speaking self-efficacy to participate in active learning activities is an extension of the self-efficacy construct proposed by Bandura (1997), defined as the student's beliefs about their ability to participate in active learning activities in their English class. Active learning became an issue as more and more lecturers and teachers voiced their concern about students' passivity and even "fatigue," borrowing the term from Wiederhold (2020), in attending online classrooms. They joined the class, but were easily distracted from materials and instructions (Tian & Wu, 2022), experienced a decline in engagement (Luburić et al., 2021), or even left the class earlier without notice to the teacher (Efriana, 2021). Enhancing students' English-speaking self-efficacy to participate and get involved in active learning activities is, therefore, very crucial. How Zoom BRs can be used to address the issue is an urgent and interesting topic to study.

## 2. LITERATURE REVIEW

### 2.1 Zoom Breakout Rooms in Online Learning

Breakout rooms (BRs) in Zoom is an electronic breakout group (Lougheed et al., 2012; Prince, 2004), where a class is divided into smaller groups to let students discuss a topic. In Zoom, a teacher or a trainer as the host can create separated virtual spaces disconnected from the main room and assigns students or training participants to work in groups independently and conveniently. They can privately talk and share screens and files, which can only be accessed by their peers in the same room (Bailey et al., 2021). This helps them feel more relaxed and less threatened, so interactions among the group participants can be boosted, and independent work can be facilitated (Chandler, 2016). By using BRs, a language teacher can encourage students to create meaning-focused output and more student-to-student interactions, which become essential elements of the success in language learning (Correia et al., 2020; Nation & Yamamoto, 2012).

Previous studies found that using Zoom BRs for online learning was positive, even "overwhelmingly positive" (Venton & Pompano, 2021). Using BRs for an active learning class, in which a few students work in a small group, has increased learning engagement and class attendance. More students voluntarily had the camera on and talked more during the group work. Introvert students spoke that speaking in BRs is more comfortable than speaking in the main room. Studies by Abuhassna (2020) and Lee (2021) on the use of Zoom BRs in English classes found that students were very satisfied with BRs as they could engage in practical conversations with their friends more conveniently and complete class assignments in groups. Nisa et al. (2021) also found that students' confidence to participate in discussions in the main room increased after they had discussed the topic with their friends in BRs.

However, there are some limitations in using BRs (Cavinato et al., 2021). Groups in different BRs cannot interact or share ideas directly unless they return to the main room. This makes communication move at a slower pace. The teacher also can only monitor and interact with a group at one time. If the students in a group are not active and no student partakes in the group discussion, they only get stuck there and learn nothing from the breakout rooms. A study by Sharmin and Zhang (2022) found that students enjoyed the use of BRs as long as they actively participated in doing the assigned tasks.

## 2.2 Self-Efficacy

The construct of self-efficacy was introduced by Bandura in his social learning theory, which later became popular as social cognitive theory (Bandura, 1997). It is defined as people's beliefs in their ability to successfully perform, manage, and control the courses of actions required to complete tasks. Self-efficacy affects how people think, feel, behave, and motivate themselves (Zulkosky, 2009); therefore, it is fundamental and determining. A student with high self-efficacy tends to set a higher goal, has a better commitment to the goal, feels confident to approach difficult tasks, and even treats the tasks as challenges that motivate them to exert more effort, and exhibits a lower level of anxiety (Mills, 2014). These characteristics lead them to better performance and success.

In language learning, studies found that self-efficacy correlates with and influences achievement and performance. For example, Mills et al. (2007) concluded that self-efficacy predicts the final course grade of intermediate-level French students. The study found that students with strong self-efficacy beliefs could use different kinds of learning strategies, had better self-regulation, and could sustain necessary efforts to complete tasks. Therefore, they performed well (Wang et al., 2013). There is also a significant positive correlation between self-efficacy and speaking skills (Desmaliza & Septiani, 2017). Students with high speaking self-efficacy more actively participated in class, studied harder, and demonstrated less adverse emotional reactions when encountering problems (Darmawan et al., 2021). In a survey involving 310 participants, Chen and Hsu (2022) reported that EFL learners with a higher level of self-efficacy tended to challenge themselves with learning content that required higher proficiency, which results in better language skill development.

Practicing the language enhances speaking self-efficacy. The study by Leeming (2017) in Japan with students having quite limited English speaking ability found that after being taught using task-based language teaching (TBLT), which involved students working in small groups, having discussions and conversations with the group members, the students could achieve a significant growth in their English speaking self-efficacy at the end of the semester. A similar research finding was found by Gorsuch (2009), with 150 U.S. undergraduate students learning different languages. Opportunities to practice and use the language increased self-efficacy.

## 2.3 Student Active Learning

Active learning is a learning process created through activities and/or discussion in a class instead of passively listening to an expert (Cavinato et al., 2021). In an active learning class, students are active and engaged, highly motivated, and involved in

higher-order thinking activities. They take control of their learning and can develop a sense of classroom ownership. They feel that the class belongs to them, not only the teacher. The class atmosphere is more relaxed and conducive to learning (Hinde & Kovac, 2001). Active learning increases students' examination performance (Freeman et al., 2014) and narrows achievement gaps for underrepresented students (Theobald et al., 2020).

In language learning, active learning allows students to speak simultaneously 4 to 5 times more than a traditional class does. It activates multi-sensory learning (reading, listening, and speaking), enabling the brain to retain more of what the students have learned. Therefore, it has become a significant component of language teaching (Devira, 2020). The principles of active learning, among others, are as follows: students are involved in learning, there is a greater emphasis on skill development, students are engaged in various learning activities, and students learn to think the way they learn (Bahri et al., 2011).

An active learning pedagogy is an effective strategy to involve and engage students with teaching and learning activities (Fook et al., 2015; Riggs & Linder, 2016). This pedagogy has been proven effective and is a good fit with the learning styles of Millennials (Donohue & Richards, 2009). However, it had become a challenge for teachers, especially when classes had to suddenly move online. For English as second/foreign language teachers, the challenge was much harder. While active learning requires communication and collaboration, many students were unprepared to do so. Their target language proficiency and other personal factors such as motivation, speaking anxiety, and self-efficacy are major issues prohibiting them from actively participating in classroom activities. This results in passive learning, low engagement, and low performance.

Social cognitive theory suggests that what people believe, think, and feel influences how they behave (Bandura, 1986). In triadic reciprocality, human behavior is collectively influenced by personal agency, self-beliefs, and external environmental factors. Students' participation in active learning activities is much affected by their belief in their abilities. Therefore, a teacher needs to choose teaching practices that potentially foster students' self-beliefs in their ability to participate and get involved in learning activities (Mills, 2014). Using BRs and giving learners ample time to discuss and share ideas in small groups disconnected from the main room, theoretically, will positively affect students' self-efficacy to participate in active learning activities. As Naik and Govindu (2022) suggest, giving students opportunities to have informal communication in BRs develops student psychology and social skills.

## 3. METHODS

The study adopted a quantitative research paradigm of pre-experimental research as it did neither have a pre-test nor a control group. An important element of the quantitative research design of this study was the experimentation with the teaching strategy of assigning students to have GW in Zoom BRs.

### 3.1 The Respondents

Thirty-six freshmen attending the English for Accounting Course served as the respondents of the study. Only seven students in this group were male (20%), and their ages were between 18 to19 years. This group was purposively selected as the class size was not too large for active learning activities. There were some other classes of English for Accounting course in an undergraduate program, but the class mostly had fifty to sixty students. In addition, because this study was not intended to generalize its findings to a bigger population, this purposive sampling method was still considered appropriate.

Although there was no pre-test to measure their initial competence in English speaking and their self-efficacy, the observation within weeks 1 to 3 of the semester showed that most students had low to moderate English-speaking proficiency. During the learning process, they were passive and quiet, and most of them had their camera off and gave a late, even no, response to calls and questions. Poor and unstable internet connection was the common reason for not responding. Many reported that they did not use Zoom for their online learning during their previous years at senior high school and never had worked in breakout rooms.

### 3.2 Procedure

From weeks 4 to 14, after a general introduction to the topics and modeling for around 15 to 20 minutes in the main room, the respondents were randomly assigned to do GW in BRs. The course itself aimed at developing students' speaking skills through discussions and presentations. In BRs, they discussed topics or questions or practiced specific language skills. On other occasions, they prepared and gave presentations. This group work lasted from 15 to 30 minutes. The teacher visited BRs, observed what was happening, answered questions, and gave explanations if necessary. As they returned to the main room, they had classroom discussions, presentations, and feedback.

### 3.3 Instrument and Data Collection

The data were collected using a three-part questionnaire written in Indonesian as the respondents' native language. It was distributed to the respondents electronically using Google Forms on Week 15 as they completed the learning activities and prepared for their final exam. The first part of the questionnaire has 16 statements covering four sources of self-efficacy information of mastery experience (ME), vicarious experience (VE), social persuasion (SP), and anxiety coping (AC) (Bandura, 1986; Schunk & DiBenedetto, 2021). It is a Likert-type questionnaire with five scales of agreement, from "strongly disagree" (scale 1) to "strongly agree" (scale 5). The second part collected information about the respondent's perceptions of how the teaching intervention enhanced their speaking self-efficacy sources. It has six questions requiring the respondents to respond on a 7-degree rating scale from "very little" (scale 1) to "very much" (scale 7). The third part collected information on the respondent's speaking self-efficacy to participate in active learning activities. It includes 15 "can-do" statements (Bandura, 2006). The respondents were to respond to them based on their beliefs and confidence in their abilities to do activities in active learning on a

rating of 10 scales of confidence from "not confident at all" (scale 1) to "very confident" (scale 10). The validity of the questionnaire was measured by the Pearson correlation coefficient, while for reliability, Cronbach alpha was used. The questionnaire was proven valid and reliable as the $r_{observed}$ of all the items of the three parts of the questionnaire was higher than 0.329 (n=36). The Cronbach alpha of the three parts was consecutively 0.860, 0.864, and 0.987.

### 3.4 Data Analysis

All the data collected were subject to statistical analysis. The first step was a data completeness check to ensure all sets of data required were complete. A descriptive statistical analysis was the second step. The minimum, maximum, mean, and standard deviation of each variable were obtained. To check whether there was a relationship between the use of BRs and students' speaking self-efficacy, correlation analysis was run using the product-moment correlation coefficient or Pearson *r* (Gay et al., 2012).

## 4. RESULTS

### 4.1 Group Work in Zoom Breakout Rooms to Enhance the Source of Speaking Self-Efficacy Information

The effect of assigning students to do GW in Zoom BRs on the sources of speaking self-efficacy enhancement was measured by a questionnaire in a Likert scale of 16 statements requiring responses on the level of agreement. The interpretation was made based on the mean scores. A mean score of 1 – 2.333 indicates the respondents perceived no enhancement, and a mean score of 2.334 - 3.666 indicates the respondents perceived low enhancement. Finally, a mean score of 3.667 to 5.000 indicates that the respondents perceived high enhancement. Table 1 presents the descriptive statistics of the results.

**Table 1.** The effect of GW in Zoom BRs on the source of speaking self-efficacy

| Statements | Source | N | Min | Max | Mean | SD |
|---|---|---|---|---|---|---|
| By doing GW in BRs, I can have enough opportunities to talk about my ideas. | ME | 36 | 4.00 | 5.00 | 4.278 | .4543 |
| In BR, I can practice giving presentations assigned by the lecturer. | ME | 36 | 3.00 | 5.00 | 4.278 | .5133 |
| By doing GW in BRs, I can discuss the questions given by my teacher with my friends. | ME | 36 | 3.00 | 5.00 | 4.278 | .5133 |
| By doing GW in BRs, I can ask my friends about things I do not know very well. | ME | 36 | 4.00 | 5.00 | 4.417 | .5000 |
| By doing GW in BRs, I can watch how my friends speak and present more closely. | VE | 36 | 2.00 | 5.00 | 4.194 | .6685 |
| In BR, I can see more students willing to speak. | VE | 36 | 2.00 | 5.00 | 3.889 | .8204 |
| In BR, I can see my friends who never speak in the main room are able to speak. | VE | 36 | 3.00 | 5.00 | 4.056 | .5828 |
| In BR, talks and discussions work more intensively. | VE | 36 | 3.00 | 5.00 | 4.306 | .6243 |
| In BR, we encouraged each other to get involved in the discussion. | SP | 36 | 2.00 | 5.00 | 4.250 | .6918 |

Table 1 continued…

| | | | | | | |
|---|---|---|---|---|---|---|
| In BR, my friends motivate me to express my thoughts. | SP | 36 | 3.00 | 5.00 | 4.139 | .5426 |
| My friends' interactions in BRs encourage me to get involved in discussions or practices. | SP | 36 | 2.00 | 5.00 | 4.306 | .7099 |
| BR makes me more motivated to speak and practice the language. | SP | 36 | 3.00 | 5.00 | 4.139 | .6393 |
| I feel more relaxed when speaking in BRs. | AC | 36 | 2.00 | 5.00 | 4.056 | .7149 |
| For me, speaking in BRs is not threatening. | AC | 36 | 4.00 | 5.00 | 4.389 | .4944 |
| Speaking in BRs does not make my heart pound. | AC | 36 | 2.00 | 5.00 | 4.000 | .8281 |
| My body is not trembling when speaking in BRs. | AC | 36 | 2.00 | 5.00 | 4.222 | .6375 |
| Valid N (listwise) | | 36 | | | | |

Table 1 shows the mean scores of the statements between 3.67 to 5, which means that the respondents agreed with the statements. They perceived that doing GW in Zoom BRs highly enhanced their sources of speaking self-efficacy. They had opportunities to do or practice the tasks of English speaking (mastery experience), to watch other students speak, which could serve as models for them (vicarious experience), and to have encouragement both from their peers and the activities themselves (social persuasion). They also could feel that speaking in Zoom BRs was more relaxing and less threatening, which helped them more confidently participate in the speaking activities.

To see how the teaching strategy, in general, affects the sources of speaking self-efficacy, another set of data is presented in Table 2. Here, students responded to 6 questions on how much the teaching strategy gave them an experience of speaking in English, having models or examples of speaking from both their teacher and peers, how much they felt encouraged to speak, and how the teaching strategy decreased their speaking anxiety. The interpretation of the result was made by referring to the mean score of each response. Three categories were set: low, moderate, and high. The mean scores between 1.00 to 3.00 show a low effect, the mean scores of 3.01 to 5.00 indicate that the teaching strategy had a moderate effect, and finally, the mean scores between 5.01 to 7.00 indicates a high effect of the teaching strategy.

**Table 2.** The effect of TS on speaking self-efficacy enhancement.

| **Questions** | **N** | **Min** | **Max** | **Mean** | **SD** |
|---|---|---|---|---|---|
| How much did the teaching strategy give you experience of speaking in English? | 36 | 3.00 | 7.00 | 6.000 | 1.095 |
| How much did the teaching strategy give you experiences of having speaking models or examples from your teachers? | 36 | 3.00 | 7.00 | 6.139 | .931 |
| How much did the teaching strategy give you experiences of having speaking models or examples from your friends? | 36 | 3.00 | 7.00 | 5.944 | .984 |
| During the implementation of the teaching strategy, how much did you get encouragement to speak in English from your teachers? | 36 | 3.00 | 7.00 | 6.417 | .996 |
| During the implementation of the teaching strategy, how much did you get encouragement to speak in English from your friends? | 36 | 3.00 | 7.00 | 5.861 | 1.150 |
| How much did the teaching strategy decrease your speaking anxiety? | 36 | 4.00 | 7.00 | 5.833 | .971 |
| Valid N (listwise) | 36 | | | | |

As all the mean scores are above 5.01, it can be confidently interpreted that the teaching strategy highly enhanced the students' English-speaking self-efficacy. It could create learning situations where they had the experience of speaking in English, observing models and examples of speaking English both from their teachers and peers, having encouragement to speak in English, and also of having low speaking anxiety.

## 4.2 English Speaking Self-efficacy to Participate in Active Learning

English-speaking self-efficacy to participate in active learning activities was measured by using 15 statements requiring responses on ten scales of confidence, from "not confident at all" (scale 1) to "very confident" (scale 10). The interpretation was made by referring to the mean scores of the statements. Three categories were set: low self-efficacy (mean scores between 1.00 to 3.33), moderate self-efficacy (mean scores between 3.33 to 6.67), and high self-efficacy (mean scores between 6.67 – 10.00). The detailed result is presented in Table 3.

**Table 3.** Students' English-speaking self-efficacy to participate in active learning.

| Statements | N | Min | Max | Mean | SD |
|---|---|---|---|---|---|
| I can speak English. | 36 | 1.00 | 10.00 | 6.417 | 2.222 |
| I can use English vocabulary commonly found during learning and discussions. | 36 | 2.00 | 10.00 | 6.639 | 2.072 |
| I can understand what my teacher and friends mean when they speak English. | 36 | 2.00 | 10.00 | 6.861 | 2.072 |
| I can use English grammar appropriately. | 36 | 1.00 | 10.00 | 5.556 | 2.431 |
| During the discussion, I can express my opinions and ideas. | 36 | 1.00 | 10.00 | 5.917 | 2.256 |
| During the discussion, I can ask questions to the group. | 36 | 2.00 | 10.00 | 6.139 | 2.072 |
| I can answer questions. | 36 | 1.00 | 10.00 | 6.111 | 2.240 |
| I can give English presentations assigned to me. | 36 | 2.00 | 10.00 | 6.444 | 2.248 |
| During learning, I can speak in English without being nervous. | 36 | 1.00 | 10.00 | 5.750 | 2.156 |
| I can ask questions. | 36 | 2.00 | 10.00 | 6.278 | 2.037 |
| During the discussion or group work, I can express my disagreement. | 36 | 2.00 | 10.00 | 6.444 | 2.144 |
| I can chair a group discussion. | 36 | 2.00 | 10.00 | 5.778 | 2.205 |
| During the discussion, I can ask my friends to give opinions. | 36 | 2.00 | 10.00 | 6.250 | 2.209 |
| During the discussion, I can express my critical opinions about a topic. | 36 | 2.00 | 10.00 | 6.250 | 2.062 |
| During the discussion, I can defend arguments. | 36 | 2.00 | 10.00 | 6.417 | 2.170 |
| Valid N (listwise) | 36 | | | | |

Table 3 shows that the lowest mean score is 5.56 (I can use English grammar appropriately), while the highest mean score is 6.86 (I can understand what my teacher and friends mean when they speak English). This is the only statement that belongs to the high category, indicating that the students had a high level of confidence or an increased belief in their ability to understand their teacher's and friends' English speech. The other statements (14 items) fall into the moderate category, suggesting they had a moderate level of confidence in successfully doing the tasks. Therefore, it can be concluded that the students had a moderate level of English-speaking self-efficacy to participate in active learning activities.

### 4.3 The Relationship between the Teaching Strategy and Students' Self-efficacy to Participate in Active Learning

A correlation analysis was run to see the effect of the teaching strategy and students' English-speaking self-efficacy to participate in active learning activities. The scores of the student's perceptions of the effect of the teaching strategies on the sources of self-efficacy enhancement were correlated to those of the English-speaking self-efficacy to participate in active learning activities, as presented in Table 4.

**Table 4.** The results of correlation analysis

| | | **Students' perception of the effects of the teaching strategy** | **Students' self-efficacy to participate in active learning** |
|---|---|---|---|
| Students' perception of the effects of the teaching strategy | Pearson Correlation | 1 | .470** |
| | Sig. (2-tailed) | | .004 |
| | N | 36 | 36 |
| Students' self-efficacy to participate in active learning | Pearson Correlation | .470** | 1 |
| | Sig. (2-tailed) | .004 | |
| | N | 36 | 36 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

The Pearson correlation coefficient (r) value is +0.470 and is significant at 0.01 (2-tailed). This indicates that teaching strategy to enhance sources of self-efficacy information was moderately correlated to the students' self-efficacy to participate in active learning (Gay et al., 2012). The positive coefficient indicates a positive relationship; the higher the students' sense of the effectiveness of the teaching strategy to enhance self-efficacy information is, the higher their sense of self-efficacy to participate in active learning activities becomes. Reversely, the lower the sense of the teaching strategy's effectiveness they have, the lower their sense of self-efficacy is.

## 5. DISCUSSION

The first objective of the research was to analyze how assigning students to GW in Zoom BRs enhanced the sources of self-efficacy. As self-efficacy is developed by the four main sources of information, namely mastery experience, vicarious experience, social persuasion, and physiological and affective states, in this case, anxiety coping (Bandura, 1986; Schunk & DiBenedetto, 2021), analyzing the respondents' perceptions about the effects of the activities on the sources of their self-efficacy is a key for the interpretation. The results show that respondents perceived the teaching strategy enhanced the sources of their speaking self-efficacy. The mean scores of all indicators are between 3.67 and 5.00 (see Table 1), which is confirmed by the data in Table 2. The mean scores of the responses to the six proposed questions were between 5.01 and 7.00, which suggests that the teaching strategy had a high effect on the enhancement of their speaking self-efficacy.

Mastery experience is the most influential source of self-efficacy information (Bandura, 1997; Mills, 2014; Usher & Pajares, 2008). It is the experience of doing the

tasks at hand. The respondents agreed that GW in Zoom BRs enhanced their opportunities to talk, deliver presentations, discuss the topics assigned with their teamwork, and ask questions about what they did not know. These are the actual experiences of using English for active learning. The researchers observed the students' activities in BRs by joining each group and staying for some time and saw the interactions among the group members using English. In addition to providing students with actual practices in using the target language in learning activities, GW in BRs also enhanced the respondents' vicarious experience as they observed how the group members talked and interacted in the target language. As more students were willing to speak and take part in the discussion, more models were available. Watching other people perform the task of speaking serves as an evaluative indicator of capabilities by comparing the self with others. This experience is effective as it can raise a student's efficacy belief by fostering the belief that they can do the same, especially when the person performing the task is believed to have the same capabilities as they do (Mills, 2009; Pekmezi et al., 2009). The study's findings augmented the previous studies suggesting that group work in breakout rooms promotes collaborative learning activities (Agustina, 2021; Lee, 2021). This collaboration facilitates students to have the experience of speaking and, at the same time, to have the experience of observing models.

The interactions in breakout rooms could also facilitate the emergence of social persuasion, defined by Chen and Usher (2013) as a kind of encouragement from influential others such as teachers, parents, and peers. The respondents agreed that they encouraged and motivated one another to participate in the discussion. GW in BRs created persuasive nuances that encouraged them to participate in the learning activities. They admitted that the interactions they created encouraged them to get involved in the discussions or practice, which motivated them to speak and practice the language. As Chandler (2016) suggested, GW in BRs can allow students to have peer-to-peer support and contacts and empower them to contribute to the discussion and speak up for their queries and concerns.

The last source of self-efficacy information, the affective state, was also enhanced as they experienced lower speaking anxiety. They could feel more relaxed, so speaking was not threatening. Physical symptoms of speaking anxiety, such as heart pounding and body trembling, could be minimized. This is positive, as anxiety has long been a problem for Indonesian English learners (Hartono & Maharani, 2019). This supports Nisa et al.'s study (2021), which found that working in breakout rooms boosts individual confidence and increases active participation, including, in this case, the reserved students who rarely talked in the main room (Venton & Pompano, 2021). GW facilitates collaborative learning and interaction. Using BRs could enliven group activities (Rucker et al., 2020), better facilitate collaborative learning and interaction, and increase student engagement (Saltz & Heckman, 2020).

The second research question of this study was about the students' English-speaking self-efficacy to participate in active learning activities. The data presented in Table 3 showed that, in general, the respondents had a moderate level of speaking self-efficacy. Except for the statement, "I can understand what my teacher and friends mean when they speak in English," the mean scores of the statements belong to the moderate level. The students admitted that they could speak in English, use appropriate vocabulary, and understand their teacher's and friends' English. Furthermore, they could express opinions, ask questions, give presentations, chair a discussion, express

disagreement, and defend arguments. Although it did not belong to a high level, there had been significant progress compared to the condition during the first few meetings of the class, where most students were passive and quiet. As they were assigned to do GW, their speaking confidence improved, and their participation in learning activities increased. The students acknowledged that they were actively involved in collaborations and discussions by expressing opinions, asking questions, and responding to questions.

Another clear indication of this improvement was when students were voluntarily requested to respond to the teacher's questions or commands as they returned to the main room. During the first few meetings before they were assigned to GW in BRs, the students rarely responded to the teacher's requests or questions. This no-response behavior was evident on several occasions. Despite continuous motivation and persuasion to respond delivered by the teacher, they kept quiet. After being assigned to do GW in BRs, their participation gradually improved. On several occasions of discussion in the main room, several students did raise their hands and voluntarily took the opportunity to take the floor and speak.

The last research question in this current study was whether the teaching strategy of assigning students to do GW in Zoom BRs correlated to students' English-speaking self-efficacy to participate in active learning activities. To answer this question, the coefficient of the Pearson correlation analysis (Table 4) is interpreted. The coefficient ($r$) is +0.470 and significant at 0.01. The positive correlation means that two correlated variables move up and down in the same direction. The coefficient of 0.470 indicates that the two variables are moderately correlated (Gay et al., 2012). GW in BRs moderately predicts students' speaking self-efficacy to participate in active learning. This is in line with the statement that self-efficacy is malleable (Bandura, 1997; Gerhardt & Brown, 2006) and is subject to its sources of information. Providing students with more opportunities to practice the language and get involved in active learning activities through GW in BRs improves self-efficacy. The students' positive sense of success in doing the assigned tasks enhanced their self-efficacy (Ferrell & Barbera, 2015). Zoom, with its BRs, is a good platform for active learning in online classes. As Riggs and Linder (2016) suggest, using BRs encourages students to develop metacognition and reflections and makes the students engaged in learning.

The findings lead to some implications. First, online learning platform affected students' learning experience, satisfaction, and achievement. Students appreciated interactions with their peers and teachers and collaboration in a virtual classroom. Therefore, teachers should use the platforms or applications which make interactions and collaboration possible. Secondly, given the vital role of self-efficacy in performance and achievement and the fact that self-efficacy is malleable, teachers should enhance their students' self-efficacy by designing learning materials and organizing classroom activities in such a way that facilitates self-efficacy enhancement. In an online learning context, small group discussions in BRs can be adopted.

## 6. CONCLUSION

The objectives of the study were to analyze the effectiveness of a teaching strategy of using Zoom breakout rooms (BRs) to enhance the students' English-

speaking self-efficacy to participate in active learning activities. With the application, the researchers randomly assigned students to work in small groups. They were requested to practice, discuss, share ideas, give presentations, and the like related to the topic of the week. The intervention lasted from weeks 4 to 14 of the semester. The results show that the intervention was effective. The student's sources of English-speaking self-efficacy information were enhanced as they could develop mastery and vicarious experience, be given encouragement and motivation by their peers, and experience low speaking anxiety. As a result, their self-efficacy to participate in active learning improved. A significant and positive correlation lay between the teaching strategy's use and students' self-efficacy to participate in active learning at a moderate level.

There are several limitations of the current study. First, this study was pre-experimental research, and thus the data were collected after treatment only. As we were unable to compare the students' speaking self-efficacy before and after treatment, making a strong claim on the positive effect of GW in BRs on students' speaking self-efficacy, as this current study suggests, is not possible. Second, the researchers were the lecturers of the class. Although it had been emphasized several times that the questionnaire results would not affect the course grades, it was hard to guarantee fair and honest responses from the participants. Another limitation is that the current research did not measure the effect of self-efficacy on performance, so we were unable to prove whether there was an effect or relationship between self-efficacy and performance, as previous studies had suggested. Future research is expected to address these limitations. How interactions and collaborations develop in BRs and how they affect self-efficacy beliefs and performance with a pre-test and a post-test are worth investigating. They will significantly contribute to the growing body of research in this field.

Despite the limitations, the authors believe that the current study can still contribute to our understanding of students' speaking self-efficacy to participate in active learning activities, especially in a virtual learning context. Students of English as a foreign or second language need to make efforts to believe they can speak the language. One effort that teachers can do is to organize classrooms in such a way that facilitates the use of the students' learned language. BRs feature found in Zoom videoconferencing application can be considered as a medium to help in the process.

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