The effect of flipped learning on EFL students' writing performance, autonomy, and motivation

Alaá Ismael Challob [1]

Abstract

Though flipped learning has positively impacted teaching English writing, its usefulness in developing students' English writing performance, autonomy, and motivation is still unclear. This study aimed at investigating the effects of using flipped learning on students' English writing performance, autonomy, and motivation in learning English writing. It also addressed the factors available in the flipped learning English writing environment that contribute to this effect. Fifteen male and female third-year students in the English department, University of Anbar-Iraq were purposively selected to participate in writing three writing tasks. A qualitative case study research design was used where triangulation of pre-and post-study writing tasks, post-study interview, diaries, and observation was implemented. Data were analyzed qualitatively using content and thematic analysis. Findings indicated that this learning environment has an impact on promoting students' English writing performance, autonomy, and motivation. Besides, findings revealed that the interactive nature of the learning environment, time and place flexibility, teacher and peers' feedback, and many learning sources were the main factors that help students improve their English writing performance, autonomy, and motivation. The study concluded that flipping the English writing classes created a user-friendly collaborative learning environment due to the much language and writing knowledge gained. As a result, students' English writing performance, autonomy, and motivation were enhanced as learners became able to practice writing comfortably.

Keywords Flipped learning · Students' autonomy · Students' motivation · EFL writing

1 Introduction

English writing is considered a challenging skill for language learners, specifically when dealing with foreign language learners. Foreign language learners believe that

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writing in the English language is difficult as it requires various types of knowledge; represented by knowledge of language, vocabulary knowledge as well as knowledge relevant to mechanisms of writing. This evokes students' negative feelings towards the English writing classes and to the act of writing itself and consequently leads to negative outcomes in English writing (Adas and Bakir 2013).

Accordingly, experienced teachers do not only need to teach English writing and ask their students to practice it. They need to work seriously to change students' negative feelings into positive ones (Challob 2018). To do this, experienced teachers need to touch students' hearts before touching their minds by employing new techniques of teaching and learning. In Iraqi context, nowadays, the Ministry of Higher Education and Scientific Research has encouraged teachers as well as their students to utilize various technologies when teaching and learning English language. Examples of these technologies are the use of Edmodo, Google Classroom, Zoom, and Google Meet as platforms of learning and sharing learning experiences. These online platforms are used in various forms such as; e-learning, blended learning, and flipped learning.

In the digital era, flipped learning, is considered one of the latest teaching methods of English language (Lee 2018; Özkurkudis and Bümen 2019) and it falls under the realm of blended learning pedagogy (Challob et al. 2016; Abdullah et al. 2019a, 2019b). Flipped learning is defined by (Braiek and Onaiba 2018; Shehata 2019) as an instructional model based on active learning where the time of classroom instruction and students' homework is reversed. To explain further, they stated that the instructional lectures are delivered electronically in the form of teacher-made materials, to be prepared by the students independently at their comfortable time and space outside the classroom. Then, in the traditional class, the students spend their time in deepening understanding. The main tenet for flipped learning is to create a motivating self-learning atmosphere for students that helps them acquire basic knowledge outside the classroom and then apply and deepen the acquired knowledge inside the classroom (Oraif 2018).

Generally, the use of technology in teaching English language is positively evidenced by previous researches (Manprasert 2017; Braiek and Onaiba 2018; Chivata and Oviedo 2018; Lee and Wallace 2018; Ansori and Nafi 2019; Tsai 2019; Zainuddin and Perera 2019) as it provides students with the learning flexibilities in terms of time and place. As concerns the English writing skill, many studies were experimentally conducted to examine the effects of technology integration and flipped learning on various dependent variables related to students' learning; such as; writing performance, attitudes, and motivation. For example, Yi (2007) implemented a purely quantitative study to investigate the use of online learning in improving students' writing ability and motivation. The study concluded that using online learning can positively improve students' writing ability and motivation. Another quantitative study is conducted by (Ahmed 2016) to examine the effect of using flipped learning on students' achievement in English writing and their attitudes toward the flipped learning instruction. The study concluded a positive effect on the investigated variables. Moreover, some past studies utilized mixed-mode research methods to study the effect of flipped learning on students' English writing in terms of performance and writing difficulties (Tuna 2011), performance and perception (Özkurkudis and Bümen 2019), and performance, attitude, and motivation (Oraif 2018; Qader and Arslan 2019; Alkhoudary 2019). These studies concluded positive results in terms of the investigated variables. As for the

qualitative investigation, few studies were conducted, for instance, Foroutan et al. (2013) investigated the use of weblog in cultivating students' autonomy. The study concluded that weblog can promote students' autonomy in writing. In addition, White (2009) conducted a study to investigate the use of Facebook to improve students' motivation. The study concluded that the students are motivated to do in-class discussion. So far, however, there has been little qualitative discussion about the effect of using flipped learning on improving students' writing performance, autonomy, and motivation in the EFL writing context. The majority of past studies were conducted quantitatively seeking numerical evidence related to students' writing performance, attitudes, and motivation in learning English writing as they were affected by the use of online learning or flipped learning. As for the qualitative studies, they were seeking qualitative evidence for the effect of weblog on promoting students' autonomy such as Foroutan et al. (2013) and the effect of using Facebook on increasing students' motivation as in the case of White (2009) study.

Hence, the qualitative investigation of the effect of using flipped learning on improving students' writing performance, autonomy, and motivation together is completely neglected in past literature, specifically in the EFL writing context. The issue of the way, where flipped learning affects students' writing performance, autonomy, and motivation, is still unclear to some extent in the past studies. Consequently, the current study aims at:

1. Investigating the effect of implementing the flipped learning on EFL students' writing performance
2. Investigating the effect of implementing the flipped learning on EFL autonomy, and motivation in learning English writing.
3. Exploring the main factors available in the flipped learning English writing environment that contribute to this effect.

The findings of the current study might be pedagogically significant for English language teachers and students in the EFL writing context. It might also have significant implications for curriculum and textbook designers to move forward towards a richer and more interactive environment that provides students with ample meaningful and authentic learning experiences that touch students' interest and motivation.

2 Literature review

This section highlights the relevant theoretical perspectives, and concepts underlying this study. As the current study attempted to investigate the effect of flipped learning on EFL students' writing performance, autonomy, and motivation, it is important to elaborate the concepts relevant to this study, namely; students' autonomy and students' motivation.

2.1 Students' autonomy

In the field of education, the term "student's autonomy" represents one of the essential issues that have been discussed and studied extensively in the literature. In the field of

English language learning, student's autonomy is broadly recognized as an important element for success. Autonomy means the learners' ability and desire to create and control their learning environment and take appropriate decisions in pursuing the goals of the learning process and keep them in progress. Accordingly, autonomous learners should be independent and in charge of all aspects of learning including the way of learning, the time of learning, and the amount of material to be learned in a specific period of time. However, autonomy does not mean self-study or self-access learning. Reasonably, it refers to the type of self-directed learning where the learners take charge of their learning, keep it in track, and evaluate its outcomes (Lee 2016; Kassem 2017; Shehata 2019).

Benson (1997), cited in (Manprasert 2017), mentioned two main aspects of autonomous learning in language learning. These are technical and psychological aspects. The first aspect refers to the language skills or strategies that focus on social skills and cognition that encourage independent learning. The second aspect focuses on learners' attitudes and cognitive abilities which help learners control their learning. Therefore, to cultivate learners' autonomy, teachers are required to implement effective instructional strategies that decrease learners' anxiety and encourage them to monitor their stress and motivation while learning (Lee 2016).

In the last decades, integrating technology in the field of language learning played a pivotal role in fostering learners' autonomy since it encourages students' reflection, negotiation, and involvement in the learning activities (Kassem 2017). It is rooted in the social constructivist learning principles which focus on the role of social communication as an important factor in developing students' autonomy in language learning (Foroutan et al. 2013). In addition, integrating technology in language learning demands students and their teachers to utilize certain Computer-Mediated Communication (CMC) applications that encourage online interaction, such as, Google Classroom, Edmodo, and Blogs. These applications provide flexible interactive learning opportunities for students and allow them to extend their learning outside class time and place. This learning flexibility is thought to lead to learners' autonomy in learning. Moreover, the World Wide Web (WWW) is the rich idyllic venue for language learners to search for new information and communicate knowledge independently and collaboratively. As such, it is anticipated to cater to different learners' needs and their individual differences and encourage them to take control of their learning (Maesin et al. 2009). Summing up the role of integrating technology in cultivating students' autonomy in learning English language, Foroutan et al. (2013) stated that it increases students' active involvement in the learning activities, provides them with learning flexibility, suits learners' differences, motivates students to learn, provides students with interactive learning opportunities and encourages them to exchange information, and gives students a high degree of control for their learning.

Hence, integrating technology and online learning activities in the English writing classes fosters students' autonomy as it increases students' interaction and involvement in English writing learning activities. Consequently, students can take responsibility for their learning in terms of time and place of learning. Besides, students' online interaction builds a close and friendly relationship among students and decreases their negative feelings and attitudes towards the writing environment and the English writing skill. This close relationship among the students leads to students' collaborative learning and the latter helps students feel confident in their learning. Thus, students

move in their learning of English writing confidently as they work collaboratively and help each other in doing the various English writing learning activities. Accordingly, students can control their learning of English writing and can discuss and take decisions related to their learning and decide how to learn and how to solve their language and writing problems collaboratively.

2.2 Students' motivation

With regard to psychology, motivation refers to the individuals' psychological state of having a desire, energy, enthusiasm, and persistence to pursue and perform certain goals or accomplish tasks (Yi 2007; Zarei and Elekaei 2013) which are voluntarily selected and self-determined (McIntosh and Noels 2004). As concern English language learning, Gardner (1985) stated that motivation is the extent to which the learner hardly and freely works or invests time and effort to learn a specific language or do certain language tasks due to his/her eagerness and inner desire to do so which results on satisfaction (Oroujlou and Vahedi 2011).

As categorized by Ryan & Deci's (Deci and Ryan 2000) Self-Determination Theory, motivation might be of two types based on its rationales, sources, and pursued goals; intrinsic motivation and extrinsic motivation. Intrinsic motivation initiates from one's self and happens when there is an inner drive to be engaged in the targeted activity without any outside reward for doing it (Yi 2007). Intrinsically motivated students seem to follow time and effort consuming strategies to adventure and struggle in complicated learning tasks and pass through trial and errors in their attempts to gain a deep understanding and insightful knowledge (Mahadi and Jafari 2012; Abdullah et al. 2020). Contrarily, extrinsic motivation is outside originated and happens when the students have the propensity to be engaged in the targeted activity for some external reasons which are not connected with the activity itself. These reasons are represented by external rewards, for example; gifts, marks, or teachers' approval. Extrinsically motivated students tend to spend minimal time and effort in pursuing their goals (Yi 2007; Mahadi and Jafari 2012). While both types of motivation are essential for successful learning, intrinsic motivation is stronger than extrinsic one in terms of learning outcomes as it allows for integration between the students' accessible and internal current knowledge that they already have and the new targeted knowledge, and consequently, it maintains long-term learning of the English language.

Similarly, Gardner and Lamber (1972) identified two types of motivation; integrative and instrumental motivation. The former refers to the learners' involvement in the community and culture of the target language as they like the people and admire the culture of the people who speak the target language to the extent that they would like to be a member within this community. In contrast, instrumental motivation means learning the target language as a means for other specific purposes, such as; rewards, employment, and high social status. They further explained that integratively oriented students are more proficient in using the language and more organized and persistent in learning the language than instrumental ones (Mahadi and Jafari 2012; Zarei and Elekaei 2013).

The learning of English language can simply be achieved when the learners are kept highly motivated. To do their teaching mission effectively, teachers of English language need to understand the close connection between students' motivation and its

potential effects on language learning (Mahadi and Jafari 2012). As students' motivation sources fluctuate, it is vital for teachers to understand students' goals and learning needs and to develop appropriate motivational strategies. Keeping students' motivated, teachers need to connect learning with students' passions; i.e., linking learning with learners' intrinsic sources of learning. At the same time, teachers should find ways to touch students' external motivational sources that can bring them to a classroom situation (Oroujlou and Vahedi 2011; Challob et al. 2016). As for students, they should know their desires and preferences, their weakness and strengths, and efficiently utilize their strengths to compensate for their weak points. To maintain that students are highly motivated in language learning, students need quality inputs and constant interaction opportunities that lead to meaningful outputs and not only to make learning progress. All of these motivational sources should be taken into consideration when designing a language course.

In the English writing classes, it is important to keep students highly motivated by addressing their internal and external sources of motivation. This can be guaranteed by addressing students' interest in using the Internet and communication via social media. Encouraging students to use the Internet and social media as mediating tools for learning in the English writing class can keep students highly motivated and targeted to the learning goals. Thus, learning of English writing is extended outside the school time and place as students can communicate and collaborate outside the school and work collaboratively and comfortably in the English writing activities. In addition, students' motivation is also important for long-life learning. Motivated students used to pursue their learning autonomously and reflect their interest and enthusiasm to further their practice of English writing. Accordingly, they autonomously seek various learning sources to learn and practice other aspects and types of English writing.

2.3 Theoretical framework

To draw a plan for the present study and attain its objectives, a theoretical framework for a flipped learning English writing environment, (henceforth, FLEWE) is designed. This theoretical framework is underpinned by three learning theories; social constructivism theory (Vygotsky 1978), the self-determination theory of motivation (Deci 1980s), and the cognitive view of the process writing model (Flower and Hayes 1981).

Generally, flipped learning is based on the learner-centred learning approaches which postulate that learners are knowledge seekers and responsible for their learning in condition that a comfortable and interactive learning environment is provided for them. In line with this fact, the various stages and activities of the writing process should be enriched with interactive learning opportunities among the students via the integration of various forms of computer-assisted language learning (Wach 2012).

This fact is emphasized by the social constructivism theory. It proposes that learning is a social process and it can be achieved via self-construction of knowledge and socialization. Self-construction of knowledge refers to the fact the students can make meaning and learn independently. Socialization indicates the active role of learners who should interact and collaborate with each other's in the learning environment, and with the new learning experience and connect it with their recent learning experience to be able to understand the new once (Can 2009). Among the variables of social constructivism theory, zone of proximal development (ZPD), more knowledgeable others

(MKO), and scaffolding are seen relevant to the current study as they help improve students' motivation and autonomy. Actually, when the students work together collaboratively in a group form to accomplish certain writing tasks, they are working within the ZPD, which means the gap between the current potential knowledge that the students already have and the new knowledge the students should have to complete the writing task. Consequently, they need scaffolding from other students (MKO), (i.e., expert colleagues). Accordingly, to get this scaffolding, they should collaborate and interact with other students in a team form (Mellow and Gobara 2013). Working with a group of students that have various language and writing abilities encourages students to collaborate with each other and thus, guarantees that the students are working within the ZPD. Consequently, weak student in the group can get scaffolding from good student (MKO) and learn from this scaffolding as well. This means that students can constantly enhance each other by sharing ideas and learning experiences related to the writing task.

In addition, integrating online learning activities promotes students' confidence, strengthens their relationships, and positively affects their motivation in language learning (Egbert 2004; Fotos 2004). The concepts of motivation and autonomy are clearly explained in the self-determination theory (SDT). This theory of motivation is based on the proposition that intrinsic motivation can be developed when a person's essential psychological needs- autonomy, competence, and relatedness are perfectly fulfilled. Hence, the learning environment that satisfies these three needs for the students can positively affect students' autonomy and, most importantly, helps them accomplish ideal learning (Alm-Lequeux 2006). Therefore, flipped learning activities, as they were used in the current study, might be motivating to the students to learn English writing and a supporting factor for them to overcome the students' negative feeling associated with the writing skill as they can support the previously mentioned psychological needs proposed by SDT.

Another important theoretical strand in this study is the Flower and Hayes (1981) cognitive view of process approach of writing. This approach is related to the current study because it was followed when learning the writing skill using the flipped learning approach. By flipping the pre-class and in-class learning activities when teaching the various stages of the process approach of writing, it is hoped that students' motivation and autonomy will be increased.

3 Methodology

This section sheds light on the main procedures followed in carrying out the current study.

3.1 Research design

This study attempted to investigate the effects of implementing flipped learning on students' English writing performance, autonomy, and motivation in learning English writing and the factors available in the flipped learning English writing environment that contribute to this effect. To scientifically attain this objective, the study utilized a qualitative research method. The rationale for using the qualitative research method in

this study is to arrive at a deep understanding relevant to the effect of implementing flipped learning on students' English writing performance, autonomy, and motivation in learning English writing. Besides, the use of the qualitative research method is also important to deeply explain and describe the investigated complex and social phenomenon within its real context. As asserted by Figl et al. (2005) and Creswell (2014), previous studies that investigated some social and complex issues quantitatively only have been flawed. In addition, the use of the qualitative research method helps the researcher to scientifically understand the main factors available in the flipped learning English writing environment that contribute to this effect from multiple data collection sources that allow for multiple perspectives relevant to these factors. To highlighting this idea, (Patton 2015) states that qualitative research methods allow researchers to collect data from multiple data collection sources that lead to multiple perspectives, which are difficult to be collected quantitatively. Moreover, the qualitative method allows the researcher to thoroughly explore students' experiences concerning the factors available in the FLEWE that contribute to the effect of flipped learning on students' writing performance, autonomy, and motivation as they are perceived by the participants of the study. This fact is emphasized by Creswell (2014) stating that the qualitative method does not treat facts as objective but as subjective reality. Accordingly, the advantage of the use of the qualitative method in this study is to explore relevant information from the participants for the purpose of generating the case study rather than just arrive at lists of numeric data.

Since the study attempted to study a complex phenomenon in its real-life context, a descriptive, single-case holistic research design is implemented. Case study is defined as a "research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context" (Denzin and Lincoln 2018: 602). Case study is important for the current study as the researcher attempted to collect in-depth information about the studied case in its real-life context which is restricted in terms of time, place, and activity (Creswell 2014). It is descriptive since the study is targeted to provide comprehensive in-depth details of a complex educational phenomenon in its authentic setting. It is a single-case holistic research design as it attempted to study the targeted phenomenon as one single case and analyzed it as one whole entity and at one unit of analysis (holistic) (Yin 2011). Accordingly, comprehensive and vivid information relevant to the students' feelings, motivation, experiences, and perception of that situation can be collected.

3.2 Participants

The objective of the current case study is to deeply understand the phenomenon under investigation, rather than generalizing its findings across a population. Like other qualitative researchers who have implemented qualitative case studies (Muhammad et al. 2020; Sabarinath and Quek 2020; Fathi and Ebadi 2020; Engelbertink et al. 2020; Kumar et al. 2020), a non-probability sample consisting of 15 volunteered male and female EFL students was selected from the English department at the University of Anbar-Iraq. As asserted by Cipani (2009:59), "single case designs usually utilize more than one participant in a research study. Some studies use as few as 2 or 3 participants, while others have whole classrooms of 20–30 students". According to Cipani, it depends more on the way the data is collected than on the size of the sample.

Supporting this claim, Kumar (2011) admitted that in qualitative studies, the saturation point is the determining factor and it is more important than the sample size. This means that the amount and the diversity of the collected data are more important than the number of participants enrolled in the study. Those 15 participants were purposively selected out of 62 students representing the total number of the population of the third academic year 2018–2019. The age of those students was ranged from 20 to 22 and they were all from Iraq. None of them had any prior experience of using flipped learning in their learning of English language.

The participants' selection procedure was based on certain criteria; students' mastery of the use of computers, Internet, and its pedagogical applications, and students' writing ability. The main reason for implementing purposive sampling procedure is to select cases of students who can participate interactively in the study, and provide it with rich and in-depth data that help attain the research objectives of the study (Cohen et al. 2007). This is in harmony with Yin's (2018) recommendation who stated that it is advantageous in case study research to select representatives who have the desired features that serve the study variables. Consequently, purposively selected students help the researcher to get the required saturation of data relevant to the investigated variables.

With regard to ethical considerations, a consent form was prepared and explained to the participants to be signed by them. To ensure the confidentiality of the participants' identities, pseudonyms were used for them instead of their real names throughout the whole period of research. In addition, the researcher informed them that their participation would not have any advantageous concern on their grade in the course.

3.3 Data collection instruments

Triangulation of multiple data collection instruments including pre- and post-study writing tasks, interviews, learning diaries, and observation was used in the current study. The term "triangulation" is defined by Flick (2009), as the use of more than one data collection instrument for getting convincing, and reliable findings. Confirming this fact, Creswell (2014) stated that qualitative researchers normally implement various sources for collecting data such as; diaries, interviews, document analysis, and other qualitative data collection instruments rather than depending on one single data collection source. The use of triangulation of data collection instruments when investigating flipped or technology-enhanced learning (TEL) is emphasized by Figl et al. (2005). They stated that a triangulation of data collection instruments needs to be implemented in such studies since they are based on social and technological theories. As for the current study, the main rationale for triangulating the data was to cross-check and to obtain valid, unbiased, and reliable data relevant to the research objectives of the study. These data can help the researcher explore the phenomenon under study deeply and arrive at saturation point and to get multiple and diverse perspectives relevant to the research objectives (Denzin and Lincoln 2018).

In line with the facts mentioned above, pre-study and post-study individual writing tasks were implemented by the researcher to collect data relevant to the first research objective of the study, i.e.; the effect of implementing flipped learning on EFL students' writing performance. To do this, students' scores in the pre-study individual writing tasks were compared with their scores in the post-study individual writing tasks to note

the students' improvement in their writing performance. It is worth noting that this comparison is based on the important macro and micro aspects of writing as highlighted in Hedgcock and Lefkowitz's (1992) rating composition rubric.

For the purpose of in-depth understanding of the context and to gain detailed responses from the participants relevant to the second and third objectives of the study, observation notes were also implemented. This fact is supported by Gillham (2000) who stated that observation is the heart of the case study method in the sense that it allows convergence, which entails different types of evidence approached via different tools, but leading to the same point. Accordingly, the rationale for using observation in the current study was to collect information that might not be gained by using other data collection instruments and to pursue events that might change over time (Ivankova 2015). In addition, observation helped the researcher to better understand the research setting and discover certain factors and elements that might have been unconsciously missed or that the participants were not able to talk about freely and to cross-check the information. In this study, observation notes were recorded in both online and face-to-face modes of the flipped learning English writing environment. In both phases, observation focused on the groups as a whole to track their collaboration, interaction, and the nature of group work in performing different writing activities. Besides, any interactions and discussions with the participants inside and outside the classroom were recorded as observation notes. For example, the researcher recorded in a form of notes some participants' reflections about the merits of using Google Classroom in the English writing class.

Moreover, students' learning diaries were also used to collect data that support the first, second, and third objective of the study. Learning diaries are regarded valid and more ecological instrument than other research instruments such as interviews and observation since they are used to reveal phenomena which are unseen or cannot be accessed by interviews and observation (Jacelon and Imperio 2005). In addition, the use of learning diaries helps the researcher follow behaviour and events and in the cognitive and social processes of learning as experienced by the students and are not restricted to the classroom situation only (Cohen et al. 2007). In this study, learning diaries were collected to support the data collected by other research instruments such as; interviews and observation relevant to the three objectives of the study. Learning diaries were also used to cross-check the results collected by various research instruments for the purpose of triangulation. To do this, participants were asked to continuously document their learning diaries at the end of each writing task. In this way, students were asked to reflect on their feelings, attitudes, and perceptions, while they were engaged in the various English writing activities throughout the semester. Accordingly, 45 copies of learning diaries were collected at the end of the course.

Finally, a post-study focus group semi-structured interview was conducted to collect data relevant to the first, second, and third objective of the study. Thus, interview data was used to address the effect of implementing the flipped learning on students' EFL writing performance, autonomy, and motivation and to explore the factors available in the flipped learning English writing environment that contribute to this effect. More specifically, the main purpose of interviewing is to get access to the participants' perspectives and to find out important things that are difficult to be directly observed and to understand what we have observed (Patton 2015). The focus group semi-structured interview method was implemented as it allows the researcher to use a list

of proposed main topics while ensuring enough flexibility for the interviewees to talk freely about any issue raised during the interview interaction. (Creswell 2014). Thus, this method gives the researcher as well as the interviewees a more conversational interaction, which allows for a rich amount of data to be collected. The interview is based on an interview guide designed by the researcher. As asserted by Charmaz (2006), the interview guide is important for semi-structured interviews as it initiates follow-up questions and encourages the interviewees to reflect their perspectives about the events freely. The semi-structured interview guide designed for this study consisted of specific main questions which were mainly inspired by the researcher's reflections, and observation notes or emerged from the main research objectives of the study. The first version of the interview guide was verified by a panel of four experts in terms of the validity and suitability of the interview questions to the constructs investigated in the current study. Those experts were having a long experience (more than twenty years) in the field of applied linguistics, teaching English writing, and computer-assisted language learning. In addition, this interview guide was piloted with four students in an attempt to find out any difficult or ambiguous question in it. All the experts' and students' constructive comments for the interview questions were highly considered when forming the final version of the interview guide.

In this study, the post-study semi-structured interview was conducted with the 15 students who participated in the study. They were divided into three groups; each consisted of five participants depending on their familiarity with each other. Each interview lasted approximately 40–50 min. Their responses were digitally audio-recorded and transcribed verbatim after taking permission from them.

3.4 Procedures of the study

The study passed through three important phases; as illustrated in the following figure.

In the pre-study phase, students were asked to write an essay individually as a pre-study writing task. Then, the researcher purposively selected the samples of students to participate in the study. Following this, a training session was conducted where the students received a practical training about the stages of the writing process and how to perform each one, a training about using Google Classroom for the writing process, a training about peer review, and a training about the principles and components of writing a good essay.

As for the study phase, the participants were assigned into three groups and asked to work collaboratively in writing three writing tasks. The main principles of flipped learning were applied when the students were working in the various stages of Hayes and Flower's (1981) model of the process approach of writing; pre-writing, drafting, and post-writing stages (see Fig. 1).

In the post-study phase, students were asked to write an essay individually as a post-study writing task. Then, the researcher conducted the post-study interview. Finally, the collected data by the students' pre-study and post-study writing tasks, interview, learning diaries, and observation notes were put together in a form of sheets to be processed in data analysis process as explained in the coming section.
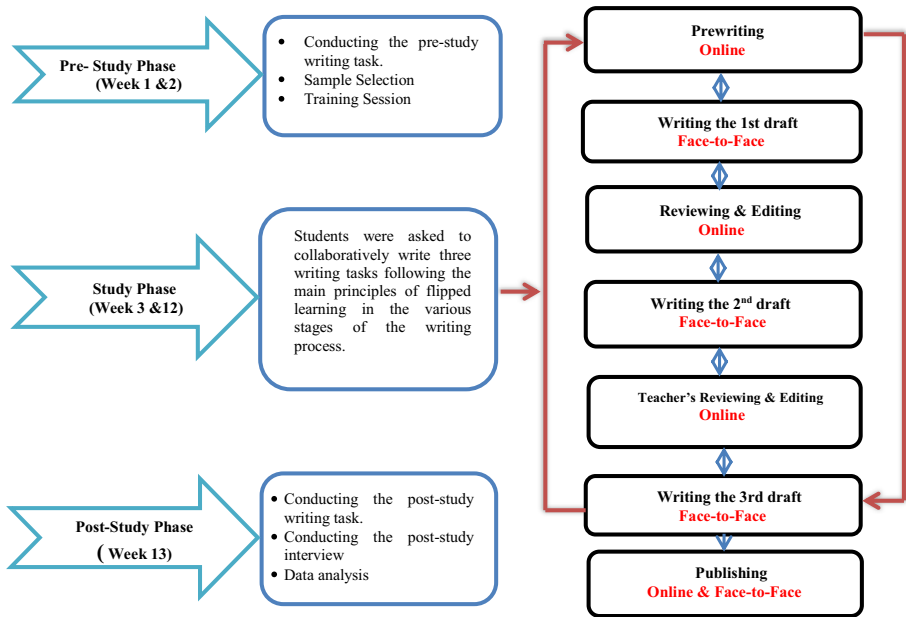
Fig. 1 Procedures of the study

3.5 Data analysis procedures

Data were analyzed qualitatively using content and thematic analysis. Content analysis was used to analyse the data collected by the students' pre- study and post-study individual writing tasks. Content analysis is based on Hedgcock and Lefkowitz's (1992) rating composition rubric. Accordingly, students' scores in the pre-study writing task were compared with their scores in the post-study writing task based on all macro and micro aspects of writing mentioned in the aforementioned scoring rubric. As for the thematic analysis, it was used to analyse the data collected by observation, students' learning diaries, and focus group interview. This thematic analysis was conducted based on the six phases suggested by Creswell (2012) as explained in Fig. 2.

In order to prepare and organize the data, the researcher prepared the data collected by the research instruments of the study by typing them and saving them in Microsoft files. As for the data collected by the students' interview, the researcher transcribed them verbatim and typed them in Microsoft files immediately after interviewing the
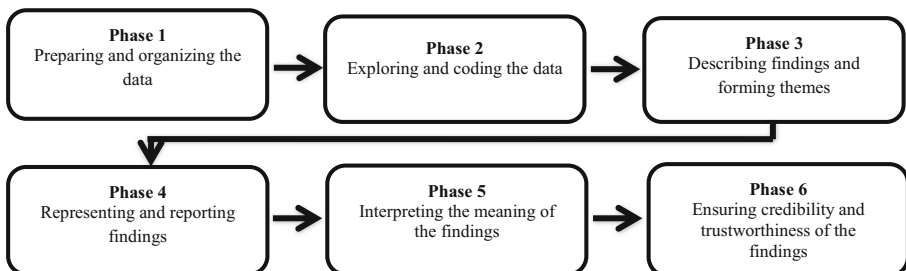

Fig. 2 Phases of qualitative thematic analysis - Adopted from Creswell (2012, p.236)

three groups of students. As for the students' learning diaries and observation field notes, they were also typed and saved in Microsoft files immediately. Then the researcher translated the Arabic version of the students' learning diaries into English language and submitted the English version to two experts in English language and translation from the department of English, College of Education for Humanities-University of Anbar. The purpose of this procedure is to check the compatibility of the meaning in the two versions of data; Arabic and English versions. Finally, the data were organized in a form of tables.

In the phase of exploring and coding the data, the researcher deeply examined and read the data many times, categorized it and wrote some descriptions and notes to develop an insightful understanding of the collected data and arrive at the probable themes that emerge and serve the investigated variables. In addition, the data collected by the means of the research instruments as well as the participants were given labels. In this way, students' interview data was labeled (I), learning diaries were labeled (LD). The fifteen students who participated in the study were given the label (S1, S2, S3,… etc.). Finally, students' three groups were labeled (G1, G2, and G3).

In the phase of describing findings and forming themes, the researcher read through the data again and created broad categories (themes) that can combine the themes that emerged from the collected data. In this way, the researcher examined the emerged themes and categorized them into main themes and sub-themes by merging them into larger categories according to the research objectives. Following this, the researcher reported the findings and provided relevant and logical justifications and explanations for the findings.

Finally, to ensure the credibility and trustworthiness of the findings emerged from the qualitative data and avoid the researcher's probable bias, and misinterpretation, various strategies can be implemented by qualitative researchers such as; triangulation of data, rigorous involvement, review by external auditors, rich and copious descriptions of the findings, and member checks (Cohen et al. 2007; Stake 2010; Yin 2011). In this study, the researcher implemented triangulation, and review by external auditors. First, multiple data collection instruments were used for the triangulation of data and to compare them to ensure their accuracy and validity. In this vein, Denzin and Lincoln (2018) stated that triangulation contributes to the verification and validation of qualitative analysis. This is done by checking out the consistency of the findings generated by different data collection methods and checking out the consistency of different data sources within the same method. Second, the researcher asked an external auditor to critically examine the entire research during its research process in terms of the weaknesses and strengths of the findings. For this purpose, the researcher submitted the first draft of the analysis and the findings to an expert who was an assistant professor and a professional academic in the field of technology and English writing teaching. He checked the accuracy of the research process from the beginning till the resulting findings and their interpretation and confirmed that everything reported by the researcher was factually correct. Finally, to ensure the objectivity of the analysis and the accuracy of the themes that emerged from the students' interviews and their learning diaries, inter-rater reliability was calculated (Cohen et al. 2007; Creswell 2014). To calculate the inter-rater reliability in this study, the collected data were coded by two coders: the first one was the researcher, whereas the second one was the external auditor mentioned above. A percentage of agreement between the two coders relevant

to the coded patterns was compared resulting in an agreement percentage of (94.5%). As concerns the disagreement between the two coders relevant to some themes of the study, they were discussed again between the two coders and resulted in a (96%) agreement percent between the two coders.

4 Findings of the study

4.1 Improvement in students' writing performance

To explain the type of improvement on EFL students' individual writing performance, the students' scores in the pre-study writing task were compared with their scores in the post-study writing task. To triangulate the data collected by the writing tasks and validate the results of the writing task, extracts from the students' responses to the post-study interview questions, their learning diaries were given and explained. Accordingly, findings revealed that all students (15 students) noticed an improvement in their individual writing performance due to the FLEWE experienced by them during the semester. Figure 3, demonstrates students' writing improvement in the post-study writing task as compared with the pre-study writing task.

As shown in Fig. 3 above, students' scores in the post-study writing task were higher than their scores in the pre-study writing task. For example, S01 scored 54 marks in the pre-study writing task and 75 marks in the post-study writing task. This means that this student gained 19 marks as an improvement in his overall writing performance in the post-study writing task as compared with the pre-study writing task. See (Fig. 3).

In addition, the findings obtained from analyzing the students' pre-study and post-study writing tasks were confirmed by students' interviews and their learning diaries. In their responses to the interview questions, all students indicated that they improved in their writing performance. For example, S10 indicated in his response to the interview questions that he got an improvement in his writing ability in the post-study writing task as he learned much language and writing knowledge in the FLEWE. He further explained that throughout this semester, he learned how to perform the stages of the writing process and how to write each part of the essay. He confirmed that he got all of these information relevant to the essay and the writing skill in collaboration with his classmates in both online and face-to-face learning activities. Expressing this opinion, he stated, *"as concerns with writing performance, I improved so much at the end of this*
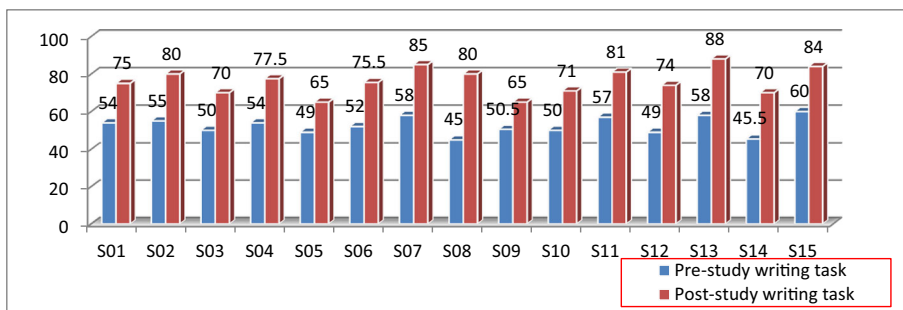

Fig. 3 A comparison between the students' scores in the pre-study and post-study individual writing tasks

semester,…..mmmm, I used to work collaboratively in online and traditional class activities and I learned so many aspects of writing, for example, I learnt how to do all stages of the writing process, the components of the essay, and how to write each one." (S10 G2 I).

In addition, S14 claimed that he improved in his individual writing ability and attained a good score in the post-study writing task due to the amount of knowledge and practice in the FLEWE. He learned some language aspects that helped him write meaningfully and grammatically and learned how to write essays systematically after designing an organized plan for the essay. Indicating this idea, he mentioned that, *"In this semester, I learned so many aspects relevant to systematic writing and the accuracy of my writing….I learning how to outline the essay and write a good plan for it. This helped me be organized in my writing. I also got some recommendations from my group mates related to grammar and vocabularies"* (S14 G3 I).

Similarly, all students reflected their improvement in their individual writing performance when documenting their learning diaries. They mentioned that the FLEWE was a good learning opportunity that helped them much in learning English writing in general, and in writing essays in particular. This positively affected their writing performance. Below, some extracts from the students' learning diaries are presented.

> *S02: this semester, I improved my writing much as it includes many comfortable learning activities that helped us to practice writing comfortably (S02 G1 LD).*
> *S05: I think that I am good now in writing, this semester helped me much in improving my writing (S05 G1 LD).*
> *S10: I am proud of my writing ability. This semester enriched my writing knowledge. (S10 G2 LD).*

To conclude, the findings obtained from the students' pre-study and post-study writing tasks, students' interviews, and their learning diaries were all in harmony. They together confirmed that students improved their writing performance due to the comfortable and rich learning opportunities provided by the FLEWE. This means that the amount of knowledge learned by the students in a collaborative and flexible learning environment was effective in helping students write individually and consequently, resulted in autonomous learning.

4.2 Improvement in students' motivation and autonomy

Learning writing in this way helped students be motivated, and dependent on their learning. Generally speaking, analysis of the students' responses to the interview questions and students' learning diaries revealed that all students experienced a positive effect on their autonomy and motivation as a result of the FLEWE. Further thematic analysis of the students' responses to the interview questions and their learning diaries revealed the following themes:

4.3 Students' self-learning

The majority of students mentioned that the use of the FLEWE in English writing class encouraged them to learn by themselves (self-learning) with collaboration with others.

They were able to develop their essay, construct knowledge, arrange and organize them in the essay and provide constructive comments for each other. All of these aspects of writing were done by the students themselves under the guidance of their teacher. Table 1 provides extracts from the students' responses to the interview.

4.4 Take responsibility for learning

Analysis of the interview data indicated that the students took the whole responsibility for their own learning and the style of their learning. The online phase of the FLEWE encouraged them to take charge of their learning of English writing as they felt that they are alone in the Google Classroom, though the teacher was available in the online class. This made students more close to each other than to their teacher. Accordingly, they collaborate and provide scaffolding to each other in all aspects of writing. This means that they have the required high motivation and autonomy to learn English writing. In the following extracts from students' interview (Table 2), they stated that they were creative in writing, feel responsible in doing all aspects of writing as they share ideas, discuss them together, and arrange them to produce a well written essay.

4.5 Take decision

Students also mentioned that this learning method helped them to work independently and take decisions in all aspects of the essay. As mentioned in students' extracts, group work which is provided by the FLEWE enabled them to decide the sources of information relevant to their essays and to decide how to collaborate with each other and share roles and responsibilities in the process of essay writing. In addition, group work helped them be negotiable and open-minded learners. In this way, they were able to discuss together, examine the ideas shared by them, and take appropriate decisions regarding the correctness and appropriateness of each other's comments and ideas. Table 3 shows extracts from the students' interview as examples for this idea:

4.6 Feel confident

Students claimed in their responses to the interview questions that the FLEWE was effective in building their high motivation and autonomy in learning since it helped

Table 1 Data extracts representing "Students' self-learning"

Participant	Data extract
S08 G2 I	Yes, it has a positive effect on my writing autonomy and independence, and motivation because it encourages us to work collaboratively and discover and develop the essay depending on our information.
S09 G2 I	Yes, positively because it installs in me the nature of depending on ourselves as a team to construct and arrange the knowledge required for the essay. It is something motivating.
S10 G2 I	Yes, I feel that it is positively affected my writing and motivation and independency to write because it encouraged me to write and construct my own knowledge and reflect on other's points of view.

Table 2 Data extracts representing "Take responsibility for learning"

Participant	Data extract
S02 G1 I	Yes, this learning method is helpful because it helps us to be creative in writing and feel motivated to write and feel that we are responsible for our writing.
S03 G1 I	Yes, of course, because we have to share and discuss the shared ideas together we have to learn by ourselves, we feel motivated because we are responsible for our learning and the style of learning.
S06 G2 I	Yes, this method affects…….positive effect on my autonomy and motivation toward writing because especially the online phase because I feel as I am responsible and have the autonomy to my writing, the content, the arrangements of the essay, and so on.

them feel confident in their writing ability. Students felt self-confidence as they learned how to write their essays correctly and acquired the required micro and macro aspects of writing. In addition, they improved their language and vocabulary knowledge throughout this course. This helped them overcome all sources of their negative feelings and any type of apprehension associated with the writing skill or language knowledge. Accordingly, they felt comfortable and confident when writing in English as they already have the required information and commands of writing that help them in writing. Table 4 provides examples from the students' interview extracts:

4.7 Extend their learning of English writing outside the school time and place

Students claimed that the FLEWE motivated them to practice and learn EFL writing outside the school time and place. Students' reflection of their high motivation to learn and practice English writing outside the school is a clear example of their high autonomy in learning. This can be due to the amount of language and writing knowledge attained by the students throughout the FLEWE. In addition, the friendly and comfortable nature of the collaborative learning activities they have experienced in the FLEWE instilled on them positive feelings towards the writing skill. All of these experiences encouraged them to further their learning outside the formal setting of schools. Consequently, they reflected their motivation to learn writing using their own

Table 3 Data extracts representing "Take decision"

Participant	Data extract
S11 G3 I	…. this method helped me how to collect ideas about the writing essay, how to collaborate with my classmates, and how to take a decision on all aspects of the essay. This really motivated me to write and enabled us to work independently as a group team in our writing.
S12 G3 I	Throughout this semester, we were able to decide together…..mmm we used to collaborate and discuss together the problems encountered during the various writing stages and decide how to overcome these problems.
S15 G3 I	….. I feel happy, and motivated when I write during this semester because we learned not only how to write, but because we learnt how to discuss and get the right decision relevant to our essay.

Table 4 Data extracts representing "Feel confident"

Participant	Data extract
S06 G2 I	In the last semester, I was nervous and not confident in my writing of an essay, but this semester I feel much more better and confident when writing an essay and I feel comfortable because I learnt how to write a proper essay.
S12 G3 I	Yes, it is a positive effect because it helped me to be more confident in myself while writing.
S13 G3 I:	Writing independently promoted my self-confidence as well as my language and writing confidence.

knowledge and skills which they learned in the writing course. The following extracts from the students' learning diaries are examples for this fact, see Table 5.

4.8 Eagerness to learn and practice other types of essays

Finally, some students reflected their high motivation and willingness to practice writing other types of essays depending on their current experience and knowledge in the writing skill. Their interest in practicing English writing is not confined to a specific type of writing. It rather extends further to practice various types of essays. This positive feeling towards practicing English writing was not only an example of students' interest and high motivation toward English writing. It also gives strong evidence for students' autonomy to practice writing autonomously. When the students were enthusiastic to further their practice of other types of essays, this means that they were ready to work independently as they have the required knowledge to start their new learning experience. This fact is stated in the following extracts from students' learning diaries, see Table 6.

Throughout the last month of the semester of the study, the majority of students were noticed active in their discussion and writing, committed in the time of assignments submission, work independently within their groups, and creative in their writing. This fact was clear in both online and face-to-face activities. In addition, the majority of students clearly reflected their interest and autonomy in their individual writing which are submitted to the teacher of English writing. Some of them were also noticed

Table 5 Data extracts representing "Extend their learning of English writing outside the school time and place"

Participant	Data extract
S05 G1 LD	I feel motivated and independent in writing. Because after learning how to write, I can write whatever I want. It is not limited to the class writing only because sometimes I practice writing in my free time at home, I enjoyed writing.
S08 G2 LD	I feel more autonomous and motivated to write inside and outside the class than before. Now, I used to practice writing at my home alone
S12 G3 LD	Now I feel more motivated to write and I will continue writing by using this way after the end of this course. I feel I can continue in my free time depending on my knowledge that I gained in this semester about writing.

Table 6 Data extracts representing "Eagerness to learn and practice other types of essays"

Participant	Data extract
S06 G2 LD	Because now I have an interest in writing I am motivated to do further practice in writing, I feel eager to do further practice in writing other types of the essay even outside the school hours for myself.
S07 G2 LD	I think that now my interest and knowledge and practice in writing help me to do further practice to write in my free time at home. Even if it is not required from me, I used to write various essays irrespective of their length and types.
S11 G3 LD	Because I have an interest in writing and my negative feelings were removed, I feel now that I can further my practice in writing other types of writing.

practicing other types of essays in their free time, either individually or with classmates. They also reflected their interest and motivation to practice and learn English writing outside the school time and place.

4.9 Factors that help in promoting students' motivation and autonomy

Analysis of the students' responses to the interview questions and their learning diaries revealed several factors that help in promoting students' motivation and autonomy in learning English writing. These factors were available in the FLEWE. In the following sections, detailed explanations of these factors as well as illustrative extracts are presented.

4.10 The interactive nature of the learning environment

Students mentioned that the FLEWE was encouraging for students' discussion and collaboration. Accordingly, students can get benefits from each other and provide scaffolding for each other. This helped them overcome their language and writing problems and consequently learn from each other. Therefore, they mastered the macro and micro aspects of English writing. In addition, the interactive nature of the FLEWE can have a psychological effect on students. It helped them work comfortably and be close to each other far away from the traditional class routine. Therefore, they felt that there were no threatening factors in their learning of English writing as they can discuss and work collaboratively to overcome any language and writing problems they might encounter. Table 7 gives extracts that clarify this factor:

4.11 Flexibility in terms of time and place

Time and place flexibility was another factor expressed by the students. The online learning activities available in the FLEWE provided the students with a type of flexibility in terms of time and place which in turn gave the students a comfortable learning space to learn and practice by themselves. In addition, time and place flexibility provided students with ample practice opportunities that can help them expand their language learning input while practicing English writing at the same time. This means that the students, who were involved in the FLEWE, have a constant

Table 7 Data extracts representing "The interactive nature of the learning environment"

Participant	Data extract
S07 G2 LD	Discussion with my friends helped me learn so much….ah…this increased my motivation to learn English writing as we helped each other when we discuss. It also helped me be autonomous within the group work and when writing alone.
S05 G1 I:	We all fell motivated and autonomous as we collaborate and interact in a group form. Hmm, we can learn from each other and practice writing together. This made me a dependent learner to me.
S02 G1 I	People are more social and interactive in social media, the teacher implemented this feature to help us learn English writing. He, with the aid of technology, made us talkative and free from class routine. This made us more collaborative in our learning and as a result, we learned better and became motivated and autonomous learners when concerned with the writing class.

learning opportunity where they can learn comfortably inside and outside the classroom. Examples for this factor are illustrated in Table 8.

4.12 Teacher and peers' feedback

The FLEWE provided students with synchronous and asynchronous feedback both from the other students and from the teacher. This helped students to be more comfortable in their learning and develop their language and writing ability at the same time. Based on these feedback comments, students can learn much relevant to the various aspects of writing. Accordingly, they felt psychologically motivated to learn English writing and more autonomous to practice it with their group mates and individually. The following extracts give clear evidence for this idea, see Table 9.

4.13 Many learning sources

Another factor for the improvement in students' motivation and autonomy was the various sources of learning and knowledge available. Students stated that the FLEWE

Table 8 Data extracts representing "Flexibility in terms of time and place"

Participant	Data extract
S10 G2 I	Throughout this semester, we don't have any restrictions. We discussed and learned so much online with our classmates. We have much time. In the normal class, we only apply what we learned online. This helped us much and improved my writing ability and autonomy.
S08 G2 I	I Feel more interested in the writing class now. We have some activities to do online and some activities inside the class. This provided me with many learning activities. I feel comfortable and autonomous learners in this way.
S014 G3 LD	Learning in comfortable and flexible environment like the one we experienced helps us to be more creative, hard workers, and independent learners. We can learn comfortably anytime. We have so many learning opportunities inside and outside he class.

Table 9 Data extracts representing "Teacher and peers' feedback"

Participant	Data extract
S01 G1 I	Feedback got from the teacher and classmates helped me be gradually dependent learner.
S7 G2 LD	I can write essays individually as I learnt many things from my mistakes when corrected by the teacher and classmates.
S09 G2 LD	I received so many comments from the teacher and classmates about my writing in a friendly manner. This helped me develop my writing ability and the style of my writing. This is why I feel motivated and autonomous learner in the writing class.

paved various ways in front of them to learn English writing. In the online mode of the FLEWE, students have many learning sources, for example, Internet Sites, online discussions, and Internet books and articles. In the traditional class, students can also learn from hard books, feedback from the teacher, and face-to-face discussion with themselves and with their teacher. These learning sources can gradually build their language and writing ability and consequently, cultivate their motivation and autonomy to learn English writing. In Table 10, examples from students' extracts are presented:

4.14 Variety of abilities in the group work

Students mentioned that involving them in groups that include students with multi abilities promoted their motivation to learn English writing and consequently increased their autonomy. As stated by students, working in groups that include students with different language abilities helped them to work collaboratively, discuss language and writing issues together, and learn from each other. This means that weak ability students can learn from the students with good ability. Some examples from students' extracts are given in Table 11.

The majority of the previously mentioned reasons that helped students cultivate their motivation and autonomy in their writing classes were observed by the researcher during the various online and face-to-face learning activities of English writing. The majority of students were so comfortable, committed, and engaged in the learning

Table 10 Data extracts representing "Many learning sources"

Participant	Data extract
S02 G1 LD	There are many comfortable sources of knowledge for us this semester. We can use books, Internet sites and discuss with classmates and learn. This facilitates our learning of English writing and helps us be independent when we write individually.
S10 G2 I	I can write depending on my knowledge and writing experience that I got from my teacher, classmates, and Internet. Even though I need some information, I can search on the Internet.
S11 G3 LD	I feel more comfortable and autonomous due to the many sources of information that helped me to learn English writing. I used books, articles, both hard and soft copies, Internet, online and face-to-face discussion. All of these helped me be confident, competent, and autonomous write.

Table 11 Data extracts representing "Variety of abilities in the group work"

Participant	Data extract
S04 G1 I	When working collaboratively, students can get benefit from each other. Good students can help poor students. This improved my learning of English writing and helped me be autonomous learners.
S08 G2 I	The group with weak and high ability students is good to work with. We can learn better together. As a result, I can reflect on my learning when writing independently.
S13 G3 LD	I feel better and autonomous in this course. This is because I learned many writing and language information from group members. Specifically, when the members of the group differ in their abilities.

activities. Besides, they were clearly noticed enjoyed the interaction with their group mates and responsive to the constructive comments provided to them. By observing each group, students were noticed discussing the comments together. Their discussion was attempting to examine some of the comments provided to ensure their validity and accuracy in their situations. Throughout their writing, they reflected their use of various learning sources. All of these factors encouraged students to learn by themselves independently and helped in improving students' motivation to learn English writing.

5 Discussion and conclusion

Even though flipped learning has been widely used in teaching English language in general, and in teaching English writing in particular, its usefulness in developing students' English writing performance is still ignored. In addition, the probable qualitative impact of using flipped learning to improve students' autonomy and motivation to learn English writing and the main factors and reasons for this impact is still unclear in the past literature.

The finding of the qualitative analysis of the data collected by the use of pre-study and post-study English writing tasks, interviews, learning diaries indicated that the FLEWE has an influential impact on improving students' English writing performance. Regarding the students' writing performance, the findings of the current study are in agreement with some previous studies (Tuna 2017; Özkurkudis and Bümen 2019; Qader and Arslan 2019; Alkhoudary 2019). However, these studies differ from the current study in terms of their methodology and procedures, participants, and the type of independent variables. This improvement in students' writing performance might be attributed to the knowledge related to the language aspects and writing aspects gained by the students when they were working in group form both in face-to-face and online modes of the flipped learning. The design of the flipped learning classroom was so encouraging and motivating for group discussion where a friendly collaborative interaction was guaranteed (Al-Bahrani 2020; Abdullah et al. 2019a, 2019b; Challob et al. 2016). Through this collaboration and group interaction, students can get immediate scaffolding from other students that help them overcome many of their language and writing problems and achieve the desired goals of the writing task.

With regard to the students' autonomy and motivation, findings revealed that the participants of the study were able to learn by themselves, take responsibility for learning, take a decision, they have the required confidence in their learning, eager to extend their learning of English writing outside the school time and place, and eager to learn and practice other types of essays. All of these facts clearly indicated that the students have promoted in terms of their autonomy and motivation to learn English writing. The FLEWE created a non-threatening learning environment where students were provided with ample self-learning opportunities. These self-learning opportunities accompanied by a comfortable learning atmosphere helped students overcome their writing apprehension and work confidently in their writing classes as they felt that they already learned the required language and writing knowledge demanded for writing essays. Accordingly, they felt that they can write autonomously when individual writing is required from them. These positive feelings towards writing increased their motivation to extend their learning of English writing outside the classroom and practice other types of essay writing. More importantly, the aptness of FLEWE to the millennial students' learning preferences and styles is believed to be another essential factor in promoting students' autonomy in learning English writing as they were accustomed to electronic tools. Hence, FLEWE succeeded in nurturing the students' positive attitude to use technology in learning English writing and consequently, increased their motivation to learn English writing autonomously (Kassem 2017). Moreover, the other justification for the increase in students' autonomy and motivation is that the students were given the opportunity to control their own learning in terms of time, place as well as initiating learning tasks on their own. This leads to an actual increase in the students' self-determination level that contributes positively to increasing their autonomy (Ryan 2009; Reeve 2012).

In addition, findings revealed that there were many factors in the FLEWE that helped students improve their English writing performance, autonomy, and motivation. These factors were; the interactive nature of the learning environment, flexibility in terms of time and place, teacher and peers' feedback, many learning sources, and the variety of abilities in the group work. These factors are based on Vygotsky's social constructivism theory of learning (1978) which believes that the concept of learning is represented by the students' self-effort in building new knowledge and constructing meaning via social interaction and collaboration. The FLEWE was well-designed to ensure that the students can interact comfortably anytime; in-class and outside the class via online group discussion. This gives the students the required flexibility to work, collaborate, and discuss without any time and place restrictions. Accordingly, they were able to learn by themselves autonomously and get feedback from their teacher and classmates anytime. In addition, students were not restricted to the materials posted by their teacher as they were able to access infinite online materials and sources outside the classroom. This idea is emphasized by (Kassem 2017: 21) as he stated that "Paring intensive exposure to the learning material outside the classroom with the cooperative in-class activities contributed significantly to the students' high academic achievement". Furthermore, the variety of students' abilities which was guaranteed in the group work was also encouraging in promoting students' autonomy and motivation. This fact is emphasized by social constructivism theory (1978) and is called "more knowledgeable others" (MKO) which represents an important construct in this learning theory. MKO refers to the more experienced, and competent students who should be

included in the group to provide scaffolding to the less experienced, and less competent students. This leads to the so-called reciprocal learning where the students can mutually share ideas and knowledge and attain the learning goals together in collaborative efforts.

Similar to the findings of the other qualitative studies, the findings of the current study can be transferred to a similar context, rather than to be generalized to other contexts. Based on the findings of the current study, it is concluded that the FLEWE can be used as an optimal learning environment that provides students with ample meaningful learning opportunities and learning experiences that help them learn English writing independently. More specifically, in an EFL context, the FLEWE is not only effective for good students. It is also effective for weak and apprehensive students as its collaborative nature can encourage them to be actively enrolled in the writing tasks and activities and improve their writing performance. Thus, weak and apprehensive EFL students feel more comfortable in learning as they learn in a flexible learning environment and get assistance and scaffolding anytime from their teacher and classmates.

The novelty of this study lies in its qualitative investigation of the effectiveness of implementing FLEWE on improving students' English writing performance, autonomy, and motivation to learn English writing in an EFL university context. Unlike the current study, most of the previous studies were mixed mode or quantitative in their methodologies and they were geared to students' English writing performance, autonomy, and motivation separately. Previous studies lack a deep understanding of the effect of flipped learning on students' English writing performance, autonomy, and motivation. To add more, the factors that are available in the FLEWE were not investigated in the previous studies.

Though the findings gained in the current study proved the effectiveness of FLEWE in improving EFL students' writing performance, autonomy, and motivation, few limitations should be highlighted for future investigations. The study is limited to a short period of time (13 weeks). To some extent, this period of time is not so ideal to deeply investigate the students' improvement in terms of their writing performance, autonomy, and motivation as they are influenced by the use of FLEWE. As a result, a longer period of time that extends for two semesters is recommended for future researches as it provides EFL students with much practice in English writing. However, the use of qualitative research methodology helped the researcher to diminish the drawbacks resulted from the short period of time. To add more, the study is limited to synchronous discussion in both Face-to-Face and online discussion modes. Accordingly, future studies are recommended to encourage both synchronous and asynchronous types of discussion in online mode along with the synchronous discussion conducted inside the class to investigate their influence in improving students' writing performance, autonomy, and motivation. Despite the limitations of the current study, it affords a step forward in the context of EFL writing pedagogy. It inspires the students and teachers' knowledge of the importance of integrating technology in the traditional English writing classes to maintain students' long-term learning of the English language. In addition, it alerts EFL students' awareness about the advantages of collaboration and discussion in both online and face-to-face modes in enriching their self-learning of English writing. It also stimulates teachers' awareness of English language to think seriously to integrate online technologies when teaching English writing to obtain optimal learning outcomes.

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