

Chapter 9 - The Impact of Virtual Flipped Learning on Gifted and Non-Gifted Students' Motivation from L2 Motivational Self-System Lens: Does Giftedness Cause Distinct Motivation?

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Chapter Highlights

- COVID-19 has borne drastic effects on different areas of society, including the education area, in that it brought virtual education to the center of attention, as an alternative to in-person education.
- In virtual education, the importance of flipped learning doubles, as students are supposed to take the main responsibility of teaching/learning process; and teachers play merely a facilitative/monitoring role. Given the students' responsibility in virtual flipped learning, students' motivation plays a pivotal role in the effectiveness of this learning method.
- The L2 Motivational Self-System (L2MSS) model is a currently proposed model elaborating on students' motivation based on three sub-components: ideal L2 self, ought-to L2 self, and L2 learning experience.
- Drawing on an exploratory sequential mixed-methods research design, this study probed the effect of virtual flipped learning (via SHAD platform) on 112 gifted and non-gifted students' motivation based on the L2 MSS.
- This study uncovered that notwithstanding the point that virtual flipped learning improved both gifted and non-gifted students' motivation, it differentially affected their motivation. In other words, gifted students mostly referred to ideal L2 self, while non-gifted ones referred to ought-to L2 self and L2 learning experience facets of motivation.

Introduction

The disruption brought about by the outbreak of COVID-19 pandemic has borne huge effects on different areas, especially education. It pushed educational stakeholders, specifically teachers and students, to swiftly adapt to a gamut of novel situations and experiences. Technology substantially assisted educational stakeholders with dealing with critical situation. Over a relatively short period of time, educational centers had to move from in-person education to virtual education in which learning materials are delivered to students via internet (Van Puffelen et al., 2022). The advancement of technology, specifically technology-assisted learning in the last decade, has caused teachers to start to consider virtual learning as a way of promoting self-directed learning for students and engaging a larger group of students, in comparison with in-person education (Bao, 2020). This education method requires adjustment by both students and teachers to adapt themselves to novel learning situations, in which technological support and active learning are foregrounded (Sandhu, 2020).

In virtual education, compared with in-person education, teachers usually have less control over students' learning and performance (Flores & Gago, 2020). Students may announce their attendance in the class but doing other irrelevant tasks or disconnecting themselves intentionally and attributing it to technology-related issues. In such a situation, students are typically expected to take more responsibility for learning and to manage their own learning. That said, motivation plays a pivotal role in virtual education, in that motivated students are more likely to manage their learning and take their classes more seriously.

Motivation

As correctly foregrounded by Noroozi et al. (2020), learning is a complicated phenomenon subsuming an ensemble of components, skills, and processes. Motivation is simply the force that pushes people forward. It is an underlying factor for managing to learn (Tăbăcaru, 2021), for it influences how students are likely to give up or move forward. According to Tăbăcaru (2021), motivation and learning go hand in hand, as they, directly or indirectly, affect each other. Motivation level is directly related to academic achievement and persistence (Anderman & Patrick, 2012). Having positive motivation for learning can drastically assist students in succeeding to achieve their learning goals. Similarly, motivation is of great

importance in learning a second language. Dornyei (1998, 2005) rightly asserted that motivation provides the primary impetus to commence language learning and sustain its long and challenging process. There is a great deal of research highlighting the importance of motivation in L2 learning. As one of earliest studies on motivation and L2 learning, Gardner and MacIntyre (1991) looked into the role of motivation in language learning of two groups of college-level students. While they told the students of one group that they would be awarded \$10 provided that they do the vocabulary task correctly, the participants in another group was only told to do their best in doing the task. The study finally indicated that the former group spent more time on and attention to the task and was more successful in undertaking it, compared with the latter group. Although the study clearly focused on instrumental motivation, its findings generally revealed that motivation, of any kind, is an influential factor in L2 achievement. After that, many researchers reported positive effects of motivation on L2 learning. More recently, numerous studies (such as Alamer, 2022; Dörnyei & Chan, 2013; kim et al., 2017; Noels et al., 2019) have highlighted that motivation needs to be taken as a central factor of L2 learning by teachers.

To narrow down the role of motivation in virtual education, most of conducted studies (to name a few recent ones, Kruk, 2022; Papi & Khajavi, 2021) have reported positive impacts of virtual education on motivation of L2 learners. The study conducted by Wehner, et al. (2011), for example, showed that language-related activities performed through virtual classes generated higher-level motivation than the activities done by learners in in-person classes. Jiang et al. (2022) also explored the the effects of virtual learning on 200 L2 learners' three variables, namely, motivation, attitude, and anxiety. The study reported positive effects for virtual education on increasing the learners' motivation and attitudes, and mitigating their anxiety. The study by Banihashem et al. (2023) also reported that inclusion of virtual learning into common traditional learning might substantially boost students' motivation.

The L2 Motivational Self-System

Despite the above-mentioned simple definition, motivation has been found to be a complex phenomenon encompassing a number of sub-components/factors which, in turn, are interlinked in varying ways. Different scholars have offered models and frameworks to clarify the complexity of motivation. Gardner (1985, 2001), as an example, foregrounded the multicomponential nature of motivation by asserting that it is the combination of three major

factors: effort (making endeavor to learn), desire (being willing to achieve a goal), and positive affect (enjoying doing the intended task). More recently, the L2 Motivational Self-System (L2MSS) was proposed by Dörnyei (2005, 2009) as a model to study and understand motivation in the new century. The origin of the L2MSS can be dated back to the study by Dörnyei and Csizér (2002) in which they ran a nationwide survey of L2 motivation in Hungary (Csizér, 2019).

A basic assumption of the L2MSS is that when a learner conceives a difference between their current state and their future self-guide (i.e., ideal or ought), this difference might work as a stimulus in order to connect the perceived gap and reach the desired final state. L2MSS encompasses three components: ideal L2 self (referring to the L2 attributes that learners ideally desire to have), out-to L2 self (referring to the L2 attributes that learners think they must possess to meet expectations), and L2 learning experience (referring to learners' perceptions and viewpoints toward different aspects of L2 classes, including teachers, textbooks, etc.).

The first and foremost point about the model is that, as Dörnyei (2019) has also reiterated, all the three constituents of the model are of significance and need to be taken into account when elaborating students' motivation through the model. The literature have reported positive contributions for the model to varying facets of learning, in general, and L2 learning, in particular, such as motivation (Taguchi et al., 2009), proficiency (Papi & Teimouri, 2014), achievement (Dörnyei & Chan, 2013), writing strategies (Jang & Lee, 2019), and anxiety (Papi, 2010). As a concrete example, the meta-analysis by Yousefi and Mahmoodi (2022) demonstrated that the L2MSS might do the justice (conceptually and contextually) about motivation and learning interaction, in that it depicts L2 motivation as an intricated system that highlights the understanding of time scales and change patterns taking place in learners' motivation and learning (Dörnyei, 2020).

In general, despite the many studies conducted on the L2MSS (Dörnyei & Ryan, 2015), there are still some unexplored issues (Papi & Khajavi, 2021). Examining the motivation of students based on the L2MSS in different academic fields, specifically L2 learning, is a topic that is in need of investigation. Further, the interaction of the L2MSS and virtual education, especially virtual flipped learning, is among these unexplored areas.

Flipped Learning

It was Wesley Baker in the late 1980s who introduced the flipped classroom as an educational strategy (Segalsson et al., 2017). Because at that time, personal computer progress had not developed to a degree that permits complete fusing of his opinion, his idea was not credible. Since the use of technology potential boosted at the outset of the twenty-first century, particularly YouTube and the Internet in 2006, Baker's tips have been granted dominant importance by a vast range of educators. (Afzali & Izadpanah, 2021).

Flipped learning, also known as inverted learning, rethinks the traditional way of teaching as it inverts the traditional classroom procedure by introducing the intended materials and content prior to class, making it possible for teachers to use class time to direct students actively (Yough et al., 2017). It is an instructional method in which learners listen to and study the materials introduced by teachers at home, and discuss them at class time (Gopalan & Klann, 2017). Flipped learning, then, facilitates a more learner-centered and learning-focused view by asking learners to take a more active role for their learning. In particular, flipped learning is a convergence learning method focusing on interaction in the form of discussion-based and problem-solving lessons (Yoon et al., 2017; Jensen et al., 2015).

Based on Sarasyifa, (2018), there are many features pertinent to flipped learning: (a) Teacher-centeredness switches to students-centeredness in the flipped learning process (the students have the chance to investigate information and make an effort by his or her own); (b) the opportunity is provided for them to have access to download video from YouTube exercise sheet, read from the textbook, micro-lecture, etc., and (c) the role of the teacher as the sage on the stage" switches to the guide on the side in this kind of learning. To put it another way, the teacher is the facilitator for the students during the learning process, and not the major origin of the information. Accordingly, a number of advantages can be enumerated for flipped learning. Learners are often more motivated in flipped learning classes, in that they are more confident, have less anxiety, and feel more accountable to other peers for their contribution to activities. Further, learners read the materials before the class time. Thus, they attend the class prepared and with almost the same level of knowledge. Finally, learners are more likely to be engaged in classroom activities, as they have some prior knowledge about and awareness of what is going to happen in class and, because of this, have more confidence in class (McLaughlin et. al., 2014).

Flipped learning has also been found to enhance students' attitude and motivation more than traditional learning. For example, in the study by Bakla (2018), flipped learning was practiced by giving students a set of activities such as taking preview notes, asking students to view teaching films in advance, establishing Google teacher–student collaboration platforms, and establishing an online evaluation system for students. The study showed that flipped learning drastically promoted the students' motivation. Lin et al. (2018) also compared a flipped classroom with a traditional classroom for mathematics learning in primary schools. The results uncovered that flipped learning increased students' learning motivation and interests more than traditional non-flipped learning.

Some studies have investigated the effect of flipped learning on varying aspects of L2 learning such as idiomatic learning (Chen Hsieh et al., 2017), speaking (Li & Suwanthep, 2017), reading (Abaeian & Samadi, 2016), and writing (Lee & Wallace, 2018; Shu, 2015).

In general, despite a bunch of research studies might be found in the literature dealing with the effect of flipped learning on motivation, no study, to the author's knowledge, has ever looked into the effect of flipped learning on L2 learners' motivation based on the L2MSS. Part of this study tries to address this lacuna.

Giftedness and L2 Learning

Reviewing the literature, a remarkable variation might be found in the definitions provided for giftedness (Sahragard & Heidari, 2014; Pfeiffer et al., 2018). While older definitions (such as Terman, 1925) took a uni-facet in nature and considered receiving very high marks on an intelligence test as the main criterion for giftedness, newer definitions (such as Sternberg, 2018 and Renzulli & Reis, 2018) are multifaceted in nature and consider a number of sub-components for intelligence and thereby giftedness or require high-level non-cognitive factors, especially motivation and creativity. Despite the considerable variation in the definitions of the concept, intelligence has always been an important benchmark for giftedness (Worrell et al., 2019).

It has been reported that many gifted students do not thoroughly realize their potential, despite the outstanding cognitive abilities characterizing these students (Stroet et al., 2013; Worrell et al., 2019). One reason for it has been found to be lack of motivation of gifted students, which, in turn, results in their underachievement (Snyder & Linnenbrink-Garcia,

2013). This lack of motivation might emanate from diverse reasons such as lack of suitable teaching approaches, methods, activities, and materials that can assist them with making the best use of their potentials. In fact, one rationale for creating special schools for gifted students was that regular classes could not support and meet gifted students' needs and expectations. Studies comparing the motivation of gifted and non-gifted students reported that gifted students, on average, show higher intrinsic motivation than non-gifted ones (Agaliotis & Kalyva, 2019; Gottfried & Gottfried, 1996; Vallerand et al., 1994). Moreover, gifted and non-gifted students have been reported to show similar performance goals, which can be regarded as an external kind of motivation (Meier et al., 2014; Preckel et al., 2008). Although the conducted studies report that gifted students often have higher intrinsic motivation and similar extrinsic motivation, not all gifted students sound to be characterized by high-level quality motivation (McCoach & Flake, 2018). Therefore, further insight is required with regard to motivational differences between gifted and non-gifted students, specifically based on recent motivation models such as the L2MSS to reach a more fine-tuned understanding of the motivation of gifted and non-gifted students. Knowing about the differences of gifted and non-gifted students in terms of the three components of the L2MSS (that is, ideal L2 self, ought-to L2 self, and L2 learning experience) can raise the awareness of educational stakeholders, including material developers, course designers, teachers, and even students, as to how they are generally motivated to learn. This understanding, in turn, might navigate them to utilize associated materials, methods, and activities to help them burgeon their potentials.

All taken together, there has been a bulk of research demonstrating the positive effects of virtual education on L2 learners' motivation. Despite these studies, there are still many areas that need to be further explored. One area is the effect of virtual flipped learning on motivation of L2 learners based on the L2MSS model. Additionally, the motivation of gifted and non-gifted students for L2 learning has not yet been academically investigated. To address such gaps, this study aimed to respond to the following research questions:

- 1) Does virtual flipped learning improve the gifted and non-gifted students' motivation?
- 2) Do gifted and non-gifted students significantly vary in their motivation based on the L2MSS model?
- 3) If yes, how the interview results reflect the differences?

Method

Gifted Schools and Research Context

This study was carried out in gifted and non-gifted high schools of two cities of Iran. Regarding gifted schools in Iran, their admission is selective and based on a comprehensive nationwide entrance examination procedure for students in grade 6 (elementary school) and grade 9 (middle school). A minimum GPA of 19 (out of 20) is required for attending the entrance exam. The entrance exam at each level includes a number of multiple-choice and written questions testing students' intelligence, math, and science skills based on what they have studied in previous years. The style of questions varies each year. In one type, questions describe a particular phenomenon and its related problems. Then, students are asked to provide solutions and reasoning. The evaluation of the answers is not based on the choice, but on the described reason, trying to distinguish students with higher reasoning abilities. In another type, students are given a succinct introduction on a certain complex scientific topic, which most students are not supposedly familiar with. Afterward, they are required to solve a specific given problem using mathematical calculations, reasoning, or their common sense.

Furthermore, SHAD is the application developed by the Iranian Ministry of Education after the outbreak of COVID-19 for delivering and teaching course content to students. It provides teachers in Iran with facilities to help them connect and communicate with their learners. Teachers shared texts, videos, pictures, exercises, and homework with students online. It is completely free for teachers and students to use.

Research Design

A mixed method study was designed to delve into the effect of virtual flipped learning on gifted and non-gifted learners' motivation based on the L2MSS. Mixed-method design was adopted because drawing upon both quantitative and qualitative data provides more insightful findings than using either of them (Creswell & Clark, 2011). More specifically, sequential quantitative-qualitative explanatory mixed-method design was used in that first in the quantitative phase of the study, the pre-test-posttest-control group design was used and after that, in the qualitative phase of the study, the perceptions of the participants regarding the flipped learning and its impact on their motivation was examined.

Participants

The participants of the study were 112 Iranian L2 students selected via non-probability convenience sampling procedure. They were both male (51) and female (61) with the age range of 16 to 18 years old. They were also both gifted (54) and non-gifted (58). The giftedness/non-giftedness of the participants was based on the Iranian Ministry of Education benchmarks and examinations. They all spoke Persian language as their native language; and their second language (that is, English) level was determined to be intermediate by running a Quick Placement Test (QPT). Finally, the participants were told about the study purposes and their informed consent was received.

Instruments

The following instruments were utilized to glean data of the study. First of all, the proficiency level of the students was checked by giving them the QPT of Syndicate (2001). It consists of 60 multiple-choice reading comprehension, vocabulary, and grammar items. It is a reliable, valid, and well-organized instrument to pinpoint English language learners' proficiency level (Syndicate, 2001). The test was administered to the learners in line with its guidelines.

After running the QPT, the questionnaire developed by Abdollahzadeh and Papi (2009) was given to the participants to examine their perspectives based on the L2MSS principles. The questionnaire comprises two main sections. The first part pertains to different demographic characteristics of the participants, involving age, gender, etc. The second part includes 24 items in five-level Likert scale (from agree to disagree) format. Although the questionnaire has already been validated by Abdollahzadeh and Papi (2009), the questionnaire was given to three University professors who were expert at testing and research areas to confirm its appropriacy for the present study purpose. Also, the reliability of the scale was .77 by running Cronbach's alpha ($\alpha = .77$).

The third instrument was a semi-structured interview run one week after the treatment to gain the students' perceptions toward the virtual flipped learning. It included several pre-planned open-ended and yes/no questions such as: "how do you feel about this way of learning?", "Did this new method increased your motivation to learn?", "Did this method make you more motivated to pursue your desired goals explain?", etc. The questions were then given to one

experienced University professor to feedback on their appropriacy, relevance, and clarity. Over the interviews, when necessary depending on the interviewees' responses, the interviewer could ask further impromptu questions. To check the credibility of the data extracted from the semi-structured interview, member-checking and peer-debriefing were implemented. For member-checking, six of the interviewees were asked to review their transcripts and emerging themes to evaluate the accuracy of the interpretations; and for peer-debriefing, two University professors were asked to review and comment on the respnses and their analyses.

Data Collection Procedure

The study had different stages. In the first stage, the QPT was given to the participants to measure their general English proficiency. In the second stge, the questionnaire by Abdollahzadeh and Papi (2009) was filled out by the participants prior to the commencement of the study. In the third stage of the study, the flipped teaching/learning process was implemented for the participants. Lastly, in the fourth stage, the questionnaire was again given to the participants after the treatment phase to respond as a post-test.

The students were assigned different materials including video clips, the files of readings, and other relevant materials via SHAD platform to practice before the next day class. During the class time, the students practice what they have learned from the materials and teachers played the role of guide or mentor to answer their questions or solve the ambiguities.

After completing the quantitative data collection, they were told to announce their willingness to take part in the qualitative part of the study (interview). From the whole participants, 22 (12 gifted and 10 non-gifted) volunteered to sit for the interview. Each participant was interviewed individually for almost 15 minutes. The interviews was audio-recorded for later analysis process.

Data Analysis Procedure

The quantitative data gleaned via the questionnaire was analyzed by SPSS (version 25), specifically descriptive statistics and independent t-test. As to the qualitative data, the interviewees' transcripts were blind re-coded for each participant. This stage of procedure

was carried out to double check the themes emerged in the study. Furthermore, 30% of the data was rechecked and reanalyzed independently by a second researcher (a Ph.D. candidate of applied linguistics) who was briefed about the purpose of the study and was also conversant with qualitative data analysis.

Results

The QPT Results

Before dealing with the research questions of the study, some primary analyses were conducted to check the descriptive statistics, homogeneity, and normality assumptions of the data obtained from the QPT. Table 1 presents the descriptive statistic pertinent to the QPT.

Table 1. Descriptive Statistics of QPT in Gifted and Non-Gifted Groups

Group	N	M	SD	Skewness	Kurtosis
Gifted Group	54	11.82	3.14	-.034	-1.201
Non-Gifted Group	58	10.91	3.06	.467	-.878

As it can be seen, the values of skewness and kurtosis in both gifted and non-gifted groups was within the acceptable range (-2 and +2), which, in turn, indicates that scores on the QPT were normally distributed. However, to ensure about the normality of scores, Kolmogorov-Smirnov (K-S) Test was also run on the data. Table 2 presents the related results.

Table 2. Test of Normality of QPT Scores

Test	Kolmogorov-Smirnov		
	Statistic	<i>df</i>	<i>Sig.</i>
QPT	.091	111	.210

Given the obtained significance value, that is $Sig.=.21$, it approved of the normality distributions of scores in the two groups.

Additionally, a *t*-test was also run on the scores of QPT in order to make sure that the two groups were not significantly different regarding their overall level of English proficiency prior to the main study. Table 3 shows the results of this test. According to the obtained $Sig.$

value in this table (Sig.=.17), there was no significant difference between participants in the gifted and non-gifted groups with respect to their scores on the QPT prior to the treatment. Thus, the homogeneity of the two groups were also confirmed.

Table 3. The Results of T-test on QPT Scores between the Two Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig.	Std. Err. Diff.
QPT	Equal variances assumed	.053	.717	1.251	111	.174	1.557
	Equal variances not assumed			1.252	111	.174	1.556

The L2MSS Results

The first research question was related to the pre-test post-test differences of each of the two main groups of study on the L2MSS scores. To this question, the descriptive statistics regarding the ought-to L2 self, ideal L2 self, L2 learning experience, as well as the total motivation pretest and posttest of the two groups are shown in Table 4.

Table 4. Descriptive Statistics of the Pretest and Posttest of the L2MSS Components of the

		Two Groups			
Group	Variable	Group	N	M	SD
Pretest	Ought-to L2	Non-Gifted	58	13.44	2.92
		Gifted	54	12.16	3.31
	Ideal L2	Non-Gifted	58	11.29	2.25
		Gifted	54	16.09	2.07
	L2 learning experience	Non-Gifted	58	14.86	2.34
		Gifted	54	12.81	2.71
Total	Non-Gifted	58	39.59	7.51	
	Gifted	54	41.06	8.09	
	Ought-to L2	Non-Gifted	58	15.15	2.74

Group	Variable	Group	N	<i>M</i>	<i>SD</i>
Posttest	Ideal L2	Gifted	54	13.61	3.25
		Non-Gifted	58	12.55	2.61
	L2 learning experience	Gifted	54	17.90	1.95
		Non-Gifted	58	15.49	2.74
Total		Non-Gifted	58	43.19	8.09
		Gifted	54	45.24	7.75

This Table shows that the mean of the posttest in all the three sub-components of the L2MSS in both gifted and non-gifted groups was more than that of the pretest. It, then, indicates that the flipped learning could improve the motivation level of both gifted and non-gifted students.

The second research question of the study was associated with whether gifted and non-gifted students statistically vary in their responses to the L2MSS model. Descriptive statistics of L2MSS questionnaire for gifted and non-gifted groups is presented in Table 5.

Table 5. Descriptive Statistics of the Scores of the L2MSS Questionnaire

Group	N	Min	Max.	M	Scale Mean	SD	Skewness	Kurtosis
					(On a 6-point scale)			
Gifted	54	40	79	66.14	7.27	7.896	-.810	-.1.49
Non-Gifted	58	35	82	61.18	4.89	9.50	.363	1.079

Based on this table, the skewness and kurtosis values for both the gifted and non-gifted groups were also within the acceptable range of (-2 and +2). In addition, the higher mean belonged to the gifted group, as the mean for the gifted group was 66.14 (7.27 on a 6-point scale) while for the non-gifted group was 61.18 (4.89 on a 6-point scale). Now, to see whether this difference is statistically significant, the results of the independent t-test is presented in Table 6. The table reveals that the two groups differed significantly in their scores on the L2MSS ($t = -.44, P < 0.05$).

Table 6. Independent t-test of L2MSS Scores in Gifted and Non-Gifted Groups

	t	Df	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
						Gifted & Non-gifted on L2MSS	-.44

The Interview Results

The quantitative results of the study showed that first, virtual flipped learning had improved the motivation of both gifted and non-gifted students; and second, the two groups were significantly different in their motivation scores on the L2MSS questionnaire. Now, to respond to the third research question asking about what the differences between the two groups exactly lied, the results of the qualitative data (semi-structured interview) are discussed to reach more accurate, comprehensive, and objective findings (Silverman, 2006). Having transcribed the recordings of the interviewees from both groups, the researcher, with the help of N-vivo, extracted a number of themes and sub-themes from them. Table 7 shows the obtained results from the gifted interviewees.

Table 7. Extracted Themes and Subthemes from the Gifted Interviewees

Themes and Subthemes	f	%	Related Subcomponent
1. General benefits of knowing English			
• Being more successful in society	13	25.13	Ideal L2 self
• Being more important in society			
2. Personal interest in learning English	11	21.25	Ideal L2 self
3. Confidence feeling by learning English	9	15.26	Ideal L2 self
4. Being a fluent English speaker	8	14.07	Ideal L2 self
5. Understanding English movies and songs	8	14.50	Ideal L2 self
6. Passing the final course exam	5	4.54	Ought-to L2 self
7. Making teachers and parents happy	4	4.02	Ought-to L2 self

Themes and Subthemes	f	%	Related Subcomponent
8. Not being mocked by peers when making a mistake	3	1.23	L2 Learning experience

The table clearly reveals that gifted students mostly referred to points that were pertinent to ideal L2 self component of the L2MSS. They mentioned issues such as “interest in speaking English like a native speaker”, “being a more important and successful person in society”, and “understanding English movies and songs”, which are all related to ideal motivational sources. As an example of the gifted students’ comments, one of them said that:

“Virtual flipped learning was a good way for me to learn English. It can help me to like English language more. I was sure that if I say something wrong, nobody mocked me. But in real classes, when I make a mistake others laugh and mock me. Virtual flipped learning helped me to be more confident and interested in English language. Of course, it had some problems too. For example, I had many problems in installing and using the program.”

Table 8 presents the main themes extracted from the non-gifted students’ interviews.

Table 8. Extracted Themes and Subthemes from the Non-Gifted Interviewees

Themes and Subthemes	f	%	Related Subcomponent
1. Personal interest in learning English	1	.93	Ideal L2 self
2. Being better than others (friends & classmates)	15	23.43	Ought-to L2 self
3. Passing the course with a good score	14	20.60	Ought-to L2 self
4. Making teachers and parents happy	11	18.38	Ought-to L2 self
5. More chance of getting a good job in the future	9	14.66	Ought-to L2 self
6. Not being mocked by classmates	8	12.45	L2 Learning experience
7. More guidance from teacher	5	9.55	L2 Learning experience

In contrast to the previous table, the results of this table shows that non-gifted students often referred to ought-to L2 self and L2 learning experience motivational factors. As an example, one of the non-gifted interviewees mentioned that:

“Virtual flipped learning was good. Because it helped me to get better support from my teacher and understand the lesson better. I also did not feel bad when I made a mistake. I should get a good score because I know it can make my parents and also my teacher happy. This method also increased my interest to English. Now I like to learn English more and be better than my cousins.”

In general, these two tables show that whereas gifted students refer to ideal L2-self as the main source of motivation, non-gifted ones mention ought-to L2 self and L2 learning experience as their main motivation source.

Discussion

This study uncovered that notwithstanding the point that virtual flipped learning improved both gifted and non-gifted students' motivation, it differentially affected their motivation. While gifted students mostly referred to ideal L2 self motivation, non-gifted ones referred to ought-to L2 self and L2 learning experience aspects of motivation in virtual flipped learning. As with the positive impact of flipped learning on motivation improvement of both gifted and non-gifted students, some studies have similarly reported the rewarding impacts of flipping the classroom procedure on students' learning and motivation. Reviewing a number of studies on flipped learning, Nguyen (2014) concluded that flipped learning can augment students' motivation and autonomy, as well as their learning achievement in different subjects. Schultz et al. (2014) and Kvashnina and Martynko (2017) also reported that students mostly had positive attitudes toward flipped learning, referring to advantages such as the ability to pause, review, and rewind materials, and increased individualized learning and teacher availability. To explicate this finding, the basic focus of flipped learning has repeatedly been said to be making students fully engaged in active learning rather than passively receiving knowledge delivered by teachers (Hamdan et al., 2013; Li et al., 2015). It requires that students actively receive instruction and assess their understanding in preparation for class time. This active anticipation and increased responsibility that flipped learning transfers to students would make them more motivated to undertake their responsibility successfully. It also creates a sense of cooperation (Strayer, 2012) among students, motivating them to implement their tasks well. Furthermore, another precept of flipped learning is that students attend the classes with prior partial knowledge about and awareness of the class content (Hung, 2015), which mitigates their negative feelings,

particularly stress. Reduction of stress, in turn, enhances their confidence and motivation and even causes them to increase their active agency in class. On the other hand, there are also few studies that reported negative effects of flipped learning on motivation. Fassbinder et al. (2014), Alzahrani (2015), and Strayer (2012) revealed that although students initially showed high motivation toward flipped learning, their motivation eventually diminished, largely due to their students' difficulty in completing their pre-classroom tasks. In fact, it might be argued that if students are adequately technology literate and become well aware of the process of flipped learning, flipped learning may desirably affect their motivation.

Another finding of this study was that gifted and non-gifted students were differentially motivated by virtual flipped learning. While gifted students were inclined toward ideal L2 self motivation, non-gifted students explained their motivation by ought-to L2 self and L2 learning environment motivations. No study, to the best of author's knowledge, has previously dealt with flipped learning from giftedness and the L2MSS lens. However, this finding may be explicated by findings and results of some previously-conducted studies.

Motivation has always been one of central components in education, especially gifted education. In the oft-cited three-ring model of Renzulli (1977, 1986) on gifted behavior, motivation has been highlighted in the "task commitment" ring, which is defined as person's, motivation, willingness, and persistence to achieve a task. Different studies such as Curby et al. (2008) and Hornstra et al. (2020) have suggested that gifted-students show higher task commitment (including higher-level motivation) than non-gifted ones. Differentiated Model of Giftedness and Talent (DMGT) by Gagne (2005) also place a high value on the role of motivation in gifted education. According to this model, high-level motivation and success are tightly interrelated in gifted students (Kover & Worrel, 2010; Sak, 2011). Gifted students often have higher-level motivation than non-gifted students, which result in their being more successful in achieving their learning goals (Gottfried & Gottfried, 1996; McCoach & Flake, 2018). These findings, then, rationalize the present study finding that gifted-students were more inclined to the ideal L2 self than the two other components of the L2MSS. Moreover, gifted students have been characterised more independent, autonomous, and self-regulated learners, compared with non-gifted students (Obergruesser et al., 2013; Tortop, 2015). Gifted students have also been reported to be more self-regulated than non-gifted counterparts (Tortop, 2015, p. 43). Self-regulation in learning simply refers to the ability to set learning goals, organize learning activities, manage time for learning, and self-assess learning

achievement (Zimmerman, 2001). Part of self-regulation is the ability to motivate themselves for learning. Given the features of self-regulated learners and those of gifted students, it might be argued that gifted students are more capable of not only quantitatively but also qualitatively motivating themselves for learning (Hornstra et al., 2020, p. 2). To put it more clearly, gifted students tend to provide themselves with a wider number of motivational sources and strategies. They are not also simply motivated by lower-level motivational incentives, such as passing the course with a good score, in that they are likely to get good scores. Rather, they need to be motivated by high-level motivational incentives for their learning; and because of this point, their tendency to mention the ideal L2-self component of the L2MSS is justified. On the other hand, non-gifted students are mostly concerned about their achievement during the course and try to get a good score on the exams. They are also more likely to experience stress in traditional classes, as they are afraid of making mistakes and being either punished by teacher or mocked by peers. Thus, it stands to reason that their motivation about flipped learning be in line with the ought-to L2 self and L2 learning environment components of the L2MSS. This is somewhat consistent with previously conducted studies (e.g., Meier et al., 2014; McCoach & Flake, 2018; Preckel et al. 2008).

Conclusion

The study aimed to explore the effect of virtual flipped learning on motivation of L2 learners based on the L2MSS model. Additionally, the motivation of gifted and non-gifted students for L2 learning has not yet been academically investigated. The study uncovered that notwithstanding the point that online flipped teaching improved both gifted and non-gifted students' motivation, it differentially affected their motivation. In other words, gifted students mostly referred to *ideal self* motivation while non-gifted ones referred to *ought-to* and *learning experience* self motivation. This finding can have some pedagogical implications to different groups of educational stakeholders, especially material developers and teachers. Considering the results of this study by material developers can aid them to develop materials that accord with the factors that can promote the gifted and non-gifted students. Teachers can also take advantage of this study findings. Knowing about gifted and non-gifted students' motivational differences can assist them with adopting teaching methods and activities that are in accordance with their motivational attitudes, which, in turn, would result in boosting their enthusiasm about and interest in learning the intended materials.

Recommendations

Given the findings of this study, some recommendations might be made for future research. First, further studies with different participants and research contexts are recommended to be undertaken on the same issue so that the present study findings would be strengthened. Second, although this study had both males and females as the participants, their differences were not examined. Thus, gender differences as far as giftedness and motivation based on the L2MSS model are concerned is another potential topic that needs research to determine whether or not gender can be taken as a factor in explaining the gifted and non-gifted students' motivational differences. Finally, undertaking studies with the same topic on different language skills and domains (reading, speaking, vocabulary, etc.) can also be a good issue to be taken into account for interested researchers. Examining the gifted and non-gifted students' learning of language skills and domains and exploring their perceptions and motivations can provide finer tuned insights on the effectiveness of virtual flipped learning. Finally, the interaction of teacher-related factors and virtual learning is also a potential avenue for further research. Although there are some studies (such as Van der Spoel (2020)) that have dealt with this issue, there is still limited understanding as to how teachers' varying traits and features, especially teacher cognition, might come to influence gifted and non-gifted students' motivation and learning.

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