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Exploring Student Perceptions of the Flipped Classroom in Reading Comprehension: The Case of Ibn Tofail University

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Abstract

Flipped classroom is one of the recent innovative modes of instruction adopted in English as a Foreign Language (EFL) education to enhance learning and teaching. Drawing on the socio-cultural constructivism theory, this study explores university students' perceptions of the effects of the flipped classroom model on self-directed learning, engagements, higher-order thinking skills, satisfaction and teacher roles in reading comprehension course. It should be noted that a little research has been conducted to investigate students' perceptions of the flipped model in Morocco. To address this gap, a total number of 39 first-semester undergraduate students from the English Department, Ibn Tofail University in Kenitra participated in the research. Data on student perceptions were collected through a structured closed-ended questionnaire and analyzed using both descriptive statistics (mean, standard deviation, and percentages) and inferential statistics (independent samples ***t***-test). The findings suggest positive perceptions about the flipped classroom model. The study concludes that this model enables students to develop critical thinking and problem-solving abilities. It also promotes collaborative classroom discussions, creating a dynamic and student-centered learning environment.

Keywords: flipped classroom, reading comprehension, student perceptions, Morocco

1. Introduction

Equipping university students with critical reading and thinking skills is of paramount importance (Le & Nguyen, 2024). Research suggests that conventional modes of instruction often limit

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students' opportunities for deeper cognitive processing of reading materials. Students who study reading comprehension in a teacher-centered environment may not have sufficient time to process reading texts at higher cognitive levels. To address this issue, the present study suggests the implementation of the flipped classroom model in teaching reading comprehension. The flipped classroom model is one of the modern pedagogical models that has grabbed the attention of a lot of researchers and practitioners in the last few years. This innovative mode of instruction is based on the premise that what conventionally takes place in the class has become homework activity; class time is allotted to participatory activities of discussion and problem-solving (Bergmann & Sams, 2012). Previous research has documented positive perceptions about the flipped classroom in different disciplines psychology (Andreychik & Martinez,2019), in chemistry (He et al., 2016), pharmacy (Ferrari & O'Connor, 2013b). In English language teaching, positive effects of the flipped model such as writing (Su Ping et al, 2020), grammar (Al-Naabi, 2020), and speaking (Cheng & Huang, 2020). Nevertheless, more research is required to explore students' perspectives on the use of this model in the realm of English language teaching in Morocco. The main objective of this quantitative study is to explore students' perceptions about the effectiveness of the flipped model in enhancing reading comprehension. The main question guiding this study is as follows:

- What effects does the flipped classroom model have on students' perceptions in reading comprehension course?

2. Theoretical Framework

The present study is underpinned by the socio-cultural constructivist theory. According to the constructivist point of view, readers are active and autonomous individuals who make use of text information and their prior knowledge (schemata) to construct meaning (Yussof et al., 2012). In a constructivist classroom, learning is an active process initiated by the learner. That is, the learner plays a pivotal role in constructing meaning with the help of teachers' scaffoldings (Sjoberg, 2007; Vygotsky, 1978). Principles of social constructivism have been associated with innovative instructional methods such as distance learning and blended learning. These instructional modes go beyond traditional knowledge transmission, engaging learners in dynamic and interactive activities.

3. Review of Literature

3.1. Effects of the Flipped Classroom on Reading Comprehension

Some studies conducted in different EFL countries, similar to the Moroccan context, have shown that students, especially at the university level, encounter difficulties in reading

comprehension (Alharbi, 2021). This is due to ineffective learning strategies and approaches employed in the classroom **(**Davoudi & Yousefi, 2015). Other difficulties are related to insufficient vocabulary knowledge (Nor & Rashid, 2018) and background knowledge (McNeil, 2011). For that reason, the flipped classroom model is suggested as an effective mode of instruction that may help students develop reading comprehension skills. Samiei and Ebadi (2021) conducted a study on the effects of Webquest-based flipped classrooms on promoting Iranian students' inferential reading comprehension skills, employing a mixed-method design with IELTS reading test samples and a semi-structured interview. The results revealed that this model not only enabled students to gain a deeper understanding of reading passages but also allowed more time for meaningful classroom engagement, interaction, and problem-solving activities. In a similar context, Karimi and Hamzavi (2017) posited that the flipped classroom model positively impacted Iranian students' performance in reading comprehension. By engaging learners in participatory activities that require higher-level thinking skills, this model offered students valuable opportunities to improve their critical thinking abilities. In the same line, Bataineh and Al-Sakal (2021) conducted quasi-experimental research to explore the potential effects of the flipped classroom model on reading comprehension skills, including scanning, paraphrasing, and giving opinions. The study involved tenth-grade Palestinian refugee students in Jordan, and the results demonstrated significant improvements in the participants' scanning, paraphrasing, and opinion skills among the flipped group. The explicit activities both inside and outside the classroom played a crucial role in fostering these improvements, offering students collaborative and self-paced learning experiences.

3.2. Students' Perceptions of the Flipped Classroom

The literature provides evidence of the positive impacts of the flipped classroom on students' perceptions in terms of self-directed learning, high-order thinking, engagement, teacher roles and satisfaction. To start with, Sigurðardóttir and Heijstra (2020) asserted that the flipped model increased students' preparedness for the in-class activities. The study found that well-prepared students in the flipped classroom adopted deeper learning approaches than their counterparts in the non-flipped classroom. Research has also shown that the flipped model developed students' autonomy and sense of responsibility (Gavranovic, 2017). Other studies have linked the flipped classroom with a deep understanding of the content (Love et al., 2014). Kim et al. (2017b) suggested that the flipped classroom enabled students to process content at higher thinking processes. Furthermore, the flipped classroom is found to increase students' active engagement (Burke & Fedorek, 2017) and interaction (Murray, 2011). In some studies, students had positive

perceptions about the role of teachers who shifted from all-knowing figures to facilitators and guides (Mclean et al. 2018). Finally, other studies have reported a positive relationship between the flipped classroom and students' overall satisfaction (Davies et al. 2013).

4. Method

This study employed a quantitative method, in which 39 semester one undergraduate students enrolled at the department of English participated in this study. 25 Female students (64.1%) and 14 male students (35.9 %) took part in this survey questionnaire. Participants' age ranged between 18 and 48 with 3 missing ages. Most of them aged 19 (M= 21,86; SD=7,21).

A quantitative questionnaire was employed to investigate students' perceptions of the flipped classroom model using a 5-point Likert scale that contained 10 items, each of which featured five answers: strongly disagree, disagree, disagree, undecided, agree, strongly agree. The questionnaire included 10 closed items with five Lickert scales and is divided into five constructs: students' self-directed learning, deep learning, engagement, teacher's feedback, and satisfaction.

5. Results

5.1. Descriptive Statistics Analysis of the Data

To compare the means and standard deviation of the scaling items, a descriptive statistic was applied. Table 1 indicates that items 7, 4, 2 and 5 received the highest means (M=4.13, SD=.864; M=4.11, SD=.924, M=4.03, SD=.778, M=4.00, SD=.782) respectively regarding the degree of agreement.

Table 1. *Means and Standard Deviation Results of the Scaling Items*

Item N.	Items	Mean	SD
1	at-home reading assignments provided me with opportunities to read the texts at my own pace.	3.82	.823
2	At-home tasks helped me come well-prepared for class activities	4.03	.778
3	The outside and inside activities helped me be autonomous and responsible for my own learning.	3.9	.718
4	Outside and inside classroom activities deepened my understanding of the reading texts**.**	4.11	.924
5	The in-class discussion helped me get involved in higher thinking processes of evaluation and analysis.	4.00	.782
6	The in-class activities increased my active participation	3.39	1.005
7	In-class activities provided opportunities for interaction and discussion	3.95	.9.16
8	The in-class activities gave me the opportunity to ask more questions	3.36	1.308
9	The professor provided effective feedback inside and outside the classroom	4.17	.846
10	The in-class activities increased my satisfaction	3.74	.84

Among all the ten items, there were 9 items whose means were higher than (3.7), which implied that participants had positive perceptions about flipped classroom model.

Table 2 represents the distribution of responses to the first questionnaire item: *at-home reading assignments provided me with opportunities to read the texts at my own pace?* The results show that the majority of participants, 29 in total, agreed with the statement, constituting 74.4% of the valid responses. 4 participants strongly agreed, representing 10.3% of the valid responses. 4 participants did not agree with the statement (7.7% disagreed and 2.6 strongly disagreed). When combining the "strongly disagree," "disagree," and "undecided" responses, we find that 15.4% of participants had a negative or unsure viewpoint. Conversely, 89.7% of participants either agreed or strongly agreed with the statement.

Table 2. *At-home Reading Assignments Provided me with Opportunities to Read the Texts at my Own Pace*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	2.6	2.6	2.6
	Disagree	3	7.7	7.7	10.3
	Undecided	2	5.1	5.1	15.4
	Agree	29	74.4	74.4	85.7
	strongly agree	4	10.3	10.3	100.0
	Total	39	100.0	100.0	

Table 3 presents the frequency and percentage distribution of responses related to the effect of the flipped classroom on students' preparedness. 27 participants (69.2%) and 8 participants (20,5%) agreed and strongly agreed with the statement. A smaller proportion (2 participants) believed that this innovative model did not have any positive effects on their preparedness for the in-class activities. In addition, two participants (5.1%) were undecided or neutral towards the statement, indicating uncertainty or lack of a clear opinion about the effect of the flipped classroom on their preparedness.

Table 3. *At-home Tasks Helped me Come Well-prepared for Class Activities*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.6	2.6	2.6
	disagree	1	2.6	2.6	5.1
	undecided	2	5.1	5.1	10.3
	agree	27	69.2	69.2	89.7
	strongly agree	8	20.5	20.5	100.0
	Total	39	100.0	100.0	

Table 4 illustrates the frequency and percentage distribution of responses related to the effect of the flipped classroom on students' autonomy and sense of responsibility. High proportion of participants (76.9%) agreed with the statement, indicating that the flipped classroom positively affected their autonomy and sense of responsibility. On the other hand, a few participants disagreed (2.6%) and strongly disagreed (2.6%) with the statement. 3 participants (7.7%) were undecided or neutral towards the statement.

Table 4. *The Outside and Inside Class Activities Helped me be Autonomous and Responsible for my Own Learning*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	2.6	2.6	2.6
	disagree	1	2.6	2.6	5.1
	undecided	3	7.7	7.7	12.8
	agree	30	76.9	76.9	89.7
	strongly agree	4	10.3	10.3	100.0
	Total	39	100.0	100.0	

Table 5 presents the results of the fourth scaling item that deals with the extent to which outside and inside classroom activities deepened respondents' understanding of the reading materials. A significant proportion of participants (79.5%) agreed or strongly agreed that outside and inside classroom activities deepened their understanding of the reading texts. A small number of participants disagreed (5.3%) or were undecided (18.4%) about the impact of these activities. This suggests that the majority of participants perceived a positive effect of outside and inside classroom activities on their understanding of the reading texts.

Table 5. *Outside and Inside Classroom Activities Deepened my Understanding of the Reading Texts*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.6	2.6	2.6
	disagree	1	2.6	2.6	5.3
	undecided	5	12.8	13.2	18.4
	agree	17	43.6	44.7	63.2
	strongly agree	14	35.9	36.8	100.0
	Total	38	97.4	100.0	
Missing	System	1	2.6		
	Total	39	100.0		

Table 6 suggests that a great proportion of participants (81.1%) agreed and strongly agreed that the in-class activities developed their higher thinking processes of evaluation and analysis. A small number of participants disagreed (5.4%) or were undecided (10.8%) about the development

of these processes through the in-class activities. This suggests that most participants perceived a positive effect of in-class activities on the development of their higher-level thinking skills.

Table 6. *The in-class Activities Developed my Higher Thinking Processes of Evaluation and Analysis*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.6	2.7	2.7
	disagree	1	2.6	2.7	5.4
	undecided	2	5.1	5.4	10.8
	agree	26	66.7	70.3	81.1
	strongly agree	7	17.9	18.9	100.0
	Total	37	94.9	100.0	
Missing	System	2	5.1		
	Total	39	100.0		

Table 7 illustrates that a majority of participants (74.3% - the sum of agree and strongly agree) agreed or strongly agreed that in-class activities increased their active participation. A small number of participants disagreed (10.2%) or were undecided (15.4%) about the increase in their active participation through these activities. This suggests that most participants perceived a positive effect of in-class activities on their level of active participation.

Table 7. *In-class Activities Increased my Active Participation*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	5.1	5.1	5.1
	disagree	2	5.1	5.1	10.3
	undecided	6	15.4	15.4	25.6
	agree	21	53.8	53.8	79.5
	strongly agree	8	20.5	20.5	100.0
	Total	39	100.0	100.0	

Table 8 indicates that 79.4% of the participants agreed or strongly agreed that in-class activities provided opportunities for interaction and discussion. A small number of participants disagreed (7.7%) or were undecided (12.8%) about the opportunities for interaction and discussion during these activities. This suggests that most participants perceived positive opportunities for interaction and discussion during in-class activities.

Table 9 suggests that more than half of participants (55,4%) agreed or strongly agreed that in-class activities provided them with the opportunity to ask more questions. However, a proportion of participants (38.4%) disagreed with or were undecided (15.4%) about the opportunities to ask questions during these activities. This suggests that a significant percentage

of participants perceived positive opportunities for asking questions during in-class activities, while a smaller portion expressed their disagreement with the statement.

Table 8. *In-class Activities Provided Opportunities for Interaction and Discussion*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	2.6	2.6	2.6
	disagree	2	5.1	5.1	7.7
	undecided	5	12.8	12.8	20.5
	agree	21	53.8	53.8	74.4
	strongly agree	10	25.6	25.6	100.0
	Total	39	100.0	100.0	

Table 9. *The In-class Activities Gave me the Opportunity to Ask more Questions*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	5.1	5.1	5.1
	disagree	13	33.3	33.3	38.5
	undecided	2	5.1	5.1	43.6
	agree	13	33,3	33.3	76.9
	strongly agree	9	23.1	23.1	100.0
	Total	39	100.0	100.0	

Table 10 suggests that most participants (87.1%) agreed or strongly agreed that the teacher provided effective feedback both inside and outside the classroom. Only a small number of participants disagreed (5.1%) or were undecided (7.7%) about the effectiveness of the teacher's feedback. This suggests that a significant portion of participants perceived the teacher's feedback to be beneficial and helpful in their learning process, while a smaller portion thought that teachers had no effects on their learning.

Table 10. *The Teacher Provided Effective Feedback Inside and Outside Classroom*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	2.6	2.6	2.6
	disagree	1	2.6	2.6	5.1
	undecided	3	7.7	7.7	12.8
	agree	21	53.8	53.8	66.7
	strongly agree	13	33.3	33.3	100.0
	Total	39	100.0	100.0	

Table 11 indicates that 30 participants (76.9%) agreed with the statement, implying that the in-class activities had a positive impact on their satisfaction. A smaller portion of participants disagreed (10.3%) or undecided (5.1%). This suggests that a significant portion of participants

perceived in-class activities to be satisfying and valuable, while a smaller portion had reservations or uncertainties about the effectiveness of in-class activities.

Table 11. *In-class Activities Increased my Satisfaction*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	2	5.1	5.3	5.3
	disagree	2	5.1	5.3	10.5
	undecided	2	5.1	5.3	15.8
	agree	30	76.9	78.9	94.7
	strongly agree	2	5.1	5.3	100.0
	Total	38	97.4	100.0	
Missing	System	1	2.6		
	Total	39	100.0		

5.2. Inferential Statistics

Based on the results of the independent t-test shown in table 12, there is no statistically significant difference in the means of the male and female groups. The p-value (0.741) is greater than the significance level of 0.05, indicating that any observed difference in means could be due to random chance. Additionally, the confidence intervals include zero, supporting the lack of a significant difference. Therefore, we do not have sufficient evidence to conclude that there is a significant difference in the means of the male and female groups in terms of the effects of the flipped classroom model on student perceptions. Since there is no significant difference between male and female, we can conclude that the data is normally distributed.

Table 12. *Independent Samples t-test*

		Levene's Test for Equality of Variances		**t-test for Equality of Means**						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SUM2	Equal variances assumed	5.099	.030	-.334	37	.741	-.7485	2.2445	-5.2964	3.79931
	Equal variances not assumed			-.434	28.52	.668	-.7485	1.7254	-4.2801	2.78299

6. Discussion

The questionnaire results posited that the implementation of the flipped classroom model had positive impacts on students' perceptions. The findings highlighted the positive effects of this

innovative model on students' perceptions regarding self-directed learning, deep learning, active engagement, teacher's role, and overall satisfaction.

To investigate whether differences in perceptions between male and female participants, an independent t-test was conducted. The results indicated that both male and female students held similar perspectives on the effectiveness of the flipped classroom instructional approach. These findings align with previous research (Newman et al., 2016), which also reported no statistically significant differences in students' perceptions based on gender. The evidence from the questionnaire supports the view that the flipped classroom model is well-received among students, fostering positive perceptions regardless of gender. The use of descriptive statistics and statistical tests adds credibility to the results, further asserting the benefits of employing this innovative model in education.

The following sections discuss the effects of the flipped classroom model on student perceptions in terms of self-directed learning, deep learning, engagement, teachers' role, and student overall satisfaction.

6.1. Effects on Self-Directed Learning

The flipped classroom is a highly effective student-centered instructional model (Bishop & Verleger, 2013). The findings from the first, second, and third scaling items throw the light on the positive impact of flipped classrooms on students' self-directed learning, specifically in terms of self-paced learning, preparedness, and autonomy.

A significant proportion of students (74.4%) reported that the pre-class time allocated for reading assignments provided them with the opportunity to learn at their own pace. Self-paced learning empowers students to be active agents in the learning process, allowing them to complete tasks at their preferred pace with limited teacher guidance (Inkson & Smith, 2001). This finding aligns with Bergmann and Sams' (2012) theory, which emphasizes that the flipped classroom goes beyond physical constraints of time and location, offering students the chance to learn independently anytime and anywhere. This goes in line with Hibbard et al.'s (2016) research, which also demonstrated a favorable impact of the semi-self-paced flipped learning approach on students' academic performance in chemistry. The study further posited that this semi-self-paced structure led to enhanced retention levels and an improved mastery of the subject matter among students. On the other hand, Johnson (2013) found mixed results on the self-paced flipped learning. While most of the students expressed positive perceptions of the self-paced environment, some students claimed that this model reduced their motivation during

classes. He also found that some students did not favour taking responsibility for their own learning within this context.

Furthermore, 69.2% of participants agreed that the at-home reading assignments facilitated their preparedness for in-class activities. Engaging with the subject matter at home fosters conceptual understanding (content attainment) (Jensen et al., 2015). This aligns with previous studies (Mclaughlin et al., 2014; Lee & Wallace, 2018), which reported that students' preparedness positively correlated with increased active learning (Rahman et al., 2014). Sigurðardóttir and Heijstra's study (2020) also supports these results, emphasizing the significance of students' preparedness. The research found that well-prepared students adopted deep learning approaches, while less prepared students tended to apply surface-level approaches during in-class activities.

The third scaling item indicated that most students (76.9%) agreed that the flipped classroom enabled them to develop autonomous learning. The finding revealed that this approach encourages learners to take ownership of their learning. This approach also provides students with the opportunity to deepen their understanding of reading texts. This is consistent with Enfield (2013) who pointed out that this model "was successful in helping students learn the content and increased self-efficacy in their ability to learn independently" (p. 14). Bergmann and Sams (2012) say that one of the benefits of the flipped classroom is that students develop a sense of responsibility for their own learning. Based on the theoretical framework stated above, autonomous learning is perceived to be "the degree to which individuals are active participants in their own learning" (Dörnyei 2005, p.191). It is also a learning that aims at shifting from teacher-directed learning (in which learning is imparted by the teacher) to self-directed learning (in which learners take charge of their learning) (Little, 1991). This is in line with Jean Piaget and Jerome Bruner's theory of child development. According to them, "the child is autonomous in the sense that the stimulus to develop comes from within itself and the process of development is not subject to external control." (Little, 1991, p. 22). The results are consistent with previous research (Gavranović, 2017) that indicated a positive impact of the flipped classroom on the development of students' sense of responsibility and independence. The findings of the present study are supported by Ryan and Deci's Self-Determination Theory which accentuates that humans have basic requirements for autonomy, competence, and relatedness (Ryan &Deci, 2000). According to this theory, learners may improve intrinsic motivation in an environment that emphasizes autonomous learning. However, the findings obtained contradict a study by Johnson and Renner (2012) who found that students did not improve any sense of responsibility for learning in the flipped classroom model.

To sum up, the results of the first three scaling items discussed here suggested that students have developed positive dispositions for self-directed learning in terms of self-paced learning, responsibility, and autonomy. The next section deals with the effects of the flipped classroom on students' enhancement of deep learning.

6.2. Effects on Deep Learning Processes

For effective learning to occur, learners must engage in reflection on the material they are studying. Bloom's *Taxonomy of Learning Objectives* accentuates that deep learning is achieved when students engage in higher-order thinking processes like analysis, synthesis, and evaluation (Bloom et al., 1956). The outcomes from the fourth and fifth questionnaire items indicate that the implementation of the flipped classroom model facilitated a deeper comprehension of reading texts among students and enabled them to actively engage in advanced cognitive skills encompassing evaluation and analysis.

Results from the fourth item reveal that 43.5% of students agreed and 35.9% strongly agreed that the pre-class preparation time facilitated a deep understanding of the reading materials. Evidently, students highly value the allocated at-home reading activity time for its role in fostering an in-depth grasp of the subject matter. This finding is consistent with prior research that established a positive correlation between the adoption of flipped classrooms and the attainment of comprehensive content understanding (Danker, 2015; Love et al., 2014). For instance, Love et al. applied the flipped classroom model in a linear algebra course and discovered that a significant number of students appreciated the model's impact on enhancing their comprehension of the content. In the present study, the reading materials were predominantly provided to students in digital document formats (pdf format). This approach likely contributed to the development of a deeper comprehension of the reading texts among students. This aligns with previous research indicating that using multimedia formats for learning can foster an enhanced understanding of reading materials, leading to deep learning (Butcher, et al. 2014).

The difference between 'deep learning' and 'surface learning' was originally coined by Marton and Säljö (1976). In their experiment, students were assigned a reading text to read at home, with the knowledge that they would be tested on it. The students adopted distinct approaches toward the text. One group focused on understanding the implied message—the core intent of the text. Conversely, the other group centered their attention on information that they expected would appear in the test. Marton and Säljö called the former as a 'deep approach' and the latter as a 'surface approach'.

Moreover, the findings notably indicate that a significant proportion (66.7%) of respondents agreed that the in-class activities enhanced their capacity for high-level thinking. These outcomes align with Kim et al.'s (2017) study, which examined the cognitive implications of the flipped classroom model on students. Their research disclosed that students exposed to the flipped classroom approach showed a higher inclination for generating cognitive comments grounded in complex information processing and advanced thinking skills compared to those in the non-flipped group. Furthermore, numerous investigations confirm the positive relationship between the flipped classroom model and the stimulation of higher-order cognitive processes (Alsowat, 2016; Zainuddin & Halili, 2016; Lee & Lai, 2017). This model establishes an ideal platform for adopting a student-centered approach, emphasizing the active engagement of students in deep learning and high cognitive thinking processes. The findings from the fourth and fifth items align with Bagheri and Ghanizadeh's (2016) research, which established a positive correlation between critical thinking skills and inferential comprehension among Iranian EFL students.

All in all, research suggests that deep processing of reading materials occurs when students' prior knowledge is effectively activated. Within the context of this study, students in the non-flipped group might not have had adequate time to activate their prior knowledge, subsequently hindering their ability to process reading materials at higher cognitive levels.

6.3. Effects on Student Engagement

Active engagement in the learning process, rather than passive information reception, is widely believed to be a key factor in successful learning (Wittrock, 1992). Notably, responses to items 6, 7, and 8 in the questionnaire indicated that the flipped classroom model has significantly enhanced active participation both inside and outside the classroom. Specifically, the findings from item 6 revealed that 53.8% of participants agreed, with an additional 20.5% strongly agreeing that their engagement during in-class sessions increased. These results showed that the flipped model has provided students with opportunities to develop their communicative skills, which can be applied in real-world contexts. These results align with a large-scale study by Chiu and Cheng (2017), involving over 80,000 students, which demonstrated that the benefits of active learning extend across students of different academic proficiency levels. The finding is also consistent with Burke and Fedorek’s (2017) study that indicated an increase in students’ active participation and engagement.

Moreover, the majority of participants (53.8%) strongly agreed, while 25.6% agreed, with the statement in item seven indicating that classroom activities provided suitable opportunities for discussion and interaction. Interaction is recognized as a vital component for meaningful and

constructive learning experiences (Bernard et al., 2009). Although the flipped model allows more time for student-instructor and student-student interactions during in-class time, this study observed a prevalent emphasis on teacher-student interactions. This finding supports previous research, reporting positive impacts on teacher-student interaction (Murray et al., 2011). Murray et al., noted increased opportunities for students to engage with peers and instructors.

The results of item seven are consistent with the social constructivists' view that stresses the importance of social interaction in meaning construction. According to this viewpoint, knowledge is collaboratively constructed (Applefieled, 2001). Learners, within this framework, are held responsible for their own learning as they cooperatively construct meaning with the help of the teacher. The teacher's role shifts to that of a facilitator, guide, and provider of effective feedback and scaffolding (Vygotsky, 1978). Akplan et al., (2020) asserted that learning occurs through social interaction within a cultural context, using classroom activities such as debates and discussions with the help of the instructor (the knowledgeable person). This kind of scaffolding is helpful for leaner development as it offers "a situation where a knowledgeable participant can create supportive conditions in which the novice can participate and extend his or her current skills and knowledge to higher levels of competence.'' (Donato, 1994, p. 40).

Additionally, the results from the eighth item indicated that 33.3% of participants agreed, and 23.1% strongly agreed that in-class activities positively influenced their ability to ask questions. Formulating questions in the classroom is is seen to be an indicator of active involvement in meaning construction (Dallimore, Hertenstein, & Platt, 2010; as cited in Lee & Wallace, 2018). These findings are supported by recent literature (Arifani et al., 2019), emphasizing that engaging in interactive question-answer discussions enhances students' reading comprehension skills. They also align with prior research (Rohel et al., 2013), highlighting the promotion of active learning within the flipped classroom model.

In conclusion, the data emphasized the positive impact of in-class activities on students' question-asking abilities, reinforcing the importance of active engagement in the learning process. These findings are in line with current research that advocates interactive discussions to enhance reading comprehension skills, resonating with previous studies that underline the benefits of the flipped classroom approach in fostering active learning among students.

6.4. Teacher's Role in the Flipping Environment

In the previous section, we discussed that active learning is a distinctive feature of the flipped classroom. This section demonstrates the pivotal role teachers play in this innovative model.

The flipped classroom has shifted the role of teachers from being didactic, all-knowing, and spoon-feeding figures to being facilitators who provide constructive feedback inside and outside classroom and engage students to think beyond knowledge and comprehension thinking processes (Bergmann & Sams, 2012; Singh, 2020).

The results from the ninth item indicated that 53.8% of participants agreed and 33.3% strongly agreed that the teacher succeeded in providing appropriate feedback either inside or outside the classroom. The teacher's feedback primarily involved addressing students' inquiries and offering guidance. This finding is consistent with prior research. For instance, Mclean et al. (2018) found that students had positive perceptions about the flipped classroom, particularly appreciating the support and assistance provided by their teachers during class time. Drawing on Vygotsky's concept of scaffolding, the teacher assumes the role of a guide, carefully assessing students' understanding through thought-provoking questions. Moreover, they (teachers) ensure that students remain engaged and motivated to complete tasks successfully.

6.5. Students' Overall Satisfaction

The findings from the tenth questionnaire indicate a significant increase in participants' overall satisfaction with the flipped classroom approach. Most respondents expressed agreement that this model significantly enhanced their satisfaction with the reading comprehension course. These results align with several qualitative studies that have also reported positive feelings and favorable attitudes towards this innovative instructional approach (Davies et al., 2013; Lage et al., 2000; Mclaughlin, 2014). For instance, Davies et al., (2013) found that learners enrolled in the flipped classroom reported greater satisfaction with the course and achieved better compared to those in non-flipped learning classrooms. The researchers posited that the flipped approach demonstrated greater effectiveness, offering students the flexibility to manage their own learning pace.

However, it is worth noting that some other studies have reported contrasting findings, where students expressed dissatisfaction with the flipped classroom. For instance, Strayer (2007) conducted a study examining students' attitudes towards the flipped classroom and found that they were less satisfied with how the classroom's structure directed them to take on more active roles in their learning tasks.

In summary, the results indicated a positive impact on participants' overall satisfaction with the flipped classroom approach in the context of the reading comprehension course. While these findings are consistent with previous quantitative studies, it is crucial to acknowledge that some students may find it challenging to adapt to the shift in learning responsibility.

7. Conclusion

The present study provides evidence of the positive effects of the flipped model on student perceptions. Based on our findings, the flipped model has the potential to offer chances to improve learning and teaching in EFL classrooms. The results seemed to support the existing literature that the flipped classroom had positive influences on student perceptions.

The present study's findings highlight some important implications stemming from the adoption of the flipped classroom in reading comprehension course. First, the flipped model fosters student-centeredness, enabling students to engage in both inside and outside classroom activities. Second, the flipped model can develop students' higher thinking processes of analyzing, evaluating and problem solving. Last but not least, the flipped model shifts the role of the teacher from all-knowing figure to a guide who provides personalized support and guidance through scaffolding techniques.

However, the study also does have some limitations. First, the study adopted a single research method, the quantitative approach; other research tools such as classroom observations and interviews are needed to explore in depth student opinions about the flipped classroom. Second, the study focused on participants from one institution; further research from different institutions in Morocco is required.

Overall, the flipped classroom model emerges as a powerful teaching method for developing students' active learning and critical thinking skills. By adopting this approach, teachers can create enriching environments that facilitate deep understanding and meaningful learning experiences for their students.

Disclosure Statement

The authors declare that there is no conflict of interest regarding the publication of this article. No financial, personal, or professional relationships have influenced the research, analysis, or conclusions presented in this work.

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