



Implementation of FCM Approach: Challenges Before Teachers and Identification of Gaps

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ABSTRACT

FCM is a new approach to lesson delivery in most of the developing world, and neither the (higher education) system, nor the teachers and learners are prepared and well-equipped to handle the demands of the approach. The present study was conducted to document the challenges before teachers implementing FCM in EFL/ESL classrooms. The study was conducted as an end-of-term survey using questionnaires and interview techniques for data collection. The questionnaire was comprised of statements on methods, materials, mode of delivery, and feedback to learners, while the semi-structured interviews were meant to gather a narrative account of teachers' experiences in implementing FCM approach to language teaching. 50 university teachers from Saudi Arabia were surveyed for the study. The obtained results present a picture of difficulties before ESL teachers in implementing FCM. The majority of the participants (mean=49.8) opine that they face one or the other challenge when they use FCM approach in ESL classrooms. Roughly one third (mean=31.6) of the participants expressed that they do not face any challenges in implementing FCM. In the semi-structured interview sessions, the teachers expressed their dissatisfaction with the approach, and said they are generally ill-equipped to deliver lessons and address feedback issues effectively.

Keywords: flipped classroom, teaching challenges, survey study, learner achievement, in-class activities, out-of-class activities

INTRODUCTION

Research Background

The primary question that drives the present study is what is the pedagogical difference between FCM and conventional teaching that is responsible for teachers' challenges reported in some research studies on the topic?

FCM is touted as the future of pedagogy in every field and course, including foreign language teaching, and the contemporary research studies in language teaching experimenting with FCM approach have lauded the model as the harbinger of unprecedented success in the foreign language classroom (e.g. Andujar et al., 2020; Chen et al., 2017; Chyr et al., 2017; Gough et al., 2016; Ha et al., 2019; Hsieh et al., 2017; Hsu, 2018; Johnston, 2017; Long et al., 2016; Nantha et al., 2022; Wilson, 2013) report that teachers perceive FCM facilitating student achievement and saving class time. However, since FCM is a major shift from the conventional mode of teaching, the approach needs clarity on a few interrelated aspects that may function as major determinants in student success in FCM classrooms. First of all, the approach is primarily technology centered, which, obviously, requires additional technical knowledge to handle certain issues, owing to which many language teachers feel they have an extra obligation to fulfil. All the aspects of foreign language teaching through FCM—content, production of teaching materials, content delivery, idea exchange with learners,

feedback, assessment/evaluation, etc.–are technology-based, and require that language teachers are equally proficient in handling technical issues to carry out their jobs effectively (Digital Pedagogy, n. d.). Although, the IT departments at universities provide infrastructural support, yet content delivery, feedback, and assessment tasks, involving technical know-how, are to be carried out by the concerned teachers. Second, the success of the approach is tied up to a higher than usual rate of learner involvement, which means that learners bear greater responsibilities in the act of their learning. However, many learners, especially the newcomers to universities, may not be prepared to become such autonomous learners as to carry out this responsibility seriously and there may arise motivation related difficulties for teachers. Third, the potential loopholes in the learning environment leave enough gaps for learners to cheat the system and display fake progress in their learning, an issue which teachers find hard to resolve under the given conditions.

However, there has been very little research input to document teachers' challenges in implementing FCM in classrooms, especially in foreign language teaching classroom. Therefore, in the wake of numerous research studies in EFL/ESL teaching, lauding the inherent qualities of FCM to enhance the academic benefit for learners, it would be a pertinent question to ask whether all language teachers are equally efficient at and comfortable with handling the daily activities involved in an FCM induced foreign language teaching to their fullest potential. If teachers face challenges in this technology-saturated pedagogy, what are those challenges?

Research Problem

Students' academic success and learning achievement in ESL are directly related to the way FCM is handled by the concerned language teachers. More often than not, in developing countries where FCM is still in its nascent state, including the background of the present study, Saudi Arabia, where technology penetration is increasing rapidly, there is no technical training given to language teachers in online class management nor are they much aware of the technicalities involved in using Flipped Classroom approach to teaching. It seems the authorities assume that if the task to use FCM approach is forced upon teachers, they have to accept the responsibility and handle everything. Lack of training in the technical aspects of FCM leads to bad teaching, affecting the teaching outcomes. Lack of or inadequate training can lead to teachers not putting the full potentials of the technology to use (Graziano, 2017). Thus, there is a strong need to investigate the potential challenges before EFL/ESL teachers using FCM as a pedagogic approach to teach English in non-native settings.

Review of Related Literature

Flipped classroom pedagogy differs from conventional pedagogy in a major way that a language teacher yoking FCM in the classroom has to be essentially proficient in using technology to teach language (McLaughlin et al., 2016). In the background functions a team of skilled workers, such as videographers, instructional designers, IT cell people, and so on, but at the forefront are always the teachers who are skilled in their subject areas but may lack technical expertise expected of them in FCM, and therefore, may require training and fine-tuning in this area of knowledge. So, in addition to preparing to teach the language, the teacher's tasks in FCM include making lesson videos, making digitally compatible exercises and discussion prompts, and work on the online App to provide feedback to learners, send and receive assignments as well as maintain an online record of learners' progress. It is true that most language teachers use pre-fabricated lesson videos, ready-made exercises and discussion prompts and books that are supplied with everything; however, it has been noted by the researchers that the quality of pre-fabricated videos and prompts does not match the required standards.

Either the instructions are not clear, or the materials are unsuitable for the local requirements since they are prepared to fit some universal need, keeping a different set of learners in mind. Students' cooperation, students' lack of preparedness, student progress and satisfaction, etc., tend to be the major issues in the given scenario. Thus, the classroom scene in FCM gets complicated as the issue assumes three different aspects. In a study, Lo and Hew (2017) categorize the three aspects of the challenges as student-related, faculty-related, and operation-related challenges. The first and foremost faculty-related challenge reported in studies is non-availability of suitable teaching materials (Cha & Kim, 2016; Tanner & Scott, 2015). Creating their own teaching materials for teachers is a distant possibility since, as has been noted in the previous section, language teachers are not experts in technical skills, and moreover, materials production requires a sophisticated

language laboratory (Ansori & Nafi, 2018). Teachers may not have sufficient time and energy to do that. For instance, Shnai (2017) in this regard says that most teachers do not have enough resources, or skills, leading to design gaps and the problems of evaluation in FCM. Furthermore, for the successful flipped classroom implementation, the detailed knowledge about the design and each part of the model are required. Wanner and Palmer (2015) note that the main concern of university teachers is the time commitment. Some teachers also face lack of institutional support to implement FCM and to provide flexible assessment of students' progress. The researchers in the present paper argue that because FCM needs more personalized assessment, language teachers and the concerned institutions have to develop 'flexible students' for the purpose.

The resource materials available online/offline are either insufficient or unsuitable for the purpose. For example, Cha and Kim (2016) say that the reading material is often too complicated for students, while Tanner and Scott (2015) note that video exercises he used were commonly unsuitable for the level of learners. Teachers also find it difficult to effectively integrate the face-to-face part and outside-the-class part in FCM, which may be termed as design challenge (Lee et al., 2017). As discussed above, being a learner-centered pedagogy, the success of FCM largely depends on learner motivation, and as studies suggest, a large number of learners show low engagement in both before-the-class and in-class activities. Alfaifi and Saleem (2022) note that FCM approach does not help learners to lower their language learning anxiety levels. Sarker et al. (2022), for instance, in a survey, note that students' experiences with e-learning (which is similar to FCM approach) are generally unfavorable. Some researchers report that students quite often do not watch videos before the class and, as a result, the in-class activities become boring and too challenging for them (Loo et al., 2016). One of the outcomes of which is that the home assignments become very tough for them, and there is almost nil in-class participation from students (Loo et al., 2016). As an example, they do not raise any doubts during in-class sessions. In common, students are diffident and show no interest in the planned activities, whether in-class or out of class (Tomas et al., 2019). Students are also reported to be inadequately prepared for in-class activities (Akçayir & Akçayir, 2018). Research surveys with students show that students are most often non-compliant with pre-class studying, which derails the whole purpose of FCM approach (He et al., 2016). The language teacher cannot make any progress and loses the pace of teaching. The result is that the whole class is affected, especially if it is a mixed ability class.

Research studies also report that more often than not language teachers teach large classes. In a large class, face-to-face interaction with each and every student is next to impossible (Rodriguez, 2016) leading to low personalization, a pre-requisite of FCM. Clark et al. (2016) also report lack of guides in FCM classes, and the issue of there being too many students in one class. Although a more personal approach also may not prove helpful in many cases. Rodriguez (2016), for instance, notes that despite an extremely personal approach, there are reported gaps in student understanding since there do exist "free riders" in a class who rarely participate in the group activities or discussions and easily hide in the crowd. Such issues cause disruption in a strategically planned approach like FCM. The teacher employing FCM approach has to make sure that there is no discrepancy in the out-of-class and the in-class activities are complementary to each other. Moreover, students' progress is also assessed-formatively and summatively-at regular intervals (Howitt & Pegrum, 2015).

Sometimes students may not be ready to use technology for classroom purpose, even if they are familiar with the technical gadgets used in FCM induced class. Jefferies (2015), for example, in a study conducted with Australian engineering undergraduates reports that though these students had been using technical gadgets, they didn't have any idea what was expected of them in the form of extensive online preparation before face-to-face classes. Researchers from the US (Dahlstrom, 2012) and from the UK (Beetham & White, 2013) also record similar results in terms of students' readiness to study at university where FCM was the common approach. My point is that the students in Australia, the US, and the UK were far better ready to use technology in the classroom as compared to students in Saudi Arabia where the present study was conducted, so, it was but natural that teachers faced numerous challenges.

The present study is justified for the reason that it is oriented to investigate only the challenges faced by teachers in implementing FCM as an approach to teach English in a non-native setting, as opposed to the largely endorsed achievements of the model for students learning enhancement in the studies reviewed above.

Research Hypothesis

The following working hypothesis was formulated to conduct the present research study:

To teach English in non-native settings EFL teachers face numerous challenges at both the stages of implementing FCM, that is, during the class activities, and out-of-class activities.

Research Questions

The present study was designed to find answers to the following research questions:

1. **RQ1:** Do EFL teachers face challenges in implementing FCM in English teaching?
2. **RQ2:** If EFL teachers face challenges in teaching English employing FCM as pedagogic approach, what is their nature?

METHODOLOGY

Mixed-methods methodology was employed to conduct the present research. The data for the study were collected through survey questionnaires and semi-structured interviews. The statements in the survey questionnaire as well as the interview format questions were directed to gather EFL teachers' appraisal of the during-class and out-of-class activities. The statements/questions were focused on methods, materials, technical aspects, learner motivation and learner assessment in FCM approach. The survey questionnaire was comprised of 20 statements. The statements were of two types- positive direction statements and negative direction statements. Statements 1-10 had negative direction, while the statements 11-20 bore positive direction. The statements measured the responses of respondents on a 5-point Likert scale, i.e., 1-strongly agree, 2-agree, 3-neutral, 4-disagree, and 5-strongly disagree. Allotment of credits for positive direction statements was 5, 4, 3, 2, and 1, whereas for a negative direction statement, it was 1, 2, 3, 4, and 5. Positive direction statements agreed with / confirmed the meaning of the stated hypothesis, that is, teachers face challenges implementing FCM, whereas negative direction statements were against the stated hypothesis.

To support teachers' appraisal of FCM-related activities in the backdrop of the survey questionnaire responses, data were collected through semi-structured interviews as well, which were constructed on similar points as were used in teachers' questionnaire. The numerical data were interpreted qualitatively to report the results in a narrative format. For the numerical data frequency calculation, and for the qualitative interview data thematic analysis have been employed as measurement techniques. To identify themes in the interview data, self-determination theory (SDT) was used as a theoretical framework. In accordance with the tenets of SDT, for an individual to get motivated the three primary psychological needs should be fulfilled, i.e., need for competence, need for autonomy, and need for relatedness (Deci & Ryan, 2002). Questions for the semi-structured interview for the present study were developed keeping the above-mentioned principle in mind. SDT as a theoretical framework was chosen for the present study based on its wide-spread use in similar studies (Guay et al., 2008), and the reputation of the theory as a useful lens to explore issues on FCM (Abeysekera & Dawson, 2015). Basic information on participants' technological gadgets usage frequency were also collected and documented. This was meant to form an idea of participants' familiarity index with technical tools used in FCM approach, apart from their use in teaching.

Research Setting, Participants, and Sample Size

The research was conducted at a university in KSA. In a random selection process, 50 teachers (30 male and 20 female) in the age group ranging from 25 to 55 years, who taught English to preparatory year students for two semesters, were selected for data collection. In Saudi Arabia, students from all streams of education undergo mandatory training in English for a year, called preparatory year, before continuing education in their chosen streams.

DATA ANALYSIS

The numerical data were tabulated to calculate the number of participants in agreement/disagreement with the positive and negative direction statements, as well as the number of those who remained neutral.

Table 1. Background information on gadgets owned and used by teachers (n=50)

Gadgets	Owned		Used for FCM	
	Number	%	Number	%
Smart phone	50	100	45	90
Laptop computer	50	100	5	10
iPad	10	20	0	0
Other tablets	13	25	0	0
Media player	5	10	0	0
Webcam	50	100	50	100
E-reader (e.g., Kindle)	13	25	5	10
Mass storage media (e.g., USB pen-drive)	50	100	40	80
External/portable hard drive	25	50	25	50

Table 2. Teachers' familiarity with online/offline activities (n=50)

Activity	Number	%
Text messaging	50	100
Facebook use	50	100
E-mail	50	100
Stream and download web-based videos	50	100
Compose/view a web-based text document	10	20
Read e-books	12	25
Write/read blogs	5	10
Use social networking sites	50	100
Participate in online chats, webinars, etc.	50	100
Use LinkedIn	45	90

Table 3. Mean, standard deviation, and variance in scores of participants (n=50)

Statements →	Positive direction		Negative direction		Neutral
	Agreement %	Disagreement %	Agreement %	Disagreement %	
Values ↓					%
Mean	49.8	31.6	16	55.4	23.6
Standard deviation	9.211	9.743	12.613	9.430	9.098
Variance	76.36	85.44	143.2	80.4	78.64

Further, the mean, standard deviation and variance in the obtained figures were also calculated. The numerical figures were interpreted in accordance with the nature of statements to present a qualitative analysis of the obtained results. The analysis was meant to determine the number of participating teachers voluntarily accepting that they faced challenges in implementing FCM in EFL/ESL classes. To this end, the responses 'strongly agree' and 'agree' were counted to mean 'agreement,' while the responses 'disagree' and 'Strongly disagree' were counted to mean 'disagreement.' Responses for 'neutral' stance were also counted.

Background Information

Teachers were asked which of the following technical gadgets they owned and used to upload and access materials and conduct classroom activities. It was meant to gather information on the extent teachers were familiar with the IT gadgets used in FCM. The data obtained on the background information is presented in **Table 1**.

Table 2 shows teachers' familiarity with information-sharing related online/offline activities.

RESULTS

The Cronbach's alpha (α) value for the questionnaire validity, accuracy and consistency was obtained .55, which was a bit low since the minimum acceptable value is .60. Consequently, a few modifications were made in the final version of the questionnaire.

The results obtained from data analysis are presented in **Table 3**.

A cursory glance at **Table 3** reveals the following points:

1. Positive direction statement: A majority of teachers (mean=49.8; SD=9.211; variance=76.36) agree to the statement supporting the research hypothesis that they face one or the other challenge in teaching

English using FCM as an approach. Roughly one third of the participating teachers (mean=31.6; SD=9.743; variance=85.44) disagree to the hypothesis statement, which means they do not face any challenges.

2. Negative direction statement: A small number of teachers (mean=16; SD=12.613; variance=143.2) agree to the statement negating the hypothesis, which means they say that there are no challenges or issues with teaching English using FCM. A larger proportion of teachers (mean=55.4; SD=9.430; variance=80.4) express disagreement to negative direction statement, meaning that they say there are challenges in implementing FCM in language classes. The percentage of participants who say that their students' motivation is high when English is taught to them using FCM as a pedagogy approach is very low (only 24%). A considerably higher percentage of participants (62%) report that their students are not motivated to do out-of-class preparation for in-class activities.
3. Neutrality: A significant number of teachers (mean=23.6; SD=9.098; variance=78.64) chose to remain neutral to the research hypothesis, which means they are undecided whether FCM is challenging to implement in language a class or not.

DISCUSSION: RESEARCH FINDINGS

The primary objective of the present study was to investigate whether EFL teachers at universities in Saudi Arabia face any challenges in implementing FCM as a language teaching approach, while the secondary objective was to document the nature of such challenges, if any. The study also intended to identify the pedagogical difference between FCM and conventional teaching that may be responsible for teachers' challenges in using FCM as repost some research studies reviewed on the topic. The results obtained from data analysis indicate that the majority of teachers express their dissatisfaction with the present state of affairs emerging from the implementation of FCM to teach English to preparatory year students. The background information on teachers' use of technical gadgets and familiarity with online/offline activities reveals that most of the teachers surveyed for the study own and use technical gadgets for FCM teaching. However, despite their familiarity with, and usage of, related technical gadgets, teachers face challenges in implementing the new model to teaching. Thus, the major difference between FCM and conventional language pedagogy is that in FCM teachers need to put extra efforts to gain expertise in the use of technological tools. This hints at the fact that, for a successful implementation, language teachers using FCM need to be prepared for more than what appears at the surface, especially to handle technological tools used to implement FCM in language classes. The interview responses from the participating teachers throw some light on the related issues.

A majority of interviewed teachers were of the opinion that many learners do not watch the lesson videos; a large number of learners join the in-class activities sessions without making any preparations for it. Since the FCM approach heavily relies on learner preparation for in-class activities, it proves to be a challenging task for teachers to conduct the activities. The activities cannot be postponed for time constraints.

Interviewed teachers reported that many learners do not take part in discussions; many of the learners do not speak a word on their turn to speak for the speaking task. Once again, for time constraints, the teacher cannot wait endlessly for the learners to participate in the scheduled activity, and finally has to let some learners be hidden in the crowd. Many teachers reported that some of the learners clandestinely circulate their assignments within their group of friends to copy and paste the solutions, and thus some learners pass the tests without making any significant progress in language learning. A majority of teachers interviewed for this study expressed their unhappiness with the quality of assignments that learners submit for evaluation. Teachers were disappointed that learners do not watch the required and related videos on the given topic, nor gather more information using university library resources or Internet resources.

Yet another major worry of the teachers was that, in line with the conventional approach to language teaching, FCM has not yet standardized the evaluation techniques that are accurate and scientific (Shnai, 2017). Therefore, the teachers apply the traditional evaluation methods to assess the achievement tasks in FCM approach too, which largely may not be a correct indicator of the progress made by students, the intended beneficiary of teaching.

Teachers in the interview sessions agreed that any pedagogic scenario has three components to its establishment: materials, methods, and measurement. In FCM approach, the component measurement is not well established, so, it casts doubts on the efficacy of the system since, as Lee et al. (2017) comment, using the same instruments for evaluation results of flipped classroom as for the traditional approach provides a lopsided picture of learners' progress.

Time management emerged as the biggest issue in teachers' interviews. Time is needed for developing instruction, developing in class sessions and preparation part. However, the course contents as well as the number of learners in a class are commonly so large that teachers have no time to devote to anything else other than teaching.

The findings from the present study have been corroborated by findings from previous research studies. For example, Tomas et al. (2019) report that significant time is required at the start of class implementing FCM to review key concepts, since students are generally found to be reluctant to engage independently with the planned activities, especially the activities that involve more challenging concepts (p. 1). Ansori and Nafi's (2018) findings are that challenges in implementing FCM come from external as well as internal factors, for instance, the supporting facilities and technological problems, creating flipped learning material, and extra time-consumption. The researchers also find that some learners lack motivation to watch the lesson videos, and, as a consequence, know nothing about the in-class activities scheduled for the day (p. 223). Shnai (2017) reports that although the number of resources to be used for FCM is constantly growing, and there are ever-developing guidelines and recommendations for the teaching community, yet teachers face challenges and identify gaps in flipped learning realization (p. 488). The researcher notes that one of the examples of FCM design barriers is low level of lesson video views before the class, which means learners do not take their responsibilities seriously.

The conclusions drawn by Akcayir and Akcayir (2018) are no different from the findings of the present study, and the similar findings from other previous studies. For an operational use of FCM, the quality of videos is to be improved since low quality videos directly impact flipped learning. Some researchers opine that the top priority of language teachers should be the quality of instructional videos (p. 343), however, not all language teachers would be so highly tech-savvy as to prepare excellent quality videos of their lessons. The researchers also recognize technology competency as a challenge, especially for learners. But the present study identifies technology challenge as a barrier for teachers' success in implementing FCM in language classes.

CONCLUSION

The results obtained from the analysis of the data collected for the present study support the hypothesis that EFL teachers face numerous challenges at both the stages of implementing FCM, that is, the in-class activities, and out-of-class activities, to teach English in non-native settings. The findings from the research answer the first research question, i.e. 'Do EFL teachers face challenges in implementing FCM in English teaching?' in the affirmative. To answer the second research question, i.e. 'If EFL teachers face challenges in teaching English employing FCM as pedagogic approach, what is their nature?' the findings pinpoint the nature of teachers' challenges as pertaining to lack of training in the required technical know-how, lack of suitable high quality lesson videos, lack of motivation among some learners, and lack of standard guidelines for learner achievement evaluation.

The study finds that there are inherent challenges involved with FCM implemented languages classes. Teachers often do not grasp and understand the learner expectations. It is time-consuming and tedious to prepare the instructional videos and lesson materials for a flipped class and manage the online class with a large number of students. In most cases, the flipped classrooms become poor replacements for the traditional classrooms leading to ineffectual lecturing. The model rather further isolates language learners. The model in itself does not offer any chances for scaffolding or independent problem solving as is done in conventional classrooms. In many institutions where FCM is relatively newly implemented to teach English, the transition is not seamless from the traditional approach resulting in messy and chaotic teaching. Learners' lack of motivation may owe to the self-paced nature of the FCM approach, particularly for the out-of-class activities, which may create a potential disadvantage for learners who are not yet accustomed to such a pace of work.

To sum up, the present study was taken up to investigate whether FCM guided approach to teach English to preparatory year students at the selected university provides a seamless transition or poses challenges to the teachers on account of lack of training and lack of materials. The obtained results suggest that the majority of the participating teachers are dissatisfied with the transition. The present study is the first of its kind since challenges before English teachers implementing FCM to teach English have rarely been explored. A corollary to the findings from the present study is that for the successful implementation of FCM as a language pedagogy approach, it is required that teachers are provided with enough time and financial resources to prepare their own quality lesson videos.

Recommendations

Based on the findings from the present study, the researchers recommend the following steps to derive better outcomes from FCM as a language teaching approach:

1. Language teachers should be trained in handling all the aspects of FCM implemented classes since the approach largely relies on technology and technical gadgets.
2. The number of learners in flipped classes shouldn't be too large.
3. For lack of sufficient understanding in this important area of language pedagogy, more research studies need to be conducted.
4. Standardized evaluation procedures need to be developed in FCM.

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