

Flipped Teaching: A Trend for Students Learning in Higher Education

Zina A. Ismail Chaqmaqchee

English Department, Faculty of Education, Soran University, Kurdistan Region, Iraq

ABSTRACT

It is time to shift teaching practice from traditional teacher-centred to novel student-centred which mainly focuses on the digital technology in higher education. Flipped approach can empower student's self-learning knowledge and help them think critically; however, inductive teaching is essential for academic process at university level. The current study investigates student's ongoing cognitive skills and the effects of flipped approach on student's procedure. This research shows students view towards flipped approach during the learning process. The researcher as a teacher has evaluated a flipped classroom with the second- and fourth-year students in English department, faculty of education, Soran University. The survey was conducted among 104 undergraduate students of the English department. The data were analysed by t-test to find out student's view on flipped approach. Most students were challenged with flipped process inside and outside the class due to lacking on campus facilities. Thus, the results demonstrated that the students prefer face to face approach in the class although flipped approach has positive effect on students learning. The study proposes that academic staff should be more involved in teaching flipped approach and apply new pedagogy in the leaning process to save time and promote students' critical thinking.

KEY WORDS: Classroom Teaching, Flipped Teaching, Higher Education, Learning Process, Pedagogy

1. INTRODUCTION:

The development of technology over the past two decades has manifested itself in higher education. Colleges in Iraq and Kurdistan teach an instruction model which is didactic approach, but American colleges have begun to adopt flipped approach in teaching process; it encourages the teachers to deliver taught materials outside the class (Anthony, 2012). This approach was first used in the 1990s in elementary and secondary education and was referred to as the flipped classroom (Missildine et al., 2013). A study demonstrated that the pretension of the lecture as a helping tool to acquire skills, the lectures are not good or bad but it is a way to achieve their works without implementing the learning outcomes. Lectures cannot

develop students thinking skills critically (Donald, 1972). Although there are some obstacles in the university regarding flipped teaching approaches and lack of using technology among the students, flipped approach is a novel approach which encourages the learners to be active learners inside and outside the class. This method fosters the students to facilitate their work easily. Nowadays, the students are familiar with digital media. It will be easier for the teachers to deliver the material through the digital media. In this case, the students have enough time to present their assignment later in the class and discuss with their colleagues and the instructor. The traditional approach focused on didactic techniques in which the students were passive in learning process and the method was transformed into flipped approach which is student-centered, that is, the students were active (Hui-Min et al., 2018). Flipped teaching allows the students to review the material before they attend the class, it means, they have enough skills about the unit; it also increases their thinking skills and broaden their horizon. This leads to provide fruitful atmosphere in the class while discussing with their groups or individually. However, a study by a researcher stated that peers influence as "peer effects exist when a person's behaviour is affected by his or her interaction with one

Koya University Journal of Humanities and Social Sciences (KUJHSS), Volume 4, Issue 1, 2021.

Received 30 Jun 2020; Accepted 23 Dec 2021,

Regular research paper: Published 30 Jun 2021

Corresponding author's e-mail: zina.ismail@soran.edu.iq

Copyright ©2021. Zina A. Ismail Chaqmaqchee, this is an open access article distributed under the Creative Commons Attribution License.



or more other people, from the expression of the student. It is apparent that students affect each other's behaviour. In learning activity, they force group friends to do in-class activities. Also, they share their own information in the direction of their goals with peers. With peer instruction, students find the chance to interact with friends during the lectures and attention on concepts" (Yilmaz, 2017, p. 99).

Furthermore, this pedagogy saves time for both the students and teachers in the class without getting bored from the material (Hsiu-Ting, 2015). In Middle East, most universities focused on the traditional approach [didactic teaching], the students mainly focused on memorizing without interaction between the teachers and the students or the students with their peers. Hence, flipped method increases learner's interaction through discussion, sharing ideas and using digital media. The developed pedagogy enables the students to reflect critically and focuses on the content instead of memorizing (Lee, 2016). Teachers need to devote time to gain good learning outcomes: activities, video lesson and extra working sheet need to be prepared by the instructor to be discussed in the class later. Some teachers cannot afford extra time so they face difficulty in their learning outcomes (Palmer, 2015). When teaching style is a traditional approach, the students face difficulty of using digital media. Teachers should manage time to encourage the learners to use and follow the rules set by the program manager. As some of the students are unable to have the net at home due to economic issues and their lack of interest on audio lectures (Lee, 2016).

Blended learning is an approach which is based on traditional (face to face) and novel methods (Flip-online). The two approaches consolidate each other. When the students come across difficulty of online learning outside the classroom, face to face would be prosperity of the learners for the learning outcomes. This approach combines the traditional class with technology and online process by using of smart phones, laptop, and the devices catch students heed inside and outside the classroom (Roberto et al., 2017).

2. LITERATURE REVIEW

Flipped teaching is a novel pedagogy in learning approach. This pedagogy is an online work between the teacher and the students outside and inside the class. Teacher's duty is to present the lecture online by using audio or video while the students are supposed to read the lecture at home and do homework in the classroom. It is a process which makes the students engage in learning and working as a team to achieve the best learning outcomes (Fidalgo-Blanco et al., 2018). Flipped teaching replaces the traditional method favouring the

student-centred approaches. However, flipped approach is minimizing the teacher's direct teaching approach and maximizes the student's interaction. This pedagogy enhances student's communication which makes the learners more sociable and enhances their language. If student's native language is not English, flipped approach is a method to improve students' English language. However, "The modern flipped classroom began in 2007 in a high school chemistry course in Colorado. It could be argued that the flipped classroom has been in existence within the broader educational sphere for a number of years" (Cui et al., 2017, p. 193).

In higher education, the curriculum needs development and renewal of teaching approach annually. The teachers get pressure of teaching and time consuming of learning so the lecture content should be provided through technology, it means to improve students thinking skills. In flipped classroom, the learners spend most of their times outside the class while discussing the problem inside the class (Jane et al., 2009). The problem of using time will be resolved by allocating more time for participation and interaction between the students together with analysing the concepts and objects with the process of active leaning (Boucher et al, 2013).

Flipped teaching is a good tool for cooperative learning. Students can interact through sharing their knowledge and material online to get others perspective and get new information from other students. The process is beneficial for students who are interpersonal and intrapersonal. Some students feel shy to share their ideas in the class while outside class they can interact and share their knowledge easily so it is a way to create a social atmosphere academically. It presents a scaffolding approach in which the students and the teacher get support from each other by measuring their learning outcomes. Technology is a link between teachers and the students which produces an active learning. Teachers present the lessons through video which allows the students to access to the lesson online at home at any time or place. The learners can check out their lessons at any time by using smart phones or laptops. This approach can be a tool for this century generation as they are using technology in their daily life; that is, they can learn easily either individually or by peers, as it's a gate to strengthen social interaction (Fidalgo-Blanco et al, 2017).

Flipped learning is like active learning which focuses on student-centred learning; that is, students are learning through doing. It's a process which mainly depends on student's activity through collaboration outside the class and it constructs student's idea. The students can broaden their horizon easily.

Bloom taxonomy is an example that shows Flipped learning shifts learning activity from lower level like

comprehension outside the class into higher level such as evaluation and synthesis inside the class. Learners can construct their idea through interaction and individually. Generally, it is a process of learning individually outside the classroom and working with their peers or groups inside the classroom. It is like a cycle which builds students' confidence and makes room for them to learn novel ideas from each other (Virginia et al, 2015).

Furthermore, self-directed learning plays an essential part in flipped approach. Students take the role of the process by doing. Teachers should provide the students resources and information about the subject. However, they should encourage them to work individually without getting help from the teacher. The learners increase confidence in their abilities and persistent to achieve their work. They will be aware of their role in learning process that is, the teachers provide clues and the learners gain solution for the opportunities. The teacher requires from the learners to achieve their work individually at home then working in groups in the classroom. The instructors guide their students by using video lessons then the students apply the knowledge by solving the problems with their groups instead of lecturing which is a traditional approach. The traditional approach is time consuming for teachers as they spend a lot of time working on lecturing, creating PDFs, e-slides, e-textbook and creation of animated. The teachers benefit from flipped approach by using audio lesson so both the learners and the teachers get benefit from the time to gain the best learning outcomes inside and outside the classroom (Rutkowski, 2015). Hence, it is clear that "Traditional lessons are limited to classroom hours" (Basal, 2015, p. 31).

However, the researchers demonstrated that class activities play a role in flipped approach. The teacher should allocate time for doing activity in the classroom including active learning and critical thinking rubrics or worksheet to work actively in the class moreover, to enhance student's learning outcomes and being engaged in learning process. Some activities in the class such as discussion, presentation, group and peer working and quizzes (Rhodes, 2016).

At first, the students may face difficulty of learning flipped approach. They feel stressed to adjust this model. Novel model will be difficult at the beginning because the learners take responsibility of using the electronic means individually.

Gradually, they will get used to learn to be active learners instead of passive learners (Treglia et al, 2000). Before applying the knowledge, the teachers should ensure the students that they learned this model and take responsibility of using it. Some students have lack of interest in this model or they have inferior level which decreases their learning outcomes. The learners cannot

adapt easily to this method so the teachers need to support them by evidence and providing more learning approaches. In this case, the learners can affirm their ability to adapt the novel pedagogy (Arnold-Garza, 2014).

A study confirms that the students' attention descent after ten minutes of the class and they will not remember most of the material that is presented by the teacher during the lecture. This method is time consuming and provides no ground for being a critical thinker and analyser of the material. In contrast to traditional approach which is being criticized by academic staffs, the material must be taught before the students apply their work in an online process (Heinerichs, 2015). In some universities, it is essential, to apply both approaches in learning process such as blended learning approach. As most students have a limited standard, as proposed by Philips, "Current educational approaches within higher education utilise blended learning; where students may for example, receive a combination of traditional face to face (F2F) instruction in class and are also required to complete activities outside of classroom, facilitated through a range of technological resources" (Philips, 2015, p. 85).

In higher education, there is a colossal scrutiny about transforming the traditional curricula into novel system for student's success. Most academic staff using passive learning that is lecturing in the class which deprives the learners from active learning and they get bored eventually. The students can learn by themselves; they just need mentors to indicate their thinking skills critically. Engaging the students in active learning can enhance students thinking skills and learning. They can learn the material by doing as it promotes the student's achievement (Jacqueline et al, 2014).

A study reports that a flipped classroom was born. Flipped classroom has altered teaching practices. The teachers no longer stand in front of the learners and teach them for one or two hours, this shift allowed the teachers to take different roles with the learners without wasting time. This allocates more time for the students to express their idea and demonstrate their application of the subject. The new generation grew up with internet access. They can do their homework easily while chatting with their friends. Nowadays, the students are busy; they appreciate the stagger of this pedagogy. Some of students miss the class due to other sessions during the class so they follow the instruction of the teacher through online video without missing their class. This approach provides flexibility for the students to help them to achieve the best learning outcomes. (Sams, 2012). Another creative way to organize blended learning for the teachers is to set their plan for teaching through social media like face book. Nowadays, the students spend most of their time checking out the

information in social media. They get interested about the videos and the subject being posted. Teachers can post articles, videos, PowerPoint presentations and topics related to their subject. This is essential for the learners whose English language is inferior so they can learn by following the posts that their instructors present. The learners can learn a subject easily through their interests and perfection. As the students spend more time on face book, they are online most of the time, it is beneficial to enhance their language accuracy (Roberto Capone, 2017).

In line with this (Warden, 2016) states that there are ways to engage the students to the content in flip classroom. The teacher has to check out student's understanding of the content and the material of the next class. This approach enhances students learning individually. Formative assessment is required during flipped approach. The students need to apply the knowledge in the class. Flipped classroom for grammar input is a good phase to save time as the traditional method needs more time for teaching the material and little time for practicing in the class. So, this pedagogy measures student's learning before and after the learning approach.

The students in traditional approach work on doing homework assignments individually, to provide skills which are devoted by the teachers. It can be said that the learners depend on remembering, they just review the lectures. It lacks of cognitive skills while in flipped approach, the learners applying what they learned and solving the problems. Although flipped approach have positive effects on the students. There is also limitation regarding this approach; the large number of the students in the class, age, cultural influence, technology and communication. factors can cause issues for the students especially students who live in the village; the factors affect their learning style which abandons the learning. The evidences provide insights into students living style and obstacles which prevents process learning through flipped approach (David van Alten, 2019). However, a researcher dedicated that "citing pre-class interaction with lecture content as a key contributor to achievement of their overarching objective: the best use of face-to-face time to provide a truly authentic, efficient, student centred, personalised learning experience. Their opinions, experiences and findings are documented in a growing body of academic publications, as well as on well-developed websites hosting online communities dedicated to the exploration, practice and development of flipped learning." (Mohan, 2018, p. 2). Generally, Technology plays a role for redefining flipped approach across learning and teaching. Sometimes the obstacles prevent the leaning process in the classroom.

3. METHODOLOGY

A researcher pinpoints methodology as a "Pedagogical practices in general, whatever considerations are involved in how to teach." (Douglas, 2001, p. 15). In flipped teaching, it reflects students learning process and its influence on this pedagogy. This study focused on flipped approach in Soran University, faculty of Education, English department and how the students view flipped approach. The study was conducted on 9th April, 2019. The study lasted for three weeks; each stage had two hours per week, morning and evening classes. The result was obtained by undergraduate students of English department, Second year (morning class) and Fourth year (Evening class). 104 students participated in this study (male and females), 42 students of evening classes and 62 morning classes. 20 items were analysed for this research. T-tests were utilized to analyse the data to find out participants' view on flipped approach and to test its efficacy in the process of learning. The questionnaire centered on flipped teaching. Although flipped classroom was better for the learners learning process, they focused on the traditional approach which is traditional face to face pedagogy. Flipped approach was conducted for this study following a number of steps. Firstly, the teacher prepared an audio lecture and posted online on Moodle and social media; Facebook, Messenger and Viber. The lecture was about the techniques and rules of writing an essay. The learners have to study at home before discussing the subject in the class next day. Next, the teacher inquired the students some critical questions in a worksheet regarding academic writing. The students start to discuss critically about the subject in the class in peers and groups. As a researcher justified.

In each class session, the Instructor provides an overview of the course content. Ideally, students would have completed most of their outside requirements and would be prepared with any questions that they needed to ask. Once the questions are answered and the Instructor feels reassured that the students have proper understanding and clarity, the Instructor would then facilitate an in-class Lab activity to reinforce the student learning. The students would work on their Labs but are encouraged to collaborate with each other. (Christopher et al, 2016, p. 349).

Some participants faced difficulty of understanding the unit as they were not prepared themselves actively or studying at home, and some of them come across issues with the internet in their dormitory or at home. Due to these issues the participants did not prefer flipped teaching. Finally, the teacher was asked the participants to identify their views towards flipped approach by answering the questionnaire items regarding flipped approach. The results were assigned

for this study and the data demonstrated students' view towards flipped approach. The hypotheses of the study are that the students prefer classroom teaching (face to face) with the help of the teacher rather than studying individually at home then discussing in the class. Meanwhile, the students were unable to think critically and their level is poor so they cannot control the subject to analyse in a good way. The learners misunderstood learning online approach.

This study addressed the following questions:

1. What is students' view towards flipped approach?
2. Does flipped approach affect the students learning process? How? Why?

4. FINDING

4.1 Validity

The purpose of this study is to find out construct validity and to demonstrate the connection between each item. The result showed that the items were measured flipped approach in relation of evidence with axis that exists among (0.371 and 0.706) and (P-value<0.05). Also, regarding the measurement of traditional approach, the connection of correlation of each item in a shape of evidence significant between (0.744 - 0.320) and (P-value < 0.05).

4.2 Reliability

For the purposes of certainty, we get benefit from the Alpha Cronbach's for the purposes of finding out the internal consistency as presented in Table one which shows that the amount of Alpha Cronbach's consists of (0.700) and (0.719) that is gained in an adequate way. However, the last item (20) in the questionnaire regarding blended learning was skipped due to not having internal consistency with other items, that is why the measurement of Alpha Cronbach's was (0.719) and placed with reliability.

TABLE 1
Internal consistency

Flipped Approach	Cronbach's Alpa	No. Items	Deleted
Flipped Approach	0.700	10	-
Traditional Approach	0.719	9	1

4.3 Normality of The Data

The purposes of producing normality of the data which is affirming the tests of (Kolmogorov-Smirnov) found in (p-value>0.05), in various ways to measure (Flipped approach=0.130) and (Traditional approach=0.768), this means that there is a Normal distribution of the data as it shown in Table 2.

TABLE 2
Normality of the Data

Variable	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis	Kolmogorov-Smirnov	
							Z	P-Value
Traditional	35.65	37.00	40.00	6.217	-0.563	-0.142	1.168	0.130
Flipped	28.980	29.00	31.00	5.665	-0.223	-0.010	0.665	0.768

5. DISCUSSION

5.1 First Research Question:

The goal of the study for the question was understanding viewpoint of the students regarding flipped approach, the question was examined by one sample t-test in the following ways, the result gained.

1. Generally, the items were valued whereas level (t) gained from (9,274) bigger than (t) the chart consist of (1,984) and (P-value < 0.05), however the central arithmetic (35.653) is larger than the central hypothesis (test value). The result of the study was meaningful with the process of flipped approach.
2. 10 items of flipped approach are compared with the central hypothesis (3). It demonstrates all the items in the medial arithmetic (mean) were proved (P-value<0.05) however it's larger than medial (test value). This study found out student's perceptions on flipped teaching.

The teacher posted an audio lecture for writing an essay online on Moodle and social media to study at home then to be discussed next day in the class. Next day, the teacher inquired the students some critical questions regarding the subject in the class. The students discussed the subject with their peers. Some of the students did not realize the subject in the class as they were offline and didn't study at home so they faced difficulty in understanding the subject. The issue is that some learners don't use technology at all or they don't have the net to participate online. The researchers stated in their study that "The flipped model inverts this process. Transmission of the required information takes place outside of class without any direct face-to-face teacher-student contact." (O'Malley, 2014, p. 60). The aim of this new approach is to keep the students and teacher in touch outside the classroom and to figure out the subject in an easy way without exhaustion. Flipped approach does not only affect students learning positively, but also saves time for studying and makes grounds for activity inside and outside the class. It enhances the communication skills among the students by sharing their skills and keep in touch with each other inside and outside the classroom. Some students feel embarrassed to be criticised in the class, but it would be

easy for them to share their ideas online and get benefit from each other's knowledge. This keeps the students to work consistently without wasting time and learn in simple way. With internet access on most college and university campus, students can view their own pace which utilizes the students to get the information in online lecture so the teacher will be able to provide students centre learning approach (Amy Roehl, 2013). Furthermore, another researcher stated that in terms of Blooms revised taxonomy, the students are going through low cognitive levels which is remembering outside the class while analysing their cognitive works inside the class collaboratively with their peers and teachers. This encourages the students to apply their works critically (Brame, 2013). It is evident through this study that the students are willing to engage with flipped approach in the university, as its learners first trial to apply new pedagogy into their teaching process in higher education. The items were enhancing student's critical thinking by working with their peers online outside the class. It saves time and keeps them active. Most students prefer to study at home then discussing in the class. Flipped approach achieved a good path in students learning outcomes although there were some obstacles made the students decrease to learn and be active most of the time. The students prefer flipped classroom as it kept them working online outside the classroom especially at home. The lectures were posted by the teacher either on academic sites like Moodle or social media. The learners were enjoyed studying at home by using audio and video posted online, however there was an issue regarding technology such as the net, it is not available for the students most of the time. In this case, they miss a lecture posted by the teacher to study at home then to be discussed next time in the class. Due to this problem, the students face difficulty of keeping in touch with the teachers online all the time. That is why, they prefer traditional pedagogy instead of flipped teaching. Although most students view towards flipped approach was positive by using social media and being enjoyed working with their peers online, they

TABLE 3
One Sample T-Test

Factor	Mean	Test Value	Mean Difference	Std. Deviation	T		Sig.
					Archived	Table	
Total	35.653	30	5.653	6.217	9.274	1.984	Sig.
F1	3.59	3	0.59	1.18	5.07	1.984	Sig.
F2	3.64	3	0.64	1.47	4.48	1.984	Sig.
F3	3.45	3	0.45	1.22	3.77	1.984	Sig.
F4	3.47	3	0.47	1.22	3.93	1.984	Sig.
F5	3.48	3	0.48	1.09	4.51	1.984	Sig.
F6	3.53	3	0.53	1.09	4.96	1.984	Sig.
F7	3.70	3	0.70	1.23	5.82	1.984	Sig.
F8	3.86	3	0.86	1.09	7.99	1.984	Sig.
F9	3.50	3	0.50	1.25	4.09	1.984	Sig.
F10	3.43	3	0.43	1.07	4.13	1.984	Sig.

Df =103 N=104 P-value < 0.05

5.2 Second Research Question:

The purpose of testing second question which is consisted of the items of the study (traditional pedagogy), regarding the learning process, one sample t-test demonstrates (t) given (archived) comprises from (3.565) which is bigger than (1.984), also (P-Value=0.001) is smaller than (0.05); it can be concluded that the students preferred traditional teaching approach in the class and its beneficial for the learner's purpose. Regarding the questionnaire items, it was measured:

The first item which was regarding active learning, the participants view about teaching approach was that the traditional approach was an obstacle for the active learning that is why the rate (t) was bigger than schedule (t), but (mean) was smaller than (test value). While the items (2, 4, 5, 6, 7, and 9), the production of rate (t) was bigger than schedule (t), and (mean>3). The participant thought that face to face teaching method is an assist for the students whose level is inferior. Furthermore, the items (3, 8), were about the obstacles in the learning online (flipped learning approach) also the videos or the leaning languages were not obvious enough for comprehending of the participants. The results of one sample t-test demonstrated that the rate (t) is smaller than the schedule (t) and (P-Value>0.05), due to the issues the students were facing, they preferred the traditional teaching approach rather than flipped approach.

TABLE 4
Sample Second Hypothesis

Factor	Mean	Test Value	Mean Difference	Std. Deviation	T		P-Value	Sig.
					Archived	Table		
Total	28.98	27	1.98	5.665	3.565	1.984	0.001	Sig.
T1	2.62	3	-0.38	1.055	3.718	1.984	.000	Sig.
T2	3.55	3	0.55	1.206	4.635	1.984	.000	Sig.
T3	3.15	3	0.15	1.221	1.285	1.984	.202	No Sig.
T4	3.73	3	0.73	1.151	6.475	1.984	.000	Sig.
T5	3.29	3	0.29	1.312	2.242	1.984	.000	Sig.
T6	2.76	3	-0.24	1.084	2.262	1.984	.027	Sig.
T7	3.41	3	0.41	1.085	3.887	1.984	.026	Sig.
T8	2.82	3	-0.18	1.022	1.823	1.984	.071	No Sig.
T9	3.65	3	0.65	1.041	6.408	1.984	.000	Sig.

df=103 N=104

6. CONCLUSION

Although flipped approach has an effect on students learning, the students have some obstacles which prevent them from following it. The learners have implemented flipped approach in their learning process that might help them to enhance their knowledge and self-learning individually and in pairs. This research demonstrates that the students prefer didactic methods Teacher-centred due to some issues regarding technology and the atmosphere of the university. Didactic method decreases students' learning outcomes,

while inductive teaching which is student-centred is better for learning outcomes. At the university level, most teachers apply blended learning in teaching process whereas the facilities should be provided in academic sector in order to apply flipped methods without any issues. So, students indicate their willingness to the new approach, but due to some factors that influence them, they preferred traditional pedagogy in higher education. It's evident that Soran university is utilizing blended learning in their teaching approaches; yet in the future, academic staffs will focus only on flipped approaches which are on the process now. Generally, the students in flipped approach achieved more significant learning outcomes than the traditional approach.

7. REFERENCES

- Anthony, S. (2012). The Flipped Classroom. *Teaching Business and Economics*, 16(3), pp. 9-11.
- Arnold-Garza, S. (2014). The Flipped Classroom Teaching Model and Its Use for Information Literacy Instruction. *Commfolit*, 8(1), p.7.
- Basal, A. (2015). The Implementation of a Flipped Classroom in Foreign Language Teaching. *Turkish Online Journal of Distance Education*, 16(4), PP.28-37.
- Bergmann, J. and Sams, A. (2012). *Flip your classroom: Research every student in every class day*. USA: Iste. ASCD.
- Bligh, D. (1974). *What's the use of lectures?* San Francisco: Jossey-Bass.
- Boucher, B., Robertson, E., Wainner, R. and Sanders, B. (2013). "Flipping" Texas State University's Physical Therapist Musculoskeletal Curriculum: Implementation of a Hybrid Learning Model. *Journal of Physical Therapy Education*, 27(3), pp.72-77.
- Brame, C. J. (2013). *Flipping the classroom*. Vanderbilt university centre for teaching Retrieved from (today's date) from *Flipping the Classroom | Center for Teaching | Vanderbilt University*
- Brown, D. (2001). *Teaching by Principles. An Interactive Approach to Language Pedagogy*. White Plains: Pearson education.
- Capone, R., Caterina, P. and Mazza, G. (2017). Blended learning, Flipped classroom and virtual environment: challenges and opportunities for the 21st century students. [online] Barcelona, Spain: Proceedings of EDULEARN17 conference. Available at: <<http://EDULEARN17 Proceedings>> [Accessed 5 July 2017].
- Cole, J. and Kritzer, J. (2009). Strategies for Success: Teaching an Online Course. *Rural Special Education Quarterly*, 28(4), pp.36-40.
- DeLozier, S. and Rhodes, M. (2016). Flipped Classrooms: a Review of Key Ideas and Recommendations for Practice. *Educational Psychology Review*, 29(1), pp.141-151.
- Fidalgo-Blanco, Á., Sein-Echaluce, M. and García-Peñalvo, F. (2017). APFT: Active peer- Based flip teaching. In: Teem. [online] Cadiz: Spain. proceedings of the 5th international conference on technological ecosystems for enhancing multiculturalism. Available at: <https://dl.acm.org/doi/10.1145/3144826.3145433>
- Fidalgo-Blanco, Á., Sein-Echaluce, M. and García-Peñalvo, F. (2017). Ontological Flip Teaching: A Flip Teaching model based on knowledge management. *Universal Access in the Information Society*, 17(3), pp.475-489.
- Gilboy, M., Heinerichs, S. and Pazzaglia, G. (2015). Enhancing Student Engagement Using the Flipped Classroom. *Journal of Nutrition Education and Behavior*, 47(1), pp.109-114.
- Hao, Y. and Lee, K. (2016). Teaching in flipped classrooms: Exploring pre-service teachers' concerns. *Computers in Human Behavior*, 57, pp.250-260.
- Hung, H. (2014). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), pp.81-96.
- Lage, M., Platt, G. and Treglia, M. (2000). Inverting the Classroom: A Gateway to Creating an Inclusive Learning Environment. *The Journal of Economic Education*, 31(1), p.30.
- Lai, H., Hsiao, Y. and Hsieh, P. (2018). The role of motivation, ability, and opportunity in university teachers' continuance use intention for flipped teaching. *Computers & Education*, 124, pp.37-50.
- McLaughlin, J., Roth, M., Glatt, D., Gharkholonarehe, N., Davidson, C., Griffin, L., Esserman, D. and Mumper, R. (2014). The Flipped Classroom. *Academic Medicine*, 89(2), pp.236-243.
- Missildine, K., Fountain, R., Summers, L. and Gosselin, K. (2013). Flipping the Classroom to Improve Student Performance and Satisfaction. *Journal of Nursing Education*, 52(10), pp.597-599.
- Mohan, D. (2018). Flipped Classroom, Flipped Teaching and Flipped Learning in the Foreign/Second Language Post-Secondary Classroom. *Nouvelle Revue Synergies Canada*, (11), pp.1-12.
- Nwosisi, C., Ferreira, A., Rosenberg, W. and Walsh, K. (2016). A Study of the Flipped Classroom and Its Effectiveness in Flipping Thirty Percent of the Course Content. *International Journal of Information and Education Technology*, 6(5), pp.348-351.
- O'Flaherty, J. and Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, pp.85-95.
- Roehl, A., Reddy, S. and Shannon, G. (2013). The Flipped Classroom: An Opportunity To Engage Millennial Students Through Active Learning Strategies. *Journal of Family & Consumer Sciences*, 105(2), pp.44-49.
- Rutkowski, J. (2015). Flip teaching Approach to smart education-principles and guidelines. In: Sorrento, *Smart education& E-learning (SEEL)*. Poland.
- Tan, C., Yue, W. and Fu, Y. (2017). Effectiveness of flipped classrooms in nursing education: Systematic review and meta-analysis. *Chinese Nursing Research*, 4(4), pp.192-200.
- van Alten, D., Phielix, C., Janssen, J. and Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, 28, p.100281.
- Virginia N. L. F. and Tunnicliffe, P. (2015). To Flip or not to Flip: A Critical Interpretive Synthesis of Flipped Teaching. *Smart Education and Smart e-Learning*, 41, pp. 57-67.
- Wanner, T. and Palmer, E. (2015). Personalizing learning: Exploring student and teacher perceptions about flexible learning and assessment in a flipped university course. *Computers & Education*, 88, pp.354-369.
- Warden, A. (2016). Investigating the use of a flipped approach to grammar input in an English as a foreign language classroom. *British council ELT Master's dissertation awards: Commendation*. The university of Chichester.
- Yeung, K. and O'Malley, P. J. (2014). Making 'The Flip' work: Barriers to and implementation strategies for introducing Flipped Teaching methods into traditional Higher Education courses. *New Directions in the Teaching of Physical Sciences*, 10(1), pp.59-63.
- Yilmaz, O. (2017). Flipped Higher Education Classroom: An Application in Environmental Education Course in Primary Education. *Higher Education Studies*, 7(3), p.93.