A Study of the Teacher-Student Relation in a Flipped learning Class Environment: Buber's Philosophy as the Foundation of Flipped Learning

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Abstract

In this research, based on Buber's educational philosophy, the purpose is to apply the teaching design principle of flipped learning. Buber's educational philosophy presents a teaching model related to educational relations, so it is important for us to practice the educational relation contained in the teaching design principle of flipped learning based on Buber's educational philosophy. Buber's educational philosophy can be the basis for practicing the teaching design principle of flipped learning. First, flipped learning based on Buber's educational philosophy has the ability to realize the reconstruction of a learner-centered class culture which emphasizes the essence of the student, through an open relation with the teacher, rather than directing forced educational transmission methods. Second, flipped learning based on Buber's educational philosophy which emphasizes dialogue, can allows students to express selfhood freely and lead them to true dialogue expressing their possibilities as they are. Third, flipped learning based on Buber's educational philosophy which is the double realization of the I-It and I-You relation can operate whilst placing importance onto both the transmission of knowledge and experience in the lecture format of the online classes, and also the direct personal exchanges of the offline classes. Fourth, flipped learning's offline classes which are based on Buber's educational philosophy can form the character of the students themselves while confirming the authentic existence in the process of responding, and can promote creativity through active exchange and sympathy. In order to accomplish this goal, this study seeks to illuminate implicit aspects of the 'I-You' relationship relating to the teacher-student relationship in Buber's dialogue education and philosophy ('dialogphilosophie'), and consider the new philosophical system provided by Buber's educational philosophy in the context of the recently developed Flipped learning classroom

Keywords: Martin Buber, Flipped learning, Buber Model for Teaching, Dialogphilosophie, I-You, I-It, relation

Introduction

Flipped learning reverses the pattern of traditional teaching methods. The existing teacher-centered class for the knowledge transfer is taught the other way outside the classroom, and the learning activity utilizing the knowledge that has done as a homework are done in the classroom space (Strayer, 2007; Dunn, 2011). Before class, flipped learning acquires the basic knowledge and concepts by utilizing the digital base technology, and has a structure that changes in the class more focused inversely on learner-centered activity than focusing on teachers as an authority (Scudder, 1968).

However, when introducing in class the teaching design principle of flipped learning focusing on learner-centered learning into actual classes, it occurred when unexpected. First, learner-centered education was not performed normally because transfer of authority for learning was carried out in a state where extension for autonomy and subjectivity were not performed. For example, in flipped learning class, it was frequently occasions when student came into offline classes of post that is not voluntarily participate in the advance of online classes. Secondly, there were frequent students who were not actively participating in cooperative learning of offline classes. That's why cases occurred in which students were dissatisfied with students who did not participate in cooperative learning. Thirdly, in the flipped learning class, in many cases, emphasis was placed on learning as a means to better receive the score rather than the internal growth of the individual. Students participated when reflected in the score, and expressed attitudes not to participate when do not reflected in the score, rather than concentrating on internal growth, development of ability and establishment of character over the long term.

In the context of our era of intellectual and moral confusion, Buber's educational philosophy has the foundation of a teaching model that combines freedom and authority (Buber, 1958), so in flipped learning classes it is necessary to overcome it based on the educational relation of Buber every time a situation deviates from the teaching design principle. Buber does not emphasize the authority of the teacher, promotes the interaction, believes that the relation between offline without media and online class through media is double reality. The educational philosophy of Buber may be the foundation to wholly practice the teaching design principle of flipped learning without restriction. Therefore, at the moment of applying flipped learning in an expansive manner, flipped learning research based on Buber's educational philosophy is required.

Buber's educational I-You, in its connection to the teacher-student relationship, which becomes meaningful when human and educational responsibility is assumed and students take the role of 'inter-being'. If this were not the case, then a student's classroom activities would be limited to the learning of preparatory knowledge and information. The activity-centered classes which should be pursued are excluded in favor of assigning learners with tasks, which is the current state of affairs. For these activity-centered classes, implicit points in Buber's teacher-student relationship will be sought out, and points of presupposition in terms of interaction of the teacher-student in the current state of flipped learning will be investigated.

I. The role of students and teachers in flipped learning

Flipped learning introduces prior learning concepts to existing forms of online classes, and students utilize appropriate prior class video content, so that previously individually learned content (in class time) forms a base for initiating a deepening and replenishment of learning. Before the advent of online lectures in 1995, flipped learning originated from the term 'flipped classroom', a term used by J. Wesley Baker, who was a professor of an engineering college which had discovered improvements in students' class attitude who had accessed content available on the website (Baker, 2000). Following this in the early 1990's, Harvard physicist Eric Mazur constructed and applied an interactive class based on students pre-studying and participation in peer instruction and a concept test quiz in the classtime. Jonathan Bergman and Aaron Sams(2007) (chemistry professors from Colombia State High School) utilized technology to propose a fundamentally more effective and improved class format which allowed teachers to lead class preparation through self-produced class videos, instead of using textbooks (Bergmann & Sams, 2012). In other words, flipped learning refers to a form of class which accomplishes a reversal of preparation and homework outside of the traditional lecture and classroom, whilst expanding opportunities for interaction between teacher and student (Bang & Lee, 2012; Bergmann & Sams, 2012).

Alongside this, learner-based class methods similar to flipped learning which use learning materials arising from the technological developments of smart devices are being used, allowing a focus on effective contemporary learning methods which transcend the limits of the temporal/spatial environment. Flipped learning's characteristics are divided into design characteristics and structural characteristics. The following are four important structural factors: ① a pliable (flexible) environment, ② a changing learning culture, ③ purposeful learning content, ④ an on-off classroom situation where all teachers etc., have different specialties (Bang & Lee, 2012; Hamdan et al., 2013; Lee, 2013). Following this, flipped learning allows the designing of a flexible environment outside of fixed class guidelines, and can be reconstructed into various forms in accordance with learning objectives. The <table> below shows an examination of material suggested by the structural characteristics of the abovementioned situations (University of Texas at Austin Center for Teaching and Learning, n.d, 2013 Re-quotation).

Classification	Existing Class	Flipped learning class
Before Class	Assigning material which the student will have to read. Teachers prepare for the class.	Student records questions related to learning content (depending on module). Teachers prepare various learning content.
Class Introduction	Teachers designate what will be generally helpful to the class. Students have limited information relating to their expectations of the class.	Students ask specific questions to teachers which guide their personal learning experience. Teachers are able to predict the areas in which students will require the most help.

During Class	Teachers endeavor to utilize and stimulate all students. Students attempt to follow the class material.	Teachers serve as a guide to the students' curriculum through feedback and small-scale lectures. Students practically apply skills which they have to learn.
After Class	Students typically receive delayed feedback and attempt homework tasks. Teachers evaluate based on past performance.	Students continue to utilize skills and knowledge according to accurate descriptions and feedback from teachers. Teachers award grades based on high quality work and suggest additional descriptions and learning materials regardless of students' basic requirements.
Daily Routine	Students require what they studied to be re-checked. Teachers sometimes repeat past material in classes.	Students have the ability to seek out in which areas they need help. Teachers continue to guide students towards a deeper understanding of content.

Table 1: A Comparison of the structure and activity content of an existing class and a flipped learning class

The flipped learning course at the University of Texas Austin Center for Teaching and Learning has five stages which cover the structure of activities before, during, and after classes (University of Texas, Austin Center for Teaching and Learning, n.d.). This type of structural frame divides the learning space whilst remapping the roles of student and teacher and providing important content. The flipped classroom based on a consideration of these design and structural factors has the following characteristics: ① increasing opportunities for interactive feedback in the teacher-student relation, ② generating responsibility relating to students' individual learning, ③ teachers' role changing to learning guide/ assistant, ④ inducing 'blended learning' (combining traditional and constructivist teaching methods), ⑤ considering students who have missed classes/ availability of supplementary classes, ⑥ continuously accumulating applied knowledge for class content through feedback and activities, ⑧ receiving education specific to the level required (Bergmann, Overmyer & Wilie, 2013).

II. Flipped learning teaching and learning activities

In designing 'flipped' teaching methods in existing classrooms and increasing the learning effectiveness, flipped learning requires a responsibility to students and leadership in terms of learning. Based on the teacher's role of actively guiding assistant, it is desirable that learners are able to study in classes fitting with their specific abilities. For this, there should be an increase in student-teacher interactions and acclimatization to various class methods in order to stimulate learning and utilize technology. In this way, an examination of flipped learning's combination of centralizing traditional and online teacher/ student

learning methods reveals three types of activities, relating to Horton's (2006) e-learning design based on Watkinson's (2005) centralized teacher/ learning activities. Watkinson (2005) suggests the following 5 points for teachers and developers of both online and traditional teaching methods solidifying classroom activities: ① introductory activities, ② e-learning technology, ③ cooperative and team activities, ④ textbook learning activities, ⑤ interaction promotion activities, etc. The three main activity strategies here are: ① activities for acquisition, ② activities for performance, and ③ activities for connection, etc (Horton, 2006).

The pre-class environment revolves around the checking of student ability by way of preparatory studies and quiz activities in the form of video, learning materials, and online lectures, etc. During class time, students adapt to and share learning content through participation in discussions and debates, cooperative learning, problem solving-based learning, practical exercises, and experiments, etc. After class, summarization takes place in the form of core content being reviewed, team activities being suggested, and individual feedback being offered as a guide for awarding individual levels. The role of teachers undergoes a change from conveyer of knowledge to learning facilitator or consultant, and students become able to creatively form knowledge through pre-online and social learning. Second, according to the creation of cultural learning communication, the communication of students has been centralized in terms of knowledge transference, invigorating constructionist learning. Third, in reconstructing classroom culture to be student-centered, the school is reorganized from 'one way' lectures to breaking the classroom away from simplistic lecture halls and offering opportunities for knowledge sharing and the evolution of new creative value platforms.

In these platforms, if the educational connection of teacher-student (originating from Buber's 'I-You' concept) becomes developed, then the following results can come under consideration in the flipped learning design. First, opportunities for teacher-student and student (amongst themselves) communication are increased. Second, student underachievers are helped. Third, the learning ability of all other students is improved. Fourth, teachers gain a much greater understanding of students. Fifth, interchange is increased in the student sphere. Sixth, level-based learning becomes available. Seventh, a complete learning program can be developed. Looking at each of the above in turn, the one-sided class methods of teachers and learning content in similar traditional class locations, are not only spaces unequipped for communication between students and students and teachers, but also restricted by the barriers of physical time. However, according to flipped learning, simple knowledge transfer is accomplished previously in an online format, and knowledge transfer in the areas of necessary observation, thinking, and creativity, in the leadership of teachers it made possible an increase of interchanges through mutual communication and the realization of various expressions and swapped opinions. Different learning maps are made available in accordance with the amount of face to face contact time (and opportunities) with students, and based on this, students are able to gain knowledge online, and are able to pursue complete learning programs through the specific offline learning maps mentioned above.

Flipped learning aids the transforming of the classroom climate into a student-centered learning culture. At the center of the traditional classroom model, the professor is a person of complete dignity and power. However, in the flipped learning model, the class is transformed to become learner-centric. This transformation, which induces deep searching of the task at hand for the learner, offers an abundance of learning experiences. From the teacher's point of view, continual research is needed regarding how to create adaptation in the classroom which considers a student's active learning participation, interaction, and rate of their personal progress through flipped learning. Following this, in the reality of successfully applied flipped learning and Buber's I-You relation, all should be treated with equal respect in the teacher-student and student-student relations, while maximizing the existing environment of people's values and meanings.

For this student-centered class culture, there must be a dissolution of deliberate learning content in the sophisticated class plans of teachers. A flipped learning class teacher should possess not only procedural fluency, but also be constantly thinking about how to use the flipped learning model to help the students reach a conceptual understanding. Additionally, because students learn independently, there is a need for the construction of an assistance support system which enables them to overcome difficult situations. At the same time, in the learning process there is there is also a need for teachers to fulfill the role of kind 'protector' guides who are effectively able to facilitate a class centered on student activities.

Ⅲ. Buber's Educational Philosophical Foundation for Complementing the Interactions of Flipped Learning

Buber's educational philosophy has a philosophical basis complementing flipped learning. Flipped learning needs to prepare a philosophical foundation concretely through Buber's educational philosophy. It can be summarized as follows educational philosophy of Buber as the foundation of philosophy of flipped learning. First, Buber does not focus on education to force students to infuse, but emphasizes communion. Buber's educational philosophy has a philosophical foundation of flipped learning in terms of sublation the compulsory cramming education method. Buber clearly states the meaning of freedom based on his insight. Buber's concept of freedom deals with concepts being forcibly opposed, unlike popular perspectives. According to Buber, it is communion and not freedom which is the opposite of compulsion; for while compulsion is a negative reality, communion is a positive reality(Cohen, 1979: 88).

Buber sublates education as a method of forcibly ordering and suppressing in the educational environment. Buber passes harsh judgment on the authoritative teacher, who dominated traditional education and who perceived his task as the mere transmission of information in the form of maxims, laws and principles which the child was required to receive and to learn by rote. Under these conditions, the child was reduced to being a receptacle of subject matter whose nature was determined by adult values, which the child was expected to accept and to which he was expected to conform(Cohen, 1979: 86). Students who are educated by an authoritative teacher determine the value of the student by information injected from the outside rather than emergence their own nature and positively resolve their own problems. Education forced in this manner does not connect encounters between students and teachers, and brings students to subjugate.

Connection in education, literally, it is precisely the connection, it is open-mindedness and relation; Freedom in education, it is connection(Buber, 1969: 23). According to

compulsory cramming education, Buber sublates the state where there is no connection between teacher and student, aims to be connected and open to each other through the relation. In this way Buber looks at the relation and connection a contrary concept of compulsion in the educational environment, which is true freedom in an educational environment. Therefore, Buber defines as education the relation as a positive reality opposite to compulsory education, and emphasizes education that do not depend teacher on while being connected. For example, teacher does not coerce strongly to put nature of a student in the frame, while maintaining communion with a student, but gives the true freedom so that students manifest their own nature.

Second, Buber's educational philosophy is the basis of the philosophy of flipped learning in that it emphasizes the dialogue and the inclusion in equal relation of seeking after truth. An inclusion is an extension of self-specificity in a state where the existence has not been lost, it is to experience and participate jointly while facing each other. Buber refuses educational practices to make students replace others. For this reason, Buber emphasizes the inclusion that respects each existence as it is, rather than empathy. The inclusion may we call a dialogical relation(Buber, 1969,32). And the inclusion is also an educational relation between teacher and student. The inclusion is love and lead done in educational relation and exist presently due to mutual relation which they participate and experience in each other. When you participate in their lives with an attitude of seeking after truth and suffer as a companion, all the lives of teacher and student are guaranteed, and it can make the awakening come and go, and it can jointly produce the truth(Kang & Shin, 2001, p. 117).

Buber emphasizes dialogue with inclusion, because teacher not only communicates knowledge through classes, but also influences student for words and actions anytime, anywhere. Human life lies in the process of questioning and replying as it is to not only the positive world but also the negative world at the same time as the two-sided world. The production of the response in all sparks of the soul, every time the blaze of the answer to the unknown in advance rush word, we call the responsibility(Buber, 1969, p. 25). In other words, students can gradually practice responsibility through response in the area of life imposed on them. Dialogue meant for Buber that the teacher should share the significant results of a scholarly decisive life in a manner which would evoke the kind of decisive response from the student which would cause him to grow(Scudder, 1968: 148). Therefore dialogue is an important element of education, starting with production of the response to words and practicing responsibility.

For example, if teacher asks questions for a double sided world with pleasure and distress, joy and suffering at the same time, in the course of response student will have for their own responsibility while understanding that matter of a twofold fact will come out, depending on the choice I can carry it.

Buber explained that student receives a personal influence in the process of being offered word to students and forming responsibility to answer the words. It is educated through dialogue that induces responsibility. Buber advocates a genuine, shared and reciprocal dialogue which, although managed and arranged by the teacher, is at the same time uninhibitedly and directly entered into by the teacher with the whole of his personality(Cohen, 1979: 99). In other words, the teacher expresses one's position and actively induces the view of the student while being in dialogue directly with the student, receives it under a personal influence. A teacher's interpretation of that part of the curriculum with which he is concerned is influential in determining the detail of what his pupils learn. He can also influence their attitudes to the content of a lesson or lessons by the way in which he organizes the presentation of it, by stressing certain features and ignoring others, by indicating his agreement or approval at this point and by registering doubt or disapprobation at that(Hilliard, 1973, p. 48).

Third, the interaction of flipped learning can construct a philosophical foundation through the relation between I-It and I-You of Buber's educational philosophy. Buber thinks that the relation between I-It and I-You is double reality. The It is the chrysalis, the You the butterfly. Only it is not always as if these states took turns so neatly; often it is an intricately entangled series of events that is tortuously dual(Buber, Kaufmann trans, 1970, p. 69). Flipped learning takes simultaneously classes through on-line media at the stage of prior Learning and then offline classes that actually interact through directly encounter. These flipped learning resembles Buber's educational philosophy in that it simultaneously takes classes that communicate knowledge through on-line media and actually converse while encountering. In other words, class taught on-line for prior Learning with flipped learning is similar to I-It relation mentioned by Buber, and the actual encounter that is made through interaction with teacher after prior Learning is similar to I-You relation mentioned by Buber. Therefore, various interactions performed by flipped learning can build a philosophical basis from Buber's I-It and I-You relation.

Teaching taken through online media with flipped learning is merely a communication of knowledge and experience rather than education, and these prior Learning remains at the stage of mastering things as information. But interaction with flipped learning which is done through online media is absent from direct sympathy accomplished through encounter between teacher and pupil and personality influence is also absent. For this reason, Buber stated that learning through the relation of I-You is very important as well as learning in I-It relation to learn via online media.

Buber thinks to be a true life through I-You relation by direct contact. And the relation of I-You exists completely I by You while speaking with one's whole being. In other words, by dialogue, You become present to us, while giving a personal influence, I come wholly into presence. What is important to education is not the accumulation of knowledge by rote learning, but constructive criticism, the direct experience and the personal integration of the discrete data which have been received; not information which has been collected and memorised, but information which after having been considered and weighed has been converted into 'active knowledge' that operates as an integral part of personal conduct(Kohen, 1979, p. 98). In fact, in an offline class of flipped learning can influence personally through encounters without obstacles such as online media. Every means is an obstacle. Only where all means have disintegrated encounters occurs(Buber, Kaufmann trans, 1970, p. 61). Therefore, in offline class of flipped learning, in addition to simple information communication, are encountered under the direct contact and a personal influence that Buber highlighted.

Fourth, as if Buber completed education of creativity and character through educational relation, flipped learning also can provide character and creativity education. Firstly let's look at the character education and it is as follows. Education that is worthy of this name is essentially character education. For the true educator has not just the individual functions in pursuit of his pupil, the one who intends to communicate him only with certain knowledge or skills, but it is always him for the whole person being(Buber, 1969, p. 53). In this way, after making prior Learning through on-line media mainly for knowledge communication, Buber focus on the character education that forms the whole person through encounter which is done in actual class. When participating directly without having prejudice about the life of student, teacher can facilitate form of the character based on the relation of trust with the teacher while including the student as it is. When existence suffering in contradictory world and society ask questions, the teacher can facilitate to have the character overcoming contradictory situations through educational relation that answers based on conscience. When a teacher stands so by his student, conscious of responsibility and participating in student's life, then everything that is happening between them can open a path to character education(Buber, 1969, p. 58).

Buber stated that he is not an online class, that he can wholly have his individual character through practical encounters held in offline classes. Students can respond with responsibility for responding to questions through educational encounters, and can form the character associated with the authentic existence. In this way, Buber argues that he is responsible for responding using a dialogical relation and guides him to mature as he continues to make his character until realizing the unity of existence. This full contradiction can face while overcoming only the revival of individual unity, the unity of Being, the unity of life, the unity of work, the unity about mutual Being, life and work(Buber, 1969, p. 71-72). And the unity means that mixes one another dynamically based on many various things, and although this is inconsistent, the differences create unity of character while mixing with each other. Therefore, student can form the character and confirms the authentic existence at the same time while he is responding individually using a dialogical relation.

It means that character is imprinted on influence from all elements such as nature, society, history, culture, ethics, etc. The Greek word character means imprint. The special connection between being and advent of man, the special relation between his essence of being and the consequence of his actions and attitudes is impressed on his still plastic substance(Buber, 1969, p. 55-56). Character is imitated due to factors affected and there are aspects to be regarded as identifying, on the other hand conflicting influences are imprinted on it while being entangled variously through situations that do not absorb while doubtfully resisting.

It is not possible to overlook the fact that there is also a personal influence of teachers who intentionally influence with the educational will to the process of forming character through imprinter. Character gradually has unity for parts imprinted while receiving personal influence from various educational environments. As stated above, students will form a unique character due to the parts individually imprinted through educational relations. The encounter is based on individuation, individuation becomes a delight of the relation, because we can use to recognize the different other one another through individuations (Kang & Shin, 2004, p. 32).

Also, flipped learning in an offline class, you can education of creativity as well as character through educational encounter that emphasizes in Buber's educational philosophy. Buber states that it creates creative possibilities with specific energy and abilities, and condemns the general reductionism practice of contemporary educator that characterizes creativity, by its essence, by the expression of individual selfhood. The originative instinct, he argued, is grounded in the wholeness of human consciousness, in its inwardness, and is nurtured, not by the free expression of individual selfhood, but by the relational experience through which human potentiality is ultimately fulfilled (Murphy, 1988, p. 91). For example, the possibility of creative in actual classes is that variety mixes and creates newly through relation that actively interacts with teachers and colleagues, are not manifested in isolated situation individually without various interactions.

However, if teachers were to acknowledge the truth of mainly situational interactions, then those who have analyzed Buber's Hasidism would have to only concern themselves with only the preparatory stages in order to accurately initiate educational existential contact. In the words of Wittgenstein: until now, my analysis has been little more than a ladder, which once climbed up must be thrown away. This is because there are more instances of both of the above models (the goal-means model and the model of the teacher first deciding on the goal, then having to find a method for achieving that goal) being ignored and overlooked than being revealed for what they actually suggest. So in involved debates relating to existentialist education, interactive methods and links for existing methods and situations must be implemented.

The relation between teacher and student present in flipped learning, rather than being a conveyor of knowledge, should be a role characterized by a responsibility to guide students in their search for answers. The individual potential/creativity of students should

be acknowledged by all, and a learning culture of communicative forms should be promoted. The classroom culture should be reconstructed with students at the center, and classrooms should be reorganized as an area for value creation and knowledge sharing, as opposed to simple lectures. This is not to impersonalize the principles of previously regulated learning of systems of ethics for the students. Teachers are to share with a personal, honest open mind, the meaning of what has been discovered through the type of learning relation where a teacher answers to his students. It follows that in an understanding of the mutual teacher-student relation present in flipped learning, the instructional design reflected by Buber's educational relation is able to discover new possibilities in terms of observation, thinking, and creativity in the conveyance of knowledge.

IV. Actual application of Flipped learning based on Buber's educational philosophy

Flipped learning based on Buber's educational philosophy is able to facilitate a more effective and systematic operation of the educational culture and environment. Put another way, by using flipped learning based on Buber's educational philosophy to initiate a shift to learner-centered education, increasing interaction, possessing the double reality of knowledge transmission in online classes and the personal encounter atmosphere in offline classes, and exceeding the 'knowledge transmission' paradigm, both character and creative education can be operated more effectively. The following is an arrangement of realistic applications of flipped learning based on Buber's educational philosophy.

First, Flipped learning, which is based on Buber's educational philosophy, which emphasizes relation, can change the educational environment to a learner-centered learning culture. Buber's educational philosophy is to sublate the coercive educational method and emphasize that students and teachers have a close relation with each other with an open attitude. A Buber model for teaching contrasts sharply with attempts to restore authority to teaching on traditional grounds(Scudder, 1968, p. 133). Flipped learning based on Buber's educational philosophy that does not adhere to the one-sided indoctrination-type educational methods is possible for a teacher to facilitate through close relations with students a learner-centered educational environment in which students subjectively solve their problems and express their own nature. Schudder maintains that especially in our own times, when traditional principles are being shattered-in an age of great confusion concerning values, wide-spread doubt and difficult reassessments-a Buber based model might allow the teacher (who is conceived of as an expert by his pupils) to demonstrate his relation to truth by his genuine authority, while making no coercive demands on his pupils to accept his relationship with the truth(Kohen, 1979, p. 99). Flipped learning based on Buber's educational philosophy can realize the reconstruction of a learner-centered class culture which emphasizes the essence of the student, through an open relation with the teacher, rather than directing forced educational transmission methods.

Second, Buber's educational philosophy, which emphasizes dialogue, becomes an educational philosophical foundation that can actively promote interactions caused by flipped learning. Buber places emphasis on inclusion participating jointly without losing one's specificity and dialogue to experience in the position of opponent. Furthermore, the dialogue that emphasis on Buber not only has a simple interaction technology, but also has its own responsibility via response, so that it has the opportunity to express selfhood. From this angle, flipped learning is able to establish the basis of philosophy for Buber's

educational philosophy in terms of centralizing the interactions between students and teachers. Flipped learning which is based on Buber's emphasis on dialogue is able to promote a learning culture that intends to communicate and practice its own responsibility in response to continuous exchange with teachers (or co-workers). Flipped learning based on Buber's educational philosophy which emphasizes dialogue, can allow students to express selfhood freely and lead them to true dialogue expressing their possibilities as they are.

Third, flipped learning based on Buber's educational philosophy can operate dually online classes focusing on knowledge transmission and offline classes focusing on the personal encounters between student and teacher. Buber thinks that I-It relation, which mainly focuses on experiences and knowledge transfer, and I-You relation, which mainly focuses on personal encounters, are double existence. Grounded in this type of educational philosophy, flipped learning has the ability to be run doubly both as an online class/lecture which concentrates on transmitting knowledge and experience, and as an offline class which concentrates on direct encounters and personal exchanges.

In other words, because flipped learning requires practical lecture in which knowledge and experience is passed down from teacher to student, we promote to pre-learning through the online classes, and in the offline classes encourages various communication and exchanges along with the act of mutually influencing each other through the direct personal encounters mentioned above. Following this, flipped learning based on Buber's educational philosophy which is the double realization of the I-It and I-You relation can operate doubly whilst placing importance onto both the transmission of knowledge and experience in the lecture format of the online classes, and also the direct personal exchanges of the offline classes.

Fourth, Flipped learning based on Buber's educational philosophy exceeds mere transmission of knowledge and it is possible to promote education of character and education of creativity. Through the personal encounters between teacher and student in the offline classes, flipped learning is able to promote the abovementioned character education, which forms whole-person. In other words, flipped learning in offline classes, students can gradually form the character associated with their authentic existence while responding to questions. In this way, students gradually have responsibility for responses, can possess diversity of existential unity and character unity. In addition, it does not mainly focus on simple knowledge transfer flipped learning in offline classes, you can actively promote creativity through various opinions exchange and sympathy. In this way, flipped learning's offline classes which are based on Buber's educational philosophy can form the character of the students themselves while confirming the authentic existence in the process of responding, and can promote creativity through active exchange and sympathy.

Flipped learning can concretely establish the direction of education through Buber's educational philosophical basis and build educational culture more effectively and systematically. Buber's educational philosophy can be the foundation of the philosophy of flipped learning which has learner-centered learning culture and promotes interaction between teacher and student. Additionally, Buber's educational philosophy poses the educational foundation for a simultaneous realization of the I-It relation centered on knowledge transmission in the online classes and the I-You relation centered on achieving an personal exchange in the offline classes. Outside of the abovementioned simple knowledge transmission Buber's educational philosophy possesses the educational

philosophical foundation for promoting character and creative education. Based on these educational philosophical foundations, flipped learning makes it possible to more clearly establish the purpose and direction of education and to practice an effective class

Conclusion

Although there have previously been attempts to apply Buber's philosophy as a teaching model, there were limitations to the realistic technological application of this teaching model (which was based on practical personal relationships). In other words, Buber's philosophy has been avoided because of the restrictions relating to the direct personal relationships involved in the practical application of this teaching model.

.Buber's educational philosophy can be the basis for fully practicing the teaching design principle of flipped learning. First, flipped learning based on Buber's educational philosophy has the ability to realize the reconstruction of a learner-centered class culture which emphasizes the essence of the student, through an open relation with the teacher, rather than directing forced educational transmission methods. Second, flipped learning based on Buber's educational philosophy which emphasizes dialogue, can allows students to express selfhood freely and lead them to true dialogue expressing their possibilities as they are. Third, flipped learning based on Buber's educational philosophy which is the double realization of the I-It and I-You relation can operate whilst placing importance onto both the transmission of knowledge and experience in the lecture format of the online classes, and also the direct personal exchanges of the offline classes. Fourth, flipped learning's offline classes which are based on Buber's educational philosophy can form the character of the students themselves while confirming the authentic existence in the process of responding, and can promote creativity through active exchange and sympathy It.

Furthermore, based on Buber's educational philosophy, flipped learning can becomes an alternative that can overcome the situation deviating from the essentially the teaching design principle. First, based on Buber's educational philosophy, flipped learning classes is to promote students to have the ability and attitude to learn by themselves and to have autonomy and spontaneity that can learner-centered learning. In classes in which flipped learning was actually applied, in many cases students did not participate voluntarily in online classes. That's why, in order to induce students to participate voluntarily in online classes, it is important to encourage students' freedom and choice, responsibility through the relation between teachers and students, as emphasized by Buber. The educational relation of Buber makes it possible to express character and creativity as well as subjective by choice and decision.

Second, it is necessary to encourage an environment where members participating in cooperative learning actively participate and share various experiences. And there were students who were not actively participating in cooperative learning which is done during offline class of flipped learning. In order to solve these problems, we can **foster** cooperative learning growing in response to it and to ask questions not only on superficial themes but also on the themes of pain and suffering occurring in a dual-sided world. flipped learning based on Buber's educational philosophy can promote a learning environment that can focus on problems related to pain and suffering, and can actively resolve.

Thirdly, it is necessary to develop students' efforts to receive good grades so that they can be expressed normally in learning environments that acquire education on knowledge, interpersonal skills, and leadership as a tool at the time of flipped learning class. In the flipped learning class, there were students who concentrated on only the part reflected in the score. In order to solve these problems, it is necessary for teachers to encourage learning from the instrumental side as Buber emphasizes I-It relation. Teacher needs to reflect on scores not only education on knowledge conducted in online class but also interpersonal skills, self-regulatory ability, communication skills, creativity that are carried out in cooperative learning. In other words, flipped learning based on Buber's educational philosophy does not overlook the instrumental learning that aims to receive scores well, and promotes learning efficiently while admitting I-You relation.

Disclosure statement

Notes

Notes on contributor

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