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From the Editor

The *Excellence in Education Journal* is an open access, refereed, online journal that promotes and disseminates international scholarly writing about excellent practices in all aspects of education. Eight years ago, this journal was founded with the goal of sharing these practices to benefit the education of children and adults worldwide**.** We encourage teachers, professors, and other professionals worldwide to write about practices that promote the improvement of education. Submissions are double-blind, peer reviewed and are accepted year-round with publication occurring twice annually.

In support of our mission, we provide assistance with writing and formatting in English to international writers who seek our assistance with preparing their manuscripts. There are no fees to submit or publish manuscripts so that cost will never be a barrier. Typeset and graphics are intentionally simple in order that the journal can be more easily accessed on a variety of devices worldwide to fulfill the mission of the journal.

I hope that the practices discussed in this journal will be helpful to you, our readers.

Ann C. Gaudino, Ed.D., Founder and Editor-in-Chief
eejeditor@gmail.com

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Teacher Turnover at the Primary Level: A Qualitative Inquiry

Kübra Özdemir, Bünyamin Bavlı, and Mehmet Gürol

Abstract

Although the teacher turnover is a known and frequently experienced phenomenon, it is clear literature does not include enough in-depth studies conducted with qualitative designs, especially focusing on instructional dimension. The current study focuses on how teacher turnover was experienced by elementary school teachers, parents and school administrators in Turkey. Qualitative Case Study method was employed in the study. In-depth, one-to-one, semi-structured interviews were conducted with 16 participants by phone due to the COVID-19 pandemic. Content analysis method was adopted to analyze the data obtained in the study. The analysis revealed three themes with rich qualitative comments in the areas of: Academic and professional dimension; communication, cooperation and support; and psychological factors.

Keywords: Teacher turnover, Primary School

Kübra Özdemir is a Master of Arts Student, Social Sciences Institute, Yıldız Technical University, Istanbul, Turkey, and can be reached at kubraozdemir3@gmail.com.

Dr. Bünyamin Bavlı is an Assistant Professor, Faculty of Education, Yıldız Technical University, Istanbul, Turkey, and can be reached at bunyaminbavli@gmail.com.

Dr. Mehmet Gürol is a Professor, Faculty of Education, Yıldız Technical University, Istanbul, Turkey, and can be reached at gurolmehmet@gmail.com.

Teachers are the main human source of schools in terms of education, and have the greatest impact on students' academic and classroom performance (Ingersoll, 2003). However, teacher turnover due to factors such as appointment to another school, maternal leave, and a leave of absence from work may cause students to be adversely affected in many ways. The turnover of teachers not only impacts the students, who are the main beneficiaries of education, but also impacts communication and collaboration among colleagues, parental communication, cooperation and support.

Teacher turnover can be defined in various ways. Teacher turnover can be defined as teachers leaving a school or a region where the school is located (Colorado Department of Education, 2015). Sorenson and Ladd (2018), on the other hand, express teacher turnover as the "exchange of teachers from one year to another in a certain school environment" (p. 1). However, the turnover of teachers includes teachers who move to a different school and teachers who want to retire or leave their profession before retirement (Carver-Thomas & Darling-Hammond, 2019). Even when the turnover of teachers takes place with the free will of the teacher, it is evident that various reasons contribute to teacher turnover. When the literature is reviewed, it is noticeable that teacher turnover is affected by factors such as lack of administrative support, poor working conditions, low student success rates, demographic reasons and socioeconomic differences between teachers and students (Gershenson, Holt, & Papageorge, 2016). The Teachers Policy Institute, on the other hand, underlines the main reasons for the turnover of teachers as "salaries and other compensations, preparation and admission costs, recruitment and personnel management, support and appointment for new teachers, business conditions caused by the management leadership in the school" (Podolsky et al., 2016, p.2).

Students experiencing teacher turnover are often more likely to be exposed to less competent and less experienced teachers (Carver- Thomas & Darling- Hammond, 2017). In Turkey, there is an insufficient number of teachers qualified as teachers and paid within the framework of 657 Civil Servants Law (CSL) as the type called "permanent", so contracted and temporary (hourly paid, master trainers, experts) teachers are employed as teachers (MoNE, 1965). This form of employment is actualized because there is no possibility of central appointment of teachers as well as other reasons such as pregnancy, retirement, leaving the teaching profession, in-house teacher needs, or death. This situation occurs in different periods of education and causes the turnover of teachers. Exposure to a large number of inexperienced teachers has an adverse impact on students' academic achievement, especially in areas such as mathematics and science, which are the core courses. Studies have revealed that hourly paid teachers have great problems with students such as disruptive student behavior and communication due to the teacher's lack of pedagogical knowledge and practice (Polat, 2013). Due to challenges experienced, it is observed that parents, students and permanent teachers are not satisfied with the practice of paid teaching, and parents perceive hourly paid teachers as temporary teachers and they request permanent teachers from school administrations. Paid teachers, who are not considered by some as 'real teachers', are unable to contribute to healthy school environment due to the lack of communication and collaboration with permanent teachers (Demirdağ, 2017). School principals also expressed their discomfort due to the high frequency of paid teacher turnover, and teachers stated their dissatisfaction of paid teachers' contributions to the school environment and of their strategies and methods employed during teaching (Yalçın, 2017). The greatest reason for this is the difference in the employee personal rights of hourly paid teachers working under the same conditions as teachers working in the permanent status,

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which leads to injustice and inequality. In addition, teachers who work in a paid status do not have job security; therefore, they feel abused because of their fear of losing their jobs. In addition, higher social status of permanent teachers makes hourly paid teachers feel excluded (Demir, Karadeniz, 2010).

Although teacher turnover and issues related to paid teacher employment are significant, there are less disadvantages and even developments in favor of learners in schools where low teacher turnover is experienced. In this context, the success of students in schools with low teacher turnover is generally higher than that of students exposed to high teacher turnover (Ronfeldt, Loeb, & Wyckoff, 2013). As a matter of fact, high teacher turnover has adverse impacts on students' school performance (Ingersoll & Perda, 2010; as cited in Norris, 2019). Adverse consequences resulting from high teacher turnover may affect other teachers and their students negatively (Donley, Detrich, Keyworth & States, 2019). When teachers leave a school, they take their expertise in teaching strategies, collaboration with colleagues, professional development, and knowledge about the students at the school. The absence of these factors damage students' learning, school activities, and the environment of the school (Simon & Johnson, 2015). In addition, those who are exposed to teacher turnover experience some disadvantages not only in the current time but also in the following years.

Students who continue with the same teacher for five years can functionally transfer what they have learned in the future, and this has a positive effect on their academic career. However, teachers who cannot continue for more than three years can have serious damaging effects on students' academic achievement (Taylor & Tyler, 2012).

The effects created by teacher turnover also differ depending on the level of the school. In primary schools, teachers spend either all their day or a majority of their day with their

students in their classrooms. In secondary and high schools, students have the opportunity to communicate with multiple teachers every day. For this reason, adverse impacts caused by teacher turnover are higher in primary schools compared to secondary schools or high schools. (Norris, 2019). In order for a person to be able to communicate and work well with another person, a basic element of trust must be experienced with that person. It is very difficult to create an element of trust in a school that constantly hires new teachers because teachers, students and parents are constantly in contact with 'strangers', whom they do not know and have no experience of trust (Guin, 2004).

Another important effect of teacher turnover is the attitude and influence of the school administration. A poor attitude in schools with higher teacher turnover may cause morale deterioration in employees or increase the tension in relations (Bryk & Schneider, 2002). School administrators should care about the staff and consider their concerns. The quality of the relationship should be of the utmost importance. Positive energy can only be constructed with this type of leadership style (Ghamrawi & Jammal, 2013). Principals are responsible for shaping the vision of the school, performing instructional leadership, developing teachers' leadership skills, managing people and processes, and providing a moderate and safe school environment (Edition, 2013).

The concept of trust in schools includes a positive relationship between students and teachers, teachers and other teachers, and parents and teachers and their school principals. These established relationship roles are damaged by teacher turnover and cause a social change at school (Bryk & Schneider, 2002). Trust between student and teacher is a preliminary indicator of student success (Ronfeldt et al., 2013). The positive relationship between teachers and students has a very important impact on learners' academic performance. A well-built teacher-student

relationship provides motivation for learners to learn actively in class and helps to create clear questions on issues they have difficulty understanding. A strong student-teacher relationship also encourages learners to be academically and socially productive (Gallagher, n.d.). It is clear that trust between students and teachers is a predictor of student achievement (Ronfeldt et al., 2013). Teacher turnover eliminates this relationship,and affects students negatively in the process. When students realize that their educational life is not sufficiently cherished by their teachers, their performance and trust begin to be damaged. It takes a significant amount of time for the learner to build a relationship with the new teacher. Therefore, the loss of a reliable teacher-student relationship is just one of the negative effects of teacher turnover (Norris, 2019).

Schools in which teacher turnover is experienced have challenges in planning a coherent curriculum and creating positive work relationships between teachers. In fact, high teacher turnover weakens the relationship and trust among the school staff, and this situation hinders colleague collaboration and teamwork (Guin, 2004). While teacher turnover occurs for various reasons in Turkey, almost no studies on this subject have been detected in the literature. Hence, this study aims to identify challenges experienced by school administrators, teachers, and parents created by teacher turnover in a public primary school in Turkey where teacher turnover is very common.

Method

Research Design

A qualitative research approach was adopted in this study. The purpose of the qualitative research approach is to help to understand and explain social phenomena. Qualitative researchers are concerned with the meaning constructed by people and how they make sense of their own world and their experiences in this world (Merriam, 2009). In this context, qualitative researchers are very interested in what sort of order individuals establish in themselves and their

environment and how the people living in this environment have a relationship with social structure and roles, symbols and rituals. Researchers employing a qualitative approach examine how individuals acquire knowledge about themselves or others and how they imply meaning. How deeply knowledgeable one is about a particular group is directly proportional to how well one understands the uniqueness of that group (Berg & Lune, 2016).

Qualitative case study design was adopted in the current study. Case studies from one individual to a school can be addressed to provide rich and detailed data to researchers and uncover case specific results (Lichtman, 2012). Case study design is a qualitative inquiry that includes the discovery of one or more cases within a limited system (Creswell, 2007). According to Gerring (2007), case study is an in-depth study of a single case in order to explain more cases. Case study design allowed the researcher in this study to obtain in-depth data focusing on how teacher turnover is experienced by school administrators, teachers, and parents as well as the reasons for and consequences.

Participants of the Study

The participants of the study were recruited by a snowball sampling method. The snowball sampling method involves interviewing or collecting data by identifying several people with relevant features. It then involves other participants with similar characteristics identified through existing participants (Berg and Lune, 2016). Using this sampling method, the participants were selected from a public primary school where teacher turnover is frequently experienced, in the Marmara Region of Turkey. The study group involves five classroom teachers, 10 parents (two parents from each class) and one school administrator. Three of the classroom teachers are female and two of them are male. All of the parents are female. The school administrator is a male. Three of the classroom teachers have a master's degree. As a

result of the high teacher turnover, one of the teachers is the 6ᵗʰ teacher of the current class, the

other is the 4ᵗʰ teacher, another is the 7ᵗʰ teacher and the other is the 5ᵗʰ teacher in their classes.

Three of the classroom teachers have been teaching for 13 years, and two of the classroom

teachers have been teaching for 10 years. Three of the classroom teachers experienced teacher

turnover when they first started their profession. The average class sizes in the school where the

study was conducted vary between 30 and 35 students. Four of the classroom teachers started

teaching in the fall term and one in the spring term. The school administrator has been teaching

for 17 years and working as an administrator for 12 years. Two of the parents taking part in the

study have been living in the school district for eight years, and another two for 17 years. Other

parents have been living in the school district for six, seven, 17, 18, and 23 years, respectively.

One of the participating parents has twins, one of whom is disabled. The same parent made a

class change for her child at the end of the first academic year. The teacher turnover was

experienced in the 1ˢᵗ grade in three classes, the 2ⁿᵈ and the 3ʳᵈ grade in one class. According to

the information obtained from the parents, students in each grade have been exposed to at least

four and at maximum seven teacher turnovers on average until now.

Data Collection

Interview technique was adopted to obtain data in the study. Interviews are effective data

collection tools when the aim is to discover participants' ideas about the subject and how they

make sense of it (Berg & Lune, 2016). A semi-structured interview protocol was developed to

obtain data from the participants. The prompts used in semi-structured interviews limit the topics

that are mentioned in the interviews in advance and help make the interviews with a large

number of different people wide-ranging, systematic and deep (Patton, 2014). The semi-

structured interview protocol consisted of open-ended questions. Regarding the interview

protocol, expert reviews were obtained from an academic staff and an administrator with 12

years of school management experience before the interviews were conducted. Following the expert reviews, a pilot interview was conducted by the researchers. Pilot interviews guide correcting data collection plans and establishing relationships between questions (Yin, 2014). Thanks to the pilot interview, interview questions were reviewed by the researchers and some general questions were made more specific. During the interview process, due to the COVID-19 outbreak, video conferences and teleconferences were operated in accordance with recommended health measures. Before each interview, each participant was provided with the necessary information about the date, time and scope of the interview. Determining the convenient date and time for the participants, interviews lasting 40- 60 minutes were held with each participant. The first interviews were conducted with the teachers who experienced teacher turnover and then the process was continued with the parents whose child was exposed to teacher turnover. Finally, administrative staff were included in the interviews. Before the interview, consent forms were sent to each participant electronically and verbal and written permission was obtained. In addition, participant consent was obtained to audio record the interview prior to each interview. Participants' hesitations were overcome by giving detailed answers to each question about the interview process. Furthermore, it was stated by the researchers that the participants could withdraw from the interview at any time without cause or penalty.

Data Analysis

In qualitative research, researchers are also a part of the research. During the current study, the researchers took memos during the interviews and supported the data analysis with the memos. In addition, the recordings were transcribed right after the interview by the researchers and the data analysis was conducted by the researchers. In advance of the data analysis, transcriptions were shared with the participants to provide respondent validation and confirmation. Manual coding was utilized for the analysis (Saldaña, 2012). Following the

confirmation of the participants, the data analysis was conducted via content analysis method. During the data analysis process, the codes were obtained first and then the themes were reached (Strauss & Corbin, 1990).

Validity and Reliability

Validity and reliability are an integral part of a scientific research. In qualitative research, credibility criteria for internal validity, transferability for external validity, consistency for internal reliability, and conformability criteria for external reliability should be administered (Lincoln & Guba, 1985). A number of measures were taken to ensure validity and reliability in the current study. A semi-structured interview form consisting of open-ended questions was employed to obtain in-depth data. After the questions were formed, an audit trail was obtained to review the design of the study (Lincoln & Guba, 1986). Due to COVID-19 pandemic, the interviews were conducted only as video conferencing and voice calls. However, by increasing the variety of participants, the reliability of the interviews was ensured. In this context, the data were obtained from administrators, teachers and parents in the research. Before starting the interviews, peer debriefing was obtained regarding to the interview protocol. Furthermore, the consent of the participants which is an integral part of the qualitative inquires, was obtained, and it was reported that any questions would be welcomed before, during and after the interviews. Before starting the interviews, the purpose of the study, its scope, and its limitations were clearly stated to the participants; and how the interview would take place and how long the interview would last were also explained. It was clearly outlined that anonymity of the participants was considered in the study. In line with this purpose, pseudonyms were adopted during the study. In addition, the school name and children's names were kept confidential in the study. After the interview, in order to confirm the accuracy of the data obtained from the writings of the

researcher, a copy of the records was sent to the participants. Data analysis was conducted following the participants' confirmation. Regarding the codes and categories emerged, peer debriefing was obtained to review the analysis (Lincoln & Guba, 1985).

The Role of the Researcher

One of the researchers involved in the current study worked as a classroom teacher at the school where the study was conducted. The researcher also worked as a 3rd classroom teacher and had the opportunity to observe the positive or negative impacts of the teacher turnover. In addition, she taught individuals who were subjected to teacher turn over at the same school with two of the teachers who took part in the interviews for this study.

Ethical Considerations

The basic ethical principle of social scientific research is not to harm the participant. This terminology basically means avoiding any physical and emotional (psychological) harm (Berg, Lune 2016). The most questionable aspects of a scientific study with human participants are factors such as validity and reliability. In this context, measures were taken to contribute to the validity and reliability of the research and to protect the participant. Each participant was presented with the interview protocols prepared in advance and examined by a specialist, and information was provided on the purpose, scope and duration of the research. At the same time, the researcher clarified the purpose and reasons of the study. In addition to that, to provide voluntary participation, consent forms were executed in the study. Furthermore, it was explained clearly to participants that they could leave the research without any excuses if they wished to do so. It was also stated that it was voluntary to answer or skip any questions. During the study, the participants were informed about the voice recording before the interview and all of the participants accepted voice recording. While the audio recordings of the interviews were

transcribed and reported, the demographic information of the participants was kept confidential. In advance of the study, researchers informed participants about the use of pseudonyms.

Results

As a result of data analysis, three different themes were identified: Academic and Professional Dimension; Communication, Cooperation and Support; and Psychological Factors. Three different sub-themes were identified under the Academic and Professional Dimension: Teacher, Student, and Administrator. Within the second theme, communication, cooperation, and support were evaluated from the perspective of teachers and parents. The last theme, Psychological Factors had sub-themes of teacher, student, and parent.

Academic and Professional Dimension

As a result of the statements of the participants, the academic element was divided into sub-categories of teacher and student, and in this context, it was seen that the elements such as lack of classroom management experience and loss of time in teaching were observed for the teacher. For the student, factors such as failure, lack of learning, and loss of time in learning were observed. The professional dimension was divided into sub-categories in terms of teacher and administration, and in this context elements such as ignoring individual differences, effort, teaching difficulties, and opportunities for professional development were found for the teacher. In terms of administration, it was seen that effort, workload and student absenteeism were emphasized. When the expressions of the participants were examined, it was detected that teacher turnover had many negative aspects. It was emphasized that the greatest effect was in the academic sense. For example, when the expressions of Merve, who is the sixth teacher of her class, were examined, it was seen that teacher turnover caused loss of time in teaching/learning, and that in turn caused lack of learning. Merve expressed:

If the student has not learnt the rules from previous teachers, she/he might not adopt my rules and ignores them. You constantly strive to overcome these challenges and you need to teach them everything from the beginning as if they were in kindergarten. On the other hand, since these are third grade students, the curriculum is very intense. They are already behind the learning goals of the curriculum. We need to catch them up.

Another emphasis on the same subject was made by Ertan, the fourth teacher of the class, who expressed his views as follows:

Also, it was difficult for me to complete this process in a limited period of one year. When I entered the classroom, I saw that during the lesson some students were easily getting up without permission and throwing trash in the trash can. And those students are fourth graders; we expect this kind of behaviors in first grade or second grade, but not in fourth grade. When I ask a student, "Why did you stand up without permission?" the student can easily say that this is normal.

Based on these expressions, there is a clear lack of learning, and it is clear that there are academic and behavioral deficiencies due to time loss. Another emphasis on this subject is made by Nesrin, who is the seventh teacher of the class. He stated, "In the simplest term, students do not even have a notebook."

Lack of learning as a result of teacher turnover is also emphasized by parents. Parents drew attention to this by emphasizing the academic losses frequently experienced by students. On this subject, a parent, whose child was exposed to seven teacher turnovers, emphasized the academic loss experienced due to hourly paid teachers as, "They did not teach anything," and then continued as follows:

My daughter was a successful student, but this process, which occurred at the end of the teacher turnover, damaged her. When our last teacher started to teach here, she/he recovered deficiencies of the class. Our teacher also had a hard time in this process because the students had fallen behind. We constantly compelled the kids because they turned into kids who didn't do anything.

Another factor that was emphasized by parents is inexperience of teachers which caused lack of classroom management and academic failure. Especially hourly paid teachers have a lack of classroom management experience. For example, a parent whose child was exposed to six teacher turnovers expressed the following:

If it is the first teaching experience of paid teachers, they are acting very emotional and we need to calm them down. However, since permanent teachers are more experienced, they are acting more effectively when problems occur in the classroom. For instance, teachers could not make themselves listened by the students during class time and they, especially new paid teachers, were unable to teach students well. In this sense, students had a lot of difficulties in the classroom.

On the same subject, the parent of twins whose children were exposed to four different teachers expressed her views stating, "I wanted to change the first teacher myself. It was a class with a disciplinary problem and the teacher was very inexperienced and could not manage the class." According to the statements of the participants, it was stressed that time loss and learning deficiencies caused by the teacher turnover brought about student failures. One of the parents, whose child was exposed to five teachers turnovers, expressed, "They would have been more successful if students had not experienced the teacher turnover. Successful students suddenly failed." Another parent who has a child in the same classroom expressed her opinion on this

issue in this way, "As regulations do not allow students to fail in primary school, they passed the classes without learning anything, just by going to school and graduating at an inadequate level." It is discovered that another disadvantage of teacher turnover is about professional dimension which was specified in two sub-categories: teachers and school administration. Teachers' ignorance of individual differences, effort, professional development opportunities and teaching difficulties were observed. Related to school administration effort, workload and student absenteeism were revealed. With reference to ignorance of the individual differences, one of the classroom teachers, Nesrin, expressed:

> It is necessary to understand the learning levels of children. One of the biggest problems that occurred at the end of the constant teacher turnover is the lack of balance and order in the levels of learning outcomes. Among these, it is very difficult for the teacher to regulate teaching. I feel like I am teaching in a multi grade class. If there are students with special needs in the class - there were three of them in my classroom - They are the most negatively affected group in this process.

Another classroom teacher, Ertan, who made similar statements about the same subject, expressed his views as follows:

> In terms of the student, this varies according to the features of the student. However, this process is difficult for the children who have an insatiable desire for knowledge and have parental support as the teacher focuses on teaching other students or tries to maintain class order. In this respect, motivated students are prevented from learning and the learning process is not beneficial for them. For students who are not motivated to learn, this class is exactly what they want. The current learning environment contributes to this situation.

Another emphasis in the professional dimension is about teaching difficulties, which is a major challenge for teachers. Related to that, a classroom teacher, Reyyan, said, "I showed the white feather when I learned this because in a classroom which was exposed to teacher turnover a lot, one should not expect academic success. Students do not adopt the classroom rules and achieve academic goals." The other classroom teacher Merve had similar opinion and expressed this as follows:

> There were bad habits in those students and it was extremely difficult to change their habits in a short time. It is very difficult to instill a new behavior or change the old one in a classroom where the teacher turnover is constantly experienced. Because the teacher tries to teach the learning goals of the first grade in the fourth grade after three years passed. I even explained the school rules in the fourth grade.

It was emphasized that the only aspect of teacher turnover that can be called positive is creating the opportunity for professional development for teachers. What appears in the statements of the participant teachers is that this process develops teachers professionally. Ertan, one of the participating teachers, expressed this as, "The challenges are pushing you to look for new methods. When you think about how to overcome these challenges, you start looking for new ways and this stimulus contributes to both personal and academic improvement." Another factor emphasized by the participants is the efforts of teachers teaching to the students exposed to teacher turnover. As it was stated previously, effort also generates professional development need for teachers. A classroom teacher, Merve, expressed this as follows:

> It is already very easy to teach something in a classroom of fast learners. The class including students with learning difficulties is also challenging for a teacher. Therefore, I was busy looking for solutions to the issues I faced and had difficulties. I have always

produced different alternatives to solve the issues. For example, how can I make

students enjoy writing, how can I teach math students more easily, etc... To be able to

solve these problems quickly, I pushed myself and started to find different activities as I

was pushed. In this sense, I have improved myself as a teacher. It was a different

experience that improved me.

Another classroom teacher Reyyan continued as follows:

I simplified the content of the curriculum; I tried to teach with simple examples. In this

sense, I was successful. We cannot keep academic expectations high in such classes. We

try to teach the basic rules of whatever it is in the content. On the other hand, we as

teachers want special education students to learn reading and writing and develop basic

math skills.

The administrative factor that is another sub-category on the professional dimension

emphasizes effort, also overlaps with the view of teachers. The assistant principal, Talha,

explained administrative efforts as, "We spend a lot of effort to coordinate students exposed to

teacher turnover. We usually organize one-on-one meetings with the parents, then we meet with

the students and try to minimize any adverse behaviors, but this is such a long and distressing

process." Another administrative challenge caused by the teacher turnover is workload. The

assistant principal, Umut, stated this as follows:

For example, we send letters to parents of the absent students. Each of those letters is

extra work. We have been having continuous one-on-one meetings with troubled

students and these meetings do not take just 5 or 10 minutes, even much more. We also

make other sessions before these meetings. First of all, we have to meet with the parents

to talk about the problems which we have and agree with them on some common

denominators. We invite the student to our room with one of his classmates. We have

conversation with the student and try to eliminate problems.

Communication, Collaboration and Support

When the expressions of the participants in the study were examined, three categories

were obtained: communication, cooperation and support. These categories were analyzed in

subcategories of teachers, parents and administrators. High teacher turnover prevented teachers

from understanding students. A parent whose child experienced four teacher turnovers

expressed this situation as follows:

Actually, the process is as follows. At first, parents are trying to express themselves. In

the beginning I too did so, and I felt the need to give information about my child to the

teacher because the teacher did not know anyone and all parents like me did not want to

waste time either. Parents are always trying to help the teachers at this stage.

Another parent, whose child was exposed six teacher turnovers, made a similar statement on the

subject:

Because the teacher has just started teaching in that classroom, a process is needed until

he/she gets to know the class. Since the teacher is unable to establish the full

relationship with the students, she/he cannot advance their learning. When she/he

completes the establishing the relationship process and then starts the next level, the

teacher leaves the class again and the process starts from the beginning one more time.

We experience the same things over and over again.

Assistant Principal Umut emphasized the communication between parents, teachers and students

with these words:

We as administrative staff are struggling with some issues such as providing teacher-

student communication, trying to improve the quality of the existing education, ensuring

the communication between the teacher and parents, teachers who believe that they are

accepted by parents, and the teachers who do not feel a part of the classroom culture.

As Assistant Principal Umut stated, teachers' not feeling a part of the class culture causes them to

be uninterested in the classroom. The parents of a student, who was exposed to five different

teachers, expressed their views on this subject as follows, "Hourly paid teachers are completely

different than other teachers. They are not interested in students' learning like permanent

teachers. In this process, we did not see much effort from paid teachers." When the opinions of

the participants were analyzed, it was detected that, as a common emphasis, the most affected

party in this process is students. As a result of teacher turnover, it was emphasized that students

experienced lack of communication and loss of cooperation. The parents of a student, who

experienced six teacher turnovers, emphasized this situation with the following words:

Until our last teacher, my daughter lost a lot. In frequent teacher turnover the student

feels anxious as s/he is unable to figure out the communication style of the teacher. It is

not possible for the student to understand the teacher's communication style

immediately. When the last teacher was appointed to the class, during the first year, my

daughter was not active until she got used to the new teacher. In the second year, our

teacher figured out and my daughter was more active. My daughter did not experience

this with the previous teachers. If she'd had only one teacher from the start, my

daughter would probably be at a much higher level now.

Another parent expressed her/his view on the subject as follows, "Yes, it is generally a negative

process. Students experience attachment problem and problem of trust." One of the important

factors that the participants emphasized about the turnover of teachers is the support factor.

When the opinions of the participating parents were examined, it was clear that there was a lack

of support for parents from school administration. The support of teachers by the school

administration was not regular or steady, either. Regarding this, a parent whose student

experienced five teacher turnovers expressed this as follows:

The administration does not help you anyway; they send you back by saying a few

clichéd sentences. I hope nobody will experience this situation. Ministry of Education of

National Education (MoNE) needs to deal with this problem as soon as possible. This

process is a loss and annoyance for everyone.

A parent whose student experienced seven teacher turnovers said

I don't think the administration is eager to help parents. When we tried to contact with

them, the administration did not want to deal with our problems; then we submitted a

letter of complaint to the MoNE, and then our teacher was appointed as a permanent

teacher.

On the other hand, it was also observed that there were teachers who could not get support from

the school administration. The classroom teacher Reyyan expressed her opinions on this issue as

follows:

For the administration, a classroom experiencing a lot of teacher turnover has turned

into the natural state of the school…because it is an institution receiving a lot of

appointments and experiencing high teacher turnover. It is an institution that already has

60 teachers and the turnover is too high. There is no precaution they take in this regard.

When there was a problem, they could easily say this classroom experienced many

teacher turnovers.

Psychological Factors

Participants drew attention to another point regarding the turnover of teachers; it has

psychological effects on teachers, parents and students. It was discovered that the participant

teachers experienced psychological challenges such as negative attitudes regarding students. The

classroom teacher Merve said, "Students recovered faster in a behavioral sense, at least they

learned the rules. In such a class, you cannot raise your expectations very much." Another

psychological problem experienced by teachers is the loss of teaching motivation. The classroom

teacher Merve continued to explain her thoughts about motivation by stating the following:

I thought about how much it could tire me. If I had approached this class with the view that this class, which has already experienced four- five teacher turnovers, could not achieve anything anymore, this class really would not have achieved anything. There are also teachers who think this way. They can give up hope from their students by saying that no matter what I teach, there is already a year left.

Regarding this subject, the classroom teacher Ertan expressed his opinions as follows:

For the teacher, a class that experiences a lot of teacher turnover is not a preferred class. The teacher does not prefer this; she/he is exposed to it. This obligation also negatively affects teacher's motivation. This negative effect influences the teacher's interest in students and commitment to the educational process and causes a poor learning environment.

Another psychological effect expressed by the participants' common opinions is anxiety. It was observed that the new teachers experienced anxiety in the classroom after the teacher turnover. On this subject, the classroom teacher, Reyyan, said, "At first my anxiety level was high, but when I realized I was improving myself, my confidence increased." Another classroom teacher, Nesrin, expressed her opinion on this matter with the following:

We have anxiety when we think what awaits. Because not only the school administration but also my colleagues warned me to be careful as students experienced a lot of teacher turnover, they argued with their teachers, they behaved rude. For this reason, there is confusion and anxiety!

It is noticed that one of the challenges highlighted by the participants is the problem of adaptation. The classroom teacher Merve explained this as follows:

It is very difficult to teach in such a classroom. I have not had a teaching experience in

such a class before. This may be related to the general characteristics of the classroom,

but the class I was teaching was not a very efficient class in academic and behavioral

terms. It was a slightly lower class. Teacher turnover may have had an effect on this. If

everyone has their own style, every teacher has a unique style. Therefore, the student

has to adapt to this.

Umut, the vice principal, expressed his views as follows, "Teacher turnover causes a disruption

in education. Adaptation problems for students, teachers and parents are also very common."

Among the psychological problems faced by teachers in this process are pressure and

comparison. When the expressions of the participants were examined on the subject, the

classroom teacher Merve explained this situation as follows, "Teachers teaching in a classroom

where students were exposed to teacher turnover are exposed to the comparison. When you are

compared to the previous teacher, you cannot do what you want to do in the class. My teaching

style is compared; even your clothing is compared." The Vice Principal Umut expressed his

views about the pressure as follows:

Even when a very qualified teacher takes the classroom, the parents always complain.

They always have an urge to complain about the teacher. Even though the teacher did

nothing, I met the parents who came to me and complained about this teacher. The first

day they said, 'She/he ignored my child.' Their purpose is just to complain, to tire us.

Dealing with these parents complicates our work, prevents us from doing our own work,

and is mentally tiring.

As a result of the interviews with the participants, it is identified that another group that is

exposed to the psychological effects of teacher turnover are students. As understood from the

expressions of the participants, students develop undesirable behaviors and show negative behaviors, such as technology addiction, not adapting to rules, and peer bullying. A parent whose student experienced six teacher turnovers explained this as follows:

> Boys developed an interest in tablet and phone games; also, the children of parents who did not have technological devices in their homes also started playing card games. There was a big trend in technology, especially our last paid teacher directed the students to open YouTube channels and Instagram accounts. Recently, girls started opening WhatsApp groups on their mothers' phones. There has been such a trend.

It was also observed that the students did not adapt to the classroom rules and showed undesired behavior such as peer bullying. Regarding that, Vice Principal Umut expressed that:

> Students acquire undesirable behaviors in this process. Students exhibit unexpected behaviors both in the classroom and home environment. Students are bullying each other. For instance, they push each other, harm the school supplies in the classroom, and their classmate communication gets disrupted.

Also, the classroom teacher Can stated that:

> When the student comes to school, he says he is feeling sick and wants to go home. This causes disciplinary problems. Besides, some students are fleeing from the classroom to hide somewhere in the school. The meaning of that is these students are not eager to follow the directions of the teacher because they feel out of place, and they isolate themselves from the learning environment.

A similar view on the subject comes from a parent whose child was exposed to six teacher turnovers, "At that time, the children saw the school as a park among themselves. They lost their respect for each other. Since there were no lessons, constant quarrels and discussions began

among themselves. This also ruined the children's relationship." It is emphasized by the common opinion of the participants that teacher turnover causes negative attitudes and loss of learning motivation in students. Regarding this subject, one of the parents whose child was exposed to five teacher turnovers stated, "My child was willing and determined to learn, but because of teacher turnover he lost his motivation and did not want to do anything. For example, he stopped doing his homework." It is clearly underlined that teacher turnover caused a change in students' attitudes. It is also discovered that students experience fear of abandonment. Regarding this, a parent whose child was exposed to five teacher turnovers expressed the following, "Teacher turnover leaves deep marks in children. The biggest problem is whether the new teacher will leave again, so this uncertainty raises the distrust towards the teacher." In addition to that, students also experience loss of self-confidence. One of the parents whose child was exposed to four teacher turnovers stated this as:

> The child is influenced by teacher turnover very much. There is a loss of self-confidence in the child. He is afraid of how the teacher will react if he answers even the question he knows. I tell my children that they should ask over and over again what they do not understand and cannot do but the children abstain because they do does not know how the teacher will react to them. This is a loss of self-confidence.

Conclusion, Discussion and Suggestions

The turnover of teachers emerges from a combination of different factors depending on culture, context and country practices. This situation arises in America due to the turnover costs of teachers' salaries and the inefficiency of the working environment in education. In a study conducted by Carver-Thomas and Darling-Hammond (2017) regarding the aforementioned situation, reasons for the teacher turnover in America were identified as: certified teachers leaving school, lack of administrative support, working with low salaries, high working pressure,

dissatisfaction, searching for other career opportunities, and poor working conditions. Under these conditions, the research uncovers that 90% of the need for teachers is caused by teachers who leave the profession. The emerging need for teachers also causes teacher turnover. Teachers are always recruited to fill vacant positions and become part of teacher turnover.

As for the reasons for the turnover of teachers in Turkey specifically, retirement, maternal leave, and assignment to another region are common as are medical excuses, personal organization change requests, educational institutions' expectations, and being assigned to a new place in the system owing to external reasons. Employment of permanent, contracted and temporary status teachers within the framework of the Civil Servants Law No. 657 (DMK) and the exact contract period and number of such employees not being determined before the academic year for temporary (hourly paid) and permanent (contract / permanent) status cause teacher transfers. This situation leads to problems not only for teachers working in temporary status but also for teachers who start working in permanent positions as well as for students. It is observed that teachers working in temporary status and hourly paid teachers have difficulties in communicating with students and there is a problem of acceptance by parents (Polat, 2013). As Carver-Thomas and Darling-Hammond (2017) and Donley, Detrich, Keyworth & States (2019) put forward, there are many adverse aspects of the turnover of teachers. In line with this, the current study also reveals that teacher turnover negatively affects teachers, students, parents and school administrators in academic and professional dimensions in terms of communication, cooperation and support.

The greatest problem caused by the turnover of teachers is that teachers who do not have professional experience are assigned to the vacant positions, and those teachers cannot respond to the academic needs of the students during their teaching period. For this reason, it is identified

that teacher turnover brings about academic and professional problems. The inadequacy of the hourly paid teachers who teach in the classes due to teacher turnover and their inexperience in classroom management cause students to fall behind academically. Polat (2013) also stated that early career hourly paid teachers are inexperienced and have challenges of classroom management. In addition to that, the frequency of teacher turnover also affects academic success of the students in a negative way. It is discovered that the disadvantages experienced by groups of learners who were exposed to one or more teacher turnover are not similar. It is detected that the frequency of teacher turnover increases academic failure. In line with the findings of the current study, excessive teacher turnover has a negative effect on students' school success (Gibbons, Scrutinio, & Telhaj, 2018; Ingersoll, 2003; Sorenson & Ladd, 2018). In their study, Chetty, Friedman and Rockoff (2014) and Lee (2018) emphasize that classroom teachers have the strongest effect on students' education. They state that this effect is directly proportional to their achievements in academic life, both in the short and long term. Ronfeldt, Loeb and Wyckoff (2013) emphasize that schools with lower teacher turnover are generally more successful than those with higher teacher turnover. In addition to the frequency of teacher turnover, the grade of the students exposed to teacher turnover is also critical. The current study suggests that teacher turnover in the second and fourth grade of primary school caused different results. The adaptation of the students to the teacher and the time spent by the teacher with the students is not a problem in the first years of the primary school. However, students at the end of the primary education experience challenge to adapt to the teacher and develop a relationship with the teacher. Academic success of the students is influenced by positive relationship between students and teachers. The break of the positive relationship due to the teacher turnover effects the student's school absenteeism. A well-established teacher-student relationship depends on a

process and that the positive relationship within this process ensures the student's attendance in the lesson (Ronfeldt, 2013).

Gallagher (2013) emphasizes that a strong student-teacher relationship will encourage learners to be academically and socially productive by providing good performance. Taylor and Tyler (2012) emphasize that teachers who are unable to be permanent for more than three years cannot achieve academic success in their classrooms. The findings of the current study are in line with that of Taylor and Tyler (2012) stating that both teachers and parents emphasize that teacher turnover resulted in loss of academic achievement. Both teachers and school administrators stated that experiencing teacher turnover exhausted them and brought about an extra workload. They emphasized that classes with high turnover were particularly demanding classes because of the fact that the teaching method of each teacher was different from that of others, and this disrupted the harmony in the classroom and students fell behind academically compared to students of other classes. It is discovered that especially the students who are exposed to high teacher turnover have communication and adaptation challenges with the new teachers. It is also emphasized that parents have difficulties in communicating with teachers in the process. It is concluded that parents have difficulties in communicating especially with hourly paid teachers and they do not want hourly paid teachers to teach their children. The results which were obtained in this study are similar to the results of the research conducted by Polat (2013) and Torun (2010). In their research, it was revealed that parents did not want to have an hourly paid teacher as constant change harms the communication between teachers and parents. Another important point emphasized by the participants is that the process of teacher turnover could be resolved with cooperation between parents and teachers and between teachers and the administration. However, the current study presented that school administration cooperates with

teachers but not with parents. Cooperation with parents, according to the statements of the participant teachers, has a positive effect on the management of the classes. For example, in his study, Wallace (2013) states that school administrators are obliged to shape the vision of the school, lead teaching, manage people and processes, and provide a student-friendly and safe school environment. From the common statements of the participants, it is concluded that the process affects especially the students negatively. In this process, it is observed that the students have a lack of motivation and this lack of motivation adversely affects their success. The study also presented that teacher turnover caused indirect results. Students who are exposed to high turnover of teachers develop negative attitudes towards the school and the teacher. At the end, students have undesired behaviors such as technology addiction, not obeying the rules, and peer bullying. It is also observed that the students who are frequently exposed to teacher turnover in early years of the primary education have problems in establishing trust and attachment. These students have a fear of being abandoned and have difficulty in bonding. Ronfeldt (2012) accordingly emphasized that trust between teacher and student was a preliminary indicator of student success. It is emphasized that the process of building the relationship between the student and teacher with each new teacher for the students takes a lot of time, this process destroys the secure teacher-student relationship, and this negatively affects student performance by damaging the motivation of the students. Additionally, it is emphasized that there is an increase in anxiety levels of students as a result of teacher turnover and this anxiety negatively affects trust in education. In his study, Guin (2004) stated that it was very difficult to create an element of trust for a school that constantly added new teachers because teachers, students and parents had difficulties in establishing connections and building trust when they were dealing with a stranger whom they did not know. It was concluded that the parents who participated in this research also

had high anxiety levels due to teacher turnover, believing that their children would fail academically and that they could not improve themselves.

Current research reveals that the teacher turnover is a topic worth exploring in many ways. It is clear that conducting separate studies with the dimensions of school administration, teacher and student is vital in order to improve the existing literature and to cope with the adverse consequences of the teacher turnover. However, it is seen that there is a need to carry out projects and research at a macro level by using quantitative research methods in order to reveal the general situation in the context of school district, education level and school type. It is also observed that there is a need to carry out projects and research at macro level by using quantitative research methods in order to reveal the general situation in the context of school district, education level and school type.

The current study revealed that policies should be developed by the Ministry of National Education (MoNE) and local authorities in order to reduce adverse effects of teacher turnover on school culture, teachers and students and eliminate teacher turnover. In addition, providing training to school management and teachers, who are subjected to teacher turnover and academic and psychological support to students and parents are among the activities that should be carried out as a result of the policy.

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Effective Makerspaces in STEAM Secondary Education:

What Do the Professionals Think?

Cheun-Yeong Lee, Li-Wei Peng, Anastasia Klemm

Abstract

Makerspaces have the potential to improve the learning outcomes of students in both middle and high schools. They support science, technology, engineering, arts, and mathematics (STEAM) style initiatives, as well as promote natural creativity among students who tend to struggle in expressing it. This study aims to gain significant insight from professionals who are involved in the Makerspaces movement within STEAM secondary education. The findings of the study highlight the critical strategies, effects, and issues behind the implementation of Makerspaces in support of STEAM education at secondary schools. These findings suggest that, for instance, Makerspaces provide students who struggle with school with a means to demonstrate their true knowledge in a way that appeals to them. In addition, in order to utilize Makerspaces properly and effectively, secondary school teachers need professional development experiences that are specific to their needs.

Keywords: Makerspaces, STEAM, secondary education

Cheun-Yeong Lee Ph.D. is Assistant Professor in the Division of Education at Governors State University. He can be reached at clee6@govst.edu

Li-Wei Peng Ph.D. is Associate Professor in the Division of Education at Governors State University. She can be reached at lpeng@govst.edu

Anastasia Klemm is Project Lead at Sherrard Middle School. She can be reached at anastasia.klemm@k12.wv.us

The purpose of this study is to investigate professionals' viewpoints on Makerspaces in science, technology, engineering, arts, and mathematics (STEAM) secondary education. These professionals are experts from higher education and enterprise or educators from secondary education who took initiative for Makerspaces implementation in secondary school districts within the States of Pennsylvania and West Virginia in the United States. They have had a significant exposure to Makerspaces particularly in STEAM programs.

The incorporation of Makerspaces into secondary schools has allowed these schools to better integrate STEAM activities into their class lessons. Sousa and Plecki (2013) note that secondary schools in the United States face the challenge of departmentalized schedules. Along with that, the schedules are usually inflexible with unexpected programs that arise and interrupt the entire plan for a school day. This makes it especially challenging for secondary students to work on a STEAM project that typically takes more than one week to complete. Sousa and Plecki recommend STEAM fellow teacher collaboration as a powerful solution to this challenge. For instance, a science teacher and an art teacher can combine two periods together into one extended block class, and a Makerspace can allow an adequate place to support student STEAM projects. This way, the idea of STEAM education is encouraged, and more authentic learning can take place. In addition, Makerspaces allow teachers of one subject to more easily integrate ideas of another, which is the true significance behind the concept of STEAM. Smay and Walker (2015) give an example of the arts being incorporated into science due to the inclusion of a Makerspace. In their example, a science teacher had the secondary students select a scientific theory in the area of physics and then conceptualize it as an artistic, physical model using the school's Makerspace as a resource. Secondary students can *tinker* with real science tools and

processes in their school's Makerspace to make real-world connections with the content being studied.

The power of STEAM education combining Makerspaces can be the key ingredient that can make secondary school a successful experience for students (Sousa and Plecki, 2013). A Makerspace approach of STEAM education offers secondary students an opportunity to gain knowledge through a student-centered environment of doing and creating, as well as to develop their collaboration skills cross-disciplinarily (Maslyk, 2016). For example, in one of the studies Bevan, Gutwill, Petrich, and Wilkinson conducted in 2015, one female secondary student was tinkering with recycled objects to make a created contraption float in a wind tunnel and was struggling in her design. Another female secondary student reached out to her and analyzed her contraption. They discovered together that it was too heavy to float and collaboratively made an adjustment before another test was conducted.

Additionally, Quinn and Bell (2013) share an example of *bio-hacking* where secondary students worked to create synthetic molecules and systems that were unconventional as compared to those that existed naturally. Quinn and Bell claim that the secondary students in their study were not only working in the realm of the biological science field, but also using engineering skills to model and design these creations. Bevan et al. (2015) point out that Makerspace activities help promote a broader understanding of content. In one of their studies, the secondary students tinkered with devices connected to a circuit board. One male secondary student demonstrated parallel circuits in a hands-on fashion with one female secondary student. The female secondary student then vocalized his process while he was doing it to help her gain a further understanding of what was happening. Both secondary students were collaborating and gaining understanding of circuits, but in two unique ways.

The integration of Makerspaces and STEAM education is crucial for middle and high school aged students because it provides students with ideal learning approaches and necessary skills they need in order to succeed in their adult lives. Quinn and Bell (2013) discuss that the processes of making at Makerspaces not only support STEAM education, but also facilitate the learning of other academic subjects. They explain that formal and informal education go hand-in-hand in the areas of STEAM, that informal learning experiences tend to create an interest in disciplinary subjects, and that developing oneself in STEAM areas is a lifelong process that expands beyond the formal classroom setting. Quinn and Bell also convey that there are significant relationships between content standards in math, science, and language arts. They argue that because schools are shifting towards the approach of integrating subjects, schools must progress forward and engage in a *minds-on* and *hands-on* approach to learning. The processes of making at Makerspaces better mirror the processes of real STEAM. Quinn and Bell go further by explaining that the design–make–play approach in STEAM classrooms incorporating Makerspaces can not only provide more valid learning experiences, but also give more context to the relevancy of the lesson, so that secondary students will apply it later in life.

Furthermore, Sousa and Plecki (2013) explore that secondary schools without the incorporation of Makerspaces and STEAM education are not adequately providing students with the necessary skills they need in order to succeed in their adult lives. The extreme focus on standardized testing in the United States eliminates opportunities for innovative and creative instruction within secondary schools. Consequently, as students graduate from middle or high schools, they are not succeeding as much post-graduation when compared to students in other countries. Sousa and Plecki believe that these students need to develop grit by engaging in creative problem solving embedded in the integration of STEAM education and Makerspaces.

They comment that when secondary students are exposed to the creative process, they recognize the importance of persistence—the need to keep on working until the task is done. Once students have passion, they have grit to solve problems.

The Study

This study investigated the first-hand experience of professionals who have implemented ideas from the movement of Makerspaces when teaching STEAM to secondary students. A semi-structured, in-depth interview was conducted to gather and evaluate the opinions of three experts in the field of Makerspaces, as well as three STEAM teachers and one principal in secondary education. The interviewees were selected based on their prior knowledge and extensive backgrounds in education, STEAM, Makerspaces, and technology integration. The interviewees were divided up into two separate groups and were given a particular set of interview questions by their groups. The first group consisted of one specialist from Carnegie Mellon University's Community Robotics, Education and Technology Empowerment Lab (CREATE Lab), one specialist from Pittsburgh Public Studio, LLC, and one specialist from West Liberty University's Center for Arts and Education. These individuals were considered the experts in the incorporation of STEAM and Makerspaces in both higher and secondary education and were given the first set of interview questions (see Appendix A). The interview questions mainly evaluated interviewees' immense knowledge and helped gain insight into the effective strategies for STEAM and Makerspace integration in secondary education.

The second group included one science teacher at Wheeling Middle School, one technology specialist for Ohio County Schools, one art teacher at Wheeling Middle School, and one principal at Warwood Middle School. These professionals all have had experiences in bringing Makerspaces to their current and former secondary schools. They were presented with

the second set of interview questions (see Appendix B). The interview questions ascertained interviewees' experiences and the goals and plans of implementing Makerspaces in their STEAM classrooms.

The interview questions were designed to address the research questions as follows:

- What role do Makerspaces play in a secondary school?
- What spaces can be used in schools to become Makerspaces, and how will they be supportive?
- What resources, besides financial, should be included in a Makerspace?
- What kinds of technology should be brought into a secondary education Makerspace?
- How can STEAM education be incorporated into the Makerspace?

This study utilized the quantitative primary, qualitative first approach into collecting data (Creswell, 2009; Morgan, 1997). A semi-structured, in-depth interview was conducted which yielded a qualitative type of data. Part of the interview questions determined specific numbers in how secondary students improved or did not improve their academic performance and participation in STEAM after they experienced making at Makerspaces. For instance, the interviewees had the opportunity to give examples of student STEAM test scores and enrollment records in STEAM workshops and classes.

The interview data were then compared to one another by the implementation of the casual-comparative type of research. Joyner, Rouse, and Glatthorn (2012) describe casual-comparative research as a way to define the causation of a certain phenomenon after looking at the data collected about something else related. This study evaluated what the interviewees have experienced with secondary students in the integration of STEAM and Makerspaces. It also examined the quantitative data that interviewees have collected about the academic performance

and participation among secondary students. The data collected through the interviews were categorized into the two different groups: 1) experts who work outside of a secondary school, and 2) teachers and administrators who work in secondary schools. Tables were used to document the commonalities among the data within each group. The topics of focus included STEAM education, the feasibility of incorporating Makerspaces in a school, technology integration opportunities, and the positive effects Makerspaces have had on secondary education students. Another table was utilized to determine the commonalities between the two separate groups. The conclusive analysis and discussion highlighted the data that most adequately answered the research questions.

Findings

The interview data were analyzed and presented into three tables. The first two tables were the results of the interviews within each of the two groups. The responses of the three experts who work outside of a secondary school were compared in the first table (see Table 1). The outcomes of the three teachers and one administrator who work in secondary schools were compared in the second table (see Table 2). The third table was used to compare the findings of all seven interviewees together (see Table 3).

Table 1

Key Data from Group 1: Experts

Research Questions	Public Studio, LLC	Carnegie Mellon University's CREATE Lab	West Liberty University's Center for Arts and Education
What role do Makerspaces play in a secondary school?	▪ Give students opportunities to learn about the design process ▪ Engage students who are disengaged by traditional teaching styles	▪ Bring STEAM together and encourage making ▪ Have a purpose – to help solve a problem	▪ Enhance student's enthusiasm in learning by doing ▪ Engage students who are disengaged by traditional teaching styles
What spaces can be used in schools to become Makerspaces, and how will they be supportive?	▪ Incorporate design among all content areas ▪ Rotate between classes to give opportunities for deep meaningful projects	▪ Embed STEAM in every classroom	▪ Rearrange any creative and flexible learning space
What resources, besides financial, should be included in a Makerspace?	▪ Allow for self-directed learning opportunities ▪ Allow students to analyze the design of what they are making, and not just the product	▪ Use low-cost or inexpensive technology to support STEAM education	▪ Integrate STEAM and Makerspaces across all class times (not just one period) ▪ Embed STEAM and Makerspaces before/after school activities – provide more opportunities ▪ Do not limit to one time
What kinds of technology should be brought into a secondary education Makerspace?	▪ Circuits – littleBits, Squishy Circuits ▪ Game Design – Gamestar Mechanic, Scratch ▪ Digital Content – Gigapan, Videolicious, Animated Gifs, Augmented Reality Image Triggers	▪ Arts and Bots ▪ Simple robotics kits that combine making with recycled materials	▪ Makey Makey and Hummingbirds ▪ iPads with apps that can do video and audio ▪ Technology that does not have to be learned in a structure way, or only for specific projects
How can STEAM education be incorporated into the Makerspace?	▪ Create context for students using engaging tools, techniques, and on-trend influences (e.g., digital media and visual communication, physical pixels and tangible technology)	▪ Encourage learning from failure	▪ Provide open-ended making activities ▪ Engage students in new ways of thinking and learning

Table 2

Key Data from Group 2: Secondary Teachers and Administrator

Research Questions	7th & 8th Science Teacher	6th-8th Art Teacher	Technology Specialist	Principal
What role do Makerspaces play in a secondary school?	▪ Offer one of the most relevant places for learning ▪ Allow for cross-curricular environment ▪ Allow for collaboration which is key for 21st century learning	▪ Give ways to self-directed learning ▪ Encourage students to be inclined to study STEAM	▪ Enable students to problem solve through thinking about a problem, sketching out a solution, and then using the items available to come up with a workable solution	▪ Enable students become leaders
What spaces can be used in schools to become Makerspaces, and how will they be supportive?	▪ Transfer a space that allows for readily available resources ▪ Concern teachers who are less familiar with Makerspaces	▪ Incorporate a flexible space that gives students a lasting positive impression	▪ Enrich a space which is able to stretch students' ideas and imaginations to solve the questions posed to them ▪ Support students who have special learning needs to be paired up with others to help them also find success	▪ Allow students space to be creative and learn through doing
What resources, besides financial, should be included in a Makerspace?	▪ Engage both high- and low-level students with materials which can be used in a hands-on fashion ▪ Give diverse opportunities for students	▪ Bring teachers in to learn more about the dynamics of a Makerspace	▪ House tools and items to allow students to create an open-ended product that fulfills a task	▪ Include moveable materials if there is no one particular space ▪ Get teachers comfortable with repurposed materials and technology
What kinds of technology should be brought into a secondary education Makerspace?	▪ Updated technology allowing students to build their own computers	▪ Technology with younger teacher support	▪ 3D printers ▪ Little Bits ▪ Robotics	▪ Technology that can easily be maintained
How can STEAM education be incorporated into the Makerspace?	▪ Enhance students' enthusiasm with STEAM activities and encourage students to exceed expectations	▪ Enable students to utilize all senses in learning ▪ Help students discover new concepts by creating	▪ Create STEAM projects purposely for problem solving cross different curricular areas	▪ Encourage Makerspaces and help teachers integrate them in STEAM curricular because Makerspaces are solid student engagement

Table 3

Key Data from Two Groups

Research Question	Experts	Teachers & Administrator
What role do Makerspaces play in a secondary school?	▪ Give students an outlet to create, and really focus on the process of making ▪ Allow for deep meaningful cross-curricular connections	▪ Get students thinking outside the box ▪ Help students solve problems and think critically in an independent way
What spaces can be used in schools to become Makerspaces, and how will they be supportive?	▪ Not be defined as one space ▪ Include flexible and mobile resources for cross-curricular instruction	▪ Open to any teacher who wants to use it with proper professional development training to help teachers understand what it is ▪ Create a place for enrichment and intervention practices for students
What resources, besides financial, should be included in a Makerspace?	▪ Include all the resources possible, but expensive items are not always the best items (not needed) ▪ Focus on the process over the product ▪ Include resources to allow for before and after school access	▪ Include repurposed materials and technology equipment ▪ Have flexible and movable carts to make materials mobile ▪ Use items in a hands-on fashion and give students freedom and open concepts
What kinds of technology should be brought into a secondary education Makerspace?	▪ Purchase specific technology tools that are designed with students making activities in mind (e.g., Makey Makey, Hummingbird, Arts and Bots, LittleBits)	▪ Purchase up-to-date technology that can easily be maintained ▪ Focus more on incorporating regular technology tools into making, but also have interests in high-tech equipment, like a 3D printer
How can STEAM education be incorporated into the Makerspace?	▪ Give ways to authentic learning, especially when activities are very open ended ▪ Appeal to a wide range of students, especially those who may not have found success in a more traditional classroom	▪ Engage students with STEAM activities very well and give educators a great opportunity to integrate various subject matters into one activity ▪ Surprise students in their making abilities and give ways to students taking control of their own learning

Discussion and Conclusions

Both groups of interviewees, the experts in STEAM and educators in secondary schools,

were extremely positive in discussing their experiences with Makerspace activities in STEAM

among secondary education students. The expert from the Center for Arts and Education at West Liberty University stated that she noticed middle school and high school aged students tend to react with a great deal of enthusiasm, especially those who disengage in more traditional classroom settings. The expert from the Pittsburgh Public Studio, LLC agreed with her statement as well. The art teacher claimed that by introducing concepts of Makerspaces in STEAM and encouraging students to exercise their critical thinking skills early on in their schooling will incline them to create and troubleshoot at an even deeper level as they progress through school. In addition, the science teacher stated that the materials in a Makerspace can not only give students diverse opportunities to discover academic contents, but also allow them to work collaboratively and creatively to solve problems in real life. The technology specialist also discussed the potential for students to use their imagination to come up with a creative solution to a problem through Makerspaces.

The key that Graves (2014) emphasizes in developing successful STEAM activities at Makerspaces for secondary students is to allow them to be in charge of the topics and procedures relevant to problem solving. The expert at Carnegie Mellon University's CREATE Lab noted in particular, the value of solving problems by learning through failure. He found in his experiences working in a photography studio with high school students that trying an idea and failing gives students the opportunity to re-evaluate and try new ideas until the result they want is yielded. All the interviewees agreed that making in Makerspaces gives ways for students who may struggle with school a means to demonstrate their true knowledge in a way that more appeals to them.

The interviewees commented some potential drawbacks in the integration of STEAM and Makerspaces, though they came up with methods to address them. For example, the principal

noticed some of the secondary students who excelled in school were uncomfortable about not having any directions, while others became leaders and thoroughly shined at Makerspaces.

The science teacher observed that some teachers in the secondary schools do not know how to utilize Makerspaces to support learning. The art teacher agreed and gave the solution of conducting teacher professional development with specific guidelines demonstrating how to effectively integrate Makerspaces into STEAM learning activities.

There is also the issue of purchasing and maintaining technology equipment. The expert at Carnegie Mellon University's CREATE Lab stated Makerspaces could be powerful even though there are not many expensive technology tools in there. Even if Makerspaces just include basic crafting supplies and recycled materials, they still could eventually lead to further growth. A common thread that should run through all Makerspaces, no matter the level of technology, is a focus on the process of making as opposed to the process of consuming (Colegrove, 2013).

This study includes limitations that should be addressed in future research. The study would be more comprehensive if more professionals working with Makerspaces and STEAM in secondary schools were also interviewed. The research would be further validated if a study among secondary students had taken place to evaluate their reactions regarding STEAM making activities at Makerspaces. After looking at the results from this investigation, a one-year study after a school implemented a Makerspace would be a meaningful analysis to further validate this study. The study could first ascertain secondary students' opinions on STEAM subjects. The survey would evaluate their prior experiences with STEAM and gain a basic understanding to what caused those opinions. Baseline data could be established from students prior to the Makerspace being implemented. Then after a year of having a Makerspace in the school, the students could be surveyed again to reevaluate their beliefs about STEAM subjects.

Since there would be hard evidence to answer the research questions, the results of the study would be difficult to contest. It might also be beneficial to implement two similar studies between two separate secondary schools where one implemented a simple crafting Makerspace, and another that implemented a very high tech one. This could be done to assess if spending a large amount of money on high tech equipment at a Makerspace is significantly more valuable to secondary students in STEAM learning, or if a simply done Makerspace would yield similar results. Even though the results from this study was significant in answering the initial set of research questions, these future research suggestions could even further support the data. The best part about this topic is that it can be constantly researched in variety of ways well into the future of education.

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Appendix A: Interview Questions for Experts in STEAM

1. What is the title of your official occupation, and how many years have you been at this position?

2. How does your job relate to the concept of STEAM education?

3. What is your experience with Makerspaces, especially those located within schools?

4. How have you worked with educators, specifically middle school and high school teachers implementing Makerspace STEAM activities?

5. Do you have first-hand experience working with middle school or high school aged students in the STEAM fields? If so, please describe some specific activities.

6. How do students typically react to Makerspace making activities in your experiences? Are there any types of students that they appeal to more, or are there students who disengage?

7. Is there anything you have been working on that you would like to see incorporated more in a regular STEAM classroom? If so, please describe it.

8. In your honest opinion, do you think Makerspaces have a relevant place in the middle school or high school classroom? Please rationalize your answer.

9. What sorts of Makerspace technology tools do you have experience with implementing in the STEAM classroom? Please describe them if possible.

10. Is there anything you want to specifically add that is relevant to the topic?

Appendix B: Interview Questions for Secondary Education Teachers and Administrator

1. What is your occupation? What grades/subjects do you teach (if relevant)?

2. What do you know about Makerspaces? What do you want to know?

3. What do you know about STEAM education? Have you implemented any STEAM activities before in your classrooms?

4. Based off your experiences, how do your students generally respond to Makerspace making activities? Do you find benefits in implementing these or not?

5. Which kinds of students do you think will benefit the most from Makerspaces in schools? Are there any you think will not benefit?

6. What is your biggest concern about bringing a Makerspace into your school specifically?

7. Ideally, what resources would you like your school's Makerspace to have?

8. Are you comfortable learning how to use new technology with students? What issues could arise, and how could you resolve them?

9. In your honest opinion, do you think Makerspaces have a relevant place in the middle school or high school classroom? Please rationalize your answer.

10. Is there anything you want to specifically add that is relevant to the topic?

Motivational and Attitudinal Behaviors of Turkish EFL Learners at the Outset of the Preparatory Program at a State University: Socio-educational Model Perspective

Derya Uysal and Sevgi Gökçe

Abstract

This study aims to define the motivational and attitudinal features of EFL learners at the outset of the preparatory program from the Socio-Educational Model perspective. Research was conducted via exploratory mixed methods design. First, the quantitative data of the study were obtained via a questionnaire in Turkish, including 19 five-point Likert scale items taken from Pulat (2010) who adapted Gardner's (1985) motivation and attitude test battery to an identical EFL context. During the second week of the academic year 2019-2020, 182 EFL students at the School of Foreign Languages at a state university in Turkey participated in this quantitative study. For the qualitative data, nine students selected by a process of purposeful sampling were addressed four open-ended questions in Turkish about what they do to improve their English, their opinions on the importance of learning English, how they interact with English-speaking people, and their lifestyle. Results revealed that learners' instrumental motivation outweighed their integrative motivation and that students lacked regular interactions with target community people.

Keywords: Motivation, English as a Foreign Language, EFL

Dr. Derya Uysal is an ELT instructor in School of Foreign Languages in Eskisehir Osmangazi University in Eskişehir, Turkey. She can be reached at dkorucu@gmail.com

Dr. Sevgi Gökçe is an ELT instructor in School of Foreign Languages in Eskisehir Osmangazi University in Eskişehir, Turkey. She can be reached at sevgokce@gmail.com

Motivation is one of the most influential determinants of EFL achievement, which explains why it is the individual variable drawing constant attention in the related body of literature (Lasagabaster, 2011). Beginning with Gardner's (1979, 1985) Socio-Educational Model, initial attempts aimed to define motivation in those learning a second language. According to him, aptitude cannot solely explain second language (L2) learning; individual differences are the key factors that determine language acquisition. Thus, the cultural context of a learner which has a significant impact on the motivation and attitude is an important factor to consider when understanding how learners approach a second language. The model mentioned here postulates that motivation and attitude of a learner correlates with her / his proficiency. Attitudes influence the learner's motivation, which in turn influences subsequent attitudes and motivation.

The original socio-educational model has undergone changes. Gardner and Clément (1990) expanded the original model to include three additional classes of individual differences; cognitive characteristics, attitude and motivation, and personality attributes. First, cognitive characteristics are related to the learner's ability and approach to the task at hand, and the two major cognitive variables put forward by Gardner and Clément (1990) are language aptitude and learning strategies. Second, motivation and attitude include two variables; integrativeness (attitudes toward other language groups, outgroups and so on) and motivation, or indices of attitudes towards the context of learning (like the desire or effort to learn the language). Last, are personality attributes. Among the most popular characteristics studied are sociability (extroversion/introversion), field dependence or independence, empathy, anxiety, and self-confidence. Additionally, Gardner and Clément (1990) discussed the systematic conceptualization of conceptual aspects (social milieu) in language learning.

Gardner (2000) stated that two classes, namely, attitudes toward the learning situation and integrativeness, have an impact on L2 learner motivation and are the two correlated variables. Ultimately, two factors, language attitude and motivation, are effective in determining language acquisition.

Figure 1

Basic Model of the Role of the Aptitude and Motivation in L2 Learning (Gardner, 2001)
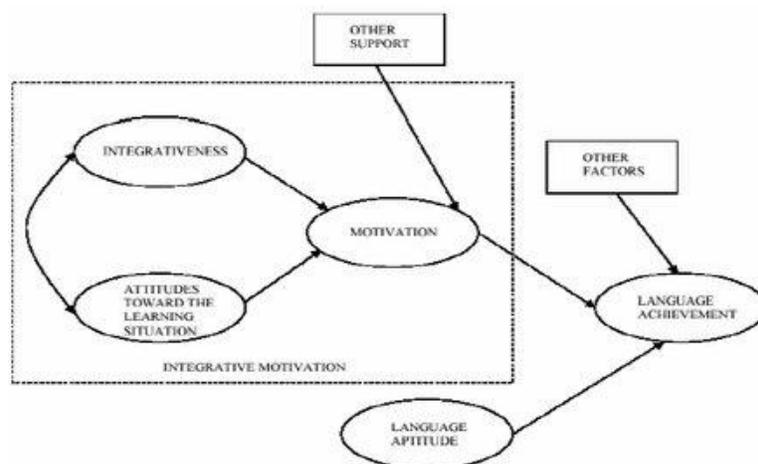
The integrativeness variable represents openness and respect for other culture groups and their lifestyle; thus, learners with variables of this class demonstrate an interest in learning the language and cultures of other groups. The attitudes toward the learning situation variable denotes the attitudes of the learner towards their classroom environment, including but not limited to the place of learning, materials, teachers, classmates and so on. If any of them is ineffective or negative, this will influence learning L2 negatively. Motivation refers to the driving force in learning and includes the desire and consistent/inconsistent effort of the learner to learn. Motivated learners want to achieve a goal; they express a desire for achieving the goal and strive for it. Integrative motivation includes three variables: attitudes toward the learning environment, motivation, and integrativeness. Thus, a learner with an integrative motivation is

motivated to learn L2, s/he desires to identify with the L2 community,and has a tendency to positively evaluate his or her learning environment. As seen in Figure 1, motivation is the driving force behind achievement while integrativeness and attitudes towards the learning situation exist as supporting factors.

Additionally, Figure 1 illustrates that while there may be other factors that uphold motivation, they are not directly related to integrative motivation. Thus, they are instrumental factors that contribute to motivation; the combination of these factors with motivation is labeled as instrumental motivation. Therefore, motivation can be driven by instrumental factors as well as integrative ones. Last, some other factors that indirectly affect L2 acquisition are self-confidence, anxiety, and learning strategies (Gardner, 2001). These results were brought forth by Gardner (2001) in his first empirical research on the socio-educational model in 2001. He attributed this study to the research conducted by Lambert (1995) on the development of bilingualism.

In 1985, Gardner developed the "Attitude Motivation Test Battery" (AMTB) in order to predict L2 outcome/performance of learners and to measure the main factors and their sub-units (Gardner, 1985). The test battery was originally developed for Canadian English speakers learning French as a second language. Later on, it was validated by a number of studies (Gardner, 2001). Different variations of the test battery adjusted to different contexts exist in other related bodies of literature. Recently, research on motivation in language learning has been flourishing with new developments (Dörnyei, 2005; Dörnyei & Ryan, 2015; Noels, 2005). However, Gardner's socio-educational model is still one of the most effective models in L2 motivation. There is still much to learn from the model; thus, L2 researchers should not lose sight of it (MacIntyre, 2007).

L2 learning context in Turkey shares much commonality with others all over the world. Motivation and attitude of students toward language learning are two significant determinants of Turkish students' ultimate success. In Turkey, students are given the opportunity to learn English both prior to and during higher education. For example, students are offered compulsory English courses from the outset of the second grade in primary school. Similarly, in higher education institutions, a significant number of universities in Turkey offer a one-year prep class (or two-year, should students fail the prep-class) compulsory English preparatory program for students enrolled in English-medium departments. In preparatory programs, students receive an intensive EFL education both to become proficient in English and to fulfill language requirements to enter their departments (Sarıçoban & Sarıçoban, 2012). However, these preparatory programs face their own challenges in terms of students' mastery of the English language. These problems result from various factors such as the short duration of the preparatory program, the programs' objectives being inconsistent with academic purposes and internationalization, and pre-conceived notions students associate with EFL after receiving English courses for eleven years such as repetitive and grammar-centered content (British Council-TEPAV, 2015; Uysal & Güven, 2018).

The studies exploring motivational and attitudinal features of Turkish EFL learners exist in related bodies of literature. One of these studies conducted by Genç and Aydın (2017) aimed to determine the motivational attitudinal features of students and their correlation with students' achievement. The results revealed that students who had positive attitudes towards the English language had above-average motivation levels. Additionally, although the correlation between motivation and achievement was found to be low, there was not any significant correlation between variables of achievement, the students' attitudes, and parental involvement. Moreover, a case study carried out by Yükselir (2018) in the optional preparatory program of a Turkish state

university discovered that students lost their motivation toward lessons due to reasons like teaching strategies and language curricula, learning processes, or subjective factors even though they believed it was necessary to complete the preparatory program to master English. In another study by Altıner (2018), Turkish EFL learners' motivation when studying a second language in the English preparatory program at a state university was explored. The results of the investigation concluded that the most influential three factors in predicting students' achievement was 1) interest in community, culture and travel, 2) positive learning experience/attitude, and 3) intended efforts.

These existing studies aiming to explore learners' motivation and attitudes were carried out during the ongoing education process. However, defining and measuring motivational attitudinal behaviors of learners at the beginning of an academic year is vital in terms of studying the change in the attitude and motivation of students throughout the academic year. While students might begin the program with positive or negative feelings due to their prior English learning experiences, they could develop contrary feelings throughout the year while taking English courses in preparatory classes. If ELT instructors are made aware of motivational and attitudinal features of EFL learners at the beginning of an academic year, it could potentially be easier for them to replace their students' negative feelings with positive ones or to maintain positive attitudes throughout the academic year. Moreover, ELT instructions would have a chance to design courses according to the needs and interests of their students from the very beginning. Even though motivation has proven to be the deciding factor in L2 acquisition of students, language teachers often do not have enough knowledge about their specific motivations for learning L2 and thus do not consider their motivation while designing courses (Altıner, 2018).

Thus, the present study aims to define the motivational and attitudinal features of EFL learners from the outset of the preparatory program. In line with this aim, three research questions were formulated:

1. What are Turkish EFL learners' attitudes towards learning English language at the outset of the preparatory program?

2. What are learners' integrative and instrumental motivation at the outset of the preparatory program?

3. What are learners' attitudes towards English speaking people or groups?

Method

Research was conducted via exploratory mixed methods design. First, the quantitative data of the study were obtained via a questionnaire in Turkish, including 19 five-point Likert scale items taken from Pulat (2010) who adapted Gardner's (1985) motivation and attitude test battery to an identical EFL context in the preparatory program in Zonguldak Karaelmas University. The questionnaire is highly reliable since its Cronbach-alpha coefficient value was 0.879 (Pulat, 2010). It is composed of three factors. Items one to seven are related to EFL learners' attitudes towards learning English; items eight to 14 include statements about learners' integrative and instrumental motivation; and the last five items aim to gather data about learners' attitudes towards English-speaking people or groups.

During the second week of the 2019-2020 academic year, the aforementioned questionnaire was distributed to 182 EFL learners who were beginner, elementary and pre-intermediate-level students receiving face-to-face compulsory EFL education at the School of Foreign Languages in Eskişehir Osmangazi University. The students were majoring in

international relations, architecture, electrical-electronical engineering, computer engineering, and mechanical engineering.

After analyzing the quantitative data, nine students whose mean scores were the highest and the lowest were selected by a process of purposeful sampling (Patton, 1990). Before gathering the quantitative data, an interview form including four open-ended questions in Turkish about what they do to improve their English, their opinions on the importance of learning English, how they interact with English-speaking people and their lifestyle was prepared. The preliminary form was sent to an expert with a master's degree in English Language Translation (ELT) and Ph.D. degree in curriculum and instruction. The expert suggested some revisions related to the wording of the questions. Afterwards, the revised questions were addressed to the interviewees in semi-structured interviews. Their responses were recorded and transcribed verbatim. The transcriptions were first read through, analyzed, and re-analyzed inductively (Creswell, 2014) by the researchers independent of each other. When emerging themes and subthemes were compared, it was understood that identical themes were found. For this reason, the inter-rater reliability number was not calculated.

Results

Quantitative Results

Analysis of quantitative data are tabulated in Table 1 in order to show motivational and attitudinal behaviors of Turkish EFL learners. The questionnaire items are translated into English although the questionnaire delivered was in Turkish.

Table 1

Motivational and Attitudinal Behaviors of Turkish EFL Learners

Items		Mean Score	Standard Deviation
Item 1	I really enjoy learning English.	3.89	0.85
Item 2	I love learning English.	4.09	0.80
Item 3	It is a perfect feeling to learn English.	3.97	0.89
Item 4	I would rather spend my time on subjects other than English.	3.35	0.85
Item 5	I hate English.	1.68	0.84
Item 6	When I leave school, I will give up the study of English entirely because I am not interested in it.	1.58	0.78
Item 7	I plan to learn as much English as possible.	4.40	0.78
Item 8	It is important to speak English because it will be necessary for my finding a good job.	4.77	0.57
Item 9	It is important to study English because it provides an opportunity to communicate with more and different people.	4.60	0.65
Item 10	It is important to speak English because I will be able to interact with English speaking people more easily.	4.57	0.70
Item 11	It is important to study English because it will help me understand and internalize English life style.	3.23	1.18
Item 12	It is important to study English because I will need English in my future professional life.	4.72	0.55
Item 13	It is important for me to learn English because it will help me communicate with English speaking people.	4.55	0.65
Item 14	It is important to study English because it will make me a more knowledgeable person.	4.08	0.92
Item 15	I feel an affinity with native speakers of English because they speak English.	2.72	0.98
Item 16	The more native speakers of English I meet, the more I love them.	2.97	0.96
Item 17	Native speakers of English have many reasons to be proud because English is the global language of science.	2.70	1.25
Item 18	I want to meet native speakers of English.	3.94	0.97
Item 19	It is important to study English because I think people will show me more affection and respect if I speak English.	2.88	1.10
Mean score for the entire questionnaire		3.62	0.47

Mean scores of all items from one to four and item seven display an above average figure about EFL learners' attitudes towards learning English. In other words, learners' general attitudes towards learning English seem positive, and they are likely to continue studying English in the future (as shown in item seven). Similarly, items five and six, which express a negative attitude toward EFL learning, have lower mean scores (1.58 and 1.68 respectively) compared to other items expressing a positive attitude, which confirms the students' positive attitudes.

Among items eight to 14, which include statements about learners' integrative and instrumental motivation, items eight and 12 stand out with their higher mean scores. These two items show how learners' see English as a significant instrument for advancing their careers. Despite being slightly lower than the scores of items eight and 12, the mean scores of items nine, 10, 13 and 14 display learners' desire for integrating with English speaking people. In an increasingly globalized world where people from a myriad of backgrounds can come together, English is often the default language used for communication. As a result, learners feel the need to integrate with these networks. The mean score of item 11, on the other hand, is lower than the mean scores of the other items in this group, which reveals learners' hesitation to approach an English life style.

The last five items aim at gathering data about learners' attitudes towards English-speaking people or groups. The mean scores in this group are considerably lower than the previous ones, with the exception of the mean of item 18. Although learners would like to meet and interact with native speakers, they do not appear to feel much affection and affinity towards them. Likewise, they do not view speaking English as a source of pride.

Overall, the quantitative results reveal learners' positive attitudes to learning English with the goal of getting better job opportunities and interacting with English speaking people.

However, their attitudes towards learning about English speaking people's lifestyles and getting closer to them are less positive. These results clearly show that learners' instrumental motivation for learning English overshadows their integrative motivation.

Qualitative Results

When interview data were analyzed, there were minor differences between students whose mean scores were low and students whose mean scores were high in the questionnaire. In fact, all the interviewees put professional development as the first and the foremost purpose of learning English. Second, six students mentioned personal development as their second purpose and one student touched on academic development. This result is in accordance with the quantitative data analysis results which revealed that learners' instrumental motivation outweighs their integrative motivation, as demonstrated in Figure 2.

Figure 2

Learners' Purposes of Learning English
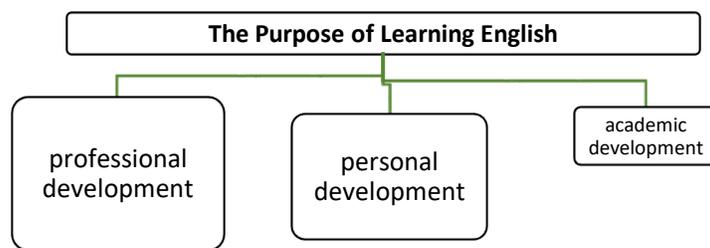
In terms of interacting with English speaking people, six learners articulated positive views. They used words and phrases like "cool", "good", "improving", "privileged" and "important for being able to learn about different cultures" and "being able to socialize with new people" to describe how they felt about communicating with English speakers. In addition, two students put special emphasis on "understanding accented speech" which made them feel

"happy" and "privileged". Nevertheless, interacting with English speaking people was not the main concern of three students.

With regard to learning about English speaking people's cultures and lifestyles, five learners stated their positive opinions about acquiring intercultural knowledge, being a citizen of the world, tolerating differences and communicating with people of developed countries. In contrast, four students did not feel motivated to learn about English speaking cultures, and one of them expressed his reservation over the possibility of encountering disagreeable things in the target culture.

The interviewees also talked about what they did to improve their English outside of school. All of them mentioned audio-visual aids such as "watching subtitled movies, TV shows, and videos on Youtube", "listening to songs" and "using mobile applications". Only one specified which mobile applications they used. They also did not explain which TV shows they watched, and what they did during or after watching /listening to such content with the goal of learning English.

Three participants stated that they read in English. Two of them said that they did extensive reading and one of them read vocational content about computer engineering. This finding might be thought-provoking for two reasons: First, students tend to prefer using audio-visual resources to reading. Second, all the participants of the questionnaire and the interview agreed on the importance of learning English for their professional careers, but only one interviewee noted that he read something career-related in English.

As for self-study outside of school, two students stated that they used supplementary materials and one student expressed that he studied vocabulary. Another student reported that he

translated English stories into Turkish. Two students also said that they took private courses in English.

Last, the questionnaire revealed that the interviewees lacked regular interactions with English-speaking people. One student experienced interacting with English-speaking people during a short school trip abroad and another one reported interacting with English-speaking tourists while working at a guesthouse in the summer. In addition, one student mentioned that although she and her friends speak the same mother tongue (Turkish), they joked with friends in English. In the era of worldwide social networking and numerous channels of global communication, this finding may indicate that learners continue to be recipients of language instead of being producers of it. In essence, they prefer being exposed to oral content, like speech and music, to being involved in two-sided genuine interactions with English speaking people.

Discussion and Pedagogical Implications

The present research aims at describing the motivational and attitudinal behaviors of Turkish EFL learners at the outset of English preparatory programs. The results conclude that Turkish learners' positive attitudes towards learning English were instrumentally motivated and impacted by their desire to improve their professional, personal, and academic development. None of the students expressed integrative motives to learn EFL. This result is consistent with a number of existing studies that showed that Turkish EFL leaners want to learn English for instrumental rather than integrative reasons (Genç & Aydın, 2017; Göktepe, 2014; Şener & Erol, 2017). Similarly, in another study conducted in an Arabic EFL context, students' future career intentions determined their attitude and effort toward learning English (Malallah, 2000). Lastly, the results of a study conducted in a Chinese EFL setting revealed that although the students'

attitudes towards learning EFL were positive and although they had a high level of motivation to master English, they were more instrumentally than integratively motivated.

According to Dörnyei (1998), who put an emphasize on instrumental orientation as a significant factor in EFL context when EFL learners do not have much opportunity to interact with the target community, they hardly get integrated into the community; thus, instrumental motivation such as career plans or travel play a much more significant role than integrative motivation in the EFL context. This claim explains why the participating students' attitudes towards learning about English speaking people's lifestyles and getting closer to them are less positive although they want to learn English. The participating students focused on mathematics and science lessons during high school; they neither had an opportunity to have a genuine two-sided interaction with an English-speaking foreigner, nor did they have an intense English education before the preparatory program. Therefore, they did not have a chance to get closer to the target community or culture.

According to the socio-educational model (Gardner, 2001), students' attitudes toward the target community's lifestyle is significant in terms of student achievement. Furthermore, a positive relationship between attitude and student achievement has been proved by existing studies (İnal, Evin & Saracaloğlu, 2005; Liu, 2007; Malallah, 2000). Therefore, it would not be incorrect to assert that helping students adopt positive attitudes toward target community's lifestyle during the preparatory year is necessary for their ultimate success. Since the study was conducted at the very beginning of the academic year, the instructors at Eskişehir Osmangazi university had sufficient time to design lessons in which students could be exposed to foreign culture and lifestyle, which helped students adopt more positive attitudes toward target communities and cultures. In the future, traditions, literature, or lifestyle of the target community

could be integrated into English courses via audio-visual materials. Another way could be to increase language contact through exchange programs or international online meetings (Genç & Aydın, 2017).

Considering the fact that interviewees preferred self-study techniques that cause them to remain recipients rather than producers of the English language, providing them with opportunities to have a genuine two-sided interaction with an interlocutor (native or nonnative) in a classroom setting is significant for their achievement. According to Swain (2000), output pushes learners to process language with a greater mental effort than input does. When outputting, learners must monitor their interlanguage to create grammatical structures in order to convey their message. In this process, learners might be able to discover what they can or cannot do and which paths to follow to compensate missing or erroneous parts in the interlanguage. Thus, producing language is a prerequisite for language acquisition. It is significant to note that the self-study techniques used by preparatory class students lack oral output and interactions with English-speaking communities; this discovery should guide ELT instructors in designing lessons encouraging students to engage in language production rather than just reception.

Despite the important role of outputting (i.e. production) in language learning, some learners may be reluctant to speak in classroom settings, and this reluctance may cause them to lose interest in language learning. This problem is worse in EFL settings, where there is little or no exposure to foreign language outside the classroom and learners' practice is limited to the opportunities presented during lessons (Riasati, 2012). Existing studies show learners may not be willing to speak a foreign language in the classroom due to teacher-related, student-related or classroom-related reasons (Aliakbari, Kamangar & Khany, 2016; Peng, 2012; Riasati, 2012).

Hence, ELT instructors need to encourage their students to produce language and explain the role of outputting/producing in EFL learning.

Conclusion

This study aimed to define the motivational and attitudinal features of EFL learners at the outset of the preparatory program from the Socio-Educational Model perspective. Research was conducted via exploratory mixed methods design, where quantitative data is initially collected and analyzed, then supported with qualitative data. Analyses of the quantitative data from 182 EFL students and quantitative data from nine students revealed that Turkish EFL students have positive attitudes towards learning English, but their attitudes towards the target community's lifestyle are slightly less positive.

Results obtained from the quantitative data support the ones obtained from the qualitative data. According to the qualitative data collection results, Turkish students want to learn EFL for instrumental reasons, namely, for their professional, personal and academic development. None of the students interviewed expressed integrative reasons for learning English. Therefore, ELT instructors are advised to design lessons that will expose students to the lifestyle of target community.

Last, Turkish EFL students prefer self-study activities that render them receivers of a language rather than producers. However, language production is key in terms of pushing learners to think deeply and produce the correct structures that communication requires. Therefore, ELT instructors should present activities encouraging students to speak or write during lessons.

Regarding suggestions for further research, the change in attitudes and motivation of the students throughout an academic year could be analyzed through latex analysis. Additionally, the

reasons behind students' avoiding self-study techniques that utilize productive skills could be

researched. Finally, the relationship between motivation and attitude with outcomes in a

specified research context could be investigated.

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Embracing Inclusive Education Online in Times of Covid-19

Evangelin Whitehead

Abstract

The concept of diversity and inclusion has continued to gain attention and attraction and is a challenging topic in the times of Covid-19. In this pandemic period, all of our systems are totally disturbed including the educational system and all sectors of life get stressed, including our principles and values. Remote teaching and learning process has become a 'new normal' for all of our educators and learners and it will be continued for an undetermined period of time. This new normal online learning poses adaptive and transformative challenges to the educators and the learners. Inclusive education in this lockdown, quarantine period is a huge challenge. This paper explains about barriers of inclusion, like unconscious bias, and the pedagogical methods to practice for successful inclusive education online in times of Covid-19 and in the future.

Keywords: Inclusive education, online education unconscious bias

Evangelin Whitehead, Ph.D. is a Professor in the Department of Education, Chennai, India. She can be reached at eva.arul@gmail.com

Diversity includes all differences that define each of us as unique individuals in terms of age, religion, education, experience, personality, knowledge, skill sets, and sexual orientation. In general terms and in educational settings, diversity includes all aspects of identity and experience, including nationality, value system, ethnicity, socio-economic context, language, gender, sexuality, family structure, age, ability, educational background, and learning styles. All people must be respected and considered as valuable members of their own communities and in public, regardless of their age, caste, abilities, disabilities and health care needs. This respect is defined by the term inclusion. Diversity and inclusion involve people understanding each other, considering that everyone is unique, practicing simple tolerance of individual differences, and embracing and celebrating the rich dimensions of diversity contained within each individual.

Education Privilege

Poverty is a major barrier for a long time in school education and higher education in the countries like India. Due to poverty, many brilliant students in our society have lost their education, lost their future and they have lost even their precious life. Recent data show that there are now more than 320 million (32 crore) students affected by Covid-19 in India. In the Covid-19 crisis, educators all around the world including India are forced to make a sudden switch from regular classroom teaching to completely online teaching and these 320 million students are in a position to attend their regular classes online. In many of our rural areas, there is a lack of internet connectivity and even electricity. The lockdown period extends endlessly and the poor and middle-class parents who mostly work for daily wages, lost their jobs and are suffering for their one square meal in this pandemic period. It is highly impossible for them to afford computers or smartphones to get their children access to online education. More than 65% of the student population has reduced hours of current electrical supply and the families are not

affording to pay electricity bills. These massive unexpected burdens on families have pushed

millions of school students out of education. It is a great exclusion happening due to poverty.

The impact of Covid-19 in these two years has affected many sectors especially low, socio-

economic groups and disabled students even face greater risk of being excluded. Dutt (2020)

asserts that the lack of diversity, which spans race, gender, disability, sexuality and other social

categories, contributes directly to the lack of inclusion and equity experienced by people from

marginalized groups. Moreover, online teaching is *Victor Ludorum* amidst this chaos; it is no

more an option but a necessity (Dhawan, 2020). Online education is the only option and students

face many difficulties in their remote learning. In remote learning, students miss their physical

classes and peer interaction which leads to a sense of isolation, mental stress and depression and

they themselves are excluded from education. It is a great challenge for the educators to make

every online classroom welcoming, engaging and inclusive.

Unconscious Bias

Generally human beings are very good in nature. But sometimes, we lack simple

tolerance and understanding and exclude people due to unconscious bias. Unconscious bias is an

unconscious judgment and an automatic mental shortcut used to process information and make

quick intuitive decisions about other people. It is a human attitude and stereotype that people

unconsciously attribute to another person or group of people that affect the person or the group.

Unconscious bias or implicit bias is often defined as prejudice or unsupported judgments in favor

of or against one thing, person or group as compared to another in a way that is usually

considered unfair. As a result of unconscious bias, certain people get benefited and many other

people are penalized or excluded. Although people are often unaware of their unconscious bias,

it creates barriers that prevent diversity and inclusion in our community, society and workplace, damaging relationships that could foster creative and innovative ideas.

Halo Effect

Halo Effect, also called Halo Error, is a well-known cognitive bias. It is a tendency of a person to create positive impressions of another person or a group, a product, a brand or a company in one area that positively influences his opinions and feelings in other areas. Cognitive bias is a mental deviation of a person from normal judgment. The deviated judgment that occurs due to cognitive bias prevents someone from accepting a person, a product or a brand based on the idea of an unfounded belief of what is good or bad. Many times, unconsciously we judge someone, something or some place as likeable and being positive based on a single positive aspect. Seeing the outward appearance of a boy to a girl or vice versa leads them to a marriage settlement. By merely seeing the outward appearance, they make major decisions and finally at the time when they realize it, everything including a peaceful life has gone from them. This is Halo Effect. They make constant errors in judgment and it is the reflection of their individual preferences. Some people go with their whims and fancies**,** they go with their choices and wishes, no matter how unreasonable it may seem. There are 'n' numbers of such cases that come every day. Facebook and Instagram attractions are good examples. In the classroom, teachers are prone to the halo effect error when evaluating their students, for example, a teacher might assume that a well-behaved student is also bright and motivated before they have objectively evaluated the student's capacity in these areas (Preta, 2021). It is the responsibility of the teachers to educate their learners about value education and decision making skills.

The Horn Effect

The Horn Effect is another cognitive bias. The horn effect asserts that physical appearance is a major criterion for our inclusion and exclusion. Rubin (1982) uses the term 'horn effect' to refer simply to the tendency to limit the overall assessment of an individual to a single negative attribute. For example, two men are attending an interview. One is average in merits and the other one is very smart. The manager selects the candidate with physical appearance not giving importance to merits. Physical appearance is a major criterion for our inclusion and exclusion. When you judge a person, attributing negative qualities to him based on one known quality, then you have used the horn effect on him. For example, physically unattractive people are perceived to be less trustworthy even though there is no connection between knowledge, talents, morality and physical appearance. Horn effect has a major part in the hiring process, due to the fact that recruiters exclude talented candidates in favor of those with a better appearance.

Affinity Bias ('Like Me' tendency)

Affinity Bias is otherwise called Similarity Bias or Like Me tendency. It is an unconscious tendency of people to connect with others and easily socialize and spend time with those who share similar interests, experiences and backgrounds. It is easy to socialize and spend time with others who are like us. Affinity Bias or Like Me tendency leads us to favor people who are more like us in character, appearance, sound and behavior. With similarity bias, people ignore finding faults in people who are more like them and find faults in people who are not similar or less like them. We exclude people in this way too. Unconsciously people gel with people who are more like them as like the idiom "Birds of a feather flock together," and exclude people who are dissimilar to them.

Confirmation Bias

Confirmation Bias is the tendency to look for information that supports, rather than rejects, one's preconceptions, typically by interpreting evidence to confirm existing beliefs while rejecting or ignoring any conflicting data (American Psychological Association, 2018). Imagine a situation that you try to reach a friend with whom you generally have a good relationship by Whatsapp. Recently, you received no calls from him in return. After some time, you come to the conclusion that your friend avoids you. Your mind easily confirms that your friend is avoiding you and you start believing that your friend is definitely avoiding you. From that time onwards, you start believing that your friend definitely avoids you and you keep this belief unchecked. Your mind tries to search for reasons to give weight to your belief that your friend avoids you. With that belief, you start excluding your friend. This is Confirmation Bias. People display these biases unconsciously by giving more weight to evidence that confirms their beliefs upon someone or something, and ignore or undervalue evidence that could disprove it. They gather selective information and interpret it in a biased way. Using this selective information they make predictions about a specific outcome including existing beliefs and their expectations. Especially people are likely to process information to support their own beliefs when the issue is highly important or self-relevant. For example, during the election season, people tend to seek positive information that paints their favored candidates in a good light. They seek and find negative information about the candidate they oppose.

Social Comparison Bias

Social Comparison Bias is having feelings of dislike and competitiveness with someone that is seen as physically, or mentally better than yourself. Misunderstandings, dislikes, groupism and ego clashes in the working places are mainly due to this social comparison bias. In the

Covid-19 pandemic, many people lost their jobs and working visas throughout the world and they compare themselves with others who are still working. As a result, they start developing low self-esteem that causes them to have a feeling that they are worthless. But reality might be different and their feelings wrong. We exclude many people in our working place and community with the mentality of Social Comparison Bias. There are two kinds of social comparisons prevailing among people. One is Upward Social Comparison. In this comparison, we compare our personality and achievements with those who we believe are smarter than us. This comparison works as a motivating factor to improve ourselves or the level of ability. The other one is Downward Social Comparison where we compare ourselves with someone who is lesser in achievement than us and feel comfortable with our achievements and quality. The recent research says that we exclude people in both these kinds of social comparison.

Gender Bias

Violence against women and girls (VAWG) is a human rights violation, a universal issue, with great impact on victims/survivors, their families, and communities (Economic and Social Council, 2002). A new United Nations report has found almost 90% of men and women hold some sort of bias against females. Stein (1999) explains:

> Sexual harassment in schools is unwanted and unwelcome behavior of a sexual nature that interferes with the right to receive an equal educational opportunity. Over 78% of students reported experiencing at least one incident of sexual harassment since starting high school, including 92% of the females and 57% of the males. Female students reported, on average, a higher number of incidents of unwanted behavior (since they started high school) than male students.

Women have the right to walk freely on the streets without sexual harassment and catcalling. Gender stereotypes exist at school and work where thinking may be that girls should stay at home and help with housework and childcare, and boys should have education.

Glass Ceiling

The Glass ceiling is a metaphor for the evident but intangible hierarchical impediment that prevents minorities and women from achieving elevated professional success. For instance, female physicians and surgeons earn 38% less than their male counterparts and female lawyers earn 30% less than male lawyers (Sadker, Sadker and Zittleman, 2009). Gender bias is a barrier for women and minorities to get promotions and leadership or reaching any upper-level roles. Often, hiring managers are unconsciously gender biased. Mentoring opportunities are minimized due to gender bias. Professional development is extremely affected by gender bias.

Objectification and Poor Representation

Objectification means treating persons as commodity or objects without regard to their personality or dignity. Recent evidence shows that the learned automatic response to objectify women has become culturally ingrained to such a great extent that choosing not to objectify women depletes self-regulatory resources and decreases performance in cognitive tasks (Tyler, Calogero & Adams, 2017). In the media, women are photo-shopped and airbrushed leading to much more emphasis and value being put on their external appearance above other capacities. Girls are represented poorly in entertainment and the media in ways that reinforce damaging gender stereotypes and traditional roles. Girls are shown in a reductive and unfair way. Performance reward bias occurs when employers or managers evaluate an employee's merit in a biased way, and allow their conscious or unconscious prejudice to affect the evaluation

of that particular employee. Increments, promotions, and merit-based rewards are included in the performance reward bias.

Bias Towards Trangender Individuals

Strousma (2020) states, "Transgender and gender diverse individuals often face discrimination in health-care settings, and are unable to find competent, knowledgeable and culturally appropriate health care. Lack of provider knowledge is a significant barrier, but our findings suggest that simply increasing training may not be the solution. Transgender and gender diverse individuals are often facing discrimination. School, peers and sometimes teachers are the major cause of their problems in their teen ages and, of course family and siblings, are also included. Often, transgender individuals are not completely accepted. Let us examine ourselves. How are we treating transgender persons? When we meet them while crossing a toll gate, do we say a good word with a smile or do we mock them? It should come from our heart and mind. It is every human being's responsibility.

Contrast Bias

It is the human tendency to mentally upgrade or downgrade an object when comparing it to a contrasting object. In a selection people often get confused whether it be either selecting a dress or selecting a life partner in marriage. Due to this bias, many times people make the wrong choice and definitely exclude the best unknowingly.

Ageism

Age discrimination based on candidates' chronological age is particularly prevalent in organizations characterized by rapid change. That is, organizations that have grown and expect to grow rapidly highlight the incongruence of stereotypes about older candidates and job requirements (Diekman & Hirnisey, 2007). People are less likely to hire older-looking than

younger-looking job candidates. More specifically, older-looking candidates were less likely to be hired than younger-looking ones, presumably because older age appearance triggered impressions of lower health and fitness (Kaufmann et al., 2016).

Ageism refers to the stereotypes, prejudice, and discrimination towards others or oneself based on age (World Health Organization, 2010). This may be casual or systematic. On many occasions, aged people are treated unfairly. Ageism has great impacts on confidence, job prospects, financial situation and quality of life. The organization's attitude towards older people is very severe in this pandemic. Aged people are targeted for terminations. In the Covid-19 crisis, many offices and shops are closed. In one instance, a middle-aged man who was the breadwinner of the family was terminated without prior notice. He couldn't bear the shock and he didn't want to face his family who completely depend on his salary. He chose to jump out from a four-story building and was found dead.

Unconscious Name Bias

This discrimination is rarely spoken. It happens all the time and its negative impact is enormous. People are discriminated against based on the meaning of a name, its pronunciation, its uniqueness, its gender affiliation, and its racial affiliation people. Someone hears a name and if that name doesn't register or it is uncomfortable for them, they may treat the person differently without even realizing what they are doing. If a name sounds African, Indian or anywhere non-western, people may make assumptions about that person or rule them out of opportunities (Morris, 2019). In general, people assume that someone with a double-barreled surname is privileged or 'posh' but it is the racial element that makes this kind of bias so damaging.

Bias in Treating Physically Challenged

Due to cognitive, developmental, intellectual, mental, physical, and/or sensory differences, disabled people are unnecessarily isolated and excluded from full participation in society (Russell & Ravi, 2019). Most of us are very confident that we treat others equally and we believe that we are fair and equitable, and evaluate others based on objective facts. However, even the most egalitarian persons have unconscious biases. They are triggered automatically, in a fraction of second, without their conscious awareness or intention, and cause attitudes about and preferences for people based on characteristics such as age, gender, disability, and religion. Nowadays, physically challenged people are in our midst in the classrooms. Do we have sufficient infra structures for their convenience? Do we have a session or at least a collection of Braille books in our libraries for visually challenged people? Do we have ramp facilities for the physically challenged students to get access to our buildings easily with their wheelchairs? We are witnessing the struggles they face in our educational institutions. We do not purposely avoid them or not help them. However, people unthinkingly create undesirable actions or attitude, regardless of the goodness of conscious intentions.

Human Blind Spots or Mind-bugs

Apart from being biased in the matters discussed above, we have so many blind spots. Blind spot is actually a metaphor for a certain type of human behavior. Blind spots or mind bugs refer to the unconscious triggers and associations made by our brains about some persons, activities or phenomena. They are often hidden to our conscious because they are embedded preferences, not reflective ones. The blind spots often bother us because they are at direct odds with our chosen beliefs. The brain contains an unconscious warehouse full of associations between certain people and particular characteristics that often cause us to mis-identify our

fellow humans (Mahzarin & Greenwald, 2016). Social mind-bugs are a very dangerous matter of diversity and inclusion.

Once I had to fly from one place to another for very urgent work. I got a seat near the pilots' cabin. To my surprise, two lady pilots entered. Seeing the lady pilots, immediately, I felt like jumping out of the flight. I strongly believed, only male pilots could handle aircraft. In another incident, a father and his son were in a car accident and the father died on the spot. The son, badly injured, is rushed to the hospital. Seeing the boy in the operating room, the doctor refuses to do a surgery and says, "I can't operate on this boy. He is my son." How could this possibly happen? How could the surgeon be the boy's father when the story stated that the father died in the same car and the boy to the hospital? What are we missing here? In case you are stumped as I was, the solution is very simple: the doctor is the boy's mother (Banaji & Greenwald 2013).

In our brain we make some unconscious associations. That is why my mind associated pilots with adult males and doctors with adult males. We know well that females are doctors too and female pilots are everywhere. But we instinctively react and this is what psychologists call 'disassociation. It has undesirable consequences, regardless of the goodness of our conscious intentions. With these blind spots or mind bugs, we exclude many people around us. For no reason we avoid some street vendors, some efficient doctors, some schools, some teachers and some students.

Inclusive Pedagogy in Diverse Learning Environments

Inclusion is not a set of strategies. Inclusion is not a placement issue. Inclusion is about belonging to a community or a group of friends, a school community or a neighborhood. If your students feel strange and doesn't get a feeling of belonging in your classroom, they won't feel

included. A teacher's instruction can help the learner in this situation. Instruction is not just teaching content. Instruction is intentional interaction. Instruction makes the learner more comfortable in the classroom and more successful. Success is not only meritorious accomplishment of content but the all-around personality development of a learner. Inclusion is something that should happen in the mind of a teacher. Good instruction leads to good outcomes. A good instructional strategy is required for a good inclusive education.

Effective Strategies for Inclusive Education Online

In the synchronous online classes, teachers should create a sense of community and a welcoming space. Teachers should create camera on/off rules and to have privacy to instruct learners and encourage virtual backgrounds especially to those who share small houses with the siblings. Virtual backgrounds should not be changed often or distracted. Early log-in and intro-chats are essential to include everyone in the learning mood. Teachers should instruct the learners to have updated profiles to display their names and they should turn to speaker view in the zoom screen. In the small classes, teachers should give opportunity to everyone to speak and participate in the interactive tasks. In the larger classrooms, teachers should plan for the best breakout room activities with groups having a note taker, reporter and a timekeeper.

1. Anecdotal records. Teachers who teach outside their cultural experience and do not have familiarities with the learners and their learning styles should learn about the identities and backgrounds in their classroom. Anecdotal Records can be used for every individual student to note down their prior education system, and perceived learning preferences. They help the teacher to acknowledge diversity in her class, and to do follow-up activities and improvement tasks with the individual students to make sure their needs are being met.

2. Online group office hours. Teachers should consider mandatory office hours appointments for students, and offer longer one-on-one appointments to understand their students' personalities. Teachers should ask about their prior educational experiences, interests, hobbies, how to pronounce their names etc., and meet them frequently on a one-on-one basis.

3. Examine your own biases and consider where they may have originated. This includes:

   a. Use a third person's point of view

   b. Don't make comparisons but do choose words carefully if comparisons are required.

   c. Use specific pronouns when writing about people: The same is true when describing people's cultures and ethnicities.

   d. Use inclusive words in the classroom.

   e. Use inclusive activities in the lesson plans.

4. Use gender inclusive pronouns

   Normally we use personal pronouns such as He, She, Him and Her to mention male and female. Currently there is a change in using these pronouns. Now people have started using gender neutral or gender inclusive pronouns. A gender neutral or gender inclusive pronoun is a pronoun that does not specify whether the subject is a male or female. Inclusive pronouns do not associate a gender with the individual who is being addressed or discussed. Rather than using pronouns she or he, her or him, teachers should consider using they and themselves.

Figure 1

Gender Inclusive Pronouns
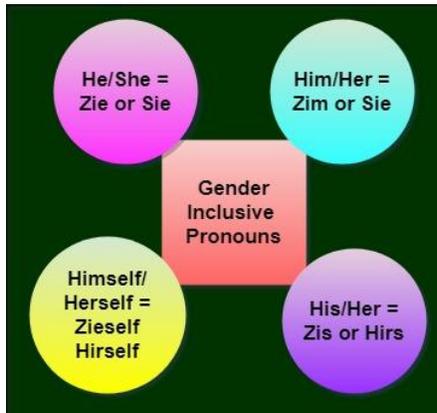
5. Validate the experiences and feelings of learners; not the color and caste.

6. Avoid jokes or statements related to community, caste and color. By making a joke related to any particular community, we exclude some persons. By doing this, we sow poison in the minds of youngsters. Additionally, to say nothing when this occurs implies that you agree. Remove negative expectations and set the right expectations. Get feedback and give feedback often.

7. Training for Inclusion: Diversity training asks teachers to understand their students' backgrounds. Teachers need training to handle challenged students in the classroom. Many students with disabilities spend most of their days in general education classrooms. Lack of training to meet these issues is a major problem. Teachers should be trained in a host of non-academic issues—from suicide prevention to food allergies to sexual assault, identifying trans-genders etc.

8. Solution Tree Partners in the Department or Staff Room should be encouraged. Solution tree partners with the brightest minds in education have to join with every teacher to develop the services and prepare suitable teaching tools to use in the inclusive classrooms. In the online

classes, tree partners can be invited to do some discovery learning tasks related to the subject. Seeing different faces on the screen may be a motivating factor.

9. Intergroup Contact: Meet and engage with individual members or groups of other schools. Faculty from neighboring schools can be invited to share their experiences in the online classes.

10. Individualization: Consider the attributes of the individual apart from his or her group. Focus on his or her individual characteristics, traits, interests, and preferences rather than stereotypes about persons. Online homeschooling is self-paced and students move at their own time in learning. Individualization can be encouraged by giving individual projects and assignments.

11. Form peer groups in the class itself to support the individuals with disabilities in any form. Make inner-circle evaluation to check for affinity bias in the online groups.

12. Perspective Taking: Try to understand from students' perspectives what they encounter and what adaptive techniques they might use to function successfully.

13. Self-Monitoring Appraisals: Continuously self-monitor your perceptions, judgments, behavior, decisions, and actions to check for the influence of implicit biases. Write all of your behaviors in the appraisal and cancel whichever is not right and correct yourself. Write all of your negatives and bias in a paper, strike it out, crush the paper and throw it away. This activity is a psychological practice of deleting negatives in your subconscious mind. Of course, it is a kind of blind spot which helps you to believe that all your negatives have gone out.

14. Avoid Microaggressions: Microaggression is a form of implicit bias.

Microaggressions are the everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, which communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership … These hidden messages may invalidate the group identity or experiential reality of target persons,

demean them on a personal or group level, communicate they are lesser human beings, suggest they do not belong with the majority group, threaten and intimidate, or relegate them to inferior status and treatment … microaggressions are active manifestations … of our worldviews of inclusion/exclusion, superiority/inferiority, normality/abnormality, and desirability/undesirability (Sue, Capodilupo, et.al 2007). Microaggressions are a great insult to the students. Microaggressions including religion, physical ability, gender, or appearance are not life-threatening by nature, but are still harmful

15. Avoid Gripe Sessions: Do not participate in gripe sessions about students. Faculty members who gripe about students are establishing a culture of failure for their students, their department and their own teaching (Rhem, 1999).

16. Use Inclusive Lesson Plans: Inclusive lesson plans consist of the range of approaches and activities to teaching that consider the diverse needs and backgrounds of all students to create a learning environment where all students have equal access to learn and all students feel valued. While preparing a lesson plan, think about different activities which should be suitable to everyone in the class. Make your lessons into small portions and introduce interactive activities.

Conclusion

Diverse classrooms contribute to students' emotional intelligence, improving empathy and perspective-taking in ways that prepare them to thrive personally and professionally. Learning among diverse peers and professors inculcates critical thinking abilities, prompting students to challenge their own received wisdom and culturally-bounded assumptions (Sanger & Gleason, 2020). Best practices of diversity in the classroom prepare students for a global economy. Properly cultivated diversity in the classroom promotes empathy and reduces prejudice and also expands students' interactive capacity. Diversity creates a culturally responsive and

inclusive learning environment. It brings a negative behavior policy and contributes to

professional growth and satisfaction.

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