





Student Teachers' Perspectives on Teacher Training and Distance Learning

Tareq Murad 
Sakhnin College for Teacher Education, Israel

Nabil Assadi 
Sakhnin College for Teacher Education, Israel

Muhammed Ibdah 
Sakhnin College for Teacher Education, Israel

To cite this article:

Murad, T., Assadi, N., & Ibdah, M. (2021). Student teachers' perspectives on teacher training and distance learning. *International Journal of Studies in Education and Science (IJSES)*, 2(1), 1- 17.

The International Journal of Studies in Education and Science (IJSES) is a peer-reviewed scholarly online journal. This article may be used for research, teaching, and private study purposes. Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations regarding the submitted work.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



International Journal of Studies in Education and Science (IJSES) is affiliated with the **[International Society for Technology, Education, and Science \(ISTES\): www.istes.org](http://www.istes.org)**

Student Teachers' Perspectives on Teacher Training and Distance Learning

Tareq Murad, Nabil Assadi, Muhammed Ibdah

Abstract

The aim of the study is to examine the effect of training and experiencing teaching via Zoom on the perception of students in Academia-Kitta Model (a clinical teacher training program) in Israel. An attitude questionnaire was developed in order to examine students' attitudes and perceptions. The questionnaire included 36 items designed to analyze attitudes and perceptions of Zoom effectiveness for teaching and training, challenges, the effect of Zoom on pedagogy and emotional and social attitudes. The findings of our research showed that most students reported negative attitudes towards the technical challenges brought about by the use of Zoom, while most trainees held positive attitudes towards the use of this tool for training guidance. Moreover, the vast majority of student teachers had positive emotional-social attitudes during this period. Therefore, we recommend incorporating remote training in working with students and improving the technical approach to these tools.

Keywords: COVID-19, Zoom, Remote learning, Academy-Class Model, Teacher training

Introduction

Due to this COVID 19 pandemic, students are required to adapt to learning and training in a way that most of them have not been familiar with before, i.e., learning outside of the educational institution. This learning and training method takes place online, while students are at home. Some students have experienced distance learning even before the pandemic, but it was often used as a complement to traditional learning taking place in school, and not as the only way of learning (Ananga, 2020; Hebebcı, Bertiz, & Alan, 2020; Niemi & Kousa, 2020; Serhan, 2020; Zhou Li, Wu, & Zhou, 2020). Distance learning occurs when the teacher and students are separated by physical distance; furthermore, participants use technology to communicate with one other (Angelova, 2020; Atabey, 2021; İlhan, Kaba, & Sin, 2021; Unger & Meiran, 2020; Willis, 1994, Willis & Dickenson, 1997). Kurtz et al. (2009) defined distance learning as an interactive learning teaching process of which at least part is done online with audio or video text. However, this technique refers to the use of a communication network that allows storage, retrieval, distribution and immediate updating of information, information transmitted to users via computer and Internet technology (Belanger & Jordan, 2000; Ghazi-Saidi et al., 2020; Rosenberg, 2001).

The COVID 19 period changed the structure of the classroom completely, as learning, training and teaching mostly take place remotely for all students at all schooling levels. This form of learning and teaching has been known for a long time, but during the Corona period, it became the most common form of teaching in the country. As early as 2007 NACOL reported a 30% increase in E-learning in the United States and to that end there was a growing demand for experienced distance learning teachers. Experts argued that teachers had to be professional and proficient in the field of teaching and not just hold a teaching certificate. Teachers that were teaching in a traditional and face-to-face classroom had to undergo special training to teach in a distance classroom (Davis, Rose, 2007).

Various studies have examined the positive effect of distance learning on students: Livingstone, 2003; Turow & Ribak, 2003; Liu, Horton, Olmanson & Toprac, 2011, Giesbers, Rienties, Tempelaar, & Gijsselaers, 2013, Thalheimer, 2017. Other studies have examined the impact of distance learning and teaching on teachers and educators (Willis, 1994, 2002, Goodyear, 2004. Kanuka, Garrison & Cohen, 2009 Rotem & Avni, 2009, Miodoser Nachmias Forkush & Tobin, 2003). However, there are very few studies that have examined the learning and training of student teachers by distance learning before and after the pandemic; therefore, this study is a unique pioneering study that sheds light on student teachers who implement their teaching units according to the Academy - Class Model, a clinical model in teacher education. Moreover, this study may suggest new methods of mentoring and training pre-service students.

Review of Related Literature

The Corona epidemic broke out in Israel in 2020. As a result, in March and early April, schools were closed and teaching took place remotely via Zoom. In April and until the end of the school year, schools were gradually reopened, but with restrictions imposed by the Ministry of Health. For 2021, the Ministry of Education has prepared an adapted format of hybrid teaching and learning in schools, a format that will combine distance teaching with face-to-face teaching in schools. Yet, it is clear to all those involved in education that the situation is dynamic and there is a possibility that schools will have to close their gates again - all in accordance with the epidemic situation and the guidelines of the Ministry of Health (Ratner, Glickman, Lipstatt, Raz and Levy, 2020).

In the educational research conducted by Ratner et al. (2020) on a number of teachers who dealt with distance learning and teaching, teachers reported that they had the required equipment and infrastructure for remote teaching at home (although it is also worth noting that about 15% reported such equipment and infrastructure to be missing or unsuitable). Most of the participants reported difficulties in working from home due to unsuitable environmental conditions - noise, lack of privacy, etc., but the percentage of teachers who reported that the schools had the appropriate conditions for distance learning was much lower than the percentage of face-to-face teaching supporters.

Junior high school teachers reported the lack of adequate quality materials for teaching remotely. Moreover, many more teachers faced challenges in addressing students in distance learning. Although, in general, strong

and outstanding students managed to learn even without attending school, teachers in Arabic-speaking elementary schools seemed to struggle more and needed special assistance to follow the curriculum when teaching remotely. Weisblai (2020) noted that an online distance learning system began to operate in schools in Israel close to the closing date of schools on March 31, 2020. Distance learning included a national broadcast system in Hebrew and Arabic alongside the uploading of content and assignments by teachers using various digital tools and platforms. Data from the Ministry of Education showed that it was not clear what proportion of students participated in distance learning.

According to the Central Bureau of Statistics, about 24% of households with children in Israel do not have Internet and 15.7% of households do not have a home computer. Also, 21.7% of Jewish households do not have Internet subscription, compared with about 51% of Arab households. There is no doubt that the Corona period is a complex event and a state of distress and change, which affects also the educational system. Schools today need organizational resilience to function well, not only in crisis, but also in daily life (Shene and Somekh, 2019). It should be noted that school functioning in crises such as the COVID 19 is an organizational function of the school staff that includes organizing immediately upon the onset of the crisis, initial assessment, decision-making, coordination and division of work, staff guidance, constant consultation and complexity management (Shene and Somekh, 2019).

Teaching via Zoom

Teaching combining different tools and social networks appeared even before this pandemic period. Rosenberg and Astrakhan (2017) see social media as the product of an important revolution that took place on the Internet, so Zoom can be defined as a type of social network and social media platform. One can create a personal information profile, which is limited or public, upload a variety of content and connect with other network members using web-based tools (Cole and Lev-On, 2014 and Schwartz et al., 2017).

Yariv and Gorev (2018) note that social networks, available from anywhere and at any time, have a significant impact on behavior. These networks create new and different needs in users because they expose them to new content and allow them to share it. Learners in the digital age are interested in experiencing active learning that is social, shared and supported by diverse media: text processing tools (Wiki, Blog, Twitter), voice processing tools (Skype, podcast), image processing tools (Flickr) and film processing tools (YouTube, Podcast).

As far as online teaching is concerned, Saultz & Fusarelli (2017) consider it a phenomenon with enormous but wasted potential, which has spread without proper supervision. According to them, most of the programmers and principals who set up online school systems failed in their mission due to lack of funding, failure of information systems and vague educational vision. This teaching method allows outstanding students to progress individually, while weaker students have difficulties in making reviews and other students can explore topics that are not taught in public schools. Also, online classes are relatively inexpensive, address an unlimited number of participants and can be extended into a variety of directions. However, online schools have limitations and challenges such as: dropouts, funding, quality control and accountability.

Academy - Class

Arbiv Elyashiv, Assistants - Reitberg and Rosenberg (2018) note that teacher training takes place worldwide and is routed into two main pathways: training in university institutions that focus on intellectual values and general studies and is aimed at promoting academic research, and training in institutions that focus on improving teaching strategies and reflective approaches. Ariav (2008) clarifies that despite the differences that exist between training institutions, they share a common ground: Discipline: Discipline studies constitute a cornerstone for content teaching, Pedagogy: Pedagogy studies in teacher training consists of teaching practice in schools designed to provide students with experience and professional confidence and cultivate professional ability. Zach and Stromer (2018) point out that teacher training and teaching practice in schools are of great importance because this experience enhances professional development in that the practicum and training help teachers become familiar with a school's daily life and atmosphere.

Studies report different models and approaches to training students for teaching. Among these Models, the "realistic approach" stands out. According to this model, teaching students will begin their experience in their first year of training with close instruction that includes feedback that reflects their work and helps them develop their teaching skills. Another model is a gradual model according to which teacher training is spread over four years and gradually increases each year by ten weeks before reaching the climax in the fourth year (Zach and Stromer, 2018).

Harpaz (2010) suggests three teacher training models, where each approach has its own unique characteristics, the first approach considers the teacher as a representative of society, therefore, teachers are socialization agents whose goals are to train the next generation. The classroom is a social system in which students practice social relationships and acquire the skills, attitudes, and knowledge necessary for their functional placement as adults. The teacher should ensure the cohesion and continuity of society by imparting agreed content, by acceptable means, while being sensitive to the student's development.

The second model, the independent teacher, strengthens the privatization processes of education. The level of teacher organization will decrease, teacher employment methods will be diverse and numerous (private, public, part-time) and the supply of teachers will be of high quality in areas of demand. The third model: the teacher as a learning expert, where the good teacher is a professional with expert knowledge of learning/ teaching, knows how to use knowledge to develop a student's learning ability.

Ariav (2008) also brings three models to the foreground, the first is the traditional model or the apprenticeship model, which sees the trainee as the apprentice of a coach teacher, where the new teacher or intern teaches a lesson or part of it himself. The second model is the professional development school or PDS that is also based on apprenticeship, but in partnership with the school. The purpose of this partnership is not only to train the students, but also to improve the teaching methods of the veteran teachers themselves.

The third model is the independent teacher model: this model is a collaborative model, students participate in everything related to teaching after training for a whole year, and in the second year they experience full

teaching of two different subjects without the presence of a veteran teacher (Arbiv-Elyashiv, Avishar and Barkai, 2016).

Atia-Gottlieb (2015) and Ratner (2018) distinguish between collaborative models built on the relationship between the student and the training teacher. The models focus on co-teaching. According to this method, the actual teaching is shared by the two teachers and so is the responsibility for the lesson taught. The two teachers do the lesson together, engaging a dialogue and interacting. This is the only model allowing a dialogue between the teachers during the lesson; therefore, it is suitable for advanced stages of teacher training.

Furthermore, this model includes three forms of work: Continuous teaching - the teachers teach the material one after the other, and only the teacher who actually teaches is present in the classroom. Parallel teaching - the teachers divide their students into study groups and teach simultaneously to different groups, depending on the needs of the group. Teaching in stations - as in parallel teaching, students are divided into groups, and each group is engaged in learning or a specific task, and the teachers move between groups. In this model, participation is reflected in the planning of a lesson and in providing assessment.

A third model occurred in Israel, under the name "Academy-Class". This model is based on research and educational experiments related to fellowship processes similar to the PDS model. The aim of the model is to strengthen the partnership between academy, schools and districts. The model is designed to address three key challenges: promoting meaningful learning in classrooms by integrating two adults working simultaneously in the classroom; improving the training of students for the teaching and professional development of training teachers; professional development of students, through trainees, training teachers to become teacher and pedagogical instructor (Ministry of Education, 2014).

Ratner (2019) notes that the "Academy - Class" program is designed to increase the component of pedagogical training experience. As part of the program, students joined expert teachers in schools and kindergartens for collaborative teaching in classrooms and heterogeneous groups. The main goal of the program was to change the process of teacher training and move to "co-teaching" in the classroom by holding meetings between academy students and school and kindergarten teachers.

Moreover, these meetings were aimed at contributing to the improvement of the quality of teaching-learning processes in the classroom, at promoting experience and at improving the quality of the teaching force graduating from teacher training institutions. As part of the program, third year students came to schools and kindergartens two to three days a week for about 12-16 weeks, and taught together with training teachers. The mission of the program is set out in the following paragraph: "The 'Academy- Class' program will improve teaching training and increase the readiness of pre service teachers to enter schools as independent teachers. In this training model, the clinical experience of students will be expanded, and they will be able to experience school culture and be partners in it by combining academic knowledge with practical knowledge.

In the study conducted by Assadi & Murad (2017), which analyzed how the clinical training model Academy-Class influenced professional development, the findings showed that the program improved the students'

knowledge, skills and competencies. Another conclusion was that the Academy- Class Model was effective and efficient. Finally, the study found that the classroom contributed to increasing the confidence of the trainees whose choice of teaching profession was correct and improved their attitude towards their teaching instructor, training teacher and school students.

A study by Assadi, Murad & Khalil (2019) dwelt on the perception of teaching instructors of the Academy-Class Program; the findings showed that training teachers had positive attitudes towards the program. Teaching instructors had a clear image of the purpose of "Academy- Class", namely to bring about the optimal integration of trainees in school. However, the instructors emphasized that cooperation between the training teacher and the student is critical for the success of the latter. Moreover, training teachers believed that the program strengthened the students' sense of belonging to a particular school and improved their attitude towards the students of that school.

Distance Learning in Higher Education

Eunjyu (2020) tackled elements that help or make it difficult for Generation Z students to get the most out of class courses taught online using the blackboard app; the study shows that Generation Z students prefer a model that combines elements of a traditional face-to-face course with an online learning environment. The students expressed satisfaction with the opportunity to be tested from home, to combine independent learning with school learning, to study under a flexible schedule that allows to complete assignments in spacious time windows and to have open access to the course from anywhere. However, students said they felt deprived of real social interactions with classmates and lecturers. They also complained about technical failures that could have been resolved with the help of an effective remote support mechanism or additional course upgrade apps. Moreover, the students admitted that the online platforms did not allow them to develop meta-cognitive, interpersonal and communication skills, although they took part in courses that were supposed to reinforce such elements.

A study by Degani and Degani (2020) found that COVID 19 and Zoom learning made it difficult to learn, whether at the economic level or given difficulties encountered at home (such as distractions from other dwellers or difficulty finding a comfortable space to study). Moreover, less than half of the students believed that the institution where they study made it easier for them to continue their studies. Although more than half of the students agreed that distance learning was necessary in times of crisis, a relatively low rate (26%) agreed that distance learning in its current form facilitated the possibility of continuing studies. In terms of the desired format for distance learning, there was a greater tendency for learning to be performed at a convenient time.

Most of the suggestions made to the academy to adapt to the new era are related to academic and economic facilitation for students, as well as to distance learning. Cohen et al. (2020) report that the analysis of the attitudes of higher education students about learning during these COVID 19 times (characteristics related to the learners themselves, lecturers, the curriculum, the university as an organization, students' organization and learning environment) paints a complex picture and reveals ambivalent perceptions. Some experts perceived the

various factors of online teaching and learning as helpers and promoters, while others saw the same factors as inhibitors or facilitators. An overview of all the answers reveals a multitude of negative references versus positive ones. This may be due to the students' desire to change or make adjustments to improve the situation; therefore, they chose to dwell on disturbing factors, rather than on positive ones. In light of all of the above, it is necessary to take a closer look at teachers' attitudes and perceptions of instruction and learning in the classroom (as part of the higher education program) and teaching via Zoom (the practical side). This study will address the following question: How does training via Zoom affect the students' professional development?

Methodology

This study is a descriptive study that examined the attitudes of 34 students attending the Academy- Class, a clinical model in teacher education. The study population included students in Mathematics and English who take teaching training according to the Academy- Class model implemented in middle schools in the north of the country. The schools that we selected have experience with this model.

Research Procedure

We recruited our participants to the questionnaire by contacting them via email and on social networks. An electronic link to the questionnaire was enclosed. A brief explanation of the scope of research, and a sequence of personal details, attitudes, pedagogy, and motivation questionnaires followed.

Research Instruments

A self-report 36-item questionnaire was administered. It includes 4 categories, with each category constituting a research sub-question that was analyzed quantitatively. Furthermore, students answered four open-ended questions that were analyzed qualitatively.

Reliability of Research Instruments

Table 1 shows the research instrument reliability.

Table 1. Alpha Cronbach of the Questionnaire

Alpha Cronbach	Questionnaire	Category
0.937	Part A, 15-20	Technical challenges
0.914	Part 2, 1-14	Attitudes towards the use of Zoom in teaching instruction including towards the instructor
0.968	Part C, 29-36	Attitudes towards teaching and training products
0.978	Part D	Emotional-social and psychological attitudes

Findings

In order to understand students' perceptions of teaching training and learning via Zoom, the findings of our research were classified in four main categories: technical challenges, attitudes toward the use of Zoom for training, attitudes towards teaching and the products of training, and finally emotional, social and psychological attitudes. Table 2 shows means, medians, and standard deviations of the challenges of Zoom training.

Table 2. Means, Medians, and Standard Deviations of the Challenges of Zoom Training

Direction	Median	Standard deviation	Mean	Question
Positive or Negative				
Positive	4	0.84	3.77	I understand the studied material well as the visual effects on the video Zoom platform are great.
Negative	4	0.88	3.77	Studying on Zoom requires special computer equipment
Negative	4	0.55	4.35	Learning via Zoom requires a stable internet connection
Positive	2	0.97	2.68	I have difficulties in using Zoom
Positive	2	0.95	2.77	Zoom presentation is more difficult than a face-to-face presentation in class
Positive	2	0.8	2.58	Using Zoom is complicated and expensive.
		0.45	2.89	Mean

As it can be seen from the above table, the mean of technical challenges encountered by students was 2.89, with a standard deviation of 0.45. As one may recall, the questionnaire used a 1-5 Likert scale, so that one may get the impression that the attitude mean is negative, but close to neutral (an average score lower than the middle score 3). Moreover, frequency analysis revealed that on average 48.4% of our respondents had negative attitudes on this subject, 16.1% had a neutral attitude on the subject (exactly 3) and 35.5% had positive attitudes. The conclusion is that most students had negative feelings about the technical challenges brought about by the use of Zoom.

Table 3 shows the means, medians, and standard deviations of our students' attitudes towards the use of Zoom for teaching training including towards the teaching instructor. As it can be seen in Table 3, the mean of respondents was 3.31 with a standard deviation of 0.73. Thus, one may get the impression that the attitude mean is positive (higher than the mid-grade 3). Furthermore, prevalence analysis showed that 58.1% of our students had positive attitudes on this issue, while 41.9% of them had negative attitudes. The conclusion is that most participants have positive attitudes toward the use of zoom in pedagogical instruction.

Table 3. Means, Medians, and Standard Deviations of Students' Attitudes towards the Use of Zoom for Comprehensive Teaching Training, Including towards the Instructor

Direction Positive or Negative	Median	Standard deviation	Mean	Question
Positive	4	1.02	3.45	I like to learn and teach via Zoom
Neutral	4	0.88	3.13	I do not like to train via Zoom
Positive	4	1.11	3.48	I am interested in teaching and training via Zoom
Positive	3	1.10	3.19	I have more motivation when I teach and study via Zoom
Positive	3	1.10	3.32	Guidance by Zoom makes me more focused because it is easier
Positive	4	1.20	3.45	I have better training through Zoom
Positive	4	0.90	3.68	Training via Zoom allowed me to communicate more with my teaching instructor despite the distance
Positive	4	1.00	3.68	I understand the teaching aids well because Zoom provides very clear audio means
Positive	4	0.95	3.42	The use of Zoom as part of a training process can enrich the roles of the teacher even when he is not actually (physically) in the classroom.
Positive	4	0.88	3.39	Learning through Zoom reduces the duration of study.
Neutral	3	0.99	3.00	Learning and training via Zoom is ineffective due to a lack of communication between teacher and student
Positive	2	0.94	2.81	Learning through Zoom adversely affects the sending of teaching aids by the instructor.
Neutral	3	1.07	3.03	Learning and teaching through Zoom is ineffective because it is not possible to have face-to-face contact between teacher and student.
Neutral	3	1.04	3.03	Learning and training via Zoom makes it difficult for students to understand the teaching aids
		0.73	3.31	Mean

Table 4 shows the means, medians and standard deviations of attitudes towards teaching training and teaching aids (lesson planning - lesson presentation - feedback and review).

Table 4. Means, Medians and Standard Deviations of Attitudes towards Teaching Training and Teachings Aids
(Lesson Planning - Lesson Presentation - Feedback and Review)

Direction positive or negative	Median	Standard deviation	Mean	Question
Negative	2	1.07	2.09	Lesson planning via Zoom is easier
Negative	4	101	3.23	Presenting lessons through Zoom is more difficult than face to face
Negative	2	0.85	2.74	Zoom training means more interaction (partnership) between me and the school principal than in regular training
Positive	4	0.77	4.16	I got a review from my teaching instructor via Zoom
Positive	4	0.81	3.74	I got a review from other students via Zoom
Positive	4	0.78	3.71	I got feedback from the training teacher via Zoom
Positive	4	1.11	3.42	Co-teaching is more efficient through Zoom
Positive		0.76	3.52	Peer comments affected your self-esteem of the sample lesson you taught
		0.64	3.17	Mean

According to Table 4, the category mean of our respondents was 3.17, with a standard deviation of 0.64. Thus, one may get the impression that on average the attitudes are positive (higher than the mid-score 3), but close to neutral. Moreover, the prevalence analysis showed that 51.6% of the students had positive attitudes on this issue, 6.5% had neutral attitudes, and 41.9% had negative ones. In other words, most of our respondents have positive attitudes towards teaching training and teaching aids using Zoom.

Table 5 shows means, medians and standard deviations of the students' social feelings.

Table 5. Means, Medians and Standard Deviations of the Students' Social Feelings

Direction Positive or Negative	Median	Standard deviation	Mean	Question
Neutral	3	0.90	3.10	I am worried that I will not find a job due to the corona virus outbreak.
Negative	4	0.92	3.45	As a result of the current epidemic, have you or your household been affected financially?
positive	4	0.76	3.52	I plan to go back to buying things like before the crisis when the situation settles.
Negative	4	0.97	3.32	During this period I felt bored, sad, and wanted to cry and so on.
Negative	4	1.14	3.45	During this period I felt indifferent and tired.
Positive	5	0.56	4.55	The teaching guide asked about our situation.
Positive	5	0.56	4.48	The teaching guide asked about our emotions.
Positive	4	0.84	4.13	The teaching guide showed us empathy.
		0.52	3.42	Mean

Table 5 shows that the social emotion category mean was 3.42, with a standard deviation of 0.52. Thus, one may get the impression that the attitude mean is positive (higher than the mid-grade 3). Furthermore, prevalence analysis showed that 80.6% of our students had positive attitudes about emotions, 6.5% had neutral attitudes, and only 12.9% had negative ones. The conclusion is that the vast majority of students had positive emotional-social attitudes during this period.

Diagram 1 shows the means of our research categories.

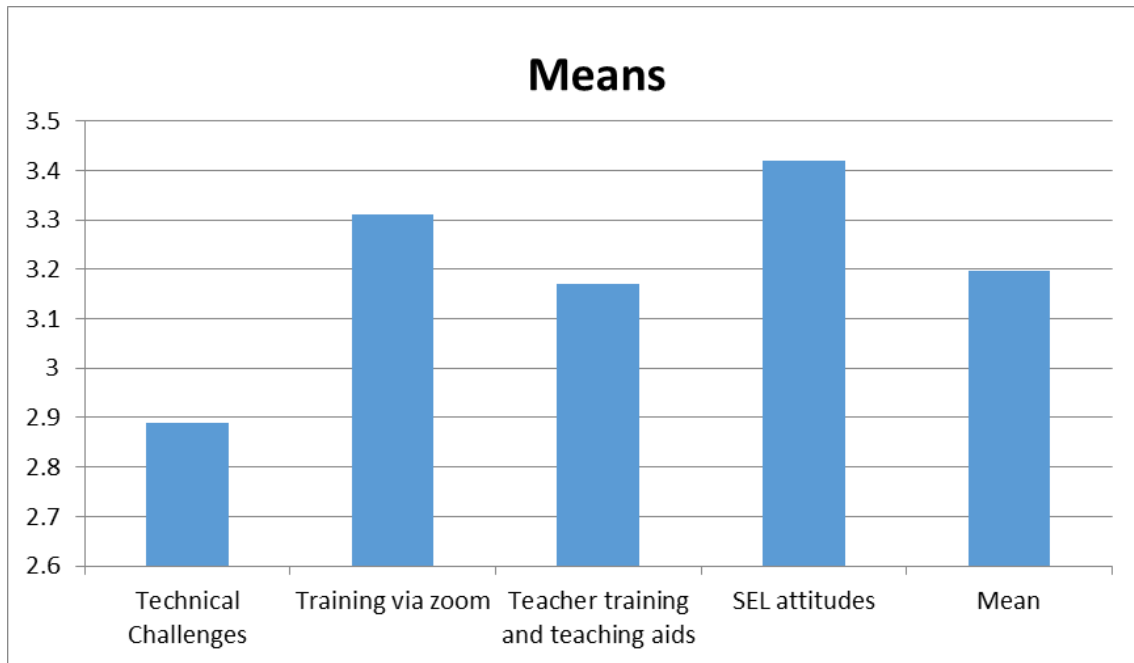


Diagram 1. Mean of Categories

In addition to the self-report questionnaire, participants were asked four open-ended questions, three of which were analyzed in a qualitative manner after being coded. The second question was not analyzed because too few participants answered it.

The first question was - "How do you feel about being guided via Zoom?" Coding participants' responses indicates that 58.2% have positive attitudes (e.g., "it's effective", "breaks the routine", "easier than getting to college"), 6.5% have neutral attitudes (e.g., "there is no difference, because the instructor is always willing to help... whether it's through Zoom or at school... or any other means of communication", "I do not care", "A lot of technical problems"). In other words, most students are satisfied with being guided via Zoom; many responded that they do not see any difference between Zoom and face-to-face interaction, and that Zoom is not an obstacle. The second question was "What makes you feel good (benefits) and what causes you not to feel good (disadvantages) about being guided via Zoom?" The question was not analyzed.

The third question was "Do you think that the teaching instructor managed to convey the learning and training processes through Zoom?" The coding of the participants' answers shows that 87.1% of our respondents have positive attitudes. For example, one said that "The instructor functioned in the best way possible...", another

commented "Zoom gave everything it had to all students", "It is excellent", "Yes, big time", "We learned how to use Zoom for teaching purposes". 6.5% had neutral attitudes, for example "Some teachers were able to use it and some teachers need to learn how to use it". 6.5% have negative attitudes, e.g. "Most instructors were unable to convey the learning process", "the knowledge would have been better conveyed face to face"). This means that the vast majority of participants feel that the instructor was able to convey the learning process through Zoom. Many responded that the teaching guide was able to convey knowledge well, use Zoom in the best way, and so on.

The fourth question was "Do you think there has been an increase / improvement in the ways in which instructors teach through Zoom?" The coding of our participants' answers indicates that 67.7% have positive attitudes, (for example: "the instructor strives to improve for every lesson", "Yes there is a big increase". "The use of technology for training led to improvements and increased motivation"), 12.9% have neutral attitudes (for example, "There are instructors who have improved their training via Zoom, at the same time there are instructors who have not improved their methods of teaching"). Moreover, 16.1% have negative attitudes (e.g., "prefers face-to-face guidance"). This means that the vast majority of students feel that there is improvement in the methods used by instructors to teach through Zoom. Many confirmed that they felt an improvement and that instructors were able to improve their work.

Discussion

This study analyzed the attitudes of students who are trained according to the Academy-Class model towards distance learning via Zoom. In our opinion, the study is unique from two main points of view, as it analyzes student attitudes in general and attitudes of students involved in the Academy –Class Model. It can therefore be noted that teachers' attitudes towards learning during the COVID 19 pandemic and other teachers' attitudes towards the integration of technological tools have been examined over the years. For example, Murray & Luo (2018) conclude that, in most cases, teachers have adopted their students' use of online technology and, despite the teachers' support for this learning method, they have experienced its shortcomings in their personal activities performed using devices that are not connected to the lesson. Thus, teachers need to guide students in the use of technology and strengthen their social skills, their skills to be involved in self-directed learning and their intrinsic motivation.

In a recent research, Glickman and Ratner (2020) analyzed teachers' attitudes towards distance learning through Zoom and they report that only 37% of them found great compliance with the curriculum and the acquisition of knowledge and skills derived from it, during this pandemic. 42% thought that targets were met moderately and 20% believed that the target meeting level was low. In light of the fact that many of the teachers did not believe that the curriculum was complied with, it seems that more advanced goals - meaningful learning and advancement of high skills - were achieved even less.

Identical data were also found in other stages of education. Deutsch et al. (2020) interviewed college students and lecturers and found that about half of the lecturers and about a third of the students reported teaching

synchronously in 90% -100% of the classes. About half of the lecturers and students believed that the supply of teaching aids was the same as in regular learning environments. Our study also found that learners report negative attitudes towards the technical challenges encompassed by Zoom, but students have positive attitudes towards the use of Zoom in terms of teaching guidance. Most of the interns have positive attitudes towards conveying teaching training and teaching aids using Zoom, and the vast majority of interns had positive emotional-social attitudes during this period.

There is no doubt that teachers' motivation and attitudes towards synchronous teaching are very important. Peled and Magen-Nagar (2012) point out that the main obstacle to the integration of ICT in schools is the teachers' attitudes towards the benefits or role of ICT in education; studies have shown that the integration of ICT in teaching is related to teachers' beliefs. Forkush-Baruch, Myodoser and Nachmias (2006) also dealt with variables that may affect the adoption of technology and the implementation of ICT. Forkush-Baruch and a colleague of his classified the variables in two categories. The first refers to the organization itself (organization of time, space, division of roles, patterns of communication between teachers, and school policy). There will be no significant changes in the education process, without significant changes in school structure (division into classrooms, study units) and learning processes (teaching and assessment methods). The second category refers to mapping the connections in which ICT and innovation activities take place while identifying the goals.

Studies on the integration of technology in teaching have found that teachers' lack of skills leads to disappointing results, so integrating technology into teaching is a slow and complex process influenced by many factors: teachers' skills, teachers' attitudes, computer availability and more (Inan & Lowther, 2012). Moreover, when teachers master ICT skills, they may adopt the technology as experience in ICT contributes to greater self-confidence and is related to better integration of technology in lessons. Teachers who feel that they master ICT skills are more willing to deal with change such as technology integration and changing teaching methods (Bernstock and Cohen, 2014).

In light of the above, students should be trained on the technical challenges that Zoom poses; moreover, they should improve their attitudes towards this method of teaching. The researchers expect that young students will have high personal teaching skills and know how to give a techno-pedagogical answer to learners. Students reported that they were satisfied with the relationship with their instructors and trainings contents, but when examining a variety of topics, such as supply of teaching aids, motivation and satisfaction among students, researchers find that switching to teaching via Zoom is not effective enough, so they recommend integrating mentoring teachers into future research and examining the differences between the responses of mentoring teachers and students.

Conclusions and Recommendations

The researchers drew the following conclusions from the findings of the study and theoretical propositions and related literature:

- The student teachers who follow the Academy-Class Model training principles for their teacher training

have almost partially positive perception and attitudes towards remote teacher training and learning via Zoom.

- Many participants felt negatively about the technical challenges created by the use of Zoom, due to the difficulties related to the availability of computers and internet connections.
- Most participants have positive attitudes towards the use of Zoom in teaching training and teaching methods. They use synchronous and asynchronous meetings in contrast to the frontal and face-to-face methods they used before the pandemic period.
- The vast majority of students reported that they needed positive emotional-social attitudes from the training teachers and teaching instructors during this period.
- Student teachers should be trained about the technical aspects of Zoom and they should also improve their attitudes towards this method of teaching. Furthermore, young students will have high personal teaching skills and know how to give a techno-pedagogical answer to learners.
- Finally, we recommend checking students' attitudes in other places and over a longer period. At the same time, we recommend that training institutions consider an intelligent combination of distance learning even after the Corona period. We also recommend teaching technical skills courses to female students and instructors together.

References

- Ananga, P. (2020). Pedagogical Considerations of E-Learning in Education for Development in the Face of COVID-19. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 310-321.
- Angelova, M. (2020). Students' Attitudes to the Online University Course of Management in the Context of COVID-19. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 283-292.
- Arbiv-Elyashiv, R. Avishar, a. And Barkai, R. (2016). *Evaluation of the 700 program for the training of academics for the establishment of leadership and / or the development of mathematics and physics majors in upper elementary schools, which takes place at the Kibbutzim Seminary College*. Kibbutzim Seminary College, Research and Evaluation Authority: Research Report
- Ariav, T. (2008). Teaching training: The situation in the world and in Israel and a look to the future. In: Kfir, D et al. Ariav (eds.). *Teaching crisis: Towards a revised teacher training (pp. 55-19)*. Bnei Brak: United Kibbutz and Jerusalem: Van Leer Institute. In Hebrew.
- Ariav, T. And Greenfeld, N. (2015). *The New Outlines of Teacher Training in Israel: Implications for Academic Colleges of Education*. Mofet Monthly, 30, 7-4. In Hebrew
- Assadi, N. & Murad, T. (2017). The effect of teachers' training model "Academy- Class" on the teacher students' professional development from the students' perspectives. ISSN 1798-4769 - *Journal of Language Teaching and Research*, Vol. 8, No. 2, pp. 214-220.
- Assadi, N. & Murad, T. and Khalil, M. (2019).). Training Teachers' Perspectives of the Effectiveness of the "Academy-Class" Training Model on Trainees' Professional Development ISSN 1799-2591 - *Theory and Practice in Language Studies*, Vol. 9, No. 2, pp. 137-145.
- Astrakhan, K., Rosenberg, H. and Schwartz, B. (2017). *The walls of education have fallen into the net? Teachers, students and social networks*. Raanana, Mofet Institute. In Hebrew.


- Atabey, D. (2021). COVID-19 from the Perspective of Preschool Prospective Teachers: What Can We Do for Children? *International Journal on Social and Education Sciences (IJonSES)*, 3(1), 82-94. <https://doi.org/10.46328/ijonSES.76>
- Atiyah - Gottlieb, A. (2015). *The model teaches practical work training*. Orot Israel College, instructor and teacher instructor at the Ministry of Education - Shahr Division. In Hebrew.
- Belanger, F. & Jordan, D.H. (2000). *Evaluation and implementation of distance learning: Technologies, tools and techniques*. Idea Group Publishing, London, UK.
- Bornstick, J., Cohen, C. (2014). The relationship between teachers' mastery of ICT skills and their readiness for change - the national ICT program. *Chase Conference Book for Learning Technology Studies 2014: The Man Learning in the Technological Age*, Raanana: The Open University. 70-64.
- Cohen, p., Barut, a., Gabay, H., Ezra, A. and Bronstein, A. (2020). Students' perceptions of online teaching in higher education in light of the Corona crisis: factors that promote and hinder. *Unit for Promoting Quality Teaching Research and Evaluation, Faculty of Medicine*. In Hebrew.
- Cole, P. And Lev, A. (2014). *The place of social networks in purchasing decision-making processes*. Jerusalem: Ministry of Economy. In Hebrew.
- Davis, N., Rose, R., & NACOL Research Committee and Working Group (2007B). Professional development for virtual schooling and online learning. Available: http://www.nacol.org/docs/NACOL_PDforVSandOlnLrng.pdf
- Degani, A. and Degani, R. (2020). *The Impact of the Corona Crisis on Students' Perceptions of Higher Education*. The Edmund Rothschild Foundation. In Hebrew.
- Deutsch, J., Landau, J., Maor, R. and Lehavi, J. (2020). Analysis of the findings of a teaching and distance learning survey (second semester, 2004). *David Yellin Academic College*. In Hebrew.
- Eunjyu, Y (2020). Student-Inspired Optimal Design of Online Learning for Generation Z. *Journal of Educators Online*, 17(1).
- Forkush- Baruch, A., Miodoser, D. and Nachmias, R. (2012). Integrated ICT innovation in the light of international research. *Teaching and Learning in the Internet Age*, 14. pp. 22-49. Fraternity College. In Hebrew.
- Garrison, D.R. & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Ghazi-Saidi, L., Criffield, A., Kracl, C. L., McKelvey, M., Obasi, S. N., & Vu, P. (2020). Moving from Face-to-Face to Remote Instruction in a Higher Education Institution during a Pandemic: Multiple Case Studies. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 370-383.
- Giesbers, B., Rienties, B., Tempelaar, D., & Gijselaers, W. (2013). A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation. *Journal of Computer Assisted Learning* 29(3), 1-21. DOI: 10.1111/jcal.12020
- Goodyear, P. (2002). *Teaching online*. In N. Hativa & P. Goodyear, eds, *Teacher Thinking, Beliefs and Knowledge in Higher Education*, pp. 79–101. Kluwer: Dordrecht.
- Greenfeld, N. (2015). *Pre-classroom and teacher training*. Mofet Institute Bulletin, 55, 3-4. In Hebrew.
- Greenfeld, N. (2015). *Pre-classroom and teacher training*. Mofet Institute Bulletin, 55, 3-4
- Harpaz, J. (2010). Learning and Teaching: In *Planning and Practicing Halacha Relationships*. Of Study

- Analysis, 21, 233-246. In Hebrew.
- Hebebcı, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of Views of Students and Teachers on Distance Education Practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 267-282.
- Ilhan, G. O., Kaba, G., & Sin, M. (2021). Usage of Digital Comics in Distance Learning During COVID-19. *International Journal on Social and Education Sciences (IJonSES)*, 3(1), 161-179. <https://doi.org/10.46328/ijonSES.106>
- Inan, F., Lowther, d. (2012). *Factors affecting technology integration in K-12 classrooms: a path model*. Association for Educational Communications and Technology.
- Kurtz, G., Amichai-Hamburger, Y. & Kantor, J. (2009). *Psychosocial well-being of Israeli students and attitudes toward open and distance learning*. *International Review of Research in Open Distance Learning*, 10(2).
- Liu, M, Horton, L, Olmanson, J & Toprac, p (2-11). "A study of learning and motivation in a new media enriched environment for middle school science". Association for Educational Communications and Technology.
- Livingstone, S. (2003). On the challenges of cross-national comparative media research. *European Journal of Communication*, 18(4): 477-500.
- Miodoser, D., Nachmias, R., Forkosh, A., and Tobin, D. (2003). Educational innovation in ICT integrated schools in Israel. IEA / OECD *Research Report*, Tel Aviv University
- Miodosur, D., Nachmias, R., Tobin, D. and Forkosh, A. (2006). *Pedagogical innovation combines information and communication technologies*. Tel Aviv: Ramot-Tel Aviv University. In Hebrew.
- Murray, A & Tian luo (2018). Connected Education: Teachers' Attitudes towards Student Learning in a 1:1 Technology Middle School Environment. *Journal of Online Learning Research* (2018) 4(1), 87-116
- National Board for Professional Teaching Standards. (2007). 55,000 reasons to believe: The impact of national board certification on teacher quality in America. Arlington, VA: Author. Available: <http://www.nbpts.org/resources/research>
- Niemi, H. M., & Kousa, P. (2020). A Case Study of Students' and Teachers' Perceptions in a Finnish High School during the COVID Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 352-369.
- North American Council of Online Learning (2007). National standards for quality of online courses. Available: <http://www.nacol.org/nationalstandards/>
- Peled, B., and Magen-Nagar, N. (2010). Characteristics of teachers in an electronic learning environment. *Teaching and Learning in the Internet Age*, 14, 157- 189. In Hebrew.
- Ratner, D. Glickman, H. (2020). Distance Teaching and Learning: Lessons from the Closure Period Following the Corona Plague, *Teacher Survey. RAM*.
- Ratner, S. (2019). The "Academy Grade" program. Findings of the evaluation study in the year 2009/10. *RAM*.
- Rosenberg, M.J. (2001). *E-Learning – Strategies for Delivering Knowledge in the Digital Age*. McGraw-Hill Companies, Inc., New York
- Saultz, A. & Fusarelli, L. D. (2017). Online schooling: A cautionary tale. *Journal of School Choice*, 1–18.
- Serhan, D. (2020). Transitioning from Face-to-Face to Remote Learning: Students' Attitudes and Perceptions of

- using Zoom during COVID-19 Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 335-342.
- Thalheimer, W., & Kinnamon, J. C. (2017). Will e-learning work in legal education? What the scientific research says. <http://www.work-learning.com/catalog.html>.
- Unger, S., & Meiran, W. R. (2020). Student Attitudes Towards Online Education during the COVID-19 Viral Outbreak of 2020: Distance Learning in a Time of Social Distance. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 256-266.
- Weisblai, A (2020). Emergency distance learning when closing educational institutions following the outbreak of the corona virus, *research and science*. In Hebrew
- Willis, B. (1994). *Strategies for teaching at a distance*. (ERIC Document Reproduction Service No. ED 351 008.)
- Willis, B. D., & Dickenson, J. (1997). *Distance education and the world wide web*. In: H. K. Badrul (Ed.), *Web-Based Instruction* (2nd ed., pp. 81-84). Educational technology Pub. Inc. Englewood Cliffs.
- Yariv, A. and Gorev, D. (2018). *Tel Aviv Classroom Management*: Mofet Institute
- Zach, S., Strommer, M. (2018). Academia Classroom Teacher Preparation Program – Physical Education Student Teachers' Perceptions of the Advantages and Difficulties. *Movement*, 11(4), 487-510.
- Zhou, L, Li, F,, Wu, S & Zhou, M (2020). Analyzed the "schools are closed" but "classes are open" campaign and practices for online education in China Practical Exploration During The COVID-19 Epidemic Prevention and Control as an Example. *Best Evid Chin Edu*; 4(2):501-519.

Author Information

Tareq Murad

 <https://orcid.org/0000-0002-4669-8411>


Sakhnin College for Teacher Education

Sakhnin

Israel

Contact e-mail: Tarenal22@sakhnin.ac.il

Nabil Assadi


 <https://orcid.org/0000-0003-2036-1121>

Sakhnin College for Teacher Education

Sakhnin

Israel

Muhammed Ibdah

 <https://orcid.org/0000-0003-4958-9955>

Sakhnin College for Teacher Education

Sakhnin

Israel
