TEACHER’S PLACE AS AN EDUCATOR IN SOCIAL INTERACTION, IN THE DIGITAL AGE, FROM THE POINT OF VIEW OF PRESERVICE TEACHERS COMPLETING STUDENT TEACHING IN PRIMARY AND SECONDARY SCHOOLS

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ABSTRACT

In the course of their training, preservice teachers learn about the importance of interaction in the educational process, and their student teaching experience in schools exposes them to different models of interactions between teachers and students. The research question for this study was how and to what extent is the role of the teacher as the educator in social interaction, in the classroom as a social group, in face-to-face, distance, and blended learning environments, reflected in schools and in higher education? The perspective was that of preservice teachers during their student teaching in primary and secondary schools. The mixed-method study involved 291 preservice teachers studying at academic institutions for teacher training in Israel. The data show that the function of a “teacher of social interaction” is present, to some extent, in schools and in higher education, but preservice teachers think that the current situation is unsatisfactory and that change is needed to place greater emphasis on interaction. Participants in the study stated that it is necessary to bring about change in higher education to encourage collaboration, networking, peer feedback, and an exchange of views. All teachers at all educational levels should strive for a combination of three components—knowledge, skills, and interactions—in all learning environments: face-to-face, blended, and distance.

Keywords: preservice teacher education, teacher-student relationships, practice-based teacher education, blended learning, information and communication technology (ICT), distance learning, digital environment, social presence

INTRODUCTION

A number of studies emphasize the importance of addressing the issue of social interactions in the classroom, during preservice teacher education, to raise preservice teacher awareness of the crucial importance of this subject (Jensen et al., 2015; Falloon & Khoo, 2014; Houen et al., 2016; Orland-Barak & Wang, 2020; Theisen-Homer, 2020; Zilka, 2015). These studies claim that interactions are a critical part of teachers’ work, and that significant social interactions affect a wide range of areas in students’ and teachers’ lives. In the process of their education, preservice teachers learn about the importance of interactions in education, and during their student teaching they are exposed to different models of interaction between teachers
and students, which prepare them to establish meaningful interactions with students and between students themselves.

The present study sheds light on the place of the teacher as an educator toward social interaction in the classroom as a social group, in face-to-face, distance, and blended (a face-to-face and digital classroom) learning environments, in schools and in higher education, from the perspective of preservice teachers who attend a university teacher training program and are conducting their practicum in elementary schools and high schools.

TEACHER AS EDUCATOR IN SOCIAL INTERACTION/CLASSROOM AS A SOCIAL GROUP

Teachers’ roles are diverse and interrelated (Branco, 2018; Katz & McClellan, 1997; Lamb, 1982, 1999; Liu, 2015; Liu et al., 2014; Zilka, 2015, 2019a, 2019b; Zilka et al., 2018). They include emotional support of their students, social support, instructional support, teaching of disciplines, tutoring, mentoring, coaching, integrating, educating, classroom organization, and more. Several researchers (Katz & McClellan, 1997; Lamb, 1982, 1999; Valiente et al., 2020) claim that teachers have critical influence on the development of their students’ social skills. Katz & McClellan (1997) proposed guiding principles for the teachers’ work with the students, with the aim of developing their social skills by: (a) addressing students’ feelings; (b) seeing the conflict as an opportunity for social learning; (c) disconnecting from negative loops and looking for ways to develop positive loops, dealing with behavior patterns that cause students to develop negative interactions and elicit negative reactions from others; (d) forming expectations consistent with student development (expectations are “self-fulfilling prophecies”); (e) taking into account that the adult’s attachment pattern to children serves as a role model for the children in their relationship with that adult, and at times it is transferred to interactions with others; (f) encouraging and guiding for the regulation of impulses and impulsivity; (g) conducting conversations with students and providing clear and direct explanations, without causing students to feel rejected; (h) avoiding intimidating the student; and (i) avoiding making comparisons between students.

SOCIAL COMPETENCE

The research literature (Blandon et al., 2010; Habermas, 1970; Hamre & Pianta, 2005; Junge et al., 2020) contains several definitions of the term “social competence.” The definitions deal with individuals’ skills to create meaningful interactions with those around them, and the ability to adapt to their environment and develop skills that are appropriate for building social connection in this environment (Katz & McClellan, 1997). Many studies have used the social relationship model, which relies on cognitive behavioral therapy (CBT) approaches. The model describes social competence as a multidimensional concept that establishes connections between the way individuals think, feel, and behave in their social environment. The model also describes the assessment by the environment of their social competence (Kashdan, 2007; Kashdan & Steger, 2006; Seligman et al., 2005).

Social competence is defined by the abovementioned researchers as a person’s ability to have meaningful interactions with others, to behave adaptively with others, to adapt and be flexible in interactions with others, and to discern opportunities that arise as a result of interactions with others. Such competence is a repository of verbal and nonverbal behaviors in which the individual uses the interactions they establish with others. Social behavior is defined as the pattern of individual behavior in a social environment, their ability to conduct meaningful interactions with the environment, adapt to it, and evaluate the outcome of their interactions with it (Blandon et al., 2010; Dryburgh et al., 2020). Social competence is related in the literature to emotional availability, which refers to the quality of emotional relationships, the nature of interactions, and the way adults convey messages to children about their commitment, support, and trust, which are likely to form the basis of safe communication between adults and children.

Emotional availability is expressed in the fact that the teacher perceives the children as having their own needs and desires, provides them with experiences that match their needs, helps them understand various processes, and encourages them to seek help when needed. Emotionally available adults show interest in children and invest thought in the quality of their relationship with them, thereby becoming meaningful in the children’s lives and likely to bring about a change in their spiritual well-being (Hamre & Pianta, 2005; Zilka, 2015, 2018). Student success in school is related to
the teacher-student emotional relationship from the perspective of both teachers and students (Baker, 1999; Mashburn et al., 2008; Zilka, 2015, 2018). From the teacher’s point of view, when relationships are perceived as positive and strong, the teacher feels motivated to invest in the students, and when the relationships are perceived as hostile, the teacher engages in “controlling” student behavior and invests less in creating positive experiences in school. Students were found to appreciate teachers who try to create positive interactions with them, address them directly, and use encouraging words.

CLASSROOM CLIMATE

Classroom climate is defined as a social, emotional, and physical environment in which students learn. The climate is determined by interactions among various factors, such as teacher-student relations, student-student relations, stereotypes, structural aspects of classroom organization, teaching styles, discipline problems, and more (Habermas, 1970; Pianta et al., 2008; Reyes et al., 2012; Wilson et al., 2007). A positive social climate in the classroom contributes to student well-being and academic achievement (Luna et al., 2020; Mashburn et al., 2008; Pianta et al., 2008; Wang et al., 2020).

The classroom climate is subjective. Some students may have a positive experience while others, at the same time, will have a negative one. A classroom with an optimal climate allows students to reach their educational, social, and emotional potential; promotes the ability to withstand stressful situations; and encourages cooperation, interpersonal communication, and the ability to learn and develop, all while addressing the needs of students. Interpersonal communication between teachers and students affects the classroom climate. Discourse serves as a means of developing interpersonal, group, and intergroup communication as a basis for developing mutual understanding and interaction between teachers and students. Discourse allows for the expression of ideas, feelings, and distress, and it helps clarify various issues and aspects, examine different solutions, and arrive at a preferred solution in a structured and respectful way.

DIGITAL INTERACTIONS AND LEARNING ENVIRONMENTS

Understanding the factors that affect teacher-student interactions is important, given that these interactions have been found to be a critical variable in learning processes, and they affect teachers’ self-efficacy, self-esteem, and professional development (Harper, 2018; Zilka, 2017a, 2017b, 2018; Zilka et al., 2018). Harper (2018) examined studies published in journals between 2005 and 2016 in an effort to understand how technology affects social interaction between teachers and students. Harper examined both face-to-face interactions and interactions in digital learning environments. Harper found that technology has become a tool for significant change in teacher-student interactions, even in nondigital environments. The change in the characteristics of the discourse between teachers and students is reflected in the frequency of interactions, duration of discussions, and their deeper layers, as opposed to a shallow, mainly informative discourse between teachers and students taking place outside the integrated digital environments. The integration of the digital environment led to a change in the students’ learning experience, in their academic achievements, and in the scope of collaboration between teachers and students, as well as to the emergence of learning strategies that aroused curiosity and interest in learning in students.

Harper and Milman (2016) examined the effect of technology on the relationship between teachers and students. They found that interactions changed significantly following the use of digital environments, and that emphasis was placed on collaboration, which allowed for more opportunities for cooperation between students. Working in groups in front of a computer has created opportunities for diverse forms of learning and encouraged students to take ownership of the self-regulated learning process. The authors found that teachers functioned as facilitators and were involved in the learning process. The teachers provided their students with opportunities to deal with learning skills, open-ended questions, and space for research and discovery. Various studies (Houen et al., 2016; Matzat & Vrieling, 2016; Zilka, 2019a) found that working in groups and sharing files strongly depend on the teachers’ guidance and supervision of the learning process, whereas others (DeGennaro, 2008; Gomez et al., 2010; Velasquez et al., 2013) claimed that in online digital environments, there was more extensive communication than in face-to-face environments.
because online forums encouraged dialogue and created a space that allowed distributed cognition, and provided guidance in the interaction between teachers and students in significant and far-reaching learning processes.

PRINCIPLE OF SHARING AND COLLABORATION

Collaboration is a process in which two or more parties work together in a way that strengthens their ability to achieve a common goal. Collaborative learning is defined as creating a space for free, shared learning discourse (Baker, 2010; Engstrom et al., 2008; Splitter, 2009; Zilka et al., 2018). Collaborative discourse enriches individual and group learning processes. The teacher should provide situations that encourage collaboration between students. In the event of a conflict between group members, the teacher must assist them in negotiating and reaching an agreed solution (Salman, 2006). The teacher must demonstrate active participation in the discourse, in order to encourage students to participate actively (Sharan, 2014). Collaboration between students can enrich their world of knowledge: by sharing their unique perspectives, ideas, and personal experiences, students maintain a sharing process that deepens their understanding. In addition, the perspectives of others lead to a deeper understanding of the study material (Ascough, 2007; Engstrom et al., 2008; Liu et al., 2007; Rovai & Downey, 2010; Snyder, 2009; Zilka, 2020a).

Rovai et al. (2004) found that a successful learning community is characterized by two main indicators: a social indicator (active involvement) and a learning indicator (content being taught). Teachers who encourage the establishment of a learning community encourage communication between students, which leads to meaningful learning. Numerous studies (Liu et al., 2007; Meyers, 2008; Pittman & Richmond, 2008; Robinson & Hullinger, 2008; Rovai, 2007; Young, 2006; Young & Bruce, 2011) found that students who are actively involved in the learning community and perform significant tasks are likely to develop a sense of belonging, as opposed to alienation and isolation, and that they persevere and succeed in academic assignments. The unique characteristics of a learning community are likely to create in students a sense of personal empowerment that leads to the enablement of the learning process and to enrichment of their lives (Billings & Halstead, 2009; Cole, 2009; Jelfs et al., 2009; Lawrence & Sankey, 2008; Lee, 2008; Oliver et al., 2009). A learning environment enables a dynamic process in which students feel confident to be active participants (Pelz, 2004; Splitter, 2009).

The present research sheds light on the existing knowledge in the field and complements it from the perspective of students in teacher training programs who are still undergoing their training. In the course of their training, in addition to academic studies, they experience teaching in elementary schools and high schools. As part of their studies, preservice teachers learn about social interactions and the role of the teacher as a teacher of social relations.

My research question was: How and to what extent is the function of a teacher, as the educator in social interaction in a classroom as a social group, in face-to-face, distance, and blended learning environments, reflected in schools and in higher education? The function of the teacher was assessed from the perspective of preservice teachers during their student teaching in primary and secondary schools.

METHOD

The present research is a mixed-method study. The data were collected in the years 2018–2019.

Quantitative Analysis

In this study, we used a closed questionnaire and performed quantitative analysis on the data to focus the findings. Averages were calculated for all statements; the closer the average is to 5, the higher the identification with the statement. To examine differences in identification with the various statements by institution (school or higher education) and mode of study (face-to-face, blended, or virtual), we conducted a two-way mixed-type analysis. The type of analysis was chosen to take into account the dependence between the answers to the various statements, given that the same preservice teachers addressed several statements. Post hoc comparison between pairs of types of study was performed with correction for multiple comparisons of the studentized maximum modulus type. We conducted an analysis of averages to find a source for the significance of the interaction. The analysis was performed in SAS, version 9.4, for Windows. P < .05 was considered statistically significant.
Discourse Analysis

The data from observations and open-ended answers were used to conduct qualitative discourse analysis and to interpret reality through the perspectives of preservice teachers. We conducted a discourse analysis on the findings obtained, based on the approaches described by Adler and Adler (2008), Atkinson and Delamont (2006), and Hammersley (2008). We identified distinct elements and formulated topics. The process was iterative and continuous, terminating with data consolidated into unified issues, showing sensitivity to context and its place in constructing reality. Conflicting, complementary, and explanatory topics were formulated based on the approach of Baskarada (2014), Braun and Clarke (2006), Pope and Mays (2009), and Spencer et al., (2003). We emphasized understanding the complexity of interactions in the teaching-learning process in diverse learning environments. Informed consent was obtained from all individual participants included in the study. The study received approval from the institutional review board (IRB) of Academic College.

Sample

The sample included 215 preservice teachers studying at academic institutions for teacher training in Israel: 75% women, 25% men; 57% aged 20–30; 35% aged 30–40; the rest aged 40 and above. Preservice teachers who participated in the study were in the process of obtaining a teaching certificate. They all had a bachelor's degree, some a master's degree (32%), and some a doctoral degree (18%). Students who expressed a desire to participate in the study did so of their own free will.

Research Tool

The research tool was composed of the following:

1. Demographic details.
2. Observations of preservice teachers who participated in the study, in social interactions in face-to-face, distance, and mixed learning, in schools and in institutions of higher education. The instruction was to observe, describe, and expand on the teacher's function, as a teacher of social interactions in the classroom as a social group, and to expand on the statement, “The teacher of social interactions and the class as a social group” — from the point of view of preservice teachers: Is it desirable and common in primary/secondary school and in higher education?
3. Closed questionnaire. The questionnaire is based on that of Mayer (2014), Napoli & Obar (2014), Ofcom—Office of Communications (2010, 2016), and Zilka (2019a, 2019b). Participants were asked to rate their agreement with each statement on a 5-point scale, ranging from 1 = Not at all to 5 = To a great extent.

The following statements were included in the closed questionnaire:

- Existing situation in schools—“The teacher of social interactions and the class as a social group.”
- Existing situation in higher education—“The teacher of social interactions and the class as a social group.”
- Desirable situation in schools—“The teacher of social interactions and the class as a social group.”
- Desirable situation in higher education—“The teacher of social interactions and the class as a social group.”

Research Process

Preservice teachers studying for a teaching certificate participated in the study. As part of their studies, they learned about social interaction and the role of the teacher as an educator toward social interaction. Preservice teachers participated in the study voluntarily. They accompanied the in-service teachers in the elementary and high school classrooms where the teachers taught. Three to four students accompanied each in-service teacher. All in-service teachers approved the study but did not take part in it; participation was limited to preservice teachers. Preservice teachers observed and conducted face-to-face, blended, and virtual lessons. The virtual lessons generally concerned topics chosen by the in-service teacher for teaching online.

Preservice teachers completed observation sheets, recorded their feelings, and formulated opinions. In addition, they were asked to comment on the statements that appeared in a closed questionnaire, to focus and express a clear position
regarding interactions in the learning and teaching processes.

FINDINGS

Below are the quantitative and the qualitative findings of the study supported by representative excerpts from the preservice teachers’ responses.

Quantitative Findings

Current Situation

Table 1 presents the results of the two-way analysis of variance, checking differences in perceptions with respect to the learning environment and mode of learning in relation to the statement, “The teacher of social interaction and the class as a social group.” The analysis shows that in the school setting there is greater identification with this statement than in higher education. The identification with the statement decreases as the mode of learning becomes more virtual. In statistical significance, however, there is no difference in identification with the statement between face-to-face and blended modes of learning (M = 3.47 vs. M = 3.38, p = 0.06). Between virtual learning and blended and face-to-face learning, there is a clear difference to the disadvantage of virtual learning.

In the distribution by educational setting, in schools, the identification with the statement decreases significantly as the mode of study becomes more virtual. In higher education there is no statistical difference between face-to-face and blended learning (M = 3.20 vs. M = 3.31 p = 0.18), but there is a clear difference between virtual and blended, and virtual and face-to-face modes of learning, to the disadvantage of virtual learning.

Regarding face-to-face learning, there is a greater and clearer identification with the statement in schools than in higher education. But no statistical differences in identification with the statement were found in blended and virtual learning modes between schools and higher education (blended: M = 3.44 vs. M = 3.31, P = 0.10; virtual: M = 2.59 vs. M = 2.61, p = 0.82). Figure 1 summarizes the findings graphically.

Desirable Situation

High identification with the statement was determined as a percentage of the respondents who assigned a score of 4 and 5 to the statement. Eighty-seven percent of respondents thought that in a school a desirable situation is for the teacher to educate toward social interaction and for the class to be a social group. In higher education, only 75% thought this to be a desirable situation.

Qualitative Findings

We conducted content analysis of observations of lessons taught by participating preservice teachers. Preservice teachers observed social interaction in face-to-face, distance, and blended learning environments in primary and secondary schools and in higher education.

The research question was how and to what extent is the role of the teacher reflected in schools and in higher education as the educator in social

Table 1. Averages of Statements and Two-way Variance Analysis Results

<table>
<thead>
<tr>
<th>Teacher of social interaction and the class as a social group</th>
<th>Face-to-face</th>
<th>Blended</th>
<th>Virtual</th>
<th>Total</th>
<th>Institution</th>
<th>Environment</th>
<th>Inst. mode*</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>3.75</td>
<td>3.44</td>
<td>2.59</td>
<td>3.26</td>
<td>F(1,1373)= 139.5***</td>
<td>F(2,1373)= 23.1***</td>
<td>F(2,1373)= 13.7***</td>
</tr>
<tr>
<td>Higher education</td>
<td>3.20</td>
<td>3.31</td>
<td>2.61</td>
<td>3.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.47</td>
<td>3.38</td>
<td>2.60</td>
<td></td>
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</tbody>
</table>

**p<.001
interaction, in the classroom as a social group, in face-to-face, distance, and blended learning environments? The perspective was that of preservice teachers during their student teaching in primary and secondary schools.

The teacher of social interaction and the classroom as a social group. Part of the preservice teachers (41%) stated that they felt that the teachers in the schools were afraid of social interaction and did not want to become involved for fear that it would lead to blurring of boundaries between the teachers and the students. Here are some excerpts from preservice teachers’ responses:

I think a class should be a unified group with great and significant power. The interpersonal connections between the students in the class, how they relate to each other — all these are skills that the students acquire in the classroom as a social group. It is desirable that a class be a cohesive, united group of students who join forces to reach a certain goal to which all class members aspire. Yet, what actually happens in the different classes is that there are always certain groups even within one class, students who are more connected to others and popular among the classmates, and there are students who are sidelined, and the presence of the teacher is not felt.

In most of the classes I observed, the class is not consolidated, requiring therefore hard work of the teacher to turn the class into a social group. The teacher is responsible for assisting the students in establishing interpersonal relationships and developing social skills. In practice, teachers see this as an increase in responsibility, and in conversations I had with teachers, they said they were not interested in expanding their areas of responsibility.

In school, this is critical: It makes possible better learning in an optimal social climate; the well-being of the students is important. It is important to emphasize the perception that school prepares students for life and not just imparts knowledge. In higher education the role of the teacher as a teacher of interpersonal relationships is less required, the studies are more goal-oriented and professional, but of course it is still important for the social relations in the classroom to be good. At this stage in life, however, students’ personalities are already more cohesive, and they have more mental strength to deal with social and emotional challenges.

It is desirable that the teacher be a person who can impart social skills and act as a mediator if necessary, and allow expression of opinions and thoughts of students in the class. A teacher who creates interpersonal relationships with students should often be able to conduct a lesson without discipline issues and teach the material well. Yet, I didn’t see this happening in any of the classes I watched.

Lecturers could be teaching interpersonal relations, but in academia, lecturers are less concerned with interpersonal relations and group activities. And this is a shame, because we are at the stage of our student teaching practice, with different teachers and in different schools, and the sharing and support between group members could help us consolidate our role as future teachers.

Students must be taught to communicate with others. The first thing I would like to do when I become a teacher is to teach social interaction and to consolidate the class. To set goals and give the students shared virtual assignments, and then work on those assignments in class. I found that it is easier to make them collaborate in this way.

Interaction in a digital environment. Some students (27%) indicated that in a digital environment, there was significant interaction between students and between teachers and students in the course of classroom learning. Here are some excerpts from the students’ responses:

I incorporate a lot of collaborative learning in my student teaching practice. I have the ability to listen to all my students and analyze existing problems, and then to try and come up with a solution for the students, given the personal situation of
one of the children. I received a class that had social problems and objectionable relationships between the students. I gave them collaborative virtual assignments, everyone had to help in a given area. I saw that they collaborated in virtual learning, so I continued the assignment in class as well. But then I saw that it was more complicated, because of all the baggage they had accumulated, and the reluctance, socially, of some students to collaborate with certain other students. At first it didn’t work well, but I saw that slowly there was a change in classroom interactions.

I saw that while learning in groups in a digital environment, students were involved in learning, they were highly motivated to learn and collaborate with other students. They enjoyed learning in a digital environment that offered means of illustration and experimentation while requiring challenging thinking skills.

I have seen teachers take time to talk to students when students were working in groups in a digital environment, much more than in computer-free lessons, because as students were working in front of a computer and the teacher came up to the group, they talked to him. When the teacher worked with another group they continued to work on their assignment.

Interaction in distance learning. Some students (67%) stated that in distance learning there are fewer interactions than in face-to-face learning and in blended learning (where some of the work is conducted in a face-to-face classroom and in a digital environment, and some in distance learning). Here are some excerpts from the students’ responses:

The teacher should serve as a guide in interpersonal relationships and be responsible for the class functioning as a social group in diverse learning environments. I saw that none of the tasks given in distance learning required interaction between the students, but each student worked alone.

In distance learning, individual assignments were given, there were no forums, no work on shared files, there was no collaborative learning.

In distance learning, there were no interactions between students, and the interaction between teachers and students was mostly to pass information.

A digital environment promotes collaboration between teachers and students as part of learning activities, and it helps teachers maximize students’ learning skills, motivating them to discover new content.

I have seen students get in touch with teachers at different hours, ask questions, speculate, and teachers responded to students in their own time, without the stress that characterizes classroom learning.

I have noticed that online feedback is much more extensive than oral feedback, perhaps because it is in writing, and teachers answer without pressure, at a time that suits them.

The teacher referred students who were interested in a particular topic to an online learning center. Students entered the online class that the teacher referred them to, expanded their knowledge, and collaborated on the forum. The teacher invited the students to talk about their experiences, ask questions, and share feelings. It was very interesting.

DISCUSSION

The present study examined the role of the teacher as educator toward social interaction and the class as a social group, in face-to-face, distance, and blended learning environments, in schools and in higher education, as perceived by preservice teachers during their student teaching in elementary and high schools.

Schools

The data show that the role of the teacher as educator toward social interaction in the class as a social group, in face-to-face learning environments, is realized in schools to some extent (3.75), less so in blended learning (3.44), and still less in distance
learning (2.59). Preservice teachers thought that the current situation was unsatisfactory (4.45), and that it was necessary to bring about change and place greater emphasis on social interaction and on consolidating the class into a social group. Some preservice teachers (41%) indicated that they had a feeling that teachers avoided social interaction, not wanting to become involved for fear that it would lead to blurring of boundaries between teachers and students. But to consolidate a class into becoming a social group, the teacher must design situations in which students experience social interaction, creating the climate of collaboration that encourages participation and involvement.

To create such an optimal climate, teachers and students must come up with a class agreement, define common goals, establish communication and interaction between classmates, facilitate both interpersonal and intergroup relationships, cultivate trust, make decisions, deal with dilemmas, and contain and resolve conflicts and difficulties. They must encourage students to coordinate expectations and set goals. They must help students examine their expectations of others and work together to achieve common goals. They need to provide students with tools for assessing the degree of success in achieving their goals and for analyzing the causes of failure. These social skills provide confidence, enhance collaboration along the way, and contribute to the shaping of the students’ personalities.

Students (27%) indicated that in classroom learning processes in a digital environment, there were interactions between students and between teachers and students, which reinforces the claims by Harper and Milman (2016) that in interactions in digital environments, emphasis was placed on collaboration and providing opportunities for collaboration between students. Working in groups in front of a computer has created opportunities for diverse forms of learning and encouraged students to take ownership of their learning process, that is, to engage in self-regulated learning. They found that teachers acted as facilitators and were involved in the learning process. The teachers caused students to acquire learning skills and consider open-ended questions. They provided space for research and discovery.

The findings of the present study indicate that some students (67%) thought that in distance learning there were fewer interactions than in face-to-face learning or in blended learning. Some students responded that in distance learning, there were mostly individual assignments, there were no forums, no sharing of files, and no collaborative learning. There was no student-student interaction, and teacher-student interactions were mostly to communicate information. At the same time, Harper (2018) argued that teacher-student interactions have been found to be a critical variable in learning processes, and these interactions affect teachers’ self-efficacy and professional development. Technology has provided tools for significant teacher-student interactions in nondigital, face-to-face environments as well. The change in the characteristics of the discourse between teachers and students is reflected in the frequency of interactions, duration of conversations, and the deep layers of the discourse. The integration of the digital environment has led to a change in the students’ learning experience, in their academic achievements, and in collaboration between teachers and students, and it has made possible the integration of learning strategies that arouse students’ curiosity and interest in learning. For social interaction to occur, teachers must make use of forums and group work, and they must assign challenging tasks, otherwise, social interactions in distance learning are liable to be limited and insignificant.

Some researchers argued that working in groups and file sharing depend largely on the guidance provided by the teachers, on the nature of the assignments, and on the clarity of the tasks (Houen et al., 2016; Matzat & Vrieling, 2016). The findings of DeGennaro (2008), Gomez et al. (2010), and Velasquez et al. (2013) show that there was more extensive communication in distance learning than in face-to-face learning because the forums allowed for dialogue and created a space that enabled distributed cognition, that is, interactions between teachers and students in significant and expanding learning processes taking place between students.

Other researchers defined collaborative learning as creating a space for free, shared learning discourse (Baker, 2010; Engstrom et al., 2008; Splitter, 2009). Collaborative discourse enriches the individual and group learning processes. Teachers should initiate situations that encourage collaboration between students that can enrich their world of knowledge. In the course of these collaborations, students
share their unique perspectives, ideas, and personal experiences, and deepen their understanding. In addition, the perspectives of others lead to a deeper understanding of the study material (Ascough, 2007; Engstrom et al., 2008; Snyder, 2009).

Higher Education

The findings show that the role of the teacher, as educator toward social interaction in the class as a social group, is manifested in face-to-face (3.20) and blended (3.31) learning environments and less so in distance learning (2.61). Students find the current situation unsatisfactory (4.12), and think it is necessary to bring about change and place more emphasis on social interactions, even in higher education, to encourage collaboration and networking, and to create support groups that encourage professional development, peer feedback, and exchanges. Researchers found that collaboration between preservice teachers made teaching easier for them (Zilka, 2020b, 2020c; Zilka et al., 2018).

Significant communication for shaping, assisting, and directing cognitive and social processes, encouraging a participatory climate, promoting social cohesion of the community, public discourse, using forums for conducting discourse between students—all these are critical factors that are likely to create a learning environment that supports the students and is attentive to their needs, establishing their social presence. According to certain studies (Zilka, 2020b, 2020c; Zilka et al., 2018), these factors greatly influenced the conduct of the course and the quality both of the learning and of the teaching process.

Preservice teachers observe in-service teachers usually from the sidelines of the classroom, from angles that allow them to see what is happening in the classroom from a different perspective from that of the teachers. Occasionally, preservice teachers come out frustrated, and the dialogue between them reveals different perspectives and angles of analysis of the events that took place in the classroom. Such discourse can lead to the professional development of preservice teachers. Social presence is defined as creating a space for free, collaborative, academic discourse, where students feel free to express their opinions and needs (Baker, 2010; Engstrom et al., 2008; Splitter, 2009; Zilka, 2020b). According to Zilka (2020b), social presence enriches the individual and group learning process. The lecturer should allow situations that encourage cooperation between students and ask them to respond in the forum to the statements of others. The lecturer should give an example of active participation in the discourse to encourage students to do the same, and to allow for a dynamic process in which students feel confident to be active participants (Sharan, 2014).

The learning community and the students’ engagement in the course are closely interrelated. Students experience a sense of closeness, as opposed to isolation, and they feel the need to be more involved in learning when there is a sense of community. Edwards et al. (2011) and Holley and Dobson (2008) found that shared online learning experiences may increase student participation and instill in them a sense of being in a safe place as opposed to a sense of anonymity. In addition, researchers found that shared forums brought students closer together (Cameron et al., 2009; Meyers, 2008; Rovai & Downey, 2010). Collaborating students can enrich their world of knowledge by sharing their unique perspectives, ideas, and personal experiences. The collaborative process creates a deeper understanding in students, and the perspectives of others lead to a deeper understanding of social situations (Engstrom et al., 2008; Snyder, 2009).

CONCLUSION AND FUTURE RESEARCH

This study shows that the function of the teacher as educator toward social interaction in the class as a social group is present, to some extent, in schools and in higher education, differentially in different learning environments, perceived by preservice teachers during student teaching in primary and secondary schools. All teachers at all levels of education, including in academia, should strive for a combination of three components—knowledge, skills, and interactions—in all learning environments: face-to-face, blended, and distance learning. A learning process without one of the three components usually reveals itself as flawed.

This study examined the place of the teacher as educator in social interaction, in the digital age, in face-to-face, distance, and blended learning environments, from the perspective of preservice teachers. It is important for future studies to examine the factors that promote, challenge, and fail meaningful interactions in distance learning.
Identifying these factors is likely to deepen the understanding of distance learning and assist in the optimal use of this learning.
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