“The Situation Here is Just like a Movie—A Horror Movie”: Computer-Mediated Troubled Talk as a Setting for Support and Professional Growth of Student Teachers in a Time of Crisis

Dvora Gorev, Adva Margaliot, and Tamar Vaisman
Achva College

Abstract

This study describes a situation in which student teachers and their teacher educators engaged in online institutional discourse expressing authentic troubled talk during a military attack. Despite the crisis situation and the closing of the educational institution, academic learning continued via email. In order to investigate the ways in which moderation of computer-mediated (CM) troubled talk developed, three cumulative logs of email correspondence and student teachers' responses to two open-ended questionnaires were analyzed. The analysis led to the emergence of three processes: immediate contact with the groups of student teachers, development of affective support and academic learning and the creation of a supportive learning community. The combination of these processes produced a model for academic CM troubled talk that promotes support and professional growth. We suggest the implementation of the model by student teachers in their future roles as teachers in situations of coping with crises when educational institutions close and the only way to continue learning is through computer-mediated discourse.

Introduction

Operation Cast Lead was a military operation of the Israel Defense Forces (IDF) that began on December 27, 2008, and that aimed to stop missile attacks coming from the Gaza Strip into Israel. The three-week armed conflict that followed between Israel and Palestinian militants in the Gaza Strip resulted in a temporary intensification of Hamas missile attacks on Israel, until each side declared a unilateral cease fire on January 18, 2009. On the day that Operation Cast Lead began, one college of education located within the range of the Hamas' missiles in Israel announced the closing of its gates, with no information regarding a possible reopening. Within a few days, the lecturers of the college received an email asking them to continue teaching via information and communication technologies (ICT) in order to allow students to continue studying. This study analyzes the communication that occurred as three teacher educators continued to email their student teachers to invite them to engage in computer-mediated (CM) learning.

A rich, wide-ranging computer-mediated discourse developed in which the participants (both teacher educators and student teachers) shared their feelings and thoughts. The characteristics of that communication illustrate what Kupferberg and Green (2005) call “troubled talk.” Some student teachers sought help by presenting the difficulty of their situation regarding both the stress and fear they were experiencing and their inability to continue studying during this time. Other student teachers and teacher educators acted as caregivers by suggesting ways of coping and possible solutions. The behavior of the teacher educators as moderators of the computer-mediated communication (CMC), the nature of the assignments, the shift in language from
formal to informal, and the troubled talk that developed helped the participants to function as a support group.

Despite the existence of crisis events such as natural disasters, wars, terror attacks, violent ethnic tensions, etc., throughout the world, and considering the innovative technological tools that are available nowadays, the literature to date has not paid much attention to theories of the role of teacher educators at such times. The present study seeks to bridge this gap by describing and analyzing the natural and authentic social CMC that developed among the three teacher educators and their student teachers when the college was closed due to the events described above.

The study focuses on how support, academic learning, and professional growth were promoted in this time of crisis in the context of teacher education. The crisis situation during which the communication described in this article developed was a military-political one. The CMC that developed moved from subjects directly related to distress as a result of the situation to learning-related subjects, as in routine times. During the period described in this article, learning and teaching went from face-to-face meetings to online, and the role of the lecturer changed from classroom teaching to online teaching, while missiles continued to fall in the area every few hours. The literature survey, therefore, begins with online communication during crisis situations, continues with online troubled talk in both general and educational contexts, and culminates with the role of the teacher educator as manager and guide of online communication.

Literature Review

Computer-Mediated Discourse in Times of Crisis

Computer-mediated discourse (CMD) (Herring, 2001, 2010) includes discussions of shared problems, information exchange, and the sharing of knowledge, in which participants are able to respond in their own free time and at a pace that is appropriate to them. The kind of crisis described in the introduction is of a short-term nature, in which the people affected do their best to recover quickly and return to their routine. Today, people use the ICT tools available to them for various needs related to crises (Mileti & Peek, 2000; Palen, Vieweg, Liu, & Hughes, 2009), including warning others of danger, evacuation notification, obtaining information concerning symptoms and medical treatments, and finding and rescuing survivors (Hagar & Haythornthwaite, 2005; Reynolds & Seeger, 2005).

In a report published after the 2005 Hurricane Katrina disaster in the southern United States (Hurricane Katrina, 2006), the lack of communication (as all communication networks had collapsed) was identified as one of the main contributors to the large number of victims. In certain places, such as New Orleans, where the authorities managed to organize a network of telephones and aid workers in advance, however, they were able to help a large portion of the victims. Shklovski, Burke, Keisler, and Kraut (2010) found that a group of musicians used cell phones and the Internet to locate family members and friends in the immediate aftermath of Hurricane Katrina, and that these forms of communication provided them with information that was unavailable in broadcast news reports. Sutton, Palen, and Shklovski (2008) studied another disaster (Wildfires in Southern California, 2007) that shed light on “backchannel” communication, or public peer-to-peer communications. This kind of unofficial communication,
including via social networking applications and messaging services, is becoming increasingly visible and influential, despite not attaining full legitimacy in information arenas of disaster (Palen, Vieweg, Liu, & Hughes, 2009). Because of its global nature, CMC also makes possible the spreading of information about organization and coping mechanisms for dealing with crises worldwide to places where new crises are taking place (Diers & Tomaino, 2010). An important kind of communication in times of crisis is troubled talk; this is described in the following section.

**CM Troubled Talk**

Troubled talk is a discourse genre that takes place as a response to the presentation of an emotional and/or cognitive problem. It deals with problems, ways of coping with them, and possible solutions. The characteristics of troubled talk can be situated along a broad continuum of types of distress and responses to them. Troubled talk is likely to take place between participants who ask for help and caregivers who may be professionals, nonprofessionals, or even colleagues. CM troubled talk might occur via synchronous or asynchronous channels of communication. After the problem has been presented, various kinds of responses are possible depending upon the nature of the problem, previous professional experience, differences in language and culture, and the social positioning of the participants in the communication (Ben-Peretz & Kupferberg, 2007; Kupferberg & Gilat, 2002; Kupferberg & Green, 2005).

Support given by experts or by colleagues may be affective or cognitive in nature. Psychological support includes emotional support, positive response, empathic attention, the building of confidence, the management of pressures, and the improvement of coping abilities (Kupferberg & Green, 2005). Cognitive support includes the encouragement of the creation of partnerships in professional matters. Support of both the affective and cognitive kinds requires awareness of the individual's needs, skills for identification of those needs, and knowledge of how to create a net of support (Paulus & Scherff, 2008). In the following section, the issues that are dealt with in crisis situations in routine educational contexts are described.

**CM Troubled Talk in Educational Contexts**

Stern-Peretz and Tobin (2010) analyzed CM institutional discourse in a linguistic-semiotic framework, in which one student related a difficult and frustrating event she had undergone with another student. She asked for advice and insight from the female members of the group who were studying with her in the same academic course. One student responded with concern and care. Another student answered in a blunt, pragmatic way. A third offered personal advice, while the fourth offered her own analysis of the event. In other words, the same request for help gave rise to multiple and diverse responses. From this example, it is clear that requests for help can be responded to in a variety of ways, which may help the person in distress perceive the event from different viewpoints.

Research on CMD in higher education has focused on ways of encouraging partnerships and promoting the active involvement of students in building shared knowledge (Brown, 2001; Georgakopoulou, 2004; Ke, Chavez, Causarano, & Causarano, 2011; Kitzmann, 2003; Kolloffel, Eysink, & de Jong, 2011; Meyer, 2010). Participants in online conversations have been found to be freer, permitting glimpses into their personal worlds, as well as into the academic aspects of
their personalities (Brown, 2001; Kolloffel, Eysink, & de Jong, 2011). Previous studies have also shown that collaboration promotes learning and that technology encourages the building of collaborative knowledge among learners. Technological environments provide learners in higher education with opportunities to share different points of view and to develop relationships with the community that investigates issues connected to higher education (Garrison, Anderson, & Archer, 2000; Meyer, 2010).

In teachers colleges, troubled talk often concerns the distress of student teachers. Student teachers face dilemmas in dealing with stress regarding the appropriate response to events that happen in their practicum teaching classrooms, how to implement theory in practice, and pupils' behavior. Studies of troubled talk in teacher education have reported on the social and emotional difficulties of pre-service and novice teachers (e.g., Paulus & Scherff, 2008). Baker-Doyle (2011) points to the importance of the establishment of online social networks to support young teachers, similar to other kinds of social networks that they use in their daily lives. However, pre-service teachers often fail to identify their own need to participate in a community of learners, thereby missing out on the benefits that a community of practice could provide (Lave & Wenger, 1991). In communities of practice, such as teacher networks and professional learning communities, learners develop shared norms and practices through collective activities and experiences that contribute to the socialization of teachers as active members of a professional community. Teachers' networks are extremely common today due to the Internet, globalization, new technological paradigms in scientific research, and the increasing global influence of multinational organizations (Castells, 2000).

In CMD, there is always a danger that, without a guiding hand, the interaction might take an unwanted turn. One or more participants may take over and prevent others from expressing themselves fully (Lambiase, 2010). The “guiding hand” in this study is called the “forum moderator”—a person who moderates and monitors the digital conversation. The role of the teacher educator as a forum moderator who guides the discussion is discussed in the next section.

The Role of the Communication Moderator in Educational Contexts

Lambiase (2010) analyzed messages generated in an online discussion group immediately following the bombing of a federal building in Oklahoma City in 1995. She found that the absence of an efficient forum moderator enabled a few participants to dominate the discussion, silence some participants, and offend others. As a result, the discourse topics became unfocused, reducing the ability of the forum to help participants cope with the event. Topical digression is a very common phenomenon in CMC (Herring, 1999). Many researchers (e.g., Jung, 2001; Nirgal, 2001; Nirgal, Noor, Gilbert, & Reinhold, 2009) have focused on the forum moderator, the person who leads the CM discussion, emphasizing the need to increase personal-affective guidance when there is no face-to-face interaction.

Xin and Feenberg (2006), in writing about the forum moderator in educational contexts, attribute three major types of function to the forum moderator's role: contextualizing functions, monitoring functions, and meta-functions. The first set of functions includes the forum moderator's opening comment that states the theme of the discussion and establishes a communication model, setting the norms by suggesting rules or by modeling, and determining the agenda by selecting topics of discussion and contextualizing the discourse. The second set of
functions includes the moderator's recognition of the participants' contributions to the discourse, prompting by means of asking questions, handing out assignments or tasks (this may be carried out through private messages or through public requests in the forum), and making assessments. The third set of functions includes making meta-comments that serve to maintain the flow of the interaction by weaving the participants' comments into a meaningful discussion and delegating assignments to participants.

Jung and Latchem (2011) emphasize the role of the educational forum moderator as an educator who guides learning in the virtual world. Their suggested model reveals the complexity of the process: The educator moves from training and instruction (training involves skill acquisition, while instruction is essentially concerned with specific information acquisition) to initiation and induction (initiation involves familiarizing participants with social values and norms, while induction involves introducing the participants to thought systems, such as teachers' ways of thinking and acting). This process takes place by means of reflection and dialogue. Reflection reveals to participants a vast array of facts, beliefs, experiences, doubts, competing ideas, and opinions (Milet & Peek, 2000). Dialogue is developed as a result of the reflections as participants examine ideas, verify their learning, provide feedback, and construct knowledge. The effective educational forum moderator acts as an effective instructor according to these standards.

Educational requirements and their fulfillment are similar in face-to-face instruction and online instruction. However, the role of the forum moderator is different from the teacher who teaches face to face, in that face-to-face teaching includes nonverbal gestures and regulated turn-taking, in contrast to online teaching, which focuses on the written language with no regulated turn-taking (Herring, 1999, 2010; Kolloffel, Eysink, & de Jong, 2011). It follows that the forum moderator must manage the discourse in an explicit verbal manner.

**Research Questions**

During the crisis to which this article relates, the educational institution was closed, but the channels of communication remained open because the tools of ICT remained fully available. The student teachers were not able to remain connected continuously and were not totally available for learning, but they became available periodically. The teacher educators wanted to continue studies, as there was no way of knowing when the situation would return to normal. At the same time, it was clear to the teachers that they must take the situation and the problems that arose from it into consideration.

Thus, the research questions that guide this study are the following:

1. In what ways did the teacher educators’ moderation of CM troubled talk provide support during the crisis?
2. In what ways did the teacher educators' moderation of CM troubled talk promote professional growth during the crisis?
Method

The data were collected and analyzed and a model was built to explain the phenomena under study. During the period of the research, the researchers returned twice to the same participants who experienced the events. The data were collected from three parallel sources of participants (three groups of student teachers), a fact which strengthened the possibility of building theoretical explanations for the phenomena under study. The documents analyzed in this study are institutional texts characterized by their intention to achieve a specific purpose and influenced by the specific institution and its norms (Drew & Heritage, 1992; Heritage & Clayman, 2010).

Participants

The student teachers are predominantly young women aged 20-28, some of whom are mothers to small children. The majority of the student teachers are Jewish, with an Arab minority. Some student teachers come from a religious background, while others are secular. The research population includes 34 student teachers distributed across four courses given by three teacher educators, as described in Table 1.

<table>
<thead>
<tr>
<th>Teacher educator and course</th>
<th>Population</th>
<th>Previous acquaintance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 1 Mathematics (two courses)</td>
<td>10 1st-year students studying for a B.Ed. and Teaching Certificate. Average age: 24.2, range: 18-38. 4 males, 6 females.</td>
<td>No previous mutual acquaintance beyond two months of participation in course.</td>
</tr>
<tr>
<td>TE 2 General Pedagogy Of various disciplines</td>
<td>11 1st-year students studying for a B.Ed. and Teaching Certificate. Average age: 25.4, range: 21-38. 2 males, 9 females.</td>
<td>No previous mutual acquaintance beyond two months of participation in course.</td>
</tr>
<tr>
<td>TE 3 Pedagogy of Science Teaching</td>
<td>13 students studying for a Teaching Certificate: nine B.Ed. students including six 2nd-year students and three 3rd-year students, and four retraining students with prior academic first degrees. Average age: 26.6, range: 20-40. 2 males, 11 females.</td>
<td>Some previous informal mutual acquaintance among some of the 2nd and 3rd-year students.</td>
</tr>
</tbody>
</table>

Table 1. Characteristics of the participants (N=34)

Data Collection

The data were collected via the following instruments for purposes of triangulation and reliability: a) three cumulative logs (one for each class) of email and forum correspondences among the participants of each course during the 20-day period of the events (see Table 2); b) student teachers' written responses to an in-class anonymous open-ended questionnaire filled in at the end of the 2008-2009 academic year (N=34) (see Appendix A); and (c) an online non-
anonymous open-ended questionnaire that was sent to the student teachers via email two years later (N=16) (see Appendix B).

The authors, who worked at the same college and had collegial relations, had not collaborated on research before or during the crisis. In a chance meeting after the crisis, they discussed the value of the data that they had collected individually. This conversation led to the current joint study. Thus, whereas the data from the first instrument were not intentionally collected for research purposes during the time of the crisis, the second and third instruments were designed and administrated for the purpose of this research after the crisis.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Messages from teacher educators</th>
<th>Messages from student teachers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Mathematics classes</td>
<td>24 to the whole group</td>
<td>41 to the teacher educator</td>
<td>93 emails</td>
</tr>
<tr>
<td></td>
<td>28 to individual students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Pedagogy</td>
<td>33 to the whole group</td>
<td>18 to the whole group</td>
<td>79 messages to the forum</td>
</tr>
<tr>
<td></td>
<td>28 to individual students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedagogy of Science Teaching</td>
<td>32 to the whole group</td>
<td>6 to the whole group</td>
<td>141 emails</td>
</tr>
<tr>
<td></td>
<td>43 to individual students</td>
<td>60 to the teacher educator</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Summary of messages sent during the crisis situation (N=313)

All of the student teachers, without exception, took part in the electronic communication. Some of them wrote more and some less, but all three of the teacher educators kept in contact with each student teacher and encouraged them to keep in touch via CMC. There is no information on the communication that took place among the student teachers, but there are evidences that such communication (both phone calls and personal emails) did take place from some of the comments the students made.

In order to uphold research ethics, written permission was obtained from the student teachers to use their CM messages and responses to both open-ended questionnaires. In addition, we used pseudonyms and changed all identifying details to protect the participants' anonymity. The student teachers' responses to the offline open-ended questionnaire (Appendix A) were anonymous and, therefore, only the class to which the students belonged was known to the researchers; the class is noted at the end of each response in the examples presented further below. At the end of the examples drawn from the student teacher responses to the online non-anonymous open-ended questionnaire (Appendix B), the first letters of the student teachers' names are noted, together with the class to which the students belonged.

**Data Analysis**

The researchers created five documents from the accumulated textual materials: three cumulative logs of the email communications (one for each group) and two cumulative documents that include the student teachers' responses to the follow-up questionnaires. The documents were read several times until three processes emerged: Active and immediate contact with students which creates a setting for emotional expression; Development of support and of academic learning;
and Creation of a supportive learning community that provides support and professional development.

Findings

The first process, **active and immediate contact**, relates to the reciprocity that developed between the teacher educators and the student teachers, in which the expression of empathy by the teacher educators for the situation of the student teachers created the setting in which CM learning became troubled talk. The second process, **development of support and academic learning**, relates to personal distress (which originated from both the situation and the academic demands), communal support, and academic aspects. The third process, **creation of a supportive learning community**, combines the social, emotional, and academic aspects of support and professional growth.

The findings are presented and analyzed in two parts in relation to these processes. In the first part, communication that took place via email during the crisis is presented, and in the second part, the findings that were collected from the surveys after the crisis are presented.

**Findings from Email Communication**

**Active and Immediate Contact**

Our first intention in connecting via CMC with our student teachers was to maintain their study routine. As seen in the examples below (originally written in Hebrew and translated by the authors), all three teacher educators planned to transfer their teaching from the usual face-to-face mode to the CM mode:

*Shalom everyone, I just opened a new [CM] forum, please, enter. ... I plan to use the forum as a learning environment. The first assignment: Write what is intelligence according to Gardner?* (TE 3, Pedagogy class, January 4, 2009)

*We’re lucky that last week I gave you this semester’s assignment and two other exercises so you can start working on them. To be sure that everyone received the assignment, I am attaching the worksheets. You can do the work in the shelter ☺...* (TE 1, Math class, January 1, 2009)

*Shalom everyone, I just received a message that today all lessons will be cancelled. Since we have a limited number of meetings, I want to take advantage of this CM option to promote our learning, although I recognize that the conditions are not ideal.* (TE 2, Science Pedagogy class, December 30, 2008)

Although the teacher educators wanted to continue the learning process, they did not ignore the context, as can be seen in the examples below. These early teacher emails were intended to create communication, empathy, and a sense of sharing a common experience with the students:
I hope you're all fine. Today I spent some time in the shelter, obeying security orders. Do not neglect [security orders]! (TE 1, Math class, January 1, 2009)

Some of us are located within the range of the Kassams and Grads [missiles] and I assume that many of us didn't sleep last night. Some of you spent the night in shelters or under a concrete roof. Those of you who are parents know that your children are stressed and terrified. War is not the kind [of thing] we want our children to experience, but in life, as you know, not everything is under our control. However, one thing is our choice: the way we behave in such times. (TE 2, Science Pedagogy class, December 30, 2008)

These days, although we are not meeting [in the classroom] I would like to see our forum as a place for connection ... (TE 3, Pedagogy class, January 4, 2009)

Thus, the teacher educators initiated the communication, defined the goal as continued academic learning, and clarified how this would be carried out. At the same time, they adopted an unconventional position in relation to the student teachers by addressing a subject that went beyond the boundaries of the course content, that of the ongoing crisis situation in which the participants found themselves.

The decision to initiate immediate communication with the student teachers that related both to studies and to the crisis situation created a framework that connected the participants and offered them a place in which they could describe their personal reactions to the crisis. For the teacher educators, as forum moderators who set the tone of the communication, this framework provided not only a place of participation, but one of leadership. The initiative taken by the teacher educators early on was the critical element that influenced the content of all future communication.

Development of Support and Academic Learning

In response to the “door” opened by the teacher educators, emails from the student teachers began to arrive, expressing their fears and concerns:

I live in Ashdod, the battlefront. My family is stressed and most of the day I stay [at home] with my elderly parents and my little nephews who are scared to death. On Saturday, a Kassam fell close to my house (two buildings away). The whole house shook and all of us were frightened. We do not leave the house, not even to go to the close-by mini-market. It sounds like I am exaggerating, but I'm not used to these kinds of situations. (M., Math class, January 4, 2009)

Good afternoon. For those of us who have been bombed since 8:00 in the morning, it seems as if it is already evening. The situation here is just like a movie—a horror movie. I'm not sure how much I'll be able to write as it is the third time I'm trying to write this email. Today, a Kassam fell closer than ever, on the neighbor’s apartment and destroyed a house just like ours on the third floor, like ours, completely—a once-in-a-lifetime experience. I'll not write here what I
feel because it is impossible to describe such things and because I'm going through enough suffering here without talking about it. ... It is impossible to sit near the computer for a long time, as this room is not protected. As for me, I'm lucky that cellular phones were invented. Unfortunately, I have to get out of this room; there were quite a few bombs falling without alarms and, as I said, the room is not protected. (V., Science pedagogy class, January 3, 2009)

These emails testify to the kind of experiences the student teachers lived through during this period. They wrote about survival, the need to be in a safe and protected place, and the loss of a sense of time. They expressed stress to the point of speechlessness, insecurity regarding their surroundings, and uncertainty about their and their family's physical safety at any given moment in the form of short, reserved descriptions. The student teachers chose to minimize their descriptions of reality, as it seemed to be too stressful. Some of those undergoing danger were not able to describe their feelings at the time. These responses to the teacher educators’ emails communicated that, for the student teachers, all semblance of routine had stopped, and the life-threatening situation demanded that they utilize all of their resources for coping with survival (although later, it could be seen that not all the student teachers had been in the same position). At this stage, the teacher educators, despite changes in the way they taught and in the amount and nature of the academic requirements, continued to give weekly assignments as they would in routine times.

Teacher educator 1, in addition to engaging in troubled talk, uploaded mathematical solutions and exercises for independent work, in keeping with the syllabus. Teacher educator 2 requested that the student teachers continue to write in their pedagogical diaries, but instead of writing about classroom teaching, they were instructed to write about their personal feelings about the crisis situation and to suggest ways of coping with them. Student teachers were asked to write virtual lesson plans that could be sent to the pupils that they were supposed to be teaching during this time. Teacher educator 3 urged students to continue to read the academic articles that had been planned for each weekly session of the course, and she uploaded guiding questions related to the articles.

The teacher educators' requests to maintain routine, read papers, do exercises, and so forth did not meet the basic needs of many of the student teachers at the time. The following emails might suggest that they unintentionally added to their students’ stress by requiring that they continue studying. For example, one student teacher complains: The truth is that I'm having difficulty thinking (even a little) about studying. It isn't easy when you're a parent ... (T., Pedagogy class, January 5, 2009). Another student teacher explains and protests:

Emotionally, I find it very hard to study now. I will try to do my best because I do not want to accumulate gaps, but I don't think it is fair to teach new material during this time. I understand that some students live outside of the missile range or in more distant areas where routine continues, but for those of us who are in the war, it's hard. (D., Math class, January 3, 2009)

Another student teacher explained the effect of the environment on her ability to think:
Today, I moved in with my parents who live in Jerusalem. I can testify that the way of thinking changes according to the surroundings and the atmosphere that you're in. One might call it 'climate.' (L., Science Pedagogy class, January 5, 2009)

These quotations show that in addition to the issue of existential anxiety, the troubled talk included subjects such as difficulty in thinking and inability to focus on learning the subject matter. Some student teachers who lived closer to the border (between Israel and the Gaza Strip, where hostilities were greater at that time) were worried that they would be left behind academically while others continued to study, as can be seen in the following responses sent by teacher educators:

[...] I stand by you and identify with your feelings. You might not believe it but I know precisely how you feel: the kind of paralyzing helplessness and frustration of having no control over the events and the time schedule. However, we [in the college] have an intense wish to maintain a regular life routine. If there is any way I can be of help, please, let me know and I'll [physically] come to you. (TE 3, Pedagogy class, January 7, 2009)

Hi dear [...], I'm in a similar situation to yours. Not so many missiles, but definitely—missiles. I'm sending all of you the papers so you can keep your mind busy with other, banal, daily matters, and in this way reduce the stress. From my experience, if I'm occupied, it helps me to divert my thoughts. My heart is going out to you. You are invited to call and talk with me. I'm trying to give simple assignments. I'm with you and I promise that if you are not able to hand in assignments, your grades will not be affected. Keep in touch. (TE 1, Math class, January 5, 2009)

[...] I'm dying to get back to routine, to hear your stories about your meetings with students and teachers, and I even miss your continuous complaints about the burden [of assignments]. (TE 2, Science Pedagogy class, January 2, 2009)

The above quotations testify to a transition from formal to informal discourse, from the writers positioning themselves as teacher educators to positioning themselves as support-givers and participants in a group of people who share similar experiences. Their responses show caring and comforting language, a desire to help, empathy with the student teachers' distress, and exposure of their own private ways of coping with stress. Each one of them responded to the troubled talk by encouraging their students and accommodating the assignments to their ability to study. Despite their expression of empathy for the student teachers' plight, the teacher educators continued to promote academic learning by giving assignments and communicating requirements for submission. The assignments were given simultaneously with the support and care described above.

Creation of a Supportive Learning Community

The dual task that the teacher educators took upon themselves, as academic lecturers and caregivers, resulted in closer contact among the community members in a way that contributed to
the creation of a supportive learning group. The support did not come from the lecturers alone, but from other members of the group, as well. Each student teacher who felt able to do so supported others in their assignments, as well as writing words of encouragement. For example, affective support is expressed in the following quotation written by a student teacher who lived far from the Gaza-Israeli border:

*I apologize for not writing earlier, but I read everything! I feel like an outsider because here, in the center of the country, everything is as usual and my connection to this war is through TV and through you. I find myself reading and identifying with people that I hardly know. So, I’m encouraging you and I hope that South Red [the name of the warning siren during missile attacks; emphasis in original] will only be the experience of seeing the amazing red color of anemones [red flowers that bloom in vast areas in the south of Israel].* (Do., Science Pedagogy class, January 6, 2009)

The following example illustrates how one teacher educator functioned to create a group that supported learning and encouraged student teachers to be responsible for promoting the learning of other group members:

*[…] I'm happy to answer your questions, but I think you'd better ask each other before [you ask me], that way you'll learn better. ... Make sure that all of you receive the materials, be responsible, I trust you!* (TE 1, Math class, January 3, 2009)

The following testifies to the formation of such a group:

*Hi TE 1, […] sorry to annoy you a bit with questions about question no. 9. ... Please, give us an example or a hint on how to solve it in an algebraic manner. We [the students of the math class] discussed the subject between ourselves and we are not sure about our solution.* (A., Math class, January 7, 2009)

Thus the teacher educators called on their student teachers to support each other, both emotionally and academically. From the above quotations, it can be seen that the students responded to this challenge.

**Findings from the Two Open-Ended Questionnaires**

So far, we have reported on the email communication that took place during the crisis itself. In this section, we show how the processes that were emerged from the email content find expression in the students’ retrospective perceptions of the email communication. In the findings from the follow-up questionnaires, one administered after five months (in July, 2009) and one after two years (in January, 2011), the first process of active and immediate contact does not appear because it belongs to the time of the crisis and is unique to that period. The other two processes, the development of support and academic learning and the creation of a supportive learning community, are reflected in the comments that were collected after the crisis in the student teachers' written responses to the offline anonymous questionnaire and the online non-anonymous questionnaire. For the purpose of coherence, we present the responses of the student
teachers from each questionnaire according to the processes in the following order: first, the offline anonymous questionnaire and, second, the online non-anonymous questionnaire.

The student teachers' responses to the offline questionnaire (Appendix A) were anonymous and, therefore, only the class to which the student teachers belonged was noted at the end of each response. In their responses to the online non-anonymous questionnaire (Appendix B), the first letters of the student teachers' names were noted together with the class to which they belonged.

Development of Support and Academic Learning

In both questionnaires, the student teachers were asked to describe the content of their emails, the impact of the troubled talk on their ability to cope with the situation, and the kind of relations that developed among their peers. Following are some of their answers to the open-ended questionnaires:

- Regarding the group, I really feel we are a group, that there is [something] between us that is more than a regular class. Students supported each other and shared their secret feelings with one another [and], in that way, I could see that there are others who feel exactly like me and that I am not alone. ... There was a feeling of care. (Science Pedagogy class)

- [Today] there is a sense of “being a group,” of friendship and care. There is continuous interaction between students. For example—the sharing of stories about coping with situations of stress was very special and gave the feeling of intimacy, even when I sat alone next to my computer. (Pedagogy class)

- It's very important for me to mention that the connections developed via emails helped me a lot. I think that I would have never “poured my heart out” otherwise. (V., Science Pedagogy class)

- It was obvious that on the other side of the screen there is a caring person that does not only expect you to do the learning assignment, but rather understands and shares the pain. It was very helpful for me. For me personally, it reduces the pressure. Your caring made me feel committed to you and to the course. (Me., Math class)

As these examples indicate, the discourse involved the expression of feelings, and the student teachers received and gave emotional support to their peers. In addition, they reported that the support helped them to cope with their suffering. At the same time, in addition to giving legitimacy to the troubled talk, the teacher educators continued to teach. This resulted in a discourse made up of a combination of teaching and emotional support.

Evidence of the dual nature of the communication can be found in the responses of two student teachers to the open-ended questionnaire:

- There was a great need to continue the communication; therefore, we all continued answering the emails and doing the assignments. From a personal point
of view, I can say that the situation consolidated us as a group and brought us closer to each other. (O., Science Pedagogy class)

[...] beyond the subject matter that we tried to learn, we spoke about the feelings of those students who live in the South and we shared experiences. (Sh., Pedagogy class)

The forgetting of events that is usually associated with the passing of time is not evident in the responses reported here. It appears that the unconventional crisis communication, which included attention to distress while attempting to return to routine, left a strong impression on the participants, and that they were able to revisit the situation and articulate what it had been like.

Creation of a Supportive Learning Community

Evidence that supports the creation of a supportive learning community includes the following excerpts from the responses to the questionnaires; they focus on both peer interaction (the first two examples) and on the role of the teacher educator in fostering such interaction (the last two examples):

In my opinion, it was good that we integrated the subject matter with the context. As a result of the assignments, we [students] came closer to each other and the sharing of our experiences promoted this process. The final result was consolidation of the group after the war. (Science Pedagogy class)

As a result of working together on the assignments, the ties among us got stronger. We [students] worked in collaboration and tried to help each other. (Pedagogy class)

We [students] had daily phone calls talking about both the assignments and the situation. (Math class)

The warm atmosphere that was created by your actions—you knew which one of us knows the answers to your questions and you sent us to each other—kept strong connections among us and among you and us. (A., Math class)

The specific way of learning that you introduced to us opened the possibility for continued learning and support of each other throughout the whole period. This way, we learned what it means to work collaboratively during an uneasy time. (G., Pedagogy class)

The way the teacher educators managed the discourse of learning accompanied by emotional support led to the creation of a collaborative social group in which its members shared a common fate in each of the classes. The process of creating group support left the participants with strong impressions that allowed them to appreciate the special contribution of the group to their ability to cope with the traumatic events. It seems that the inclusion of both cognitive and emotional components in the discourse contributed to the creation of a supportive learning group.
Discussion and Conclusion

Nowadays, in normal times, most instructors in higher education use CMC technology as a means to communicate with students. However, unless it is an online course, most do not use it as the exclusive or dominant means of communication with students. In the present study, the teacher educators were forced to move hastily and without preparation from face-to-face communication to CMC. They started emailing their students, an easy and familiar mode of communication. In comparison with other new ICTs (such as blogs, text chat, Skype, etc.), email is an effective way to communicate, as students frequently open their email inbox, especially in times of crisis and isolation when people are eager to connect, share, and keep informed of what is happening around them.

The theoretical background to our study dealt with common sources of stress among educators (Brown, 2001; Georgakopoulou, 2004; Ke, Chavez, Causarano, & Causarano, 2011; Kitzmann, 2003; Kolloffel, Eysink, & de Jong, 2011; Meyer, 2010) and the uses of technology in crisis situations that are unrelated to educational contexts (Diers & Tomaino, 2010; Mileti & Peek, 2000; Palen, Vieweg, Liu, & Hughes, 2009). This study deals with troubled talk in a crisis situation whose source was not in the educational field, but whose treatment was carried out in an educational context.

Through investigation and analysis of the ways that the teacher educators managed communication in their classes, we arrived at the processes reported in the findings: active and immediate contact, a development of support and academic learning, and the creation of a supportive learning community. These three processes delineate the ways in which management of CM troubled talk provided support and promoted professional growth.

The first process, active and immediate contact, refers to the creation of a setting for emotional expression. This emerged from emails that were sent at the onset of the crisis for the purpose of conveying the intent to use technology to continue the learning process. Each of the teacher educators wrote some opening comments in these messages that referred to the crisis situation and to the way that communication would be monitored within the group. Analysis of the ICT communication process reveals that the teacher educators changed their positioning from a strictly academic role of college lecturer to a more personally supportive one. They constantly shared their emotions with the student teachers by writing about the way they felt during the crisis situation. This behavior is in accordance with research on distance learning (for example, Ben-Peretz & Kupferberg, 2007; Brown, 2001; Meyer, 2010) that has shown that when there is no face-to-face interaction, the need for personal-affective guidance increases. In other words, the teacher educators acted according to the first set of functions described by Xin and Feenberg (2006), which includes the forum moderator's opening comment that states the theme of the discussion and establishes a communication model. The change of positioning and the support and concern that were presented in the initial emails set new norms through modeling and created informal conversation within the institutional discourse. A new kind of routine was established, consisting solely of CMC, after the regular routine had been disrupted by the crisis situation.

The second process, the development of support and academic learning, emerged from the analysis of the teacher educators’ reactions to the students' initial emails. As moderators, the
teacher educators gave more affective support to those who needed it and encouraged other students to support those who were more emotionally distressed (Ben-Peretz & Kupferberg, 2007; Paulus & Scherff, 2008; Mileti & Peek, 2000). At the same time, they retained their original aim of promoting continued learning. The attitude of care accompanied the requests for continued learning and the fulfillment of academic tasks and activities. These tasks and assignments were modified to accommodate the level and type of assignment appropriate for each individual student. The monitoring activity correlates with the second set of functions described by Xin and Feenberg (2006), which includes the moderator's recognition of the participants' contribution to the discourse. Jung and Latchem (2011) point to the complexity of e-education, which includes components of training and instruction, as well as components of initiation and induction. The flexibility of the academic demands and the sensitivity to students' ability to carry them out coincide with the last two components of Jung and Latchem's model.

The third process, identified in this study combines components of both support and learning and reflects the concept of a supportive learning community. The communicative-dialogic ability of the teacher educators to generate social processes in a technological environment was crucial to the formation of such communities. The way the communication with the students was monitored is in accordance with Xin and Feenberg’s (2006) third set of functions, according to which the role of the forum moderator is to be a leader, where leadership is considered to be a process of facilitating or guiding a collaborative learning setting through dialogue. This was accomplished by meta-comments from the teacher educators that served to maintain the flow of the discourse by weaving the participants' comments into a meaningful discussion.

Building on the above analysis, the following model (Fig.1) is presented for CM troubled talk as a framework for support and professional growth in times of crisis in an academic context. The model shows the way in which the forum moderator moves the wheels of troubled talk and learning that leads to the smooth operation of the process of professional development.

This model bridges the existing gap between the literature that deals with educational distress and that which deals with distress in crisis situations in educational contexts. The kind of short-term crisis that we describe in this study typically leads to the closing of educational institutions (as was the case also, for example, in the shooting of children that took place in a school in Connecticut on December 14, 2012) and the cessation of learning, and it may result in an additional toll of alienation between students and teachers. Today, with the intensive use of ICT in educational contexts, student-teacher connections can be maintained. This study illustrates how online connections can be implemented for the purpose of sustaining learning and providing support among students and teachers.

Participation in the kind of supportive communities that developed in the present study provided the student teachers with an experience that will hopefully help them to lead similar communities as professional teachers in the future. Although this study relates to a specific and local situation whose context is limited, the principles that emerged from it can be implemented in other contexts in which the routines of daily life and studies have been abruptly curtailed. Crisis situations occur from time to time throughout the world. For this reason, it is advisable for teacher educators to prepare themselves to act professionally in such situations, basing their actions on theoretical knowledge. The findings suggest that the community of teacher educators
can be harnessed to support and guide student teachers in times of crisis when face-to-face meetings are impossible and the only (or major) way of communicating is via CMC. The model is a visual demonstration of the sequential conditions of CMC.

The teacher educators found themselves alone in front of the computer with no one to consult with during the crisis described here. They understood the importance of creating support groups via CMC, not only for the students, but also for the professionals who are in charge of students, resulting in the identification of two parallel needs. The first is a need for an academic course that teaches student teachers how to use CM troubled talk for coping with crisis situations, as well as to learn how to deal with their future students at such times. The second is a need to create a professional social network of teacher educators as a supportive learning community in times of crisis. Our model may contribute towards both of these ends.
Notes

1. Hamas (“Islamic Resistance Movement”) is a militant Palestinian Islamic organization that since June 2007 has governed the Gaza Strip (http://en.wikipedia.org/wiki/Hamas).

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Appendix A: In-class anonymous questionnaire for student teachers

During the military operation you received emails from your teacher educator. Describe the issues written about in those emails.

(1) Describe the relations that were established between yourself and other students as a result of the assignments that were handed out.
(2) Describe the teacher educators' role in the creation of these relationships.

Appendix B: Online non-anonymous open-ended questionnaire for student teachers

(1) Did you communicate via email with your teacher educator and with your fellow students during the military operation?
(2) If your answer is positive, what issues were raised in these communications?
(3) In what ways did the CM discourse help you?
(4) What do you think about the decision of your teacher educator to continue the learning process by means of email communication during the military operation? Explain your answer.
(5) Will you use similar CM methods when you become a teacher?

Biographical Notes

Dvora Gorev (Ph.D.) [gorevd@bezeqint.net] is a lecturer in the Department of Mathematics Teacher Education at Achva College, Israel. Her research interests include integrating digital technologies into mathematics education and the knowledge of mathematics teachers.

Adva Margaliot (Ph.D.) [adva_m@macam.ac.il] is a lecturer in the Department of Science Teacher Education at Achva College, Israel. Her research interests include integrating digital technologies into science education and the development of creative cognition for higher order thinking skills among teachers and student teachers.

Tamar Vaisman (Ph.D.) [tami.vaisman@gmail.com] is a lecturer in the Department of Science Teacher Education at Achva College, Israel. Her research interests include integrating digital technologies into science education and adult education for teachers and student teachers.