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## Team-based simulations: Learning ethical conduct in teacher trainee programs

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### H I G H L I G H T S

- ▶ A four-dimensional model emerged describing the concept 'Learning through TBS'.
- ▶ Most of the simulations differed from the original incidents.
- ▶ Trainees' decision making depends greatly on the context and people involved.
- ▶ Integrating TBS into teacher training programs may promote trainees' learning.

### A R T I C L E I N F O

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### A B S T R A C T

This study aimed to identify the learning aspects of team-based simulations (TBS) through the analysis of ethical incidents experienced by 50 teacher trainees. A four-dimensional model emerged: learning to make decisions in a "supportive-forgiving" environment; learning to develop standards of care; learning to reduce misconduct; and learning to develop an integrative approach. Most of the simulations differed from the original incidents. The reason for these discrepancies may be due to the fact that trainees' decision making depends greatly on the context and people involved. Findings suggest that teacher training programs should incorporate TBS as an integral part of their curriculum.

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### 1. Introduction

It is accepted that a teacher requires not merely a level of cognitive attainment but must have a sound ethical basis as well (Buzzelli & Johnston, 2001; Elbaz, 1992). Indeed, teaching may be considered primarily a moral enterprise, with moral values at the heart of teachers' knowledge of their discipline (Bullough, 2011). Furthermore, society has clear expectations for teachers to be able to make ethical decisions for the common good (Starratt, 2007) and expects teachers' actions to be always driven by a commitment to moral excellence. Given the ethical expectations that one has of teachers, it seems essential that teacher training programs should include systematic education on how to deal with ethical dilemmas while working in teams and especially under stressful conditions.

However, whether due to budgetary and time constraints, or lack of professional interest, many teachers today continue to graduate without having had sufficient exposure to ethical dilemmas and how to deal with them (Bullough, 2011). This lacuna calls for the promotion of some program at the training stage to

develop a teacher's potential to cope effectively with ethical dilemmas so that they may be properly prepared to deal with such matters prior to actual encounters with situations where unethical decisions may result in serious repercussions (to them, their pupils, or their schools).

In as much as most of today's teachers' activities revolve around teamwork (Somech, 2008), the ability to make difficult ethical decisions while collaborating in teams is a particularly essential ingredient in educational systems. An effective teacher should not only have sound personal attributes (such as the ability to establish positive interpersonal relations when operating as part of a team), but also the ability to make proper ethical decisions while working in teams, often under stressful, uncertain or changing circumstances (Nevin, Thousand, & Villa, 2009). Researchers have demonstrated that stressful situations have adverse cognitive effects on decision makers, for example reducing their ability to attend to multiple information sources, which may impact the quality of the ethical decision making process (Bullough, 2011).

Team-based simulations (TBS) have long been used as a tool for teacher instruction, yet previous studies have generally focused on the pedagogical approaches and educational tools that participants

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adopted due to such simulations (e.g., Keskitalo, 2011; Keskitalo, Ruokamo, & Väisänen, 2010). This current study, however, aims to focus primarily on teacher trainees' ethical decision making processes. The findings may help in deciding whether TBS should be integrated into teacher training programs as a method to prepare trainees to cope with real ethical dilemmas.

## 2. Theoretical background

### 2.1. Promoting ethical conduct among teachers

Teachers are moral exemplars. They are expected to model socially acceptable and desirable behavior on behalf of the students and families they serve (Campbell, 2003), and they have to be ethical teachers in order to justify their decisions (O'Neill & Bourke, 2010). One way to promote ethics among teachers is to develop a code of ethical conduct. A code of ethical conduct which specifies desirable behavior, evaluates practice in terms of shared norms and assists in day-to-day ethical decision making, may benefit teachers by promoting their learning, motivation, and professional growth (Barrett Casey, Visser, & Kathy, 2012).

While in many places around the world, teacher organizations or the Ministry of Education develop a code of ethical conduct for teachers and make an effort to implement it (e.g., Canada, USA, New Zealand, Germany, Switzerland, Philippines), the only tool that Israeli teachers have is a draft general code of ethics written for educators in a variety of capacities: school teachers, kindergarten teachers, school principals and inspectors. Thus, there is no code of ethics that addresses the specific needs of school teachers (Executive Committee of the Association of Israeli Teachers, 2002). Furthermore, no concerted effort has been made to publicize this draft general code of ethics in Israel, so professionals who may have a need for them are oblivious to their existence.

While a code of ethics could serve as an important guideline for teachers, studies indicate that in order to think and act ethically in real-time situations, teachers need more than a formal written code of ethics. A code of ethical conduct may assist, but not always instruct exactly what ought to be done in a specific context (Bourke & O'Neill, 2009; Newman & Pollnitz, 2002; Strike, Haller, & Soltis, 2005). Moreover, while organizations or systems can mandate what should or should not be done in particular situations, it is impossible to list all possible scenarios (Carter, 1998).

Various studies (e.g., Arnold, Hooley, & Williams, 2012; Campbell, 2011; Ehrich, Kimber, Millwater, & Cranston, 2011) describe different educational strategies that may promote ethical conduct among teachers, for example, using case studies which include detailed descriptions of real dilemmas (Campbell, 2003) in order to initiate dialog and a dynamic process of competing perspectives. That is in contrast to the relatively passive acceptance of mandated practices (Carter, 1998). Another educational strategy that is used to promote ethical conduct among teachers is to hold workshops that focus on scenario-based professional learning underpinned by two key ethical decision-making models: (1) Kidder's model (1995) and (2) Newman and Pollnitz's (2002) ethical response cycle.

The Kidder's model (1995) of ethical analysis has been used by practitioners in the educational system (Newman & Pollnitz, 2002) to determine whether or not an issue is in fact an ethical dilemma. It consists of three tests that can be applied to a moral issue in order to estimate the ethical decision making process: *The stench test*, *the front-page test* and *the Mum test*. *The stench test* focuses on moral principles rather than consequences, asking people if their actions have an implicit component of corruption; *the front page test* involves ends-based reasoning and focuses on negative outcomes. It asks people how they would feel if their actions were reported on

the front page of the local newspaper, forcing them to think how their actions might look to the outside world; *the Mum test* forces people to put themselves in the shoes of others, asking them what they would do if they were their mother.

The Newman and Pollnitz's (2002) Ethical Response Cycle is a diagram representation of a reflective and analytic process that can be used to reason through ethical scenarios to the point of making a decision. The cycle commences with the recognition of the dilemma, followed by reflecting on personal beliefs as well as initial considerations regarding the outcome of any decision or action. Subsequent phases in the cycle comprise of legal considerations, professional considerations, ethical principles and theories, judgment, actions, documentation of the process and implications for further action.

Evaluation of Kidder's model (1995) and Newman and Pollnitz's (2002) cycle show that teachers are aware of the complexities of teaching and need ongoing systematic support regarding the ethical decisions they make (O'Neill & Bourke, 2010). This study suggests an additional strategy for coping with ethical dilemmas. This strategy is based on team-based-simulations that explore the multifaceted character of ethical dilemmas in complex ethical situations and may help teacher trainees' in reaching ethical decisions in real-time situations.

### 2.2. The multifaceted character of ethical dilemmas in critical ethical incidents

While a substantial number of studies use morality and ethics interchangeably, Wiggins (2006) distinguishes between the two concepts. *Morality* expresses the most fundamental beliefs, but does not necessarily provide a means for resolving practical dilemmas. *Ethics*, on the other hand, does not only relate to beliefs but also to the way people determine how to act in practice. Thus, morals are first order beliefs, while ethics are second-order beliefs which stem from a reflective process about moral beliefs and practices (Sun, 2011). The complex interpersonal nature of teaching, which involves frequent clashing beliefs between teachers, pupils and administrators, renders it a profession which typically generates a multitude of ethical dilemmas (Noddings, 2002).

This study emerges from teacher trainees' dilemmas in teaching and their reflections on their decision making process. Therefore, the study focuses on ethical dilemmas and ethical conduct in teaching. An ethical dilemma in teaching is defined as a problematic situation, usually arising from a conflict of obligations, which demands complex decisions about appropriate responses (Campbell, 2000). The complexity of ethical dilemmas in teaching is further intensified by teachers' emotional involvement in arising situations, as well as by social, cultural and contextual forces. This complexity implies that there are no absolute right and wrong solutions in handling ethical dilemmas, since different forces may change the situation and thus change the derived solutions (Kelchtermans, 2005).

The literature (e.g., Barrett et al., 2012; Bullough, 2011; Warnick & Silverman, 2011) presents several types of ethical dilemmas that are dominant in teaching. One type of ethical dilemmas focuses on *caring for students* (Webb & Blond, 1995) as there are limits as to how and to what degree teachers may care for a student. For example, on the one hand, teachers are expected to be kind and considerate, but on the other hand, for the sake of the child's future, teachers may need to be demanding and insistent.

Another type of ethical dilemmas focuses on *protecting a child against physical or mental harm*. For example, teachers may feel the need to protect their students from harm, while at the same time feel uncomfortable to report suspected parental abuse. Another example may be when a conflict arises between being a "caring surrogate" for the pupil and being a loyal colleague. A caring

teacher who witnesses a colleague treating pupils in a harmful way might find it difficult to confront him/her (Colnerud, 1997; Klaassen, 2002).

A third type of ethical dilemmas focuses on *teachers' accountability to the curriculum*. An example of such a dilemma may be the tension teachers may feel between their responsibility to teach the entire curriculum and what they regard as really necessary for preparing students for real life. Teachers may question whether, given the limited number of teaching hours, it is in the best interest of the teacher, the students, or the school to stick to the specified curriculum or whether it is preferable to teach issues that they deem more important for real life (Campbell, 1997).

Since teachers have to deal with many types of ethical dilemmas, they are frequently forced to decide on an action even when there is no clear-cut answer or the chosen action is followed by further dilemmas (Campbell, 2003). Carter (1998) for example, showed how one case study may generate a range of possible responses. The fact that there are ethical situations where there may not be only one 'correct' answer shows the multifaceted character of ethical dilemmas.

A critical ethical incident is usually an undesirable situation that involves ethical dilemmas and marks a significant turning point or change in a person's life (Author, 2011; Tripp, 1993). In some cases, critical incidents may change a person's decision-making process so that he/she learns how to integrate more ethical values into this process (Christensen & Kohls, 2008). Nilsson (2009) suggested that encouraging teachers to reflect on critical ethical incidents will improve their handling of future ethical dilemmas.

In educational systems, critical ethical incidents are not necessarily sensational events. Rather, they may be every-day incidents that happen in every school. Their classification as 'critical' is determined by the significance and meaning that the teacher attributes to them (Angelides, 2001). Previous studies examining the effectiveness of reflecting on such incidents found that it increased teachers' orientation toward critical thinking, growth, and inquiry (Allen, 2008; Gaba, Howard, Fish, Smith, & Sowb, 2001; Griffin, 2003; Shields, 2004). However, to the best of my knowledge, no study has ever investigated the effect of using team-based simulations as a tool for learning how to deal with ethical dilemmas and improving the decision-making process.

### 2.3. Ethical decision making process in teams

Teachers constantly make judgments both in and out of the classroom. However, the criteria for deciding what to do usually depend on the social and cultural context in which judgments are made and decisions executed. In another context, with different students and a different point in time, the same teacher may decide to act differently and for good reason (Kelchtermans, 2005; O'Neill & Bourke, 2010).

For example, according to Hansen (1998), when teacher trainees were asked to answer the question "whose ethics are we talking about?", their answers related to differences in culture, race, class, gender and language. They suggested that ethics differ widely and that teachers have an obligation to be sensitive to this fact and be non-judgmental when faced with ethical issues. In a later study, Hansen (2002) argued that schools do not exist in a social or political vacuum and therefore, it is possible for teachers to change their outlook on education over time and as a result, change their ethical decisions as well.

An ethical decision-making process is defined as "a decision in which all stakeholders have been accorded intrinsic value by the decision maker" (Christensen & Kohls, 2008, p. 332). When all stakeholders are not explicitly considered, a decision is not ethical. According to the above definition, ethical decision making should be a team process. Making ethical decisions in school as a team is

important because training that is based on a code of ethical conduct cannot anticipate all ethical questions. In addition, dealing with ethical dilemmas in a team makes the commitment to ethics stronger than the attempt to deal with ethical dilemmas alone (Short & Rinehart, 1993; Sumsion, 2000).

However, although the team in educational systems is a well-researched unit, little research has been conducted on the team as an ethical unit per se, and research findings in this area have been difficult to interpret (Treviño, Weaver, & Reynolds, 2006). Nichols and Day (1982) used the moral development theory as a lens for examining group-level phenomena. They discovered that teams demonstrated a higher level of moral reasoning than was revealed on average by individual team members. On the other hand, Abdolmohammadi and Reeves (2003) found no such advantage of teamwork over individuals in producing moral decisions. Thus, the inconsistency of the findings available to date does not allow for clear conclusions to be drawn about team performance when considering critical ethical incidents. This study aims to carefully examine team-based simulations in order to assess their impact on teacher trainees' learning and their ethical decision making.

### 2.4. Learning through team-based simulations (TBS)

Thavikulwat (2009) defines team simulations as exercises that allow participants to experience reality in an artificial environment. In other words, team simulations are simplified versions of reality. They capture the essential dynamics of a workplace through role-playing in a way that allows learners to explore different approaches, test diverse strategies, experience various outcomes, and altogether build a better understanding of key aspects of the real world (Hill & Semler, 2001; Romme, 2004).

Learning takes place not only during the role-playing stage of TBS, but also during the investigative stage, when the role-playing is discussed. During the investigative stage, a process of cooperative learning occurs as participants conduct in-depth discussions of the problem at hand and consider a range of possible solutions before reaching a decision (Romme, 2004). In addition, during the investigative stage, the role players receive feedback from their peers who have observed their behavior via a video recording (Hooper & Rieber, 1995; Masats & Dooly, 2011; Sweeder & Bender, 2001).

Previous studies have shown that TBS has the potential to enhance learning from the two following aspects:

- TBS facilitates better transfer of knowledge.* Research indicates that learning activities that recreate actual work situations foster better transfer of learning (Swanson & Holton, 1999). Simulations provide opportunities to practice educational skills in a realistic risk-free learning environment, so participants can then transfer the knowledge of what they have learned by role-playing and investigation to real educational situations (Anderson & Lawton, 2009).
- TBS enhances knowledge retention.* The role-playing part of TBS furnishes active learning opportunities through 'learning by doing and exploring' (Keskitalo, 2011), similar to another concept termed 'active epistemology,' whereby students are perceived as active individuals in the learning process (Lonka, Joram, & Bryson, 1996). Such a learning process engages participants, leading to increased development of thinking skills, increased ability to reason, all of which promote the retention of knowledge (Bruce & Gerber, 1995; Clark, 2007).

Kelchtermans (1993) collected extensive narrative accounts of teachers' experiences and found several critical incidents in which teachers felt powerless and threatened by others (principal, parents), without being able to properly defend themselves. Based on



Kelchtermans (1993) study, it seems that TBS may provide teachers with an environment to act out critical ethical incidents and learn how to deal with them.

On the other hand, TBS may be less effective if participants perceive the learning environment as intimidating or stressful. The notion of having one's performance analyzed and reflected upon from a critical perspective can be daunting and may lead to fear of mentors' and peers' judgments (Savoldelli, Naik, & Hamstra, 2005). Another disadvantage of TBS is that real-world situations can differ greatly from laboratory-based settings in terms of the intensity of personal involvement in the decision making process and the complexity of determinants and outcomes (Keskitalo, 2011).

Considering the advantages and the disadvantages of TBS, using team simulations is likely to be particularly useful when the stakes are high (e.g., possibility of losing one's job as a teacher) or when the performance arena is stressful and uncertain, as in the case of critical incidents. Furthermore, the experience obtained from the simulation can then be utilized by course designers as a powerful tool for coaching teachers to effectively handle similar challenges in the future (Frederick, Cave, & Perencevich, 2010).

In order to assess the emergent learning of ethical conduct through TBS, the present study was designed as three stages: (a) generating a pool of critical ethical incidents, (b) initiating team-based simulations of critical ethical incidents and discussing them in a supportive environment that is conducive to constructive critical analysis, and (c) conducting qualitative analysis of the videotaped and transcribed simulations and discussions in order to identify the ethical dilemmas and the code of ethical codes that were construed by the trainees.

### 3. Method

#### 3.1. Participants and their educational background

The research observed 50 teacher trainees (35 women and 15 men) who were enrolled in a teacher training program<sup>1</sup> at one of the largest universities in Israel. All the participants were during their first year of practice teaching. They were chosen from 50 Israeli high schools in the center of Israel.

Each participant taught in a different school, and each had been hired through a temporary contract. Various disciplines were represented (biology, mathematics, history, Bible studies, etc.), and the participants' schools varied in the socio-economic levels of the students, representing a cross-section of the school population in Israel (Ben-David, 2010).

The average age of the participants was 24.70 ( $SD = 3.75$ ). 38 participants taught full-time and the rest taught part-time. All participants held a Bachelor's degree. These characteristics roughly represent the composition of the teachers in Israeli educational systems in general (Israel Central Bureau of Statistics, 2010).

#### 3.2. Data collection

The data were collected during 2009. Ethical considerations regarding the procedures of the study were made on the basis of

guidelines taken from the *Ethical Principles of Psychologists and Code of Conduct (2002)*. First, permission to perform the study was obtained from the Institutional Review Board at the author's university. Then, in group information meetings, the research coordinator informed trainees in the teacher training programs that after their study day, they will be asked in a group setting to report on critical ethical incidents they had experienced. They were told that the data would be used to study the effectiveness of TBS in helping teachers cope with ethical situations.

All the participants who voluntarily took part in the study agreed to participate and to role-play because they were interested in learning how to deal with ethical dilemmas in a technological environment and through a unique approach. The trainees were ensured that when the findings of the study were published, their statements during the simulations could not be traced back to them. This assurance was a contributing factor in the willingness of the trainees to participate. The participants received a formal letter describing the goals of the study, the pledge to preserve anonymity and confidentiality, and their right to withdraw from the research at any time. They were also asked to sign an informed consent, including a specific consent to being video-recorded.

#### 3.3. Procedure

The study comprised 50 simulation sessions, each session lasting 45 min (generally, a 10-min period of role playing and 35 min of discussion), with two to three simulation sessions per meeting. The participants were divided randomly into 10 groups of 5, meaning that each group met twice during the research period in order to role-play all the 50 simulation sessions. The research staff included the author (the lead researcher), a research coordinator, mentors (3), research assistants (6) and video technicians (2):

- The author, who has a PhD in educational leadership, has extensive knowledge in teacher training programs and has specialized in investigating organizational ethics in the school system. The author's role was to lead the research, get permission to perform the study, analyze the data independently, compare his findings with the research assistants' findings by performing a cross-checking procedure, and formulate the suitable categories, ethical dilemmas, and codes of ethical conduct. The author was not involved in the team simulations, neither as a mentor nor as an observer. Thus, there was no conflict of interest or dependence between the study subjects and the author.
- The research coordinator had an M.A degree in mentoring and leading groups, and 10 years of experience in mentoring teams. His role in this research was to inform the trainees about the research goals and process, organize the trainee groups, randomly select the critical incidents that would be used in the simulations teams, manage the simulations, and coordinate the video length with the video technician.
- The mentors were senior teachers whose main job was teaching various subjects in high schools (e.g., biology, mathematics, history, Bible studies). They all had an M.A degree in mentoring and leading teachers' teams and had at least 5 years of experience in mentoring teams. As a part-time job, they were hired by the university to mentor teacher trainees in the TBS workshops. Their role was to lead the team simulations, ask questions and manage the discussions, all in a supportive atmosphere.
- The research assistants were second year M.A students in education who have taken courses and had experience in qualitative research. Their role was to identify the participants by code numbers to assure anonymity, translate, code, and

<sup>1</sup> Israeli universities grant a Bachelor's degree in education after the completion of 6 full academic semesters. Students who intend to become teachers must achieve a minimum GPA of 75 and complete a 2-year training program which they may begin either in the 3rd or 4th year of the program or after finishing their Bachelor's degree. The teacher training program is comprised of 20 courses and workshops such as 'educational psychology,' 'teaching methods,' 'evaluation and assessment,' 'technology in the classroom,' and 'practice teaching.' After completing the two-year training program, teacher trainees receive a teaching license for their discipline from the Israeli Ministry of Education and are then entitled to benefits and tenure.

compare their findings with the findings of the other research assistants and with the author of the study.

- The video technicians were M.A students who worked at the audio visual center as video technicians. Their role was to film the simulation segments in the audio-visual room and to transfer it to the computer in the adjacent simulation classroom, where the participants would view and discuss the filmed simulations (Fig. 1). The discussions that were held after the simulations were also filmed by the video technicians.

The study was performed via a three-stage design:

1. *Generating a pool of critical ethical incidents for TBS.* In order to make the research authentic and relevant to the participants' world, it was based on the teacher trainees' own experiences. Therefore, before the actual meetings, the participants were asked to send an email to the research coordinator, describing one critical ethical incident that each of them had experienced while working in a team at school (e.g., at a staff meeting), including all the discussions they could recall and how the ethical incident had been resolved. The research coordinator then re-formulated the descriptions of the incidents, without changing their essential content, but adapting them to fit the role-playing structure of TBS.
2. *Role-playing the critical ethical incidents.* For each session, the research coordinator randomly chose one incident for the participants to simulate, and set a time-limit for the role-playing. The mentors randomly distributed the roles to up to five trainees and asked them to actively play their role. The number of trainees chosen to actively participate in each simulation was determined according to the ethical incident. The remaining participants observed quietly until the role-playing ended. Observers usually sat in a circle around the role-players. The structure of 50 simulation sessions, with two to three simulation sessions per meeting, gave all the participants the opportunity to role-play in at least three simulation sessions.
3. *Investigation-* viewing the videotaped simulations and discussing the emerging ethical dilemmas and their derivative ethical codes. Immediately upon completion of the simulation, the video technician uploaded the videotaped simulations to the classroom computer. The mentors and the teacher trainees then selected specific segments of the video recording to

project onto a screen in the simulation room. The segments chosen were those which included the focal points of the simulation and highlighted the team's ethical dilemma, the decision-making process, and the outcomes based on the mentors' and the teacher trainees' perceptions.

In order to create a supportive, non-judgmental environment, which is essential for an effective investigation of the simulation (Salas, Wildman, & Piccolo, 2009), mentors and teacher trainees were careful to phrase their comments and feedback in a supportive and non-judgmental way. The supportive atmosphere was reflected in the teacher trainees' discussion of the ethical incidents that they had experienced. Since the simulations covered sensitive ethical issues, the discussions were prompted by a set of specific questions that were asked by the mentor, such as: "Can you share with us one or more ethical dilemmas that arose in the team simulation?" or "Can you suggest a code of ethical conduct that pertains to this simulation?"

### 3.4. Data analysis

This study collects data about critical ethical incidents that were experienced by teacher trainees. Since TBS has never been used before to study the efficacy of learning from the process of ethical decision making, we analyzed the data through Grounded Theory, a qualitative methodology which generates a theory from collected data (Charmaz, 2000; Strauss & Corbin, 1998). Grounded theory was suited for this study because: (a) it builds rather than tests theory; (b) it provides researchers with analytic tools for handling masses of data; and (c) it identifies, develops, and connects concepts, all of which are the building blocks of theory (Moghaddam, 2006; Samik-Ibrahim, 2000).

The data analysis followed a three-step process: open coding, axial coding and selective coding, as outlined by Strauss and Corbin (1998):

*Open coding.* Open coding is the process of breaking down the data into separate units of meaning through analyzing, comparing, labeling and categorizing the data. Key words or phrases are labeled, compared and then clustered to form abstract categories (Brown, Stevenson, Troiano, & Schneider, 2002). In this study, the coding began with a full transcription of the TBS sessions. Then, the text was analyzed to recognize key words or phrases and cluster them into subcategories of either ethical dilemmas or codes of ethical conduct. For example, the ethical dilemma 'school rules vs. collegial relationships' (simulation 5) and the derived code of ethical conduct 'We believe that we should be flexible with our colleagues in order to make teaching more effective' were based on several phrases where participants had to decide whether to act in accordance with the rules of the school and report the misconduct of a colleague, or ignore the rules and discuss the matter with that colleague privately.

*Axial coding.* This stage focused on reducing the number of categories and grouping them together according to more general concepts. At the peak of the hierarchy are categories which, as Goulding (1999) describes, unite the concepts and reveal a theoretical explanation of the phenomenon under study. The focus of axial coding is to construct a model that details the specific conditions that give rise to the occurrence of a phenomenon. Axial coding consists of three analytical processes: (a) continuous grouping of subcategories into categories, (b) comparing categories with the collected data, and (d) exploring variations between categories and between subcategories (Brown et al., 2002).

In this study, each ethical dilemma and code of ethical conduct was treated as a subcategory which was placed along the axis of an 'ethical conduct learning' category. In some cases, several



Fig. 1. Audio-visual centre of Bar-Ilan University (Reprinted with permission from Bar-Ilan University).

subcategories emerged simultaneously from the same simulation. Therefore, for each team simulation, only the most salient subcategories were considered for the purpose of clarity. Following are some salient examples in order to demonstrate the axial coding process:

- (a) In simulation 1, the subcategory of the ethical dilemma 'Duty to report vs. caring for students' and the subcategory of the derived code of ethical conduct 'We believe that we should act according to state and school rules, norms, and standards' were placed along the axis of the category 'Learning to make decisions in a "supportive-forgiving" environment.' This category included simulations which demand an action that might cause unpleasant feelings to others, thus making it difficult to decide how to act.
- (b) In simulation 3, the subcategory of the ethical dilemma 'Caring for students vs. school standards' and the subcategory of the derived code of ethical conduct 'We believe that we should care for our students' physical welfare' were placed along the axis of the category 'Learning to develop standards of care.' This category included simulations in which trainees might use intuition rather than school standards (reporting to several authorities: principal, counselor, child social services, or police) in caring for their student.
- (c) In simulation 5, the subcategory of the ethical dilemma 'School rules vs. collegial relationships' and the subcategory of the derived code of ethical conduct 'We believe that we should be flexible with our colleagues in order to make teaching more effective' were placed along the axis of the category 'Learning to reduce misconduct among colleagues.' This category included incidents relating to the obligation to reduce professional misconduct among colleagues.
- (d) In simulation 7, the subcategory of the ethical dilemma 'Promoting student achievement vs. developing critical thinking' and the subcategory of the derived code of ethical conduct 'We believe that we should encourage creativity among our colleagues' were placed along the axis of the category 'Learning to develop an integrative approach.' This category included incidents relating to sharing and honest communication between colleagues as to how to best strike a balance between creative teaching and traditional teaching.

*Selective coding.* Selective coding can be described as the process by which categories are related to a core category, ultimately becoming the basis for the grounded theory (Moghaddam, 2006). In this study, the core category was "Learning ethical conduct through TBS" and four dominant categories of learning aspects were found to be related to this central concept: learning in a supportive-forgiving environment, learning to develop standards of care, learning to reduce misconduct among colleagues, and learning to develop an integrative approach.

Table 1 presents the various categories that were found to have the common central concept "Learning ethical conduct through TBS." Each category is represented by two case examples which were repeated most frequently.

To ensure accuracy of analysis, the data were organized using the ATLAS.ti 5.0 software package that assists in qualitative analysis of textual data (Muhr, 2004). This software helps in methodically organizing and documenting themes within data and enables the user to retrieve text passages from one or more text documents (Crego, Alcover de la Hera, & Martinez-Inigo, 2008).

Several steps were taken to establish the trustworthiness of the data collection and analysis procedures. *First*, the data were analyzed by the author and by the research assistants who have had extensive training in qualitative analysis. *Second*, the data were

authenticated through "member checking," a process of returning the findings to the participants in the study in order to confirm accuracy. This is in accordance with Lincoln and Guba (1985) who contend that a good researcher refines tentative results in light of the subjects' reactions, and, in effect, puts the participants' perspectives at the center of the study. *Third*, the author and the research assistants used a cross-checking procedure of independently-coded data and then held a meeting to discuss preliminary findings to ensure the consistency of the analysis (Boardman & Woodruff, 2004).

#### 4. Findings

A qualitative analysis was performed on 50 simulations of critical ethical incidents. The analysis revealed four dominant dimensions of 'learning ethical conduct through TBS':

(a) learning to make decisions in a "supportive-forgiving" environment (19 cases); (b) learning to develop standards of care (15 cases); (c) learning to reduce misconduct among colleagues (10 cases); and (d) learning to develop an integrative approach (6 cases).

Most of the simulations revealed different team processes and different results (34 cases) from those that had actually occurred in practice, with only 10 cases presenting similar team processes and results as the original incidents. Six cases present similar results but different decision making processes from those reported in the original incidents (see far right column of Table 1).

The majority of the decision-making processes in the TBS (42 cases) were characterized by cooperation between all parties concerned (e.g., Simulation 2: 'Let's call their parents, discuss the situation with them, and decide together what to do with them'), whereas in the actual events, a considerable number of decisions (39 cases) were made by the principal without seriously considering other people's opinions (e.g., Simulation 6 – The principal rebuked the Hebrew coordinator and documented the case in the teacher's personal file).

The data analysis of the transcribed simulations and discussions revealed the following findings (Table 1): (a) the main consideration in the described ethical dilemmas and the derived codes of ethical conduct was caring for students or teachers (22 cases). (b) several ethical dilemmas and derived codes of ethical conduct that preoccupied the participants focused on whether or not to report misconduct of students or teachers (10 cases). (c) collegial relationships were a factor that had an influence on both a caring climate and school standards (8 cases). (d) other ethical dilemmas and derived codes of ethical conduct focused on family agenda (6 cases) and student achievement (4 cases).

The inconsistency between the decision making processes and solutions in TBS versus the originally reported incidents can be explained by the difference of environment. The TBS environment was a supportive environment. In addition, teachers came with the motivation to learn from their colleagues and the fact that they worked in teams enabled them to reflect on different perspectives, in contrast to a school context where they usually had to make decisions in stressful situations.

After the role-playing, participants spontaneously discussed the optimal wording for formulating an ethical code of conduct. They decided to formulate guidelines beginning with "We believe that..." instead of "The educator should...". They explained that this wording aimed to increase their commitment to the ethical code of conduct that they were developing.

#### 5. Discussion

The main objective of this study was to identify emergent learning aspects of TBS among teacher trainees through transcribed

**Table 1**  
Four emergent dimensions of learning using team-based simulations.

Theme	Critical incidents submitted by email	Excerpts from TBS	Results of investigative stage	Actual decision in practice	Comparison between simulation and actual event
<b>Simulation 1: Learning to make decisions in a "supportive-forgiving" environment</b> (1 of 2)	During the annual overnight field trip, some students smoked drugs. Decide whether to report them to the police in a staff meeting comprising: (a) the principal (b) the teacher (c) the homeroom teacher (d) the counselor	<b>Teacher:</b> I found them smoking drugs in the tent. I didn't know what to do. <b>Homeroom teacher:</b> We should report them to the police. In the future they will thank us. If we don't respond sternly this time, they will think that there is no law. <b>Counselor:</b> They are going to the army [mandatory enlistment] next year. They will have problems with their enlistment if they have a police record. I can take care of it through the Department of Education in the municipality. <b>Principal:</b> I know exactly what we have to do. We have to report them to the police. And because this is a difficult situation, they will need support, so we will involve psychologists from the municipality.	<b>Ethical dilemma:</b> Duty to report vs. caring for students <b>Code of ethical conduct:</b> We believe that we should act according to the state's and the school's rules, norms, and standards.	The participants unanimously agreed to report the students to the police. The students were placed under arrest for 24 h. Their homeroom teacher remained involved to offer support.	<b>Different team processes but same results:</b> In both cases, students were reported to the police. However, in the simulation, participants expressed different opinions, whereas in practice, all team participants thought alike.
<b>Simulation 2: Learning to make decisions in a "supportive-forgiving" environment</b> (2 of 2)	A tenth-grade homeroom teacher comes to the principal's office in tears and says that she does not want to continue teaching her class because two students are undermining her authority, acting insolently and disrespectfully. Moreover, they have made the class rebel against her. Decide what to do in this case, in a team meeting comprising: (a) the principal (b) the tenth-grade coordinator (c) the homeroom teacher (d) the counselor	<b>Homeroom teacher:</b> I can't be in that class anymore. These two students are destroying everything that I have built over the year with my class. <b>Counselor:</b> I will talk with them, and see whether there is a solution. <b>Principal:</b> Although this is not a simple case, I am certain about my decision. We don't need talking here; we need punishments for these two kids. <b>Coordinator:</b> They are only afraid of their parents. Let's call their parents, discuss the situation with them, and decide together what to do with them, including what their punishment will be next time they are disruptive.	<b>Ethical dilemma:</b> Caring for teachers vs. school standards. <b>Code of ethical conduct:</b> We believe that we should care for and empower our colleagues.	The principal decided to call in the students' parents and talk to them about their children's behavior. In addition, the students were suspended from school for a week.	<b>Different processes and results:</b> In the simulation the team elected to impose sanctions if the students continued their misbehavior, whereas in practice, the principal decided to call in the parents and suspend the students immediately.
<b>Simulation 3: Learning to develop standards of care</b> (1 of 2)	A high school student called her homeroom teacher one evening, crying that her father had beaten her and that she had red marks all over her face. The homeroom teacher rushed to meet her in the mall, where the student waited with a friend. The homeroom teacher drove the student home after she had calmed down. Decide whether the homeroom teacher acted appropriately in a team meeting comprising: (a) the principal (b) the homeroom teacher (c) the counselor	<b>Principal:</b> First, I wish to thank you for your devotion to our students even after school hours. <b>Homeroom teacher:</b> I was only doing my job. <b>Counselor:</b> Actually, although you meant to do good, we think that there is a problem in this case. You should have called us first. We could have guided you as to how to respond based on our experience. <b>Homeroom teacher:</b> I tried to call, but I couldn't find you. I had to act under pressure.	<b>Ethical dilemmas:</b> • Caring for students vs. school standards • Family privacy vs. students' physical welfare <b>Code of ethical conduct:</b> We believe that we should care for our students' physical welfare.	During the meeting, the homeroom teacher was reprimanded by the principal and the counselor because he did involve the relevant professionals in the real time situation.	<b>Different processes and results:</b> In the simulation, the homeroom teacher was commended for his efforts and was guided how to respond the next time, whereas in practice, the homeroom teacher was reprimanded for his behavior.

(continued on next page)



Table 1 (continued)

Theme	Critical incidents submitted by email	Excerpts from TBS	Results of investigative stage	Actual decision in practice	Comparison between simulation and actual event
<p><i>Simulation 4: Learning to develop standards of care</i> (2 of 2)</p>	<p>A student missed five days of school because his grandfather died, and when he returned, he was told to bring a note from his parents explaining his absence. The student's father called the school principal, very angry that the homeroom teacher did not believe his son. The school policy for mandatory written parental explanations for student absences was originally conceived as a partial solution to rampant absences that affect student achievements. Decide whether to continue this school policy in a team meeting comprising:</p> <ul style="list-style-type: none"> <li>(a) the principal</li> <li>(b) the counselor</li> <li>(c) the grade coordinator</li> <li>(d) the homeroom teacher</li> </ul>	<p><b>Principal:</b> <i>We understand, but next time, you should involve the relevant professionals.</i> This girl should not have returned home; we need to involve child social services and the police. This case can end badly.  <b>Homeroom teacher:</b> I know the family; therefore, I took responsibility for returning the girl home.  <b>Counselor:</b> We should be very cautious and not impulsive in this case. Let's summarize: <i>Next time you will involve us in such a serious case.</i>  <b>Grade coordinator:</b> We have to decide what to do with the absence rules. <i>We developed them because we care about the students' achievements.</i> However, this case presents us as an insensitive educational system.  <b>Home teacher:</b> I was only doing my job, working according to the rules.  <b>Counselor:</b> I don't think we should cancel this policy. Actually, these rules have really helped students attain better achievements. <i>We just have to write more detailed rules for sensitive cases so that we don't unintentionally cause distress to families in similar cases.</i>  <b>Principal:</b> O.K. We will revise our rules in order to be more caring and sensitive to the students' world.  <b>Principal:</b> We are here because of a problematic issue. First, let me state that we value your work. However, there are some complaints that you have been late or absent, and have left school instead of doing your individual work with students. Can you explain?  <b>Grade coordinator:</b> You built a terrible timetable for me. I have to take my four children to school in the morning, and that is why I arrive late.  <b>Vice-principal:</b> We are talking about hours in the middle of the day.  <b>Grade coordinator:</b> I went on a home visit to one of my students.  <b>Timetable coordinator:</b> All of us are familiar with your contribution to our school. <i>Please let us know if we can do something to reduce your lateness in the morning.</i></p>	<p><b>Ethical dilemmas:</b> Caring climate vs. school rules.  <b>Code of ethical conduct:</b> We believe that we should be sensitive in delicate situations.</p>	<p>The principal apologized to the father for any distress that may have been caused, explaining that the rules are aimed to help students maintain high levels of achievement. He told the father that the school had learned its lesson and would be more sensitive in the future. However, no changes were made to school policy.</p>	<p><b>Different processes and different results:</b> In the simulation, a decision was made to revise the rules to increase sensitivity, whereas in practice, the problem was solved between the principal and the father, including an apology.</p>
<p><i>Simulation 5: Learning to reduce misconduct among colleagues</i> (1 of 2)</p>	<p>The grade coordinator's activities are highly valued by all the school management; however, she is consistently tardy or absent during the hours allotted to working individually with students, and leaves the school unannounced. Decide how to respond in a team meeting comprising:</p> <ul style="list-style-type: none"> <li>(a) the principal</li> <li>(b) the vice-principal</li> <li>(c) the grade coordinator</li> <li>(d) the timetable coordinator</li> </ul>	<p><b>Principal:</b> We are here because of a problematic issue. First, let me state that we value your work. However, there are some complaints that you have been late or absent, and have left school instead of doing your individual work with students. Can you explain?  <b>Grade coordinator:</b> You built a terrible timetable for me. I have to take my four children to school in the morning, and that is why I arrive late.  <b>Vice-principal:</b> We are talking about hours in the middle of the day.  <b>Grade coordinator:</b> I went on a home visit to one of my students.  <b>Timetable coordinator:</b> All of us are familiar with your contribution to our school. <i>Please let us know if we can do something to reduce your lateness in the morning.</i></p>	<p><b>Ethical dilemmas:</b></p> <ul style="list-style-type: none"> <li>• School rules vs. collegial relationships</li> <li>• Caring for students vs. collegial relationships</li> </ul> <p><b>Code of ethical conduct:</b> We believe that we should be flexible with our colleagues in order to make teaching more effective.</p>	<p>The grade coordinator was reprimanded and the school management team developed rules against teachers' tardiness and absences.</p>	<p><b>Different processes and results:</b> In the simulation, participants tried to find a win-win situation, whereas in practice, the team participants focused on developing rules against staff tardiness after the grade coordinator was reprimanded.</p>

<p><b>Simulation 6: Learning to reduce misconduct among colleagues</b> (2 of 2)</p>	<p>The principal suspects that the Hebrew language coordinator unjustifiably inflated the grades of an entire class by 15 points to justify overtime work hours that she had spent on enrichment. Decide how to investigate this case in a team meeting comprising:</p> <ul style="list-style-type: none"> <li>(a) the principal</li> <li>(b) the Hebrew language coordinator</li> <li>(c) the Hebrew language teacher</li> <li>(d) the counselor</li> </ul>	<p><b>Grade coordinator:</b> I would appreciate it if you could move my 8–10 AM teaching hours to a different time.  <b>Timetable coordinator:</b> I will try. I will let you know.  <b>Principal:</b> Again we appreciate your work. Just let us know when you have to leave school in the middle of the day.  <b>Principal:</b> I don't understand. I teach this class too. These grades seem much too high. Iris, you are the class teacher. Did you give them these high marks?  <b>Hebrew teacher:</b> (doesn't answer)  <b>Hebrew coordinator:</b> I did round up their grades to take their efforts into consideration.  <b>Counselor:</b> I believe that the teacher had already considered the students' efforts in the grades she gave them. <i>Besides, you have to ask her permission.</i>  <b>Principal:</b> Fortunately, the grades have not yet been submitted to the Ministry of Education. I demand transparency in this school. All the class grades should be the responsibility of the Hebrew language teacher. The coordinator can advise, but the teacher makes the final decision.</p>	<p><b>Ethical dilemmas:</b> Collegial relationships vs. school standards  <b>Code of ethical conduct:</b> We believe that we should act according to school standards and norms.</p>	<p>The principal rebuked the Hebrew language coordinator and documented the case in her personal file. The class grades were changed back to the original grades.</p>	<p><b>Different processes but the same results:</b> In the simulation, the principal encouraged participation of other stakeholders and explained school standards, whereas in practice, the principal decided on his own to rebuke the teacher.</p>
<p><b>Simulation 7: Learning to develop an integrative approach</b> (1 of 2)</p>	<p>A young teacher creatively teaches high school history through connections to current events. Students like his lessons but did not succeed on the grade-level final exams. Decide what to do with the history lessons in a team meeting comprising:</p> <ul style="list-style-type: none"> <li>(a) the principal</li> <li>(b) the history coordinator</li> <li>(c) the history teacher</li> </ul>	<p><b>Principal:</b> I know that your lessons are up-to-date and creative, but why are the grades so low? <i>We need good grades.</i> The parents are very angry.  <b>History teacher:</b> Because in the final exam, <i>they don't test what's really important, whether the student has critical thinking!</i> They want technicians.  <b>History coordinator:</b> This year there were two good thinking questions on the test, but I suppose it wasn't enough to get a high grade. Can you please try to balance between your creativity and the information needed for the final exam?  <b>History teacher:</b> It will be hard, but I promise to do my best.  <b>Principal:</b> There are a lot of complaints about your teaching.  <b>Teacher:</b> This class – it's so difficult to teach in that class. They are so noisy... The other teachers also say that it's difficult to control them.</p>	<p><b>Ethical dilemma:</b> Promoting student achievement vs. developing critical thinking  <b>Code of ethical conduct:</b> We believe that we should encourage creativity among our colleagues.</p>	<p>The principal fired the teacher because of parental pressure to obtain better grades.</p>	<p><b>Different processes and results:</b> In the simulation, different viewpoints led to a balanced decision, whereas in practice, the principal fired the teacher because of parents' demand for higher grades.</p>
<p><b>Simulation 8: Learning to develop an integrative approach</b> (2 of 2)</p>	<p>Students complained that a teacher "does not know how to teach." Decide what to do with the teacher in a team meeting comprising:</p> <ul style="list-style-type: none"> <li>(a) the principal</li> <li>(b) the teacher</li> </ul>	<p><b>Principal:</b> There are a lot of complaints about your teaching.  <b>Teacher:</b> This class – it's so difficult to teach in that class. They are so noisy... The other teachers also say that it's difficult to control them.</p>	<p><b>Ethical dilemmas:</b></p> <ul style="list-style-type: none"> <li>• Professionalism vs. collegial relationships</li> <li>• Caring for students vs. collegial relationships</li> </ul>	<p>After the meeting, which focused on students' complaints and the teacher's defensiveness, the teacher cried and did not return to school for a week.</p>	<p><b>Different processes and results:</b> In the simulation, participants tried together to find a way to solve the problem, whereas in</p> <p style="text-align: right;"><i>(continued on next page)</i></p>

Table 1 (continued)

Theme	Critical incidents submitted by email	Excerpts from TBS	Results of investigative stage	Actual decision in practice	Comparison between simulation and actual event
	(c) the counselor	<p><b>Councilor:</b> But the complaints about your teaching are not just from this class. Furthermore, there haven't been complaints about other teachers who teach this class.</p> <p><b>Principal:</b> There were no such complaints last year. Can I help?</p> <p><b>Teacher:</b> I want you both to become more involved. <i>Please come to the class, and advise me on what to do.</i></p>	<p><b>Code of ethical conduct:</b> We believe that we should act respectfully toward our students.</p>		practice, the team discussion did not promote improvement in the teacher's behavior.

**Notes.** The column 'Excerpts from TBS' introduced the original excerpts that the mentors and the teacher trainees have chosen and discussed during the investigative stage. The column 'Results of investigative stage' presents the ethical dilemmas and the codes of ethical conduct that appear in the transcriptions based on the teacher trainees' narratives during the investigative stage. Italicized sentences present the most salient characteristic in each simulation. All participants' names were changed to assure confidentiality.

videotaped simulations of critical ethical incidents. We found that the TBS offers an attractive (e.g., role playing, video, investigation) and at the same time, effective learning experience (e.g., building a code of ethical conduct) in a realistic context, but without the pressure that accompanies real life contexts. The different activities that are involved in TBS (e.g. role playing, investigation) enable the testing of different strategies for solving ethical problems. This may lead to a better understanding of the real world, where cooperation is the key, as trainees must work together in order to determine the most suitable solution from a range of possibilities.

Findings point to a four-dimensional model of 'Learning ethical conduct through TBS.' First, TBS enables trainees to *learn to make decisions within a "supportive-forgiving" environment* in which both the participants who role-play the simulations and those who discuss and investigate them can learn from the role-players' behavior without the risk of harming others (Griffin, 2003). Simulations could help break the code of silence regarding unpleasant situations and reduce future harm in the teaching practice.

Second, the use of TBS may increase trainees' awareness of their responsibility to *learn how to develop standards of care* for their students. Emphasizing care for students in the decision-making process may help ensure that students will receive the best care that can be reasonably provided and that they will be protected whenever possible, even when conflicting considerations arise.

Third, TBS helps teacher trainees to *learn how to reduce colleagues' misconduct*. This issue appeared to preoccupy trainees, perhaps because they were concerned that they would need to know how to deal with misconduct of colleagues with higher seniority.

Fourth, TBS helps trainees *develop an integrative approach* as they have to consider different perspectives simultaneously. Contextual information embedded in the simulation's dynamics exposes trainees to alternative perceptions proposed by different functionaries in school practice and by other stakeholders at school and in the community. As a result, trainees may change their initial attitudes and beliefs and eventually reach an optimal response to the incident at hand.

The current findings highlight the ethical dilemmas that preoccupy trainees who are on the verge of undertaking teaching positions. Some of the ethical dilemmas are not unique to teachers. Nevertheless, several aspects can be better understood when examined within a teaching environment. For example, ethical dilemmas are often rooted in a caring climate typified by positive collegial relations. Although schools often encourage friendship among teachers to develop a positive climate and increase organizational effectiveness (e.g., Coleman, Mikkelson, & LaRocque, 1991), the present findings suggest that at times, allegiance to collegial relationships may actually reduce school effectiveness because professional commitment may be compromised when teachers do not wish to harm their colleagues.

A considerable number of ethical dilemmas concerned the issue of obeying the rules, such as reporting misconduct among students or teachers and reporting physical or mental harm caused by parents. While rules demand full compliance, the current findings suggest that codes of ethical conduct that are derived through TBS are much more effective in dealing with ethical dilemmas because they are tailored for specific situations and therefore can be more flexible. They take into account the specific context, recognize the unique multiple-obligation environment in which teachers must function (Sockett & LePage, 2002; Sumsion, 2000), and encourage critical thinking that is needed to solve ethical dilemmas that teachers encounter daily. With appropriate practice, trainees will eventually be able to solve ethical dilemmas on their own (Barnett, 1995).

The inconsistencies found between the findings in team simulations and the actual decisions made in practice may be explained

by the complexity of the ethical dilemmas which create a multi-faceted structure of ethical dilemmas and multifaceted solutions dependent on the situation, context and the people involved. This is in accordance with Kelchtermans study (2005), which claims that teachers' actions are influenced by emotions and by moral judgment which may change depending on the social context. The supportive atmosphere in TBS in comparison to the stressful conditions that existed in actual critical incidents gave teachers the opportunity to consider different perspectives and thus steered the simulations to different directions and solutions.

## 6. Conclusion, limitations and directions for future study

The findings of this study emphasize the complexity of ethical dilemmas, and indicate that reaching ethical decisions depends on the atmosphere, context, and people involved. Similar to Kelchtermans and Ballet (2002) findings, this study shows how the same interactions may lead to differences between the decisions made in the simulation and the decisions made in the actual event. We may conclude that teachers' actions can never be predicted without taking into account the specific context. In addition, the findings of this study show that in TBS, decisions were made in cooperation with all those involved and flexibility in school rules was considered. In the actual events, however, final decisions were often made by the principal and usually adhered to the rules of the school, without contemplating whether the situation demanded flexibility in approach and action. Thus, the unique learning strategy of TBS, which provides a relaxed atmosphere and encourages contemplation of different perspectives, may be an ideal method to encourage teachers to reflect on their perceptions regarding ethical conduct in schools. By incorporating TBS into teacher training programs, trainees will learn how to observe, reflect, and think analytically about their critical ethical incidents. Furthermore, they will develop caring practices which will heighten their sensitivity to the thoughts and actions of their students, colleagues and superiors, thus enabling them to deal more effectively with critical ethical incidents.

Two main limitations of this study should be mentioned. *First*, a relatively small sample of teacher trainees participated in the study. *Second*, data were collected from teacher trainees at a single university. Thus, the findings of this study may not apply to trainees at other universities in and outside Israel.

Due to these limitations, the present initial findings should be followed by further research regarding the effectiveness of TBS. A larger sample could show whether the use of TBS generates additional concepts of learning that have not been defined by the present study. In addition, longitudinal research should study the effectiveness of TBS on teacher trainees' ethical decision-making processes by examining reports from the teacher trainees themselves and from their superiors. Researchers would also do well to investigate the cross-cultural validity of the current findings.

Finally, future studies should be designed to collect data regarding the expectations that trainees have of the learning process in TBS. The core issue in this developmental process is to address theoretical questions about the nature of learning in the context of TBS as well as define useful educational principles that can be employed to plan, implement, and evaluate learning in these contexts.

## 7. Practical implications for trainees and course designers

Previous studies suggested various strategies about how ethics should be taught; through case studies (Campbell, 2003; Carter, 1998), workshops, professional development training day, and developing codes of ethical conduct (O'Neill & Bourke, 2010). This

study suggests a different way to train teachers to become ethical teachers, through team simulations based on critical ethical incidents. In TBS the complexity of teachers' ethical dilemmas is revealed, including teachers' emotions, culture and the context of the situation. Through TBS, teachers have an opportunity to develop specific codes of ethical conduct, depending on the specific context, emotional situation, and cultural factors involved in the simulation (Hansen, 1998, 2002; Kelchtermans, 2005; Kelchtermans & Ballet, 2002). However, there may not be universal principals for solving ethical dilemmas because when one factor changes, the entire situation and its derived solutions may change as well.

The inconsistencies found between the team simulations reported herein and the actual ethical decision-making processes that had occurred in schools underscore the practical merit of incorporating TBS into teacher training programs. The use of TBS provides an important venue for trainees to experience ethical dilemmas and decide on a response without worrying about time constraints and the possibility of hurting someone. The 'supporting-forgiving' environment also gives support to teaching trainees in handling resistance from other team members and constructively considering conflicting opinions. By integrating TBS into the curriculum of training programs, teachers may have the opportunity to reflect on their actions in a guided environment and understand that this is an important step in truly becoming exemplary teachers.

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