Design Principles for Promoting Intergroup Empathy in Online Environments

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Abstract

This study examined a professional development program designed to support civics teachers in their efforts to promote empathy towards Arabs among Jewish students in Israel. The design rationale for the program is that teachers should experience empathic processes themselves, before supporting their students in such an endeavor, and that meaningful empathic processes can occur online, if activities are properly designed. Furthermore, all stages of the program were designed to support teachers to be part of an online learning community. Sixty Jewish teachers participated in two iterations of the design; refinements were made in the second enactment to provide teachers with explicit definitions of empathy and specific instructions for reflection. Findings indicate that these changes were reflected in teachers' higher degrees of empathic responses. Teachers also indicated the contribution of being a part of an online learning community to the learning process they experienced during the program. We interpret this as a first step in enabling teachers to assist their students to develop a more empathic approach toward the minority group and conclude with design-principles.

Keywords: Empathy, minority group. Teacher professional development, teachers as designers, online learning community.

Research Objectives

The current study examined an online teacher professional development (TPD) program for civics teachers in Israel, which uses clips from the popular TV series ‘Arab Labor’. The series presents the complexities of the Arab minority life in Israel with humor and compassion, and adopts a critical view towards both groups of the society. Clips from the series, which appears in an educational web-site developed at the Center for Educational Technology (CET), serve as resources in a technology-enhanced educational online TPD environment entitled "Fostering Empathy through E-Learning" (FEEL). The program, which was designed in this study to foster empathic processes towards Arabs, among Jewish participants, employs a 'Teachers as designers' (Kali, McKenney, & Sagy, 2015) pedagogical approach, and includes three stages: (a) Teachers as learners (b) teachers as designers (c) and teachers as implementers.

The goal of the FEEL program is to support teachers in developing the skills and knowledge required to teach civics to junior and high school students. The Israeli-Palestinian conflict affects the relations between the Jewish majority and Arab minority, which are often characterized by mutual negative attitudes, and prejudice towards the minority group. Our educational approach is predicated on the premise that empathy is an important skill, necessary to improve the relations between the groups (Stephan & Finlay, 1999).

The main goal of this research is to examine the design principles that are potentially associated with enhancing empathic processes among teachers (and ultimately, their students). In this paper, we report and discuss preliminary findings from the first phase of the project (teachers as learners).

Two major questions guided this research:

(a) What empathic processes occur among teachers during the first phase of the FEEL TPD program?

(b) How does the design of the program affect teacher learning in terms of developing empathic processes?

Theoretical Background

Teachers as Designers

Teaching is increasingly considered as a design profession, in which teachers are actively involved in designing learning environments (Laurillard, 2012). Teachers are required to perceive and interpret existing technology-enhanced resources and adapt them to their students and classroom settings (E.A., Davis, & Varma, 2008; Matuk, Linn, & Eylon, 2015). In this research, teachers had an opportunity to be involved in a design process in a gradual manner through their participation in the three stages of the online FEEL program.

Teachers in a Learning Community

The FEEL TPD program was designed to support teachers in a learning community, aiming to help teachers break down the walls of isolation within which they are so used to working (Barab et al., 2001). Technology can address this challenge by supporting collaborative peer learning in various manners (Bransford, Brown, & Cocking, 1999; Kali & Linn, 2007; Linn, Davis, & Bell, 2004). Research shows that even when little or no face-to-face components are involved, online learning can be designed to provide learners with the benefits of belonging to a learning community (e.g., Barab et al., 2001; Kidron & Kali, 2015). In addition, research shows that fostering a norm of ingroup empathy can promote more positive attitudes towards people from the outgroup (Tarrant, Dazeley, & Cottom, 2009).

Empathy and Intergroup Relations

Empathy is a complex phenomenon in which one individual comes to experience and understand the cognitive and affective mental states of another person (M.H. Davis, 1994). Contemporary conceptual frameworks underscore the multidimensional nature of empathy and include cognitive, emotional, and behavioral components (M.H. Davis, 1983; Hoffman 1984, Zaki & Ochsner, 2012). The current research is based on the dynamic 3R (Resonance, Reasoning, Response) model of empathy (Zisman, 2009).

The first phase of the empathic process, according to this model, is a spontaneous, automatic and involuntary resonance with the mental state of the other person (Hodge & Wegner, 1997), sometimes referred to as parallel empathy or emotional contagion (Batson & Ahmad, 2009; M.H, Davis, 1994; Decety & Jackson, 2004; Stephan & Finlay, 1999). This initial internal and largely unconscious reaction is then followed by more elaborate, contextualized, and controlled cognitive appraisal and reasoning processes (Hodge & Wegner, 1997), in an attempt to understand and explicitly imagine the other's perspective (Stephan & Finlay, 1999; M.H, Davis, 1994). Finally, resonance and reasoning processes lead to an internal response to the other's situation. The response may consist of compassion-related emotions, usually labeled empathic concern, that are often associated with altruistic motivations and behaviors. In other situations, the response may evoke negative feelings and personal distress in the face of the suffering of the other (M.H. Davis, 1994).

It is therefore important to understand and learn to improve, or at least prevent the erosion of empathic processes in situations of intergroup conflict, where strong negative emotions interfere with the ability to imagine or legitimize the other side’s perspective. The gradual development of empathic interpersonal relations may be key to improving intergroup relations through educational interventions (Kupermintz & Salomon, 2005), and technology-enhanced environment can play an important part in this endeavor.

The Design of the FEEL TPD Program

Previous findings indicate that watching videos, reading or listening to information about the experiences of another group (the outgroup), may enhance empathy towards that group (Batson & Ahmad, 2009; Decety & Jackson, 2004; Stephan & Finlay, 1999), and that technology has its advantages in fostering these processes (Gorry, 2009; Manney, 2008).

Except for two face-to-face meetings, at the beginning and the end of the school year, the whole FEEL program was conducted online using the Moodle platform. The online environment included resources (lesson plans, video clips and collaborative activities). The clips were designed to serve as reflection catalysts, as well as resources that teachers could choose from to design activities that would meet their student's needs. The collaborative activities were designed to support teachers in sharing their ideas and experiences within the learning community they were part of, and providing feedback to each other throughout the program.

Method

This study employs a Design-Based Research (DBR) methodology, in which elements in learning environments are systematically explored in terms of their effect on learning, thereby contributing to the development of theory, as well as to design practice (Kali, 2008; Cobb at al., 2003; Design-Based Research Collective, 2003). DBR is typically conducted by iterative refinements of innovative learning environments, enacted in naturalistic and local contexts. Changes in outcomes, as a result of these iterations, are used as evidence for the viability of the theory underlying the design principles, and serve to enhance knowledge about learning or teaching (Kali, 2008; Sandoval 2014).

Two groups of teachers participated in two consecutive iterations of the TPD program. The analysis focused on the first stage, as teachers watched selected clips, reflected and shared their experiences with other participants in the online learning community. The research examined the changes in empathic processes following a major design decision implemented in the second iteration – teacher reflections from the first iteration underscored the need for more direct and explicit prompts to elicit empathic processes.

Two major changes were incorporated in the second iteration: (a) more explicit prompts for reflection on the clips (Table 1) were added, and (b) teachers were explicitly introduced to the 3R model of empathy and the role of empathic skills in intergroup relations in Israel.

Table 1. Prompts for reflection and sharing in each of the iterations

General prompts in iteration 1	More explicit prompts in iteration 2
1. What did you feel like during the activity and while watching the video clip? Share your ideas and thoughts with the community. 2. Have you changed your point of view of the Jewish-Arab relation in Israel (understanding the situation, willing to change the situation, identification with the situation) following the activity and the video clips? Share this with the community.	1. ***While watching the video clip***, write down on a piece of paper all the emotions you experience. 2. ***Following watching the video clip***, share with the community the emotional and cognitive process you went through during and after watching the video clip. 3. Try to imagine what the characters in the clips felt like, and share your ideas with the community.

Participants and Data Sources

Participants: Sixty Jewish civics teachers (around 30 in each iteration) participated in this study. Most of the teachers were secular and some religious and came from different parts of Israel. Most participants were individual teachers from different schools, who felt challenged in their attempt to respond to racism in their classrooms. The decision to include only Jewish

teachers was based on findings that show that the Jewish population in Israel is less empathic towards the Arab population (Zisman, 2009) and the growing understanding of the importance of uni-national educational programs in situations of intractable conflicts (Bar-Tal & Rosen, 2009).

Intergroup empathy questionnaire: This questionnaire was developed to measure intergroup empathy (Zisman, 2009). Teachers in the second iteration, responded to the questionnaire in the beginning (Pre) and the end (Post) of the FEEL program.

Empathy toward the characters in the TV series questionnaire: This questionnaire was developed for this study, and was based on teachers' statements in the online forum that pertained to their empathy towards the various characters in the clips they watched. All teachers in both iterations responded to this questionnaire at the end of the FEEL program.

Reflection sharing: Teachers' reflections in the online forum, regarding their feelings while watching the clips were coded in both iterations to capture the three empathic dimensions: resonance, reasoning and response (coded as 1 = present or 0 = absent).

Interviews: 12 interviews of about 40 minutes each were conducted (3 in the first iteration and 9 in the second) to of deepen our understanding of the empathic processes, and of the design features that contributed to these processes.

Findings and Substantiated Conclusions

The analysis revealed two major sets of findings:

(1) Changes in empathic processes between iterations:

(a) Teachers in the second iteration (M = 4.28, SD = 0.35) scored significantly higher than teachers in the first iteration (M = 3.86, SD = 0.78) to the questionnaire 'Empathy toward the characters in the TV series' ($t(47) = 2.54$, $p < .01$).

(b) In the second iteration teachers exhibited a significantly higher degree of empathic responses in their reflections compared to teachers in the first iteration ($\chi 2(1) = 6.42$, $p < .01$) (Table 2).

Table 2. Empathic responses from the reflections – iteration 1 & 2

	Iteration 1 (n=31)	Iteration 2 (n=27)		
	Frequency	Frequency	df	X2
Empathy - (General)	87.1%	92.6%	1	.47
Resonance	51.6%	40.7%	1	.69
Reasoning	71.0%	74.1%	1	.07
Response	45.2%	77.8%	1	6.42*

* $p < .01$

(2) Changes in empathic processes within iteration 2:

The analysis of 'Intergroup empathy questionnaire' in the second iteration, revealed a significant gain between the beginning (M = 3.8, SD = 0.4) and the end (M = 4.0, SD = 0.4) of the program. This change was reflected mostly on the empathic response scale ($t(27) = –2.15$, $p < .05$) (Table 3).

Table 3. Pre and post 'Intergroup empathy questionnaire' – Iteration 2

	Pre (n=28)		Post (n=28)		
	M	S.D.	M	S.D.	t (df =27)
Empathy - (General)	3.88	.44	4.02	.36	-2.57*
Resonance	3.33	.63	3.60	.59	-2.57*
Reasoning	3.90	.53	3.93	.48	-0.37
Response	4.16	.57	4.33	.45	-2.15*

* $p < .05$

In addition, evidence from the interviews provided further support for the findings:

Using clips from the series 'Arab Labor' as resources: The excerpt below represents the emotional impact of video clips on the teachers (that was stronger than in their preliminary experience with the series, before the TPD).

"Looking at things … from the point of view of pain… even if you see that the actor (Amjad, the main character)… is a little afraid… to say (his opinion) … you can understand why. You actually feel like him".

The effect of learning as an online community: Teachers greatly benefitted from the learning community, which provided them with opportunities for further development, with regards to empathic processes.

"Responses were really interesting for me, so I found myself coming back (to the online forum), checking and reading every response from the beginning and trying to understand and learn from it".

Overall, the findings indicate that the design refinements that were made between the two iterations were instrumental in bringing about a significant increase in teachers' empathic responses. We view this change as an important first step that can enable teachers to productively adapt the FEEL program resources, and assist their students to develop a more empathic approach to the minority group, and thus view the Jewish-Arab conflict in a more balanced way.

Scholarly Significance

This research provides empirical support for the usefulness of the design principles that may promote intergroup empathy in a technology-enhanced online environment: (a) Reflective engagement, in a community of learning, with popular media that captures the life of a low-status minority group. (b) Tailored instructions, including explicit definition of empathy and specific guidance for reflection when watching the video clips, and sharing reflections with the online community. Evidence in support of the first design principle stems from the findings in both iterations, whereas evidence for the second principle stems from the second iteration, in which the explicit definition and instructions were added. The findings underscore the potential of online experiences, as part of an online learning community, during the "teachers as learners" stage, to help teachers design effective learning environments for their students. As this research continues, further findings will provide insights on subsequent stages of the program.

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