

Mentors' Perceptions of Factors Associated with Change in Early Childhood Classrooms

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Mentors' perceptions of factors associated with educational change were identified following an individualized mentoring program about constructivist curriculum for early childhood educators. A qualitative case study analysis of the mentors' journals of six classrooms was conducted to review their perceptions of change. Classroom environment quality was assessed with the Early Childhood Environmental Rating Scale-Revised (ECERS-R) before and after the intervention program. At post-intervention, mentors reported that classrooms with increased ECERS-R Activities scores were likely to engage in behaviors promoting change, for example reflective skills, documenting children's learning, and challenging their own beliefs. In contrast, educators in classrooms with relatively stable post-intervention ECERS-R Activities scores appeared to create barriers that inhibited change, for example being less willing to challenge their beliefs, make changes in practice, and to document children's learning. Recommendations presented in the paper focus on successful implementation of mentoring programs; policy implications indicate that individualized mentoring programs require proper financial and personnel supports.

Suite à un programme de mentorat individualisé portant sur un curriculum constructiviste pour les éducateurs de la petite enfance, nous avons recueilli les perceptions des mentors quant aux facteurs associés aux changements éducatifs. Nous avons entrepris une analyse qualitative de cas basée sur les journaux des mentors qui évoquaient six salles de classe et ce, afin d'étudier la perception qu'ils avaient du changement. La qualité du milieu scolaire a été évaluée avec l'Échelle d'évaluation de l'environnement préscolaire révisée (ÉÉEP-R) avant et après le programme d'intervention. Après l'intervention, les mentors ont signalé que les salles de classe ayant augmenté leur score selon l'échelle ÉÉEP-R étaient plus aptes à adopter des activités promouvant le changement, par exemple, celles impliquant les habiletés de réflexion, la documentation des apprentissages par les enfants et la remise en question des croyances. Toutefois, les enseignants des salles de classe dont le score selon l'échelle ÉÉEP-R après l'intervention était demeuré relativement stable semblaient créer des obstacles qui freinaient les changements. Par exemple, ils étaient moins disposés à remettre en question leurs croyances, d'apporter des modifications à leur pratique et de documenter l'apprentissage des élèves. Les recommandations proposées portent sur la mise en œuvre réussie de programmes de mentorat; parmi les implications stratégiques, notons la nécessité d'un appui financier adéquat et d'un soutien approprié de la part du personnel.

Educational change is a necessary, but difficult process to effect (e.g., Borko, 2004; Fullan, 2007; Tillema, 2000). Critical factors include the willingness to commit to change, systemic and organizational supports (e.g., time, budgets), and an openness to reflecting on one's beliefs and

values (Fullan, 2007). Recently, international early childhood experts have advocated for constructivist curriculum models, which may require educators to examine and adapt their classroom practice (Howe & Prochner, 2012; Reynolds, Rolnick, Englund, & Temple, 2010). Inservice professional development (IPD) is one mechanism for educators to keep up-to-date with educational developments that may impact their classroom practice (Borko, 2004). IPD programs vary in format, (e.g., workshops, courses, mentoring), length, and effectiveness (Burchinal, Cryer, Clifford, & Howes, 2002; Cassidy, Buell, Pugh-Hoese, & Russell, 1995). Mentoring is one form of IPD that is associated with positive outcomes for improving both novice and experienced elementary school teachers' practice and children's academic performance (Cummins, 2004; Evertson & Smithy, 2000; Fletcher & Strong, 2009; Hobson, Ashby, Malderez, & Tomlinson, 2009; Peterson Valk, Baker, Brugger, & Hightower, 2010), but little attention has focused on mentoring early childhood educators or the *processes* of change during mentoring programs (Wood & Bennett, 2000). Our study examined three mentors' journal reports of the process of change that early childhood educators in six classrooms underwent as they engaged in an intensive, individualized 15-week mentoring program focused on understanding and implementing a constructivist curriculum. A qualitative analysis of the mentors' journals for each classroom was conducted to identify overarching themes that focused on the process of change and are reported as six case studies. Based on the mentors' perceptions, we identified factors in their journals that seemed to promote or act as barriers to change regarding educators' adoption and implementation of a constructivist curriculum.

Constructivist Philosophy and Early Childhood Curriculum

Constructivism is a "theory of knowing that emphasizes the role that each person plays in the construction of their own knowledge and is based upon the premise that children learn through their interaction with the environment (social and physical)" (p. 10, Branscombe, Castle, Dorsey, Surbeck, & Taylor, 2003). It is a curriculum model in which learners play an active role in their development of knowledge (Fosnot, 2005; Perkins, 1999). According to Fosnot and Perry (2005), constructivism is a theory of learning and not a theory of teaching; educators learn along with the children in interaction with one another and act as guides and facilitators as they co-construct an understanding of the world and negotiate the early childhood curriculum (Bodrova & Leong, 1996; Fox, 2001; Gould, 2005; Nuttall, 2003).

In a constructivist early childhood classroom the educator's knowledge of child development and understanding of the children in the class influence her/his approach to curriculum development and implementation. Observation and documentation are the basis for understanding children's development and for reviewing learning experiences (Kroeger & Cardy, 2006); and educators may also take photos to document and support their understanding (Luckenbill, 2012). By observing children's learning styles, the educator looks for evidence of the children's current knowledge and interacts with them to understand their thinking, reasoning, and judgment processes (Vartuli & Rohs, 2007). Reflecting on this information aids the educator in determining effective ways to enhance children's motivation for learning (Lehrer, 2013; Vartuli & Rohs, 2007; Veenman & Denessen, 2001). In our study, the mentors recorded their perceptions of the educators' adoption of a constructivist approach to curriculum during the 15-week program. We now turn to the literature on promoting educational change.

Educational Change

Educational change involves many individuals (teachers, principals, directors, civil servants, and others) from different levels and contexts (child care, elementary, high school, and government) (Burgess & Fleet, 2009; Elmore, 1995; Fullan, 2007; Sarason, 1971; Veenman & Denessen, 2001). Fullan (2007) argues three dimensions are involved in the implementation of change: new (1) materials; (2) teaching approaches; and (3) beliefs. Meaningful IPD can effect change when teachers are actively involved in determining the program content rather than attending fragmented inservice workshops that may not address their perceived needs (Borko, 2004; Clark, 1992). As discussed below, mentoring is one IPD approach that has been employed successfully due to its more sustained and intensive mentor-mentee interactions (Hobson et al., 2009; Ryan & Hornbeck, 2004).

Fullan (2007) and Hobson et al. (2009) propose that the teacher, as the frontline classroom change agent, must understand and agree with the new educational philosophy and its content as well as demonstrate a willingness to embrace a new policy or philosophy. Educators' values and beliefs are critical factors in their willingness to adopt change and may need to be challenged for change to be a possibility (Tillema, 2000). Educators bring their values, based on prior experiences, to the classroom, which influence how they respond to children's behaviours, personalities, and their curriculum choices (Howe, Jacobs, Vukelich, & Recchia, 2012; Wang, Elicker, McMullen, & Mao, 2008; Wilcox-Herzog, 2002). Beliefs are shaped by values and take the form of personal convictions that drive the individual's behaviour (Jacobs, Vukelich, & Howe, 2007; Tillema, 2000). Some research indicates that educators' beliefs are related to their classroom practices, while other studies do not show an association (Brunning, Schraw, Norby, & Ronning, 2004; File & Gullo, 2002; Stipek & Byler, 1997). In the current study, the mentors and educators explored values and beliefs to sensitize the educators to their own views about learning, teaching, and curriculum design so that they would be open to adopting a constructivist approach. This was a crucial step in determining whether the educators could incorporate constructivist values and beliefs into their practices.

Building a community of practice that allows teachers to engage in discussions that may influence their values, beliefs, and practices is often one component of mentoring programs (Fleet & Patterson, 2001; Fullan, 2007; Orland-Barak, 2007; Raths, 2001). In constructing a community of practice, each participant brings a wealth of knowledge and understanding about the profession that reflects past experiences, culture, and language; each member contributes to his/her own learning and to the progress that the group makes in understanding relevant issues (Fosnot, 2005; Fullan, 2007; Raths 2001). Educators' classroom observations are the basis for discussing, analyzing, and identifying ways to handle relevant concerns (Branscombe et al., 2003; Orland-Barak, 2007). From a constructivist perspective, the children's contributions are critical, because they reveal their thinking, knowledge, and interests (Forman, 2005; Vartuli & Rohs, 2007). The outcome of this collaborative educator-child process may be a curriculum that is responsive to the needs and interests of children while incorporating what the educator knows and wants to include. In our study, the mentors endeavoured to build a community of practice by creating opportunities for educators to discuss their observations and relevant issues; the educators also visited each other's centres as another way to build a community of practice.

Fullan (2007) also notes the importance of organizational structures to support the process of change; specifically teachers require concomitant systemic alterations, budgets, and release time to accommodate to new materials, teaching approaches, and values or beliefs (Bloom,

Sheerer, & Britz, 1991; Ryan & Hornbeck, 2004). Such change may be most effective when implemented in systematic school-wide programs (Algozzine & Algozzine, 2007). In sum, Peterson et al. (2010) argue IPD that focuses on teachers' practice in the context of their own classrooms is most likely to promote learning associated with educational change; mentoring is one such ecologically meaningful approach to educational change (Bellm, Whitebrook, & Hnatiuk, 1997).

Mentoring and Professional Development

The literature on mentoring as a form of professional development has mostly focused on novice early childhood educators and elementary school teachers (Evertson & Smithey, 2000; Fletcher & Strong, 2009; Hobson et al., 2009; Puig & Recchia, 2008; Strong, 2005) with the goal of improving teacher retention rates (Ingersoll & Strong, 2012; Strong, 2007). Less attention has been paid to mentoring preservice elementary school teachers (Hobson, Harris, Buckner-Manely, & Smith, 2012), uncertified teachers (Heung-Ling, 2003; Lai, 2010), and principals or head teachers (Hobson & Sharp, 2005). However, the mentoring programs for early childhood educators are associated with higher quality care by family daycare providers, improved literacy practices, and overall higher classroom quality as measured by the ECERS-R (Neuman & Cunningham, 2009; Raikes, Wilcox, Peterson, Hegland, Atwater, Summers, Thornburg, Torquati, Edwards, & Raikes, 2003; Ramey & Ramey, 2008). Apparently, mentoring can be effective because it provides instructional and emotional support for the mentee concerning his/her practice (Peterson et al., 2010); emotional support for novice teachers that may reduce feelings of isolation, build confidence, and enhance the ability to reflect analytically about one's own practice (Byington, 2010; Cummins, 2004; Hobson et al., 2009; Peterson et al., 2010). Reflection also allows the educator to bridge the gap between theory and practice while analyzing whether the intended and actual outcomes of change have been achieved (Lehrer, 2013; Veenman & Denessen, 2001).

Hobson et al. (2009) identified four factors to ensure mentoring programs are carefully planned, cost effective, and successful in meeting their goals: (a) context support (e.g., release time, coherent program, collegial culture); (b) mentor selection and mentee match (e.g., personal qualities, respect, willingness to be mentored); (c) mentoring strategies (e.g., supporting adult learning, emotional and psychological needs, holding meetings and dialogue, conducting observations and analysis, scaffolding reflection and deeper thinking; and (d) mentor training (e.g., training sessions and support). Training mentors is critical so that they can offer guidance and advice that promotes the mentee's professional development and strategies for improving classroom and behavior management (Evertson & Smithey, 2000; Fletcher, Strong, & Villar, 2008). In addition, training and the process of mentoring allows mentors to develop their own professional skills.

Professional Development in Early Childhood Education

Providing high quality experiences for preschoolers is a difficult task for many educators due to the complex nature of the work (Landry, Anthony, Swank, & Monseque-Bailey, 2009); educators require knowledge about child development, curriculum, learning styles, facilitating optimal learning, and strong reflection skills (Bowman, Donovan, & Burns, 2001). Even experienced and trained educators find this to be a formidable challenge; therefore, IPD programs (e.g.,

workshops, courses) are designed to improve teaching quality and effect educational change (Borko, 2004; Burchinal et al., 2002; Helterbran & Fennimore, 2004; Landry et al., 2009). Many early childhood IPD programs, including mentoring programs, employ a situated cognition framework of adult learning; that is, individuals learn most effectively when instruction is based in meaningful contexts such as their own classrooms (Landry et al., 2009; Ryan, Hornbeck, & Frede, 2004; Seel, 2001; Veenman & Denessen, 2001). This framework also provides opportunities for both novice and experienced educators to practice skills and engage in collaborative problem solving (Byington, 2010; Cummins, 2004; Peterson et al., 2010).

Successful mentoring should also take into account the educator's stage of professional development. Katz (1972) outlined four stages of teacher development: (a) year 1 day-to-day survival; (b) year 2 consolidation of knowledge; (c) year 3 renewal, indicating the educator is ready to learn about new developments and approaches; and (d) year 3 or 4 maturity, when the educator has the "perspective to ask deeper and more abstract questions" (p. 53). Except for programs for novice educators, the educators' developmental stages may have been overlooked in many IPD programs. Our study was designed for educators with at least two years of experience and whom we expected would be in Katz's stage 3 or 4.

Peterson et al. (2010) were interested in the process of change and examined how mentors and educators of infants/toddlers constructed the social and emotional aspects of their relationship during a community-wide PD program. Both parties explicitly negotiated the roles and boundaries of their relationship, while mentors took account of the mentees' willingness to change their practices. Wood and Bennett (2000) also investigated the processes of change by examining inservice early childhood educators' practices and beliefs about play. Key change factors included (a) reflection, (b) high quality PD that facilitated critical thinking, and (c) communities of practice promoting professional discourse. Unfortunately, a comparison with educators who did not change their beliefs and practices after undergoing IPD was not addressed; thus, raising questions about which factors may promote, or alternatively, inhibit change. Finally, Howe et al. (2012) reported that inservice educators receiving mentoring on constructivist curriculum demonstrated increased guidance interactions (i.e., questions, suggestions, scaffolding to promote children's social and cognitive problem-solving) that facilitated children's development; however, only some classrooms improved in overall quality, which prompted our study into the processes of change as recorded by the mentors.

The Present Study

The present study emanates from a larger investigation conducted in three Canadian cities regarding the delivery of an IPD program on constructivist curriculum to inservice child care educators with at least two years of experience currently working in daycare (Howe et al., 2012). Employing a situated cognition model of learning, in each city one group received the consultant model where a mentor worked individually with the educators delivering a 15-week intensive program on constructivist curriculum (Jacobs et al., 2007); the other two groups (workshops, control) are not included in the present study. In the present study, we investigated why some educators who received the mentoring model made positive changes in their classroom practices that reflected a constructivist approach as demonstrated by increased Activities scores on the ECERS-R (Harms, Clifford, & Harms, 2005); whereas, others did not. The ECERS-R is a widely used measure of classroom quality for early childhood classrooms. In each city we selected the classroom where the ECERS-R Activities scores (a) increased the most and (b) those that

showed little change from pre- to post-intervention. Each mentor kept a detailed weekly journal for each classroom and recorded her perceptions of the educators' beliefs, activities, discussions, progress, and construction of a community of practice. For the case study of each classroom, we analyzed the mentor's journal to retrieve her perceptions of the factors associated with change and her perceptions of the barriers to change in the six classrooms.

Method

Design of Study

Since child care is a provincial responsibility, the three cities for the larger study were selected based on differences in provincial regulations; 44 not-for-profit daycare centres participated in one of the three groups (mentoring, workshops, control) (Howe et al., 2012). In each city, the mentor worked with all of the participating centers in each group. In the current study, we focused on the 15 classrooms receiving the mentoring model and selected those with the largest pre- to post-intervention change in ECERS-R Activities Scale scores ($n = 2/5$ in each of three cities; one classroom/participating center) for a total of six classrooms. Ethical approval was obtained from the University Human Research Committee and each educator provided written consent.

Participants

Educators. All educators were female and had post-secondary training in ECE rated as basic (one year/Attestation program), intermediate (2- or 3-year college/CEGEP program), or advanced (university) (see Table 1).

Mentors. Each city had one mentor. Individuals were interviewed after the position was advertised in the local newspaper and by consulting officials at the provincial ministry responsible for child care. All three city mentors were female, had degrees in ECE, extensive experience in child care settings and mentoring, college-level ECE teaching experience, strong communication skills, and the required knowledge of child care quality and constructivist curriculum; thus, meeting the criteria to be effective mentors (Ryan & Hornbeck, 2004; Ryan et al., 2004). Mentors received an intensive 3-day training session in Montreal led by the second author, the project coordinator, and the developers of the constructivist training manual (Jacobs et al., 2007). During the session, the training team and mentors engaged in lengthy discussions and the latter contributed many ideas that enhanced the manual's content and their subsequent work with the educators; thus, the mentors became comfortable with and took ownership of the manual's content. Also, we were assured the mentors were working with the same material, although they individualized it for each educator, for example, the order of chapters and issues analyzed.

Before, during, and after the 15-week program, the three mentors, the second author, and the project coordinator participated in a 2-hour weekly conference call. Each call had an agenda with a main topic for discussion and time was reserved for the mentors' issues regarding their interactions with the educators. This helped to establish a community of practice for the mentors and researchers. In addition, the second author and project coordinator visited each city to meet with the mentor and each of the five participating mentoring centres, which allowed for a discussion of the project's progress and to resolve any problems the mentor encountered.

Table 1

Levels of Teacher Education and Years of Experiences

Classroom	Educator	Education	Years of Experience
Venus	1	ECE Attestation	3 years
Mars	1	2-year College Diploma in ECE	7 months
	2	1-year College Diploma in ECE	13 years
Saturn	1	2 years of BA; ECE certificate in Child Care	18 years
	2	3-year college Diploma in ECE	4 years
Moon	1	ECE Attestation	18 years
Sun	1	1-year College Diploma in ECE	15 years
	2	ECE equivalency	15 years
Comet	1	3-year college Diploma in ECE	2 years

Note. The CEGEP (Collège d'enseignement général et professionnel) system is unique to Québec. High school ends at grade 11 and then students attend CEGEP programs that provide technical or applied training or university preparation. The applied programs, such as Early Childhood Education, are intensive 3-year programs. *Attestation* programs are also offered through the CEGEPs, but are shorter Early Childhood Education programs (12 months) designed to provide an alternative route to the 3-year program. The number of courses (17 vs 41) and the number of field placements (2 vs. 4) are considerably reduced in the *Attestation* compared to the 3-year program.

Selecting Classrooms Based on Quality (ECERS-R Activities Scores)

The ECERS-R (Harms et al., 2005) used to measure classroom quality is composed of 43 items grouped into seven subscales; each item is scored on a 7-point scale ranging from 1 = inadequate to 7 = excellent. In the present study, we employed only the Activities subscale (9 items) based on a 2-factor model (Cassidy, Hestenes, Hedge, Hestenes, & Mims, 2005). Three items were added—diversity, sand/water, music—given their conceptual similarity to the items on Cassidy Activity scale, which were positively correlated with the Activities factor ($r_s = .31$ to $.66$, $p < .05$). Cronbach *alphas* for the Activities scale (pretest = $.83$; post-test = $.72$) were high. Each classroom was observed by a research assistant for 1-2 days to ensure ratings were representative of the settings. The mentors and educators were blind to the classroom scores during the entire project.

ECERS-R Reliability. Research assistants (RAs) from the three cities received initial training from the second author in Montreal, who was a qualified and highly experienced ECERS-R trainer. In each city, interrater reliability was established by two RAs prior to data collection by practicing until they achieved at least 70% agreement. Interrater reliability was conducted on 20% of classrooms ($n = 3/15$ classrooms per city; total = $9/44$ classrooms) at pretest and post-test. Disagreements were resolved by discussion between raters. Reliability was determined with the Spearman-Brown formula for each city on the collapsed pre-and post-test data (city 1 = $.86$; city 2 = $.99$; city 3 = $.85$).

Classroom Selection. For this study we selected the classroom in each city that increased the most or remained relatively stable (decrease of one point or less) on their pre- to post-intervention ECERS-R Activities scores (see Table 2). The scores for three classrooms (Venus, Mars, Saturn¹) increased significantly by at least two points and moved to a higher quality rating

(Harms et al., 2005), whereas the Activities scores for three classrooms (Moon, Sun, Comet) remained relatively stable (decrease of one point or less).

Professional Development Intervention for Constructivist Curriculum and Mentoring

Constructivist curriculum was the focus of the IPD intervention and a training manual was developed by three external consultants in collaboration with the authors (Jacobs et al., 2007). The manual was employed as a guide for the mentors' work with each educator and included five pathways to constructivism: (1) values and beliefs, (2) constructivism in early childhood settings, (3) observations, (4) documentation, and (5) reflection. Each pathway included an in depth discussion of issues and activities to support and reinforce the concepts. Each mentor and each classroom was also given a camera and printer to document children's learning (Luckenbill, 2012). The mentor visited each classroom once a week (4-5 hours per visit) for 15 weeks to observe activities, educator-child and child-child interactions, and to engage the educator in individual discussions based on the observations, classroom concerns, and activities in the manual. Mentors often interacted with the children to model constructivist-based behaviours. Handouts and articles were provided when appropriate. Each centre received release time funds to hire substitutes to replace the educator for an unhurried engagement between the mentor and the educator. In the final weeks, the educators and mentors visited other classrooms in the mentoring group to observe those environments and develop a professional network. The mentors kept weekly journals about each educator, which included detailed and extensive notes regarding their observations, interactions, and they also embedded photos to complement their analysis. They recorded successes, frustrations, details about activities, and plans for future meetings. The journals for the six classrooms were the data source for our study.

Coding of Mentors' Journals

A case study method with a grounded theory approach was employed to examine the mentors' journals (Stake, 1995; Strauss & Corbin, 1998). Each author independently read the journals and

Table 2

ECERS-R Activities Pre- and Post-Test Scores for the Six Classrooms

Classroom	Scores			Qualitative ECERS-R Rating
	Pre-Test	Post-Test	Change (points)	Direction of Change
Venus	3.92	5.50	+1.58	Minimal to Good-Excellent
Mars	1.83	4.08	+2.25	Inadequate to near Good
Saturn	4.08	6.08	+2.00	Minimal-Good to near Excellent
Moon	4.25	3.25	-1.1	Within Minimal-Good range
Sun	5.33	4.67	-0.66	Above Good to below Good
Comet	5.25	4.42	-0.83	Above Good to below Good

Note. The qualitative ratings associated with the numerical ratings on the ECERS-R include 1 = inadequate, 3 = minimal, 5 = good, 7 = excellent (Harms et al., 2005).

identified themes that mentors reported that seemed to indicate factors and barriers associated with educational change; we did not identify a list of potential factors prior to reading the journals. The authors met a number of times to compare lists of themes and evidence based on their reading so as to meet the criteria for theory triangulation (Stake, 1995). Overlapping themes were identified and following extensive discussion sub-themes were reduced and grouped into two major themes: mentors' reports of educator factors that promoted (a) change ($n = 5$) and (b) barriers ($n = 10$) (see Table 3). Next, the authors reread the journals to verify the two themes, compare examples, and analyze any problems with identifying themes. Finally, we cross-referenced the behaviors and examples and then conducted member checks with the mentors, who agreed with our coding of their journal entries.

Findings

Factors Associated with Educational Change

These analyses provide an overview of the mentors' reports of factors that may be associated with educational change while implementing a constructivist curriculum. We counted the number of weeks each mentor discussed the factors for each classroom (see Table 4), which

Table 3

Mentors' Perceptions of Educator Factors that Promote Educational Change and Create Barriers to Educational Change

Factors that Promote Change

1. Willingness to participate (e.g., engage in discussions, critically analyze readings)
2. Openness to new ideas (e.g., ways to improve transitions, more open-ended materials)
3. Reflective skills (e.g., reflecting on successful or unsuccessful practice, activities)
4. Supportive and interested peer culture (e.g., co-workers discuss new ideas for change)
5. Flexible thinkers (e.g., educators open to taking risks)

Factors that Create Barriers

1. Unwilling to work beyond paid hours (e.g., beyond classroom time)
 2. Time issues (e.g., daily scheduling problems)
 3. Resistance to new ideas (e.g., dismissing mentor's suggestions)
 4. Resistance to being observed/judged (e.g., observation is too stressful)
 5. Unwilling to participate (e.g., reflect on practice, write journals, talk with mentor about practice)
 6. Hold onto own values/beliefs (e.g., not open to challenging beliefs)
 7. Cling to what they were once taught (e.g., previous educational experiences guide educator's decisions and behavior)
 8. Not recognizing children's needs (e.g., not letting children have free choice about materials)
 9. Defensive peer/work culture (e.g., no support for change from co-workers)
 10. Poor pedagogy (e.g., only use close-ended questions, chaotic classroom environment)
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Table 4

Number of Weeks Themes Recorded in Mentors' Journals by Classroom

Themes	Venus	Mars	Saturn	Moon	Sun	Comet
Factors that Promote Change						
1. Willingness to participate, engage in discussions & readings	12	2	4	11	7	10
2. Openness to new ideas & improvements	7	8	6	5	9	14
3. Reflective skills (re: practice)	7	5	6	2	6	9
4. Supportive & interested peer culture	4	2	3	2	0	8
5. Flexible thinkers, open to taking risks	4	6	8	0	2	3
Total Scores	34	23	27	20	24	44
Factors that Create Barriers						
1. Unwillingness to work beyond paid hours (classroom time)	0	0	0	4	9	0
2. Time issues	0	2	2	4	5	4
3. Resistance to new ideas	0	2	3	4	7	0
4. Resistance to being observed/judged	0	0	0	3	3	1
5. Unwilling to participate (reflect on practice/write journals/talk with mentor about practice)	0	1	3	2	7	0
6. Hold onto own values/beliefs (not open to challenging them)	0	2	0	1	5	3
7. Cling to what or how they were once taught themselves	0	4	0	0	6	1
8. Not recognizing children's needs	0	2	2	0	4	1
9. Defensive peer/work culture (no support for change from co-workers)	0	4	2	1	2	3
10. Poor pedagogy	1	14	1	6	6	10
Total scores	1	31	13	25	54	23

Note: The Venus, Mars, and Saturn classrooms demonstrated increased ECERS-R Activities scores from pre- to post-intervention, whereas the Moon, Sun, and Comet classrooms demonstrated only a slight decrease in ECERS-R Activities scores from pre- to post-intervention.

provided an indication of the themes that were more or less prevalent in the mentors' journals. Classrooms were grouped according to whether their ECERS-R Activities scores increased or not to highlight several patterns. When Activities scores remained stable (or only decreased slightly) over time, mentors were more likely to report factors that created barriers compared to classrooms with increased Activities scores. Patterns for factors that promoted change were less clear, because mentors reported some change in all six classrooms. To provide a picture of the processes involved in change, we conducted a case analysis of each classroom.

Case Study Analysis of the Six Day Care Classrooms

Based upon the extensive journal reports of the mentors, we focus on the three classrooms with stable ECERS-R Activity scores and then those with increased scores.

Moon Classroom.

Description. In this hospital work-place centre, the 4-year-old classroom was team taught by two educators. Educator one (E1) participated but E2 was not interested in the project, thus the mentor (M1) worked only with E1. However E1 shared information with E2 and other colleagues during the project. The 4-year-old group shared the classroom for part of the day with the 2.5-year-old group; it was divided into some interest areas, but had few manipulatives and no book corner.

Factors associated with change. In general M1 reported many educator factors seemed to create barriers, but also promoted change (see Table 4). In terms of barriers, E1 initially reported to M1 that she had “mixed feelings” about participating and although M1 noted that E1 greeted her warmly, she seemed “on edge and uncomfortable” (Mentor journal Week 2). M1 stated that it was difficult to develop a trusting relationship with E1, and E2’s non-participation limited how much “leeway” there was to implement classroom changes (Week 2). M1 reported that E1’s apparent reluctance to become fully engaged was still evident in Week 8, but that E1 was slowly becoming “more at ease with the process,” although she was still “guarded at times”. According to M1’s journal even in Week 15, E1 seemed ambivalent and said she was “happy” to finish the project.

According to M1, E1’s ambivalence was manifested in several ways. For example, M1 was unable to observe E1 for a variety of scheduling reasons (e.g., Time Issues as reported in Table 2 for Weeks 7, 13, 14). M1 indicated that E1 also seemed rather resistant to new ideas; in Week 4, M1 reported she had a list of “explanations and excuses” to rationalize her choice of curriculum (the choice of St. Patrick’s Day theme that the teacher used annually without reference to the interests of the children), which M1 reported limited E1’s ideas about how children’s interests and the curriculum were “aligned”. M1 recorded many examples of poor pedagogy. Initially, the classroom was disorganized and lacked materials (Week 1). Children also had few opportunities to make decisions about activities (Week 4); the adult-directed art was closed-ended, there was little educator scaffolding; and no activities responded to the children’s interests (Week 5). M1 also recognized that sharing the classroom with the 2.5-year-old group created planning challenges for E1.

Nevertheless, M1 also recorded examples of change; E1 participated in weekly mentoring sessions, did the readings, manual exercises, and made some changes in room organization (Week 6). In Week 7, M1 recorded that E1 was “making small progress,” which was evident the following week when M1 observed that the children made their own bird feeders without an adult model. Although E1 struggled with some basic management issues such as transitions and noise level, M1 reported that E1 worked to identify the problems and used observation techniques to develop a better understanding of the situation and create solutions (e.g., Week 6). In Week 15, E1 created a list of potential classroom changes (e.g., separate the two age groups, give children more choices, and create an art area).

Initially, E1 was unwilling to reflect on her own practice and never kept a journal, but over time M1 recorded that E1 began to enjoy the reflection process. According to M1, E1 only began to question her own strong beliefs about teacher-directed curriculum and practices in Week 15. M1 reported that it was challenging to work with E1 and while small changes were evident, she (M1) needed more time to overcome the barriers; although, E1 “related to constructivist principles and practices . . . conceptually more than practically . . . not many of these principles are observable in her classroom practices” (M1’s summary report).

Sun Classroom.

Description. This centre was housed in a recreation facility and had a mixed-age classroom; the two educators (E1, E2) had worked together for several years.

Factors associated with change. Throughout the intervention, E1 and E2 displayed behaviours that Mentor 2 (M2) recorded as a lack of interest in challenging their beliefs and practices. For example, both educators stated that they were unwilling to do homework (e.g., readings or manual exercises, Weeks 1, 2, 15). M2 also reported struggling to get E1 and E2 to participate in individual discussions (Weeks 1, 7, 12, 13). M2 recorded E1 and E2's resistance to new ideas or to change their practice, for example she indicated that E1 seemed "skeptical" about the constructivist approach and E2 was uncomfortable with suggestions for change (Week 6), and there was no evidence of the implementation of new practices (Week 11). Far along in the mentoring process E2 explained that she did not understand the project's purpose (Week 9). In M2's journal entries she indicated that both educators were "deeply entrenched in their own beliefs" and she had difficulty challenging E1 and E2's values and beliefs through readings, visits to other classrooms, or discussions. M1 stated that this resistance resulted in poor pedagogy and she labeled them as "stand back" educators (Week 12).

Nevertheless, M2 also recorded factors that were associated with change. Sometimes both educators were willing to participate, for example initially they expressed excitement about the camera (Week 1), but E2 only made photos for labeling toy bins rather than for documentation (Week 12). M2 reported that both educators shared stories with her (Week 3); E2 completed the traits exercise in the manual during a discussion period (Week 7); and E1 and M2 discussed group versus individual talk with children (Week 13). M2 also recorded instances of an openness to new ideas such as enriching the art area in Week 2 and brainstorming about curriculum and child development (Week 3). Following E2's expressed interest in early literacy (Week 2), M2 provided appropriate readings; however, in Week 6, E2 gave the children literacy worksheets. In conclusion, M2 reported that the willingness of E1 and E2 to participate and be open to new ideas amounted to "more talk than action" (Week 15).

Comet Classroom.

Description. The infant, preschool, and afterschool programs were located in a church basement. Although recently painted, the preschool classroom had worn out equipment. The educator (E1) had an uneven work history of seven jobs in the prior four years.

Factors associated with change. Although Mentor 3 (M3) identified a number of challenges in her journal, two themes seemed to stand out for her: (a) poor pedagogy (see Table 2 for definition), and (b) initially E1 seemed slow to examine her own beliefs. In terms of poor pedagogy, M3 noted the classroom was disorganized, noisy, and there was "poor proactive planning" (Week 2), little afternoon free play (Week 5), poor transitions (Weeks 8, 9), and educators asked children few open-ended questions (Week 11). M3 reported that E1 struggled with issues related to giving children control over the curriculum and making choices about use of materials. For example, in Week 5, E1 reported to M3 that it was hard for her to watch the children poke at a piece of styrofoam and make a mess, yet she did not interfere. According to M3's journal entries, E1 explained that she was also struggling to overcome the "stigma" associated with just observing and not interacting with the children, a view expressed by her co-workers (Week 6). In response, M3 suggested E1 use her observations of the children's development in a documentation panel as evidence of the value of observation, but E1 did not initiate documentation until Week 15.

M3 indicated that E1 responded positively to the mentoring; in Week 4 E1 reported to M3

that she had not been “excited” about her job prior to the intervention; nevertheless, she had been eager to participate (Week 1) and was “keen to really get to the ‘meat and potatoes’ of the project” (Week 2). According to M3’s journal, by Week 11 E1 reported a renewed enthusiasm for her job. M3 recorded that E1 was open to new ideas and reflection. For example, in Week 4, M3 reported suggesting an activity about color mixing to replace a spontaneous glue and paper mixing that had worried E1; E1 implemented the activity immediately and M1 observed that E1 seemed excited by the children’s interest and how it promoted their learning. M3 indicated that E1 also began to take initiative in identifying problems that required change such as the arrangement of toys (Week 8), the transition to the playground (Week 9), learning to create a curriculum web for planning based on observations of the children’s interests (Week 10), asking more open-ended questions (Week 11), and giving the children greater autonomy (Week 14).

M3 recorded that E1 reflected on her own practice in her (E1) weekly journal and by Week 10, M3 noted a significant improvement in E1’s reflections about what she was doing with the children and why. Over the intervention M3 observed E1 reaching out to her co-workers and noted that by Week 6 E1 was encouraging them to do journaling about the children; in Week 9, E1 reported to M3 that the staff were now making program decisions and solving problems as a team; for example, changing the afternoon schedule to allow for more indoor free play.

Venus Classroom.

Description. This college-affiliated centre was located in a small building surrounded by green space. One educator (E1) was in charge of the 4-year-old group. The small, bright classroom contained many varied materials in developmentally-appropriate centres.

Factors associated with change. Table 4 indicates that Mentor (M1) recorded only one instance of a barrier, specifically poor pedagogy when the activities were not based on E1’s observations of the children. In contrast, M1 recorded many examples of educator behaviors that seemed to promote change. From Week 1, M1 reported E1 was an active participant and engaged in the discussions, readings, manual exercises, and reflected and analysed her own practice in her (E1) journal. For example, in Week 4, M1 noted that E1 was “thrilled” that she (M1) had brought the camera and printer, which E1 used extensively to create documentation panels about the children’s activities and development (e.g., Week 5, daily activities; Week 8, paper bag art; Week 9, my family). M1 reported that E1 actively made changes to the classroom and her practice. For example, in Week 7 following a discussion of constructivist principles, E1 began posting documentation of the children’s activities, adding books, and open-ended art materials. M1 reported that E1 also employed new ways of talking to the children by asking them, “What they wonder?”

M1 recorded a number of examples of E1’s openness to new ideas and her integration of the information from discussions with M1 and readings about constructivist principles, for example in Week 9 E1 added new materials to promote “exploration, discovery, and scientific concepts”. M1 also reported that E1 was reflective. For example in Week 3 E1 articulated her educational beliefs (which leaned towards constructivism), goals, and desire for greater parent communication, but M1 noted that the road to success was not always smooth. In Week 12 M1 stated that E1 was experiencing high stress levels about personal and work-related issues. Nevertheless, E1 indicated that there were changes she wished to incorporate into her practice when she was “psychologically” ready. M1’s journal entries provided evidence of a supportive peer culture, for example, E1 reported that her co-workers wanted to learn more about the project (Week 4) and by Week 14, E1 had talked about constructivism at staff meetings and reported to M1 that she had assumed the “role of an advocate for effective practices”.

Mars Classroom.

Description. The small preschool classroom had two educators: One educator (E1) was a recent graduate hired as a parental leave replacement, while E2 had worked with the parental leave educator (PE) for several years. The room was divided into interest areas, but the equipment and supplies were in poor shape.

Factors associated with change. Based on Mentor 2's (M2) journal the largest number of entries in Table 4 was for poor pedagogy (14 weeks) including: (a) resistance to new ideas and (b) "a defensive peer culture" (Weeks 7, 8, 10, 12). M2 indicated that there seemed to be a "fear of structure", because the educators seemed to avoid providing any structure to the curriculum (Week 10). M2 also noted evidence of a defensive peer culture, which seemed to make the educators resistant to change (Weeks 3, 4, 9, 11); M2 cited as evidence that the new hire, E1, who explained that she "did not want to make waves" given that E2 and PE had worked together for many years and that they liked how they operated.

Nevertheless, M2 noted many change factors including the educators' willingness to participate, discuss readings (Weeks 9, 10), openness to new ideas and improvements, and a willingness to take risks (Weeks 5, 6, 8-10, 12, 14). For example, M2 recorded that E1 and E2 worked as a team to create a new writing centre (Week 7); E1 and E2 used the camera to send home pictures and descriptions of the children engaged in various activities (Week 9); and they collaborated to rearrange the room with positive results (Week 12). M2 noted that both E1 and E2 became more reflective, for example E1 began writing stories in her (E1) journal about the children (Week 9) and recorded interesting anecdotes for curriculum planning (Week 10), E2 recorded the children's stories on large pieces of paper and M2 observed a circle that ended with a planning path to determine where each child was going to play in the room (Week 10). M2 also observed E2 discussing documentation (Week 10) and by Week 15 documentation panels were hanging up in the room.

Saturn Classroom.

Description. This centre was located in an inner city housing complex with access to a playground and gym, but was in poor condition. The two educators worked with the 4-year-old group that included a child with a severe disability. E1 had both a staff supervisory and educator role, while E2 was responsible for the group of children.

Factors associated with change. Mentor 3 (M3) reported in her journal that there was some evidence of resistance to new ideas (Weeks 9-11). M3 attributed this in her journal to the fact that although E1 often discussed changes, she was slow to implement them. Additionally, M3 often recorded that E2 was more focused on housekeeping and plans for finding a new job than observing the children to gather data for curriculum planning (Weeks 5, 6, 10).

Nevertheless, M3's numerous entries in her journal under factors that seemed to create change indicated that E1 and E2 participated willingly, were often open to new ideas, developed reflective skills, created a supportive and interested peer culture, were flexible thinkers, and open to taking risks. For example, from Week 1 onward M3 recorded that E1 expressed a desire to learn more about working with staff to improve the centre. In Week 5, M3 recorded E2's statement that journaling would be useful for her work with the children. In Week 6, E2 indicated that the discussions with M3 and the readings provided the necessary information for making documentation panels. Another example M3 recorded of the educators' openness to new ideas was that they used the camera to create documentation panels and E1 completed a panel collaboratively with the children rather than doing it on her own (Week 9).

Further, M3 made several entries concerning reflective skills. In particular she noted E1 and

E2's discussion regarding the children's focus on burning buildings (Week 6) and the decision to extend this interest with a trip to the fire station and an invitation to the fire fighters to visit the classroom (Week 8). Additionally, M3 noted evidence of a supportive and interested peer culture. For example, she witnessed E1 and E2 sharing a manual exercise on values with co-workers, discussing documentation panels (Week 8), and brainstorming ideas for the program (Week 12). M3 recorded evidence of flexible thinking and openness to risk-taking by both educators. One example involved children building ramps using a climbing structure in the gym; E1 engaged the children in figuring out what they could do with the pieces to create different heights and sizes of ramps.

Discussion

Our analysis of the factors associated with educational change reported by the mentors seemed to be captured by three overarching themes: (a) willingness to participate in IPD including personal characteristics, reflection, and classroom practices; (b) values and beliefs about child development and early childhood education; and (c) a community of learners and supportive peer culture. We discuss each theme below.

Willingness to Participate, Personal Characteristics, and Practices

In line with the literature (Fullan, 2007; Hobson et al., 2009), the educators' willingness to participate and to invest in the process of change appeared to be an important factor, but a serious time and energy commitment was also required by the mentor to facilitate the educators' participation and willingness to embrace change (Whitebrook & Bellm, 1996; Ryan & Hornbeck, 2004). According to the mentors' reports, the educators in the three classrooms (Venus, Mars, Saturn) with increased ECERS-R Activities scores expressed an interest in the project, agreed to be observed, completed the readings and exercises, engaged in weekly discussions, and analyzed their practice and beliefs. Although the Activities score in the Comet classroom decreased slightly, this educator's willingness and positive attitudes toward change were very similar to the educators in classrooms with increased Activities scores and, as the mentor noted, with a longer intervention this classroom may have resulted in improved quality. The issue of length of mentoring has important implications that we return to below.

Although the mentors recorded a number of factors associated with change for educators in the Moon and Sun classrooms, these educators seemed to pay more lip-service to making change than acting on change. Both systemic issues (e.g., not arranging meetings or hiring substitutes) and personal beliefs may have contributed to their reluctance to participate fully. In both centres, the Director apparently had volunteered the centre's participation, perhaps without discussing it first with the classroom educators. The educators may have felt that they had no choice about participating and as a consequence may have raised barriers to the project (particularly in Sun classroom). The Moon class educator was also in a difficult position because her co-worker refused to participate, which the mentor reported created a challenge for her, and raised questions about whether there was a positive climate for facilitating change in this room.

The personal characteristics that differentiated the educators in the two groups of classrooms were rather striking. Factors that mentors perceived as associated with change included openness to new ideas, strong reflective skills, and flexible thinking (Venus, Mars, Saturn educators), which may have afforded opportunities to analyze practice, identify poor

pedagogy, resolve problems, and reflect on ways to improve teaching practice and the classroom environment (Lehrer, 2013; Veenman & Denessen, 2001). These educators seemed willing to take risks such as when the Mars class educators changed their room arrangement several times to accommodate more interest centers. The mentor described the process for the Venus class educator as linking new ideas with practice similar to the process identified by Wood and Bennett (2000). In contrast, the mentors reported that the educators in the Moon and Sun classes seemed to hold onto their own beliefs and values and were not open to the mentoring process or ideas about constructivist curriculum, as addressed below. As Fullan (2007) has argued, it is critical for the educators to take risks by actually implementing changes. In this way, educators can critically assess the value and impact of the change on their own behavior and those of the children.

Two practices differentiated the educators who appeared to implement classroom changes versus those who did not, namely journaling and documentation. Journaling is a key component in the reflection process, because it allows educators to describe critical issues regarding children's behavior and development, curriculum design, their own feelings, thoughts, strengths and weaknesses, and to consider how to resolve issues (Lukenbill, 2012; Weatherson, Wigand, & Wigand, 2010). Educators who reflect on feelings and thoughts about an issue and take the child's point of view are more likely to become responsive caregivers and to understand the child's thinking (Forman, 2005; Vartuli & Rohs, 2007; Virmani & Ontai, 2010). By intensively observing the classroom and engaging in ongoing analytical discussions about practice and the educator's journal reflections, a mentor can facilitate the process towards positive change (Lukenbill, 2012). This process was evident for the Venus class educator, who kept a journal and collaborated with the mentor, whereas the Moon and Sun educators did not and they seemed rather resistant to the reflection process. Our study may provide support for the view that analytic reflection is a key process in bridging the gap between theory and practice and thus, it may be critical for facilitating educational change (Furlong, 2000; Lehrer, 2013; Veenman & Denessen, 2001). Clearly, further research is needed to examine this point in more detail.

Learning to engage in documentation was another example of risk-taking, which the three educators in classrooms (Venus, Mars, Saturn) with improved Activities scores seemed to embrace, in contrast to the two more instructivist educators (Moon and Sun classes). Documenting children's development, interests, and learning for program planning and parent communication are key constructivist principles (Curtis & Carter, 2008; Jacobs et al., 2007; Kroeger & Cardy, 2006). The ability (or not) to embrace these principles may be partly due to differences in basic beliefs and values about how children learn and the nature of teaching.

Values and Beliefs

Our mentoring program was based on a social-constructivist approach to learning and teaching using a situated cognition framework (Bodrova & Leong, 1996; Branscombe et al., 2003; Fosnot, 2005; Landry et al., 2009; Seel, 2001), in contrast to a more instructivist or educator-centered approach (Katz, 1999). Educators' beliefs tend to guide their classroom practices and reflect their views regarding how children learn and develop (Wilcox-Herzog, 2002). The mentors' journals provided evidence of the educators' fundamental values and beliefs about children's development, ways of learning, and thus nature of teaching. The mentors perceived that the beliefs of the Venus, Mars, and Saturn educators (rooms with increased Activities scores) appeared to be compatible with a constructivist approach. These educators were more likely to

implement changes to reinforce this curriculum model compared to the Sun and Moon educators. The latter educators appeared to hold more instructivist views and seemed to be afraid of giving “control” of the curriculum to the children. Although the Comet class educator struggled with the notion that her job was just “glorified babysitting” unless she was “teaching,” with the mentor’s guidance, she did become more open to constructivist principles.

Sometimes beliefs are open to change via personal experiences or preservice education, but they are often resistant to change, particularly for more experienced educators (File & Gullo, 2002; Pajares, 1992; Tillema, 2000); the mentors perceived both patterns in their work. In our larger study (Howe et al., 2012), classrooms were randomly assigned to the mentoring group and we did not consider how the educators’ initial values and beliefs might impact their willingness to consider new approaches. This lack of attention to the match between mentor and mentee values, beliefs, and personalities may partly explain why the ECERS-R Activities scores increased in only some classrooms. As Hobson et al. (2009) argue, the mentor-mentee match is a critical factor to consider in developing programs. The compatibility of fundamental beliefs regarding curriculum and preparing participants for the possibility of embracing change should be addressed in future research.

Community of Learners

Our findings provide support for literature indicating that educational change is more likely to occur when a community of learners is established (Fleet & Patterson, 2001; Wood & Bennett, 2000). In a collaborative community, educators can develop professional discourse by sharing insights, discussing issues, and problem-solving, and can influence one another’s values, beliefs, and practices (Fosnot, 2005; Orland-Barak, 2007; Raths, 2001). In our study, educators who created a community of learners with their co-workers also demonstrated increased Activities scores, whereas 2/3 classrooms with stable Activities scores did not. For example, the Venus class educator shared her new knowledge with her co-workers and described herself as becoming “an advocate for effective practices,” while the Mars and Saturn educators collaborated with colleagues to improve classroom quality. The mentor working with the Comet educator noted that all of the centre’s educators worked together to improve the daily schedule, which provided support for her belief that with more time this classroom would have demonstrated improvements in quality. In contrast, the mentors did not report evidence that the Moon and Sun educators were interested in creating a collaborative peer culture. An enthusiastic and supportive peer culture may perhaps have made it easier for some educators to participate in the process of change with the mentor (Fleet & Patterson, 2001; Fosnot, 2005). This may be an area where directors could take a leadership role in helping to facilitate a community of practice (Bloom et al., 1991), which is a question for future research.

Conclusions, Limitations, and Policy and Practice Recommendations

As Hobson et al. (2009) note, developing an IPD program requires careful planning due to the financial and time commitments required for individualized mentoring. Our study had a number of limitations including that we worked with a single data source and did not assess the educators’ beliefs prior to the program to ensure that they would be open to learning about a constructivist curriculum. In addition, not all educators in each class participated and some educators did not keep a journal so, we were not able to record their perceptions of the

mentoring process and compare it to the mentors' perceptions. Although we worked only with educators with at least two years of experience, not all educators were in Katz's (1972) stage 3 or 4 of professional development and were not ready for renewal and to examine their practice critically. Future research should account for this point. Our sample was small and although the educators worked in three different cities, it is difficult to generalize our findings to other populations. Additionally, the mentoring program may not have been long enough for some educators to make significant progress, suggesting the importance of individualizing the length of programs to meet the needs of each educator. One further issue that warrants more detailed research is the impact of the mentoring on the children's development. Nevertheless, our study had some important strengths, which were in line with many of Hobson et al.'s (2009) recommendations for developing mentoring programs. We included an analysis of the mentors' perceptions of the mentoring process and provided intensive training for the mentors and verification checks (e.g., conference calls, site visits, and emails), paid release time for the educators to work with the mentors, and a detailed manual on constructivism curriculum designed to be used in flexible ways. We also presented clearly articulated strategies for each classroom visit aimed at promoting adult learning, emotional and psychological support, and professional development (i.e., observation, discussion, scaffolding practices and reflection, and activities to reinforce constructivist principles).

Regarding policy recommendations, individualized mentoring programs require proper financial and personnel support as well as rigorous evaluations of teacher success in promoting change (Fullan, 2007). Recommendations for practice indicate that it is important to assess the educator's initial beliefs and values prior to an intervention to determine if she/he is open to change and to consider how to modify and individualize the mentoring both for those who are open to or more resistant to educational change. One stimulus for change might include visiting classrooms that are models of 'best practices' early in a mentoring program, so that educators can observe and analyze a high quality program in action. Classrooms are unique (e.g., population, staff, physical environment, and philosophy), therefore the mentor must be sensitive to many factors in building trusting relationships to facilitate change (Hobson et al., 2009; Peterson et al., 2010; Ryan & Hornbeck, 2004). Therefore, training the mentor is a critical factor in the success of any program (Evertson & Smithey, 2000; Fletcher et al., 2008).

In conclusion, as Raths (2001) argues teachers are professionals, which distinguishes them from nonprofessionals in three ways: professionals (a) value knowledge, (b) are colleagues who consult and collaborate with one another, and (c) advocate for their clients, the children they teach and their families. One means for promoting educational change may be to help educators view themselves as professionals who take responsibility for improving their knowledge and practice and view themselves as colleagues and advocates. Our study indicates that some educators who viewed themselves as professionals were open to embracing educational change and mentoring can provide an appropriate context for adult learning (Veenman & Denessen, 2001), improving classroom quality and having a positive impact on children's development.

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Note

1 All classrooms were assigned pseudonyms.

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