Five

TEACHER PROFESSIONAL DEVELOPMENT IN PALESTINE

Hope Despite All

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studies in the field of positive psychology suggest a strong correlation between hope and work. According to one study, leaders who are hopeful have an impact on positive financial and job satisfaction results (Luthans & Youssef, 2004). Further studies have found that hope is a motivational state determined by the interaction between three factors: goals, agency, and pathways. Luthans and Youssef (2004) state: "People are driven to accomplish their goals by their sense of agency, which provides them with an internalized determination and willpower to invest the energy necessary to achieve their goals. Those with high hope are also motivated by their sense of having the capability to develop ways to get the things they want, which provides them with the ability to generate alternative pathways towards the accomplishment of their goals if the original ones have been blocked" (p. 16).

Regarding the professional development (PD) of teachers, hope is a poten- tial catalyst to improve not only teachers' professional practice but also their lives and well-being. The idea of hope has long been understood in relation to the human condition, with previous literature on the subject indicating how hope is instrumental in human adaptation. Early research has suggested that hope is important for change, for willingness to change, and for well-being. Furthermore, training teachers to have optimism, which differs from hope in that it attributes positive events as internal and permanent, and negative events as external and temporary, may help them stay positive about their situation (Luthans & Youssef, 2004). This becomes especially important in conditions where the general political situation is dire. Leaders of education initiatives, especially international development agencies (such as those that are active

in Palestine) can undoubtedly lead as optimists optimists in these situations. Some researchers contend that hopelessness is not inevitable or structural, meaning that interventions could be effective in changing hopelessness levels (Bolland et al., 2001, 2005). One possible way to effect this would be through interventions targeting social factors that play a role in developing hope in youth, rather than having to change conditions of economic disparity (Bol- land et al., 2005). This also means that educators in leadership positions do not need to wait for political conditions to change but rather can invest in current education systems by believing in the ability to effect change and empowering educators to believe the same.

The Context

In Palestine, according to the Ministry of Education and Higher Education (MOEHE), only 40% of young children have access to preschool education, and retention numbers may even be lower. International organizations have been carrying the burden of the early childhood development (ECD) sector, especially in the areas of in-service teacher training and mentoring and pre-school upgrading and renovations. This is a contribution to the international effort to increase enrollment and retention of young children in preschools as well as to improve the quality of services for young children in marginalized communities. An abundance of one-time generic teacher-training workshops dominates the ECD sector in Palestine. Many programs offer little guidance on next steps or follow-up plans, and it is not clear how many of these trainings are evaluated and how many of them document the possible impact on teachers. Nevertheless, they may be used as examples of hope interventions in ways that bring joy to teachers' lives and the communities they serve.

Until very recently, there were no set professional competencies or curricu- lum objectives that were agreed on by stakeholders such as teachers, supervi- sors of the Ministry of Education (MOE), and families. Local and international nongovernmental organizations (NGOs) offered training for kindergarten teachers with no guidance or set standards for the sector. A national task force on ECD convened in 2016–2017, including NGOs1 and the MOEHE, and put together professional standards and a kindergarten curriculum framework to guide teachers to develop child-centered pedagogy. Although this is a huge step for the improvement of the ECD sector, the implementation of this strategy poses a problem because some early childhood education (ECE) teachers and their supervisors, who are already in the education system, are not qualified to teach this age group. This is in part because many carry upper-elementary

teaching diplomas and end up in preschool education due to the shortage of elementary teaching positions (Nasser & Shami, 2013). Because preschool education is not compulsory in Palestine, charitable organizations and local councils primarily run the sector (out of 1,600 preschools, only about 170 are run by the MOEHE in Palestine).2

This study, conducted during the 2016–2017 school year, aimed at sharing the knowledge gained from a comprehensive PD program designed by an NGO, where school rehabilitation and renovations along with PD training and mentoring are offered using the model presented in figure A.1. This model is unique because, unlike others in the region, it is a long-term pro- gram that invests in marginalized villages and remote communities that are far from major cities in Gaza and the West Bank (WB). In addition, it offers an adaptable model whereby foundational knowledge may be adjusted as needed by the facilitator and teachers and more advanced training may become more necessary.

Background Information on Teacher Development

Studies point to the importance of ongoing opportunities for PD of ECE teach- ers, especially the need for learning formats that go beyond the one-time work- shops prevalent in many PD designs (Diamond & Powell, 2011; Simon et al., 2011). Recommendations from the field support the importance of considering the form, duration, and prior knowledge of participants in designing successful PDs, including integration of content knowledge and opportunities to enact newly learned information and to reflect on that enactment individually and in groups (Van Driel & Berry, 2012). In a meta-analysis of PD literature, Birman et al. (2000) suggested that more hands-on PDs, more time combined with more contact, and collective participation are essential components and show greater potential for achieving success and transformation in pedagogy.

A high level of support, whether teachers are veterans or novices, is documented as important in promoting teachers' professional knowledge. Anders et al. (2000) concluded that quality PD is characterized by the following features: intensive/extensive commitment; monitoring/coaching/clinical support; reflection; deliberation, dialog, and negotiation; voluntary participation/choice; and collaboration. In addition, PDs that allow feedback and modeling had a greater impact on teachers' practices and ensured change continues after the intervention (Joyce & Showers, 2002). Diamond and Powell (2011) also con- cluded that effective PD focuses on the learner, takes place in a collaborative

environment, includes opportunities to enact the content gained, and is supported by constructive feedback and we add a hopeful agenda for the future.
It is clear in the literature that long-term PD that is comprehensive and includes usable ideas enacted in real classrooms is showing promising results in increasing the quality of teaching (Nasser et al., 2015). The current study examines this approach in marginalized locations in the WB (Ramallah and Jericho areas) and in Gaza (Gaza and the North Gaza governorates). It answers the question of whether a comprehensive PD model makes a difference for teachers and young children in these conditions and environments.
The PD training model, developed by one of the NGO's professional teams and examined here, is offered for a period of six to nine months and a total of 120 hours of training (on weekends and for an intensive period in the summer in the WB and in various other formats in Gaza, such as intensive daily after- school training). In this model, teachers are provided with new knowledge on theories, inquiry-based learning, literacy and numeracy, and practical applica- tions in the classrooms (see figure A.1). The training team also engaged teach- ers in two one-on-one mentoring sessions before preschool rehabilitation and then three such sessions after the renovation of the preschool facilities. The mentoring sessions were conducted in the classrooms, where a mentor mod- eled best practices, including classroom management and working in learning centers.

Methodology

A mixed-method approach combining quantitative and qualitative research tools was used to measure the impact of the PD program for that academic year:

1. Pre- and post-observations checklist using components of the Classroom Assessment Scoring System (CLASS) developed in the US to measure the quality of ECE classrooms (Pianta et al., 2014). We used the same scoring system but not all the domains, as some were not relevant to the context in Palestine. We focused on the domains of "interaction with children," "teaching strategies,"3 and "classroom environments" (see table A.1 for a list of items on the survey). Fifty-one teachers were observed by two observers—one in Gaza and one in the WB—to gain independent and reliable knowledge about practices and the quality of teaching before and after the PD training and renovations of facilities.
2. Focus group discussions: Two discussions each were conducted in Gaza and the WB with groups of teachers at the end of the

program, designed to elicit feedback about the training content, style, and materials and their impact on their performance.

3. Self-administered questionnaire: Eliciting teachers' background information and teaching attitudes administered to all at the beginning and end of the training program.

Twenty teachers out of fifty regularly attending the thirty sessions (for a total of 120 hours) in the WB, and thirty-one out of fifty attending the trainings in Gaza were part of this study. Only some of the teachers in the observations and focus groups were included to allow for observations before the training start date (pre) and after (post). As many teachers lived in isolated villages in the WB and Gaza, travel to conduct observations was limited. In addition, we selected teachers who would remain for the next academic year and did not miss any training sessions. We chose preschools that went through renovations and kept the same teaching staff because we wanted to observe the teachers in the classrooms they had used before and after the training. Teachers who left the preschool were dropped from the study.

Two researchers conducted the observations at pre and post, and the same two conducted the focus groups. A pilot observation to try the items selected was conducted first and was followed by discussions to agree on items to include in the survey in both Gaza and the WB. Interrater reliability was conducted on pilot observations and proved to be very high, as both raters had similar scores on more than 95% of items scored. The preintervention observations were completed nine months before the post observations and the focus groups were conducted. Quantitative analysis to compare pre and post scores was administered on the three measures mentioned above. Analysis of the CLASS scores was conducted in the following three domains: (1) interaction with children, (2) teach- ing strategies, and (3) learning environments. Qualitative analysis was used to examine and generate themes based on teachers' responses in focus groups using the open coding thematic analysis technique. The quantitative data were analyzed and the transformation of data was done to get descriptive scores. A paired t-test was used to compare pre and post scores, while an independent t-test was used to compare scores by teachers in Gaza and the WB.

Results

Responses on the CLASS were highly reliable, with a Cronbach Alpha equal to 0.954 (perfect reliability equals 1; 0.7 is considered a good reliability). Findings show that improvements were made because of the training, but further invest- ments and training are needed, especially since preschools in the WB elicited higher scores than their counterparts in Gaza (see figure 5.1).

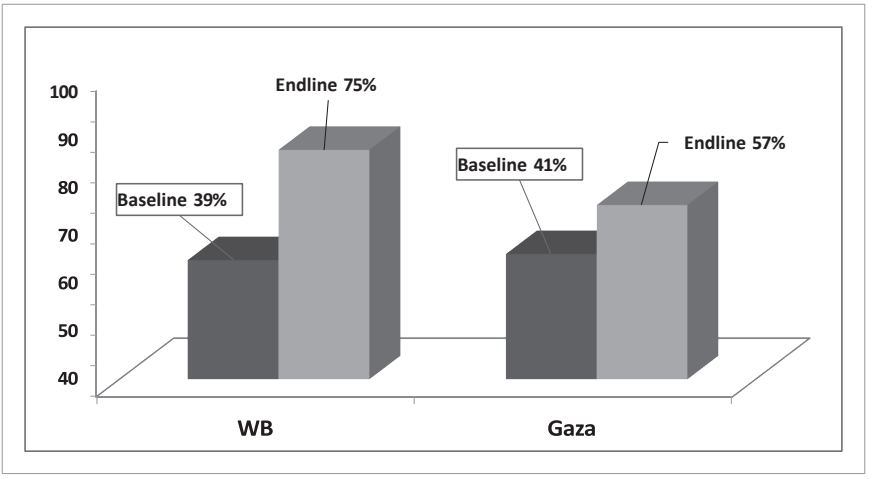

Figure 5.1. Teachers' Overall Scores on CLASS Items (Pre and Post)

The differences in the overall score on the checklist between the pre and post readings in both Gaza and the WB were statistically significant ($p < 0.001$). The same applies to the three subdomains constituting the CLASS tool, which all showed statistically significant differences between the baseline and the endline readings. This result is possibly due to the fact that, at the preinterven- tion assessment, the status of preschools in Gaza was somewhat better than the WB, and therefore the change in the WB data is more tangible. This result may also be explained by the prevailing complicated conditions in Gaza that are characterized by siege, economic collapse, and psychosocial stress due to the political conditions that drive high unemployment rates and isolation from the rest of Palestine since the siege in 2007.

Pre and Post on CLASS

Domain One: Interactions with Children

Table 5.1 suggests that the differences in the first domain, interactions with children, were found to be large and significant at pre and post in Gaza and the WB. The percentage of improvement achieved on the item "teacher shows respect toward children" was high, as it was practiced "most of the time" at only 3.2% of Gaza preschools at the time of baseline assessment, and it has increased significantly to 61.5% at the endline assessment. Similarly, in the

WB, this item increased from 15% at pre to 68.8% at the post assessment. The reported proportions of the teachers' awareness of their surroundings have improved, as it was regarded as not evident / little evidence (combined) at around 54% in Gaza preschools at the baseline assessment and 26% of schools after joining the PD program. In the WB preschools, responses in the not evident / little evidence (combined) of surroundings category dropped from 45% of preschools to zero.

The level at which children seemed comfortable with teachers has significantly improved, as it was regarded as not evident / little evidence (combined) at around 40% of Gaza preschools at the baseline assessment and dropped to around 7% after joining the PD program. The same applies to the WB, with a decrease from 15% to zero. Also, the proportion of teachers who "encourage the child to take initiatives" has significantly improved, as it was regarded as not evident / little evidence (combined) at around 61% of Gaza preschools at the baseline assessment and decreased to around 25% after benefiting from the PD. In the WB, it decreased from 68% to 19%. The overall score for the first domain at the baseline was nearly 50% at preschools in the two sites. However, after the implementation of the training program, the mean scores have increased, especially in the WB. The margin of improvement in Gaza in this domain was 28%, and it reached 50.4% in the WB.

Table 5.1. Domain 1: Interactions with Children

Percentage distribution of preschool teachers' performance on CLASS in Gaza (Baseline *N* = 31, Endline *N* = 26) and WB (Baseline *N* = 20, Endline *N* = 16)

Variables	**Gaza**				**WB**			
	Baseline		**Endline**		**Baseline**		**Endline**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**
Teacher shows respect toward children								
Not evident	1	3.2	0	0.00	0	0.00	0	0.00
Little evidence	11	35.5	5	19.2	6	30.0	0	0.00
Sometimes	18	58.1	5	19.2	11	55.0	1	6.3
Most of the time	1	3.2	16	61.5	3	15.0	11	68.8
Consistently (all the time)	0	0.00	0	0.00	0	0.00	4	25.0

Table 5.1. (*continued*)

Variables	Gaza				WB			
	Baseline		Endline		Baseline		Endline	
	No	%	No	%	No	%	No	%
Teacher is aware of her surroundings								
Not evident	2	6.5	1	3.8	3	15.0	0	0.00
Little evidence	15	48.4	6	23.1	6	30.0	0	0.00
Sometimes	13	41.9	7	26.9	9	45.0	5	31.3
Most of the time	1	3.2	8	30.8	2	10.0	6	37.5
Consistently (all the time)	0	0.00	4	15.4	0	0.00	5	31.3
Children seem comfortable with teacher/s								
Not evident	1	3.4	1	3.8	1	5.0	0	0.00
Little evidence	11	37.9	1	3.8	2	10.0	0	0.00
Sometimes	11	37.9	11	42.3	9	45.0	1	6.3
Most of the time	6	20.7	12	46.2	8	40.0	8	50.0
Consistently (all the time)	0	0.00	1	3.8	0	0.00	7	43.8
Teacher encourages child to take initiatives								
Not evident	6	19.4	4	17.4	5	26.3	0	0.00
Little evidence	13	41.9	2	8.7	8	42.1	3	18.8
Sometimes	12	38.7	5	21.7	4	21.1	3	18.8
Most of the time	0	0.00	11	47.8	2	10.5	9	56.3
Consistently (all the time)	0	0.00	1	4.3	0	0.00	1	6.3
Overall mean scores for the interaction domain	**Baseline = 50.3%; Endline = 64.4%**				**Baseline = 53.3%, Endline = 80.2%**			

Note. Improvement in the interaction domains for both Gaza and the WB was statistically significant at p value <0.001.

Domain Two: Teaching Strategies

Table 5.2 depicts the results of the preschool teachers' observations before and after the training program. Improvement levels in this domain in Gaza preschools were less obvious in comparison to the WB. For instance, the percentage of children who are free to move between activities was judged with a status of not evident / little evidence (combined) at 27% of Gaza preschools at the endline (baseline figure is 70%), as not evident at 20% only in the WB (WB baseline figure is 95%). In the same line, the proportion of children who were free to move between activity centers most of the time / consistently (combined) was at 54% of Gaza preschools after implementation; in the WB, teachers elicited similar scores in this regard (53%). However, it was reported as not evident / little evidence (combined) at 27% in Gaza and 20% in the WB. Additionally, the proportion of teachers who "redirect students' behaviors when needed" was observed as not evident / little evidence (combined) at 19% of Gaza preschools at the endline assessment (baseline figure is 70%), while it was zero at the WB preschools at the endline assessment (baseline figure is 56%). The proportion of teachers who have established routines at preschools most of the time / consistently (combined) has improved from 6% at the base- line to 50% of Gaza preschools after benefiting from the support; in the WB it increased from zero to 40%.

Teachers' disciplinary practices showed significant improvement after the implementation of the PD intervention program, with 24% reporting teachers' tendency to scream, push, or spank children in Gaza, and 84% in the WB. Teachers' tendency to scream, push, or spank children signifi- cantly improved by 22% at the baseline in Gaza preschools and 10% in the WB schools. After the implementation of the intervention program, 46% of Gaza teachers and 94% of the WB teachers refrained from these practices most of the time or consistently (combined). The overall mean score of the learning strategy domain in Gaza was 42.4% at the baseline and increased to 55.6% at the endline, with a 31% improvement level after the implemen- tation of the project. In the WB, the level of improvement was highly sig- nificant (84.2%), as the overall mean score percentage has increased from 38% to 70%.

Domain Three: Learning Environment

The findings in table 5.3 illustrate the learning environment at the preschool as observed by the assessors. The results of both baseline and endline assess- ments indicate an improvement in the learning environment in Gaza and

Table 5.2. Domain 2: Teaching Strategies

Variables	Gaza				WB			
	Baseline		Endline		Baseline		Endline	
	No	%	No	%	No	%	No	%
Children are free to move between activity centers								
Not evident	12	40.0	4	15.4	16	80.0	0	0.0
Little evidence	9	30.0	3	11.5	3	15.0	3	20.0
Sometimes	7	23.3	5	19.2	0	0.00	4	26.7
Most of the time	2	6.7	10	38.5	1	5.0	3	20.0
Consistently (all the time)	0	0.00	4	15.4	0	0.00	5	33.3
Teacher redirects students' behaviors when needed								
Not evident	2	7.1	0	0.00	3	16.7	0	0.00
Little evidence	14	50.0	5	19.2	7	38.9	0	0.00
Sometimes	12	42.9	9	34.6	7	38.9	2	13.3
Most of the time	0	0.00	10	38.5	1	5.6	8	53.3
Consistently (all the time)	0	0.00	2	7.7	0	0.00	5	33.3
Teacher has established routines								
Not evident	6	19.4	2	7.7	9	45.0	0	0.00
Little evidence	10	32.3	0	0.00	10	50.0	4	26.7
Sometimes	13	41.9	11	42.3	1	5.0	5	33.3
Most of the time	2	6.5	10	38.5	0	0.00	6	40.0
Consistently (all the time)	0	0.00	3	11.5	0	0.00	0	0.00
Teacher refrains from screaming, pushing, or spanking children								
Not evident	10	32.3	4	15.4	2	10.0	0	0.00
Little evidence	5	16.1	6	23.1	9	45.0	0	0.00

Table 5.2. (*continued*)

Variables	Gaza				WB			
	Baseline		Endline		Baseline		Endline	
	No	%	No	%	No	%	No	%
Sometimes	9	29.0	4	15.4	7	35.0	1	6.3
Most of the time	7	22.6	11	42.3	2	10.0	8	50.0
Consistently (all the time)	0	0.00	1	3.8	0	0.00	7	43.8
Overall mean scores for teaching strategy	**Baseline = 42.4%; Endline = 55.6%**				**Baseline = 38%; Endline = 70%**			

Note. Improvement in the teaching strategy domain for both Gaza and the WB was statistically significant at *p* value <0.001.

WB preschools. One of the most significant improvements was noticed in the percentages of teachers who ensure that spaces are well used, open, and not cluttered with furniture most of the time / consistently (combined) at 50% of Gaza preschools after implementation and zero at the baseline. In the WB, the improvement in this area was even higher, increasing from zero to 100%. Other improvements were noticed in the percentage of teachers who ensured that there are clear activity centers most of the time at 50% of Gaza preschools, although around one-third still regarded it as not evident; again, preschools in the WB elicited higher scores than Gaza. Moreover, the percentage of teach- ers who ensured that materials are accessible to children was very low at the baseline but improved at the endline (not evident = 46.2%, and little evidence = 11.5% in Gaza; not evident = 0%, and little evidence = 7.1% in the WB).

The overall score from preschool teachers about the learning environment domain was initially as low as 31% in Gaza and 23% in the WB. The training pro- gram significantly contributed to improving the learning environment, with an overall score at the endline of 52% in Gaza and 78.9% in the WB, marking a level of improvement of 66% in Gaza and more than 100% in the WB preschools. This result testifies not only to the success of the program to improve the learn- ing environment but also to the fact that the baseline levels were very low and almost unsuitable for children. Thus, the learning environments at the selected preschools require further enhancement and maintenance.

Table 5.3. Domain 3: Learning Environments

Variables	Gaza				WB			
	Baseline		Endline		Baseline		Endline	
	No	%	No	%	No	%	No	%
Teacher ensures that there are clear activity centers								
Not evident	28	90.3	7	29.2	16	80.0	0	0.00
Little evidence	2	6.5	2	8.3	4	20.0	2	13.3
Sometimes	1	3.2	3	12.5	0	0.00	6	40.0
Most of the time	0	0.00	12	50.0	0	0.00	7	46.7
Consistently (all the time)	0	0.00	0	0.00	0	0.00	0	0.00
Teacher ensures that spaces are well used, open, and not cluttered with furniture								
Not evident	15	48.4	4	15.4	5	25.0	0	0.00
Little evidence	13	41.9	3	11.5	9	45.0	0	0.00
Sometimes	3	9.7	6	23.1	5	25.0	0	0.00
Most of the time	0	0.00	11	42.3	1	5.0	12	75.0
Consistently (all the time)	0	0.00	2	7.7	0	0.00	4	25.0
Teacher ensures that materials are accessible to children								
Not evident	26	83.9	12	46.2	17	85.0	0	0.00
Little evidence	2	6.5	3	11.5	2	10.0	1	7.1
Sometimes	3	9.7	3	11.5	1	5.0	1	7.1
Most of the time	0	0.00	7	26.9	0	0.00	7	50.0
Consistently (all the time)	0	0.00	1	3.8	0	0.00	5	35.7
Overall mean scores	**Baseline = 31.7%; Endline = 52.7%**				**Baseline = 23%; Endline = 78.9%**			

Note. Improvement in the learning environment domain for both Gaza and the WB was statistically significant at *p* value <0.000.

When all the items constituting all three domains were calculated, findings showed that at the baseline the overall score for Gaza was higher than the WB (41% and 39%). Although both sites saw an improvement in the overall score at the endline, the WB showed significantly higher improvement levels (57% in Gaza and 75% in the WB). It is encouraging to see an overall improvement in all teachers' scores after the project's completion despite the differences in scores between Gaza and the WB. This is true because all teachers who were observed improved in their interactions with children and their teach- ing strategies and the general learning environment as suggested in scores on the post observations. When looking at study results generated using the CLASS in the US and other areas, the Palestinian teachers in this study out- performed in the average gains received on class in the post observations. Most teachers usually score in the middle of the scale; our teachers scored in the higher range.

Focus Groups

The focus group interviews at the end of the program generated similar trends, with participating teachers identifying and expressing significant improvements mainly in three areas related to their jobs and professional growth:

1. **Personal development and growth:** This was a main result of the professional engagement with peers and trainers in the field of ECD. This is true because many were mothers themselves, and the training benefited them and their interactions with their own children and families. For example, one teacher said, "The training made me a better person . . . I scream less now at my husband and children and my husband noticed that." Another young teacher from a village near Ramallah stated: "I feel calmer and more in control, this means I don't go home stressed and frustrated." It does make a lot of sense that feeling better at one's job makes them feel better at home, as spillover from home to work and work to home is documented in the literature (Bronfenbrenner, 1986).
2. **Professional image:** This theme seems to be impacted by the various training sessions and mentoring received during the PD program and intervention. This was evident in Gaza as well

as the WB, even among those who did not like being preschool teachers and expressed dismay about their job (in Gaza more than the WB). For example, several teachers said, "I don't care about what people say about my profession now, I am proud to be a preschool teacher." A teacher in Gaza was very honest when she expressed that she used to hate children and now can "live with the fact that she works with young children." Of course, while the work conditions and compensation cannot be changed for these teachers, the professional investment in them means a lot and pays dividends. In Ramallah, and at the end of the pro- gram, the Prime Minister himself distributed the certificates to teachers from the Ramallah area and Jericho, which highlighted their importance and empowered participating teachers.

3. **Improved teaching strategies:** This theme was very strong and supports the changes noticed in the CLASS pre and post observations. One teacher said: "I no longer use corporal punishment to control children," and other teachers were amazed by the power of learning centers. Another teacher said, "I can't believe how exhausted I used to be trying to control the children. Now I facilitate and monitor learning while the children work independently." A third said, "I didn't know what games and songs to teach, and I was too shy to sing with the kids. Now, I have a lot of options and I sing with them and play with them."

While it was expected to hear of improvements in teaching strategies as evident in the CLASS scores, it was surprising to learn about the improvement in the personal growth and professional image of preschool teachers because of the training program. Personal change was a huge gain for the teachers, with improvements in their self-image as preschool teachers and their satisfaction on the job. Nevertheless, this investment should be accompanied by further enforcement of mandatory kindergarten education (including increased fund- ing) that would enhance the status of these teachers because they could earn salaries that are compatible to elementary education teachers in the system.

Preschool Teachers' Knowledge and Practice in ECD

To assess preschool teachers' knowledge and practice, a self-report questionnaire was administered twice, before intervention (baseline assessment) and

after the implementation of training (endline assessment). The reliability test- ing showed that the teachers' knowledge about early childhood questions is highly reliable (0.91). Also, the reliability of teachers' practice questions was acceptable (0.74).

The data analysis revealed some interesting points about preschool teach- ers' knowledge of ECD and education. Comparing the baseline and endline results showed little change in Gaza preschool teachers' knowledge about child growth and needs. This may be due to high turnover among preschool teachers, so it is possible that those who filled out the baseline questionnaire were different than those who filled the endline questionnaire. For the level of knowledge about child growth and needs from birth to eight years, the per- centage of "know little" responses went from 23.3% of preschool teachers in the baseline assessment to 19.4 % after the implementation. Preschool teachers who reported "knowing much" increased from 30% at the baseline assessment to 40% in the endline assessment. Similarly, 45.5% of the WB preschool teachers reported "knowing little" at the baseline, and this number decreased to 40% at the endline. However, both Gaza and WB preschool teachers reported a higher level of knowledge after joining the program. Furthermore, teachers in Gaza scored higher overall than those in the WB on all questions related to the knowledge of ECD.

The overall score computed from the thirteen questions constituting teach- ers' knowledge of the early childhood domain was higher in Gaza (81.9%) than the WB (70.2%) at the baseline assessment. At the endline, the scores slightly increased in Gaza (82.8%) and significantly increased in the WB (85.7%). When examining preschool teachers' practices, significant improvements were found (as reported by teachers) in Gaza and WB preschools regarding the ability to plan a comprehensive program for strengthening the learning and active learn- ing in kindergarten after joining the PD program, with an extremely high per- centage of "yes" for annual and weekly plans. Also, at the endline assessment, teachers reported that they present and implement fixed daily plans with chil- dren, at around 86% of Gaza preschools and 100% of the WB schools (baseline 79% in Gaza and 75.6% in the WB). Some variables of follow-up and documen- tation in Gaza preschools have significantly improved after the implementation of the program. For instance, there was an obvious improvement in the level of keeping private child-cumulative records, as evidenced by the 93% positive response for the Gaza preschools in the endline assessment (baseline 77.4%) and the increase from 73% at the baseline assessment to 96% at the endline in the WB.

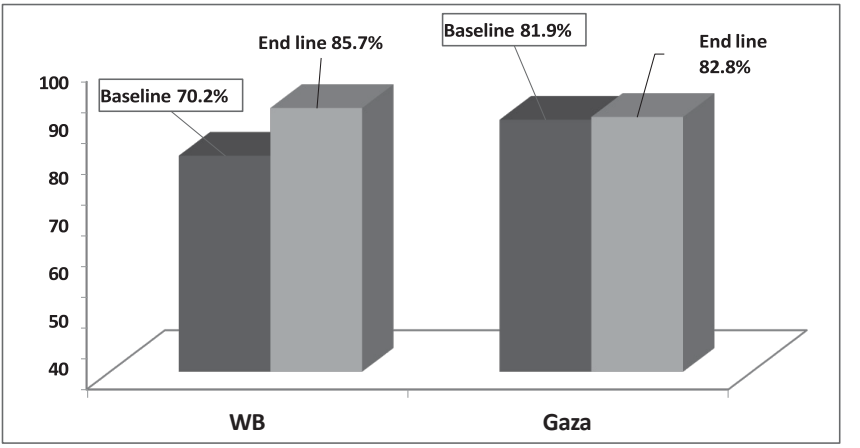

Figure 5.2. Teachers' Knowledge about Early-Childhood Development (Pre and Post)

The overall score computed from all nineteen questions constituting teach- ers' practices was similar at the two sites at the baseline assessment (82.9% in Gaza and 84.9% in the WB). At the endline, the scores slightly increased in Gaza (84.5%), while they significantly increased in the WB (95.8%). The level of improvement in the WB was 13%. The differences between the baseline and the endline readings in the WB were statistically significant ($p < 0.001$). In Gaza, the differences were minimal and not statistically significant. Figure 5.2 illustrates the improvement in scores on background self-administered questionnaires.

Significance and Recommendations

This study highlights the accomplishments of teachers in a sector mostly run by charities and local councils among marginalized communities in Gaza and the WB. It also raises the general awareness of the benefits of a research-based PD that is well planned and well executed, one that allows the time and space for the transformation of attitudes and practice. The PD became a mecha- nism for changing the future of children in the eyes of participating teachers. This was evident in the teachers' eagerness to learn and their willingness to improve to change the lives of children and to lead toward political emanci- pation and better futures. This is where the hope lies in those communities

that see education as a transformative process and not a mechanism to keep the status quo.

It is clear from the results that gains were made because of the interven- tion in both areas of Palestine and for all participating teachers. The long-term engagement in PD created a support system for teachers in isolated villages where many live their daily lives in poverty and lack access to services and resources. In addition, teachers gained confidence in their ability to see the positive and felt confident about the knowledge gained and their ability to use and adapt it as needed.

Visible differences between the WB and Gaza were expected and were, in fact, not surprising given that the baseline was already in better shape in the WB, where resources are more available and the living conditions better than in Gaza. In addition to the differences in economic and political conditions, further reasons were provided by the staff as possible explanations for the varia- tion. The following are possible reasons that may have contributed to the dif- ferences even though we cannot claim with certainty that these had an impact on the results.

1. Number of children per class and kindergarten: In Gaza and at the time of the study, kindergarten classes were larger.
2. Role of MOE supervisors: In Gaza, supervisors play more of an administrative role in working with teachers, focusing on such areas as licensing and supervision and less on mentoring and training. In the WB, most supervisors play this role, but some supervisors (especially those in areas of intervention) are more active, see themselves as mentors, and provide supervision (Nasser & Shami, 2013). The two supervisors from Jericho and Ramallah also attended all meetings in the WB.
3. Trainers' qualifications: In the WB, a minimum of eight trainers delivered the training throughout the program, with each trainer having a specialization in one or two topics. In Gaza, there was only one trainer with specialization and practical training in ECD on staff. Unfortunately, WB trainers are not able to easily travel to Gaza, and attempts to find others in Gaza have not been successful. Further investment in training of trainers in both Gaza and the WB is very much a priority.
4. Mode and length of delivery: The training meetings and mentorship in the WB were delivered over a longer period (weekly through the end of the school year and in summer with two weeks' intensive meetings), from February to August. In Gaza,

this was delivered more intensively and after school on many days. Further explorations and investment in coordination between the program in Gaza and the WB should allow for further discussion on the above points and ways to address the gaps.

Finally, this study suggests that intervention programs are making a significant difference and are improving the conditions for teachers and children. There are specific characteristics that make these types of interven- tions successful and impactful, and professionals in the field of training and development may benefit from some of the lessons learned. For example, the uniqueness of this PD is in the holistic investment in teaching and training it provides. The program included weekly PD sessions as well as mentoring sessions (a total of at least five), which totaled about 120 hours distributed throughout the school year. In addition, the PD program was accompanied by renovation and improvement of the learning facilities. The teachers also received new teaching materials and instructional aids. The children received new furniture and educational and child-friendly games. All instructional materials, games, and books were locally made (when possible) and authentic in reflecting local capacities and potential. Finally, continued demonstration and documentation of impact are necessary through follow-up studies and expansions to more preschools and more areas of focus. A larger-scale study examining intervention programs should assist the international funders to make decisions on scaling up programs in such contexts.

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Appendix 1

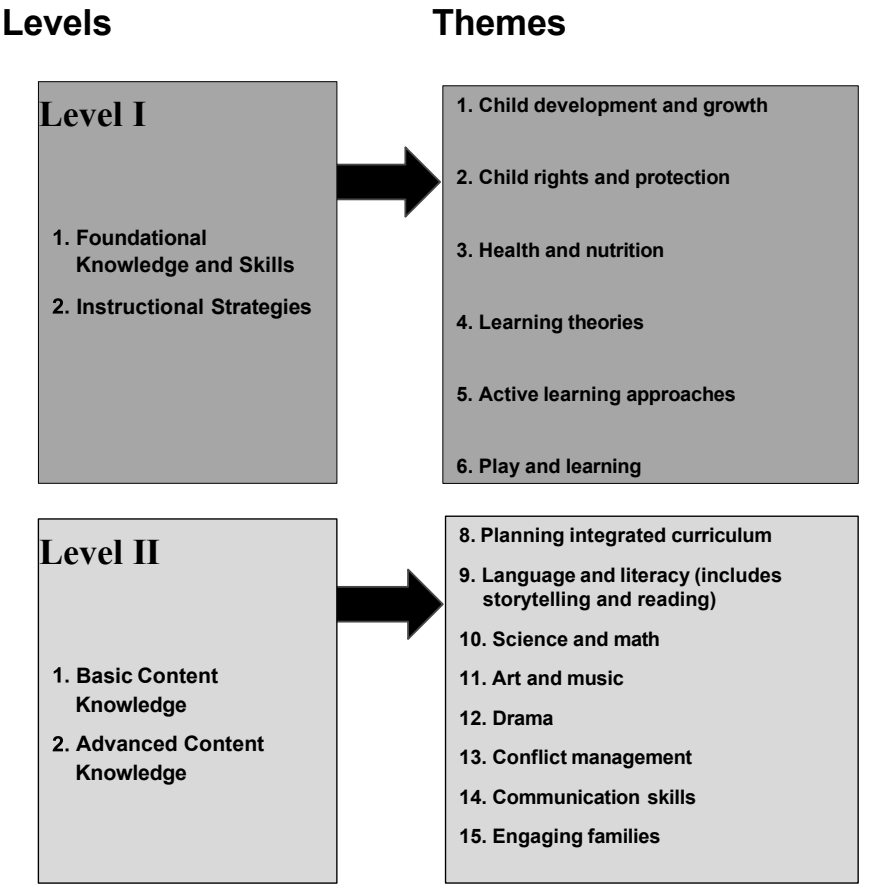

Figure A.1. Professional Development Design. Level I is foundational knowledge, and level II is advanced knowledge

Appendix 2

Table A.1. Survey Items Based on CLASS

Target Behavior	Ratings	Comments/ Examples
Interactions with children		
1. Teacher shows respect toward children	1 2 3 4 5	
2. Teacher shows positive communication with children, such as simple and clear language use	1 2 3 4 5	
3. Teacher is aware of her surroundings	1 2 3 4 5	
4. Teacher is responsive to children's needs	1 2 3 4 5	
5. Children seem comfortable with teacher/s in room	1 2 3 4 5	
6. Teacher provides assistance where and when needed	1 2 3 4 5	
Teaching strategies		
7. Children are free to move around	1 2 3 4 5	
8. Teacher illustrates support for autonomy and leadership in children	1 2 3 4 5	
9. Children have a say in activities	1 2 3 4 5	
10. Teacher takes children's input into consideration	1 2 3 4 5	
11. Teacher models positive behaviors	1 2 3 4 5	
12. Teacher redirects student behaviors when needed	1 2 3 4 5	
13. Teacher has clear behavioral expectations	1 2 3 4 5	
14. Teacher uses a soft voice	1 2 3 4 5	
15. Teacher plans with children	1 2 3 4 5	
16. Teacher has established routines	1 2 3 4 5	
17. Teacher illustrates smooth transitions from one activity to another	1 2 3 4 5	
18. Teacher explains and provides directions on activities	1 2 3 4 5	

Table A.1. (*continued*)

Target Behavior	Ratings	Comments/ Examples
Learning Environment		
19. There are clear activity centers	1 2 3 4 5	
20. Space is well used, open, and not cluttered with furniture	1 2 3 4 5	
21. Materials are labeled	1 2 3 4 5	
22. Materials are accessible to children	1 2 3 4 5	
23. Room is clean and preventive steps taken to ensure health and hygiene	1 2 3 4 5	

Notes

1. American Near East Refugee Aid convened the group.
2. For the latest information, see www.moehe.
3. Two of the categories/domains observed on the CLASS measure.