The Impact of an International Training Program on Early Childhood Education in Central and West Africa: Comparisons of 2010 and 2009 Training

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Abstract

Beginning in 2006, a three-week Japan International Cooperation Agency (JICA) training program entitled "Early Childhood Education for West and Central African Countries" has been conducted annually by Ochanomizu University in Tokyo, Japan. This paper discusses outcomes—i.e., whether or not the 2010 training program has fulfilled its objectives. The study assessed participants' level of knowledge of each module (i.e., early childhood development, child-centered care, inequity, teacher development and training, and evaluation) and attitudes towards applying their acquired knowledge to their respective countries. As a similar evaluation had been undertaken for the 2009 training, comparisons were made between 2009 and 2010 training outcomes, highlighting both the similarities and differences therein. The change in the level of understanding during both the 2009 and 2010 training was highest for the child-centered care module. In general, the level of understanding was higher for the 2010 training, but trainee's confidence in applying acquired knowledge was higher for the 2009 training. In both years, the training program also led to changes in participants' commitment to their work. This paper also speculates on some of the factors that may have led to differences in the outcomes of the 2009 and 2010 training programs.

Key words: Impact evaluation, International training program, Early childhood education, West and central Africa

Introduction

Because brain, cognitive, and social development take place in early childhood, this phase of life has a significant influence on primary and post-primary school life, as well as on the entire life of each individual (National Research Council and Institute of Medicine, 2000). However, the lack of specialists in early childhood development (ECD) has been an obstacle to the development of ECD programs in developing countries. Although a number of projects have been implemented by UNICEF, the World Bank, and international nongovernmental organizations, the present capacity of developing countries in this regard is far from sufficient (UNESCO, 2006). In light of this situation, knowledge among mothers regarding the rearing and development of infants and children is limited and the significance of ECD is not fully recognized, especially in sub-Saharan African countries. For this reason—and as supported by the Dakar Framework of Action—there is an increased need to cultivate human resources and capacity-building, in order to develop and disseminate ECD education in sub-Saharan Africa. Within this context, the Japan International Agency Cooperation

(JICA) began in 2005 an annual, three-week technical training program entitled "Early Childhood Education for West and Central African Countries." The training is financed and organized by JICA, and designed and implemented by Ochanomizu University.

In 2009, to assess whether or not that training accomplished its desired objectives, a study was conducted to evaluate the participants' acquisition of knowledge and their changes in attitudes as a result of the training program (Nonoyama-Tarumi & Hamano, 2010). The study posed the following questions, with the endpoint of evaluating the outcomes of the training program: (1) What is the participants' perceived level of knowledge after the training program? (2) What is the participants' attitude towards applying and disseminating the knowledge they gained through the training program? (3) What are some changes in the participants' commitment to their work after the training program? The same research questions were asked in the current study, not only to evaluate the outcomes of the 2010 training program, but also to investigate the differences and similarities between the 2009 and 2010 training outcomes.

March 2011

Conceptual Framework

Levels of Training Effects

The current study uses Hamblin's (1974) model as a conceptual framework. Hamblin's five levels of training effects, building on the work of Kirkpatrick (1967), are useful for thinking through the cause-and-effect chain of training (Stiernborg, 1996): training leads to (1) reaction, which leads to (2) learning, which leads to (3) changes in behavior, which leads to (4) changes in organization, which leads to (5) changes in achievement of ultimate goals. These chain "links" lead to five different levels of evaluation, which can be summarized as follows. Level 1 (evaluation of reaction effects) measures the level of participant satisfaction, in order to assess whether the training is achieving its objective—and if not, how to make appropriate adjustments. Level 2 (evaluation of learning effects) measures acquired knowledge, attitudes and skills. Level 3 (evaluation of changes in behavior) assesses behavioral changes, which should result in the participant applying the acquired knowledge, attitudes, and skills to his or her job. Level 4 (evaluation of changes in the organization) assesses the impact of training on organizational effectiveness. Finally, Level 5 (evaluation of changes in the achievement of ultimate goals) measures overall improvement, while also taking into consideration non-training factors (Stiernborg, 1996).

The current study focused on Level 2 of Hamblin's model-i.e., learning effects-but also assessed participants' beliefs and attitudes towards applying acquired knowledge (in what will be called "Level 2.5"). It is argued that, even if the participant absorbs and internalizes the knowledge extensively, if he or she (1) perceives it as impossible to apply such knowledge in his or her country, (2) anticipates that his or her government would not buy into such knowledge, or (3) simply believes that the knowledge is better suited to self-development (i.e., not committed to applying the knowledge to his or her own society), what was learned during the training (Level 2) will not result in behavioral changes or concrete actions (Level 3). By assessing participants' beliefs and attitudes prior to their return to their native countries, personal beliefs and attitudes (which may be considered an effect of the training) can be distinguished from the various obstacles they may face in their countries, such as budgetary constraints (which may be considered external factors of the training).

JICA Training Program

Purpose

The goal of the training is to allow participants from west and central African countries to (1) acquire specialized knowledge of ECD and early childhood care and education, and (2) strengthen their abilities as leaders in the early childcare and education field. Specifically, the training aims to improve participants' knowledge and skills, in terms of the following six modules.

Module 1: Identify and organize issues within each participant's parent organizations and select the issues to be resolved.

Module 2: Increase each participant's understanding of the concepts, contents, and trends in ECD.

Module 3: Increase each participant's understanding of inequities in early childhood education and the measures used to rectify these inequities.

Module 4: Increase each participant's understanding of the contents and methodologies of appropriate early childhood care and education, according to a child's stage of development.

Module 5: Increase each participant's understanding of teacher development and training systems.

Module 6: Increase each participant's understanding of evaluation in early childhood education.

Because the prevalence of early childhood education in the participants' countries is still low, the growth potential of early childhood education is high in those countries. Therefore, the training courses are not designed for specific disciplines; rather, they address pedagogical and psychological (i.e., micro-level) issues, as well as system- and administration-wide (i.e., macro-level) issues.

The training examined in the current study is part of the second phase of "Early Childhood Education in West and Central Africa." The first phase was conducted for three consecutive years, starting in fiscal year 2006; for the second phase, training is planned for three consecutive years, starting from 2009. The current study evaluates the training held in the second year of the second of these three-year periods.

Participants

The training participants were government officials, inspectors, and professors at teacher colleges who are or will likely be in leadership roles in their countries. Each year, there are one to three participants from each of five countries: Burkina Faso, Cameroon, Mali, Niger, and Senegal. (See Nonoyama-Tarumi & Hamano [2010] for descriptive statistics of the demographic, economic, and educational situation of these countries.) However, for the 2010 training, Niger was not included, due to its political instability. As a result, there were 10 participants from four countries in the 2010 training, whereas in the 2009 training there were 12 participants from five countries.

Content of Early Childhood Education in the Central and West Africa Training Program

The training period is approximately three and a half

weeks, and the training consists mainly of lectures, visits (observations), workshops (including producing workshop materials), presentations (including time to prepare for presentations), and reflection. The proportions of these content components are roughly as follows: 30 percent for lectures, 30 percent for visits (observations), 10 percent for workshops, 20 percent for presentations, and 10 percent for reflection. The proportion of lectures was somewhat smaller and the proportion of visits (observations) was somewhat larger in the 2010 training than those in the 2009 training; these changes occurred because the teacher development and training module was emphasized more so than in the 2010 training, which led to an increase in visits to teacher colleges and discussions with students from these colleges. In addition, in comparison to the 2009 training, more time was allocated for reflection in the 2010 training so that (1) question-and-answer sessions on the covered training topics could be held, (2) supplementary explanations could be provided for content that the participants did not sufficiently understand, (3) the content of the lectures and visits (observations) could be reflected upon, and (4) the participants could take the time to deliberate how the content of the lectures and visits (observations) could be applied to improving the circumstances in their respective native countries. Furthermore, during the 2010 training, in order to visit sites and observe the current state of early childhood care and education outside the Tokyo metropolitan area, the participants for the first time visited and observed daycare centers, kindergartens, and teacher colleges in Hamamatsu City, Shizuoka Prefecture. The structure of the curriculum, crafted to achieve the goal of each module, is shown in Table 1.

Table 1 Structure of the Curriculum for Achieving the Goal of Each Module

Goals	Main training topic	Method	Content of training	Number of hours
	Identify and organize issues within the	Presentation/ discussion	Presentation of the initial report	8.0
Goal 1	participants' parent organizations and select the issues to be resolved.	Presentation/ discussion	Presentation of the interim report	8.0
		Method Content of training Presentation/ discussion Presentation of the initial report Presentation of the initial report Presentation of the interim report discussion Dresentation of the interim report Dresentation of the initial report Presentation of the initial report Presentation of the initial report Dresentation of the interim report Experience and lessons learned from ECD Experience and lessons learned from ECD Experience and international trends in ECD Experience and lessons learned from ECD Experience and international trends in ECD Experience and international trends in ECD Experience and international trends in ECD Experience and internationa	0.5	
		Lecture	Concepts and international trends in ECD	2.5
		Lecture		3.0
Goal 2	Increase participants' understanding of the concepts, contents, and trends in ECD.	Lecture	the Children's cooperative effort with regards to early childhood education: a case from Sri	2.5
		Lecture		2.5
		Lecture	· ·	2.5
G 10	Increase participants' understanding of the inequities in early childhood	Lecture	for early childhood education: from the	2.5
Goal 3	education and the measures taken to rectify these inequities.	Lecture		2.5
		Lecture	Basic education and community participation	2.5
				2.5
	Increase participants' understanding of the contents and methodologies of appropriate early childhood care and education according to a child's stage of development.			6.0
Goal 4		Visit (Observation)	Multi-age childcare/education, childcare/education through setting corners, integrated childcare/education for children with special needs, and child-raising assistance	2.5
	ис усторитель.	Visit (Observation)	Cooperation between early childhood education and primary education	2.5

March 2011

		Visit (Observation)	Kindergartens and daycare centers in Japan	2.5
		Visit (Observation)	Multidisciplinary activity (making toy trains), and child-centered childcare and education	2.5
		Lecture	Methods for early childhood education according to a child's stage of development	2.5
		Visit (Observation)	Collaboration with kindergartens, and child-raising assistance	1.5
		Visit (Observation)	Natural environments appropriate for children's growth—field trip-based childcare and education	4.0
		Workshop/Lecture	Learning through play activities	6.0
		Visit (Observation)/ Workshop	Universal "play workshop" (workshop)	2.5
	Increase participants' understanding of teacher development systems and	Visit (Observation)	Training facilities for childcare workers	2.5
Goal 5		,	Training of childcare workers	2.5
	training systems.	Discussion	Round-table conference with students aspiring to become childcare workers	1.0
	Increase participants' understanding of evaluation in early childhood education.	Lecture	Overview of early childhood education in Japan	2.5
Goal 6		Lecture	Evaluation in early childhood education: children's quality of life (QOL)	2.5
		Lecture	Evaluation methods and evaluation indices for early childhood education: from the viewpoint of inequality	2.5
		Discussion	Reflection and preparation of a textbook	7.5
	Application, incorporation, and	Discussion	Summary of the training/discussion	2.5
Final Goal	dissemination of the achievements	Writing	Preparation of the interim report	2.5
	stemming from training in Japan.	Presentation	Presentation of the interim report	8.0
		Discussion	General overview	1.0

After returning to their home countries, the participants were asked to (1) disseminate the knowledge acquired during the training to those who are involved in early childhood education, and (2) begin new initiatives based on their newly acquired knowledge, in order to improve early childhood education in their home countries. The participants were also required to report back on their work progress, approximately six months after completing their training in Japan. It was anticipated that the participants would take back to their home countries specialized knowledge and experience in ECD, and that the participants would contribute to improvements in early childhood education and ECD in their home countries by incorporating feedback from their parent organizations and other stakeholders. Therefore, important factors relevant to evaluations of the training include whether or not (1) the participants gained a thorough understanding of the content of the training, and (2) the content of the training was organized in such a manner that the participants could easily disseminate it to others.

Methods

Instrument

At the end of the 2010 training program in Japan, participants were asked to complete a questionnaire that consisted of both multiple-choice and open-ended questions (40 and 16 questions, respectively). Participants took approximately 40–60 minutes to fill in the questionnaires; they were also asked to provide their names, as it was explained that a future study to assess changes in behavior was planned. However, in order to solicit the most candid opinions possible, it was emphasized both verbally and on the cover sheet that data used in the analysis would be anonymous, and that the content therein would not be reported back to their countries or used for future participant selection.

Sample

For the current study, a questionnaire was distributed to the training program participants in the fall of 2010. The participants' median age was 45.5 years (range, 34–54 years). The median number of years of experience in

early childhood education was 12 years (range, 1–20 years). Five participants were administrators in the Ministry, three participants were inspectors, and two participants were professors at teacher colleges. In comparison, in the 2009 training program, the participants' median age was 42 (range, 35–54 years), and the median number of years of experience in early childhood education was 14 years (range, 8–30 years); seven participants were inspectors, two participants were administrators in the Ministry, and two participants were professors at teacher colleges.

Given the current study's small sample size, no statistical tests were performed. The study's population was defined as the 2010 participants, and no attempts were made to generalize findings to any larger population, such as all the participants of this training program since 2005, or the participants of other international training programs.

Measures

The current study focuses on Level 2 of Hamblin's evaluation model—namely, the evaluation of learning—and on what we call "Level 2.5," the evaluation of attitude.

Learning: As the training program is quite comprehensive, a test would capture only a limited picture of what the participants had learned. Thus, selfassessment questions related to the subjects' level of knowledge were used. Knowledge of overall early childhood education and development was assessed, as well as knowledge of the five modules (i.e., ECD, childcentered care, inequity, teacher development and training, and evaluation), at both the beginning and end of the training. For example, the questions "What was/is your level of understanding towards the concept of ECD at the beginning of the training/at the end of the training?" were asked with a choice of four response categories (i.e., very knowledgeable, somewhat knowledgeable, somewhat unknowledgeable, and unknowledgeable). Open-ended questions were also asked, to triangulate the above question—i.e., "How would you briefly explain the concept of ECD to your colleagues?" and "What are the two key features in your country of inequity in early childhood education?".

Attitude: As the current study was conducted at the end of the training, it assessed the participants' attitudes towards applying and disseminating what they had learned. For example, participants were asked, "Do you think it is difficult to apply what you learned about child-centered care to your country?" and offered four response categories (very difficult, somewhat difficult, somewhat easy, and easy). Open-ended questions—such as "Assuming you had a sufficient budget, what would be the difficulties in developing child-centered care in your country?"—were used to triangulate the above question.

Commitment: The current study also assessed

participants' commitment to and satisfaction with their work. Although these factors were not part of the direct objectives of the training program, it could be that the experience of seeing, with their own eyes, how Japanese early childhood care specialists work, or having had the privileged opportunity to go abroad, may have affected participants' commitment to their work.

Findings

Table 2 shows the average score for self-report of knowledge at the end of the training. All of the variables in the analyses are on a scale of 1-4, with 4 being the highest score. The level of understanding was highest for inequity (3.89), ECD (3.80), and teacher development and training (3.70). Compared to those from the 2009 training, the scores from the 2010 training were slightly higher in most of the modules; this may have been due to the increase in reflection time, in which question-and-answer sessions were held on the covered training topics, and supplementary explanations were given for content that the participants did not sufficiently understand. The largest difference compared to the 2009 training was found with regards to teacher development and training; this was most likely due to the fact that the 2010 training placed more emphasis on this module and increased not only the number of visits to teachers colleges, but also the amount of discussion with students at these colleges.

With respect to increases in knowledge (which is calculated by subtracting the beginning score from the end score), the largest increase was found in the childcentered care module. This was expected, as the course placed considerable emphasis on this module from the first year, and this aspect was emphasized by principals at each kindergarten and at day-nursery visits. When participants were asked to make a plan to disseminate information in their countries, the majority of activities therein related to the concept of child-centered care. Participants tended to write most extensively and concretely in qualitative responses to "How would you briefly describe the concept of child-centered care to your colleagues?" It should be noted that large changes in knowledge in teacher training and development compared to the 2009 training is partly due to the wording of the 2009 questionnaire. (The question in 2009 asked about "Japanese teacher training and development," but this was changed in 2010 to "teacher training and development.") Although understanding levels of inequity and the concept of ECD scored high at the end of the training, their levels were also high at the beginning of the training, resulting in smaller increases. As was concluded in the 2009 evaluation study (Nonoyama-Tarumi & Hamano, 2010), participants had become more familiar with the concept of ECD, a holistic and multidisciplinary approach to early childhood education, and

March 201

inequity in early childhood education, due to increased training and advocacy by various international organizations, whereas the concept and methodologies of child-centered care may be rather unique to JICA training.

Table 2 Mean Scores of Learning

	End of the Training					Increase of	Knowledge 2009 Mean S.D.		
	2010		20	2009		2010		2009	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
ECD	3.80	0.42	3.67	0.49	1.30	0.48	0.83	0.39	
Child-centered care	3.30	0.48	3.75	0.45	1.60	0.70	1.25	0.62	
Inequity	3.89	0.33	3.50	0.52	1.11	0.60	0.83	0.39	
Teacher development and training	3.70	0.48	3.33	0.65	1.30	0.82	1.50	0.80	
Evaluation	3.30	0.48	3.27	0.65	1.30	0.68	1.18	0.41	

Table 3 summarizes participants' attitudes towards applying their newfound knowledge. If an item had a high score, this meant that participants perceived it as easy to apply. Looking at the 2010 results, one can see that participants perceived "concepts," such as ECD or childcentered care, as easy to apply, and "systems," such as inequity, teacher development and training, and evaluation, as difficult to apply. This pattern can also be detected in responses to the qualitative questions. In response to the question, "Assuming you had sufficient budget, what would be the difficulties in spreading the ECD concept in your country?", many participants responded positively, as in the following: "We need to increase the literacy level of parents, so that parenting programs on integrative ECD can be implemented," and "We can spread the concept of ECD without problem as long as we have the political will and teachers' motivation." In contrast, responses to the question, "Assuming you had sufficient budget, what would be the difficulties in improving early childhood teacher development and training system in your country?" were more negative, as in the following: "There are fundamental issues. Teachers have not received specialized training on holistic development. Moreover, the real problem is that teachers are unsatisfied with their salary," and "The government does not have a policy on the quality of teacher training content, and therefore improvement of teacher training system is difficult." This pattern of a stronger sense of difficulty in applying information from the "inequity," "teacher training and development," and "evaluation" modules, as well as a greater sense of ease in applying information from the "ECD" and "child-centered care" modules, can also be found in the 2009 results.

Another pattern of note is that 2010 participants, in general, perceived it more difficult to apply their knowledge to their native countries than their 2009 counterparts. One possible explanation is that the 2010 participants tended to emphasize factors outside their

realm. In response to the above question, phrases arose such as "Things depend on people who make political decisions," "I do not have the power to make decisions, but politicians do," and "In our activities or our positions at work, we cannot implement innovation or reform." A comment that supports this interpretation was also heard at the final presentation of the training program, in which each participant presented his or her planned activities upon return to the native country. When asked why the participants had included child-centered care activities but did not include public health activities—despite the provision of lectures on integrated ECD and lectures by medical doctors—one participant responded thus: "These activities are beyond our realm. We do not have control or power in those areas." In other words, rather than actively generate ways of cooperating with health specialists or lobbying politicians, the 2010 participants tended to emphasize the boundary between their own work and "others' work." The tendency to emphasize external factors beyond their realm may be one explanation for the 2010 participants' lower score with respect to the ease of applying acquired knowledge. Another possible explanation is that by increasing reflection time in the 2010 training, participants were given more time during their training to consider how they could apply the acquired knowledge to their native countries; this may have led them to think more concretely and realistically, and thus anticipate the various hurdles they would encounter in doing so.

Nonetheless, when asked how important they felt it was to spread the concept or improve the system of each module, the 2010 participants said they considered all modules very important. For example, although there were seven participants who perceived the evaluation module as being "somewhat difficult to apply," all 10 participants felt it "very important to improve early childhood education evaluation methods."

Participants' confidence in their engagement in dissemination activities was high: six participants perceived themselves as being much more capable of implementing training activities as a result of the training (3.60), while seven participants felt themselves to be much more capable of being involved in national activities, such as the development of guidelines (3.70).

When asked about the different audience levels to which they would disseminate their knowledge, the participants considered themselves very capable of sharing their knowledge with kindergarten principals and teachers (3.90) and their own organization (3.80), but felt

less capable of doing so with policy-makers (3.20). This pattern of having low confidence in sharing knowledge with policy-makers was also found among the participants of the 2009 study. Although there were more central-government participants in the 2010 training, the score was still low; this may suggest that adding case studies of policy changes, or lectures on how to translate research findings into effective policy-making, may be useful.

Table 3 Mean Scores of Attitude towards the Application of Knowledge

**					
2010		2009			
Mean	S.D.	Mean	S.D.		
2.50	0.53	2.92	0.67		
2.50	0.53	2.83	0.58		
2.40	0.52	3.08	0.67		
2.20	0.42	2.75	0.62		
2.20	0.63	2.42	0.79		
2.30	0.48	2.25	0.45		
3.60	0.52	3.58	0.67		
3.70	0.48	3.67	0.65		
3.80	0.422	3.92	0.289		
3.90	0.316	3.83	0.389		
3.20	0.632	3.33	0.778		
4.00	0.00	3.91	0.30		
3.40	0.52	3.82	0.41		
3.90	0.32	3.91	0.30		
4.00	0.00	3.64	0.51		
4.00	0.00	3.73	0.47		
	Mean 2.50 2.50 2.40 2.20 2.20 2.30 3.60 3.70 3.80 3.90 3.20 4.00 3.40 3.90 4.00	Mean S.D. 2.50 0.53 2.50 0.53 2.40 0.52 2.20 0.42 2.30 0.48 3.60 0.52 3.70 0.48 3.80 0.422 3.90 0.316 3.20 0.632 4.00 0.00 3.40 0.52 3.90 0.32 4.00 0.00	Mean S.D. Mean 2.50 0.53 2.92 2.50 0.53 2.83 2.40 0.52 3.08 2.20 0.42 2.75 2.20 0.63 2.42 2.30 0.48 2.25 3.60 0.52 3.58 3.70 0.48 3.67 3.80 0.422 3.92 3.90 0.316 3.83 3.20 0.632 3.33 4.00 0.00 3.91 3.40 0.52 3.82 3.90 0.32 3.91 4.00 0.00 3.64		

Finally, this paper considers whether or not the training program led to any changes in general attitudes towards further learning and work (Table 4). Participants felt that their commitment to their current work had strongly increased as a result of the training (3.80). The training, they felt, also led to changes in broader issues of motivation, such as commitment to improving early childhood education (3.80) and interest in learning more about early childhood education systems in other

countries (3.70); the scores were higher than those for the 2009 training program, especially in these two respects. In the 2010 training, there was one participant who repeatedly mentioned the importance of the participants creating a network amongst themselves, and proposed the building of a list-serve through which they could exchange post-training experiences and problems. This kind of leadership and group dynamic may have contributed to a higher sense of commitment.

Table 4 Mean Scores of Commitment to Work and Learning

	2010		20	2009	
	Mean	S.D.	Mean	S.D.	
Interest in learning	3.70	0.675	3.50	0.522	
Commitment to current work	3.80	0.422	3.67	0.492	
Commitment to improve early childhood education	3.80	0.422	3.50	0.522	
Satisfaction with current work	3.60	0.516	3.50	0.522	

As emphasized in the 2009 study, these findings demonstrate that training in a foreign context has an immense impact on participant morale and their commitment to their work. By observing how Japanese early childhood specialists engage in work outside of their work hours, as well as how they engage passionately with children and parents, participants may acquire a new lens through which they can view and assess their own work. In addition, by sharing various problems in early childhood education in their own countries with participants from countries with similar situations, participants can build a sense of camaraderie; this, too, can improve participant morale.

Conclusions

Summary of Findings

The current evaluation study focused on participants' level of understanding and their attitudes towards applying acquired knowledge. The level of understanding was generally high, as well as slightly higher than that of the 2009 training. The increase in reflection time and the increased emphasis on the teacher training and development module in the 2010 training may have contributed to this difference. In both the 2009 and 2010 training, the change in the level of knowledge between the beginning and the end of the training was highest for the child-centered care module; this suggests the "niche" nature and uniqueness of this module, in light of various training and advocacy activities led by international agencies and other donors.

With respect to participant attitudes towards applying learned knowledge, participants expected it to be more difficult to apply knowledge related to system-related issues—such as evaluation, teacher training and development, and inequity—than knowledge related to concept-related issues, such as ECD and child-centered care. The participants of the 2010 training, in general, anticipated greater difficulty in applying knowledge than those of the 2009 training; this may be partly explained by the increase of reflection time in the training—which have contributed to a fuller consideration of certain realities—and also by the tendency of 2010 participants to emphasize external factors beyond their realm and power.

Finally, the training also resulted in changes in

participants' commitment to their work—which is to say, both their current work and their broader definition of "work." This change in morale was found in both sets of participants. With respect to the 2010 training, it was noted that the group dynamic among the participants was a contributing factor to such changes.

By evaluating both the 2009 and 2010 training programs with the same framework, it was possible to test whether the findings from the 2009 evaluation also held in the current study, and also to determine if changes to the training content led to differences in training results. It should be noted, however, that the latter point needs to be interpreted with caution, as it is not possible to distinguish differences driven by changes made to the training content and changes resulting from the participation of different sets of individuals.

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