CHAPTER SEVEN

**"We're Trying to Get Ahead": A Developmental View of Changes in Polaroid Learners'
Conceptions of Their Motivations for Learning, Expectations of Teachers, and Relationship to
Work**

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PROLOGUE

"Life is full of opportunities; you just have to reach out and grab one.
Never give up your dreams." (Hope, June 1999)

June 27, 1999, was a sunny, warm, and clear Sunday afternoon in Boston, Massachusetts. Shortly after noon, our research team left nearby Cambridge, traveling to the University of Massachusetts' campus, located just steps away from the John F. Kennedy Library on a piece of land offering an inspiring view of Boston's waterfront and harbor islands. We were on our way to join Polaroid Corporation's adult learners for their graduation from high school. The Continuing Education Institute (CEI) holds graduation ceremonies each year at this campus. The adult learners who participated in CEI's diploma program classes would receive their high school diplomas that day. This was a day to celebrate and a time to remember.

Adult learners from five CEI-sponsored adult diploma programs in the greater Boston area gathered together on this special day with their families, friends, coworkers, CEI teachers, and program administrators, as well as CEI president Dr. Lloyd David. Distinguished guest speakers came to celebrate and recognize the graduates' most impressive achievement: completing the CEI Adult Diploma Program and earning a high school diploma. On that sparkling Sunday afternoon, each adult learner who had successfully completed all graduation requirements during the 14-month program at Polaroid or other CEI sites, would be awarded a high school diploma from Boston's Cathedral High School.

While traveling from Harvard's Graduate School of Education to the University of Massachusetts, Boston campus, we talked about our deep admiration for all that the learners in the Polaroid cohort had accomplished over the course of their program. We reminisced about our first meeting with these special people—just 15 months earlier—when we introduced ourselves as researchers while inviting their participation in our research study. On that opening day, the adult learners in the Polaroid program attended an orientation and welcoming event, "The Kick-Off," at Polaroid's Norwood facility in the meeting room where their program classes would take place.

As we traveled to the graduation ceremonies, we remembered these learners telling us about their initial feelings of trepidation about enrolling in the program. During that trip, we also talked about how rewarding it was to have witnessed *changes* in the ways in which the Polaroid participants thought about their learning and themselves. In the months between kick-off and graduation, learners had discussed with us certain changes in their sense of confidence. They had shared with us the important difference that learning in this program had made for them—both at work and at home. We were moved by how much these learners had talked about themselves, both individually and as a group, as "changed" by their participation in the program. We were inspired by the relationships they developed with each other and with their teachers—and by the way in which these relationships supported their learning. Learning and earning the diploma meant so very much to them.

Conducting research with these adult learners opened our minds and our hearts to their sense-making. While we conducted research, and especially on that Sunday, we celebrated the privilege of accompanying these exceptional people along their important learning journey. We were and remain grateful for all they have taught us about their worlds.

Entering the auditorium a few minutes before ceremonies were to begin, we searched the several hundred faces and scores of seating sections to find "our" group of learners. Our eyes darted about the large, tiered assembly room, making contact with the Polaroid cohort graduates one by one. Seventy-four adults would receive their diplomas that day, and 16 of these were the Polaroid cohort

we had come to know so well. Graduating men were dressed in robes of green for this special occasion, and women wore gold gowns. The different cohorts gathered together in designated seating sections. The room brightened with faces beaming with the kind of joy wished for us all at times of commencement. We located our seats in a center-section row toward the rear of the now-buzzing auditorium. Throughout the room, small children gripped helium-filled balloons with emblazoned congratulations. Adults moved quickly here and there, offering congratulatory handshakes and hugs to each other, mixing green with gold and gold with green as they reached out with extended hands.

"Pomp and Circumstance" played as the graduates marched down the auditorium aisles, followed by CEI teachers and CEI's program president and program director. The commencement speaker, Dr. Ismael Ramirez-Soto, dean of UMass, Boston's College of Public and Community Service, followed the CEI group to the front of the auditorium. Graduates seated themselves in the first dozen or so rows while CEI people and certain guest speakers took their places on the elevated stage. Speakers representing students at each of CEI's five program sites sat with their cohort groups, as each site group had elected its own class speaker to express a few thoughts about their learning journeys on this important day.

Kathy Hassey, CEI's program director and a dedicated educator who once taught high school math and science, opened the ceremony. She talked about this graduating Class of 1999 as a "diverse, kind, and spirited" group of learners who spoke 14 different native languages in addition to English. After these opening remarks, Dr. Lloyd David presented the Class of 1999. Dr. David shared his initial vision for CEI, which was founded in 1977 as an organization to help adults in the workforce earn high school diplomas. He spoke of his hope to help "every adult to become more literate and possess the knowledge and skills necessary to compete in an international economy." CEI was founded to create innovative educational and training programs for adults in the workplace who needed English and academic skills, and more than 7,000 adults have participated in these programs. Proudly, Dr. David reported that this was CEI's 18th graduation. He said earning a high school education is important for many reasons—among the more practical, access to job opportunities with "better salaries."

Dr. David congratulated graduates before passing the baton back to Kathy Hassey, who introduced graduation speakers. Hope, the class-elected speaker from the Polaroid Corporation cohort, spoke fourth. Dressed in her flowing gold robe, Hope approached the podium with grace and self-assurance. During a focus group meeting we held just one week earlier, Hope excitedly told us how happy she was to have been elected speaker for her cohort class. She said she had worked very closely with her classmates to be sure the ideas she presented at graduation represented the cohort's thoughts. During that focus group session, Hope also told us and her cohort colleagues that she had created a second speech on her own and she hoped the group would help her decide which of the two speeches to deliver on graduation day. After much discussion, Hope was convinced it would be better to deliver the collaborative speech rather than her own.

Many of the Polaroid learners told us they had "dreamed" of graduation day before and during the program. During our research, we often heard learners say that it was "harder" for them to learn, because they were "adults" or "grown-ups" with multiple responsibilities. Often we heard learners say how "proud" they were of themselves for being able to "stick with it" even when they doubted their abilities. Support from family, classmates, teachers, coworkers, and supervisors gave them the encouragement they needed to continue. Hope spoke:

> We, the graduating class, would also like to thank our friends, family, classmates, and coworkers. It was hard work because we had families and other obligations, but

we accomplished our goals. After all of this hard work, we are proud of ourselves and excited to be receiving our diplomas. We serve as an example to others to open doors of opportunity. You are never too old and it is never too late to get an education. Life is full of opportunities; you just have to reach out and grab one. Never give up your dreams.

After the final class speaker delivered his speech, Dean Ramirez-Soto delivered the commencement address. He told the graduates and all of us in the auditorium that the ceremony was a "celebration of your culture." He applauded graduates for their "hard work" and "energy." As an inspiring surprise, he also invited all of the graduates to continue their education by earning a bachelor's degree at UMass, Boston. "There is a place for every program graduate," he said, "This school was created for people like you." He reminded graduates that they had earned an important degree and encouraged them to use it as a "steppingstone."

Sister Patrice, the assistant principal of Cathedral High School—the diploma-granting Boston school—then offered congratulatory remarks to the graduates. After her greeting, she and Dr. David awarded the diplomas. We watched as each graduate proudly walked to center stage to receive the "piece of paper" encased in a hunter green folder. Applause and cheers filled the air as each graduate was announced. Ceremonies concluded with Kathy dedicating a heartwarming poem to all CEI program teachers. We were all invited to attend a reception for graduates in the school cafeteria.

We walked the short distance to the cafeteria by way of an overpass that overlooked the John F. Kennedy Library and provided a stunning view of Boston Harbor. In the cafeteria, all waited to greet and again congratulate the graduates—in our case, especially the Polaroid Corporation graduates. One by one, they entered the room, faces beaming with joy. We congratulated. We took photographs. Diplomas were circulated and admired. We were honored to meet many families, children, and friends of graduates. Polaroid graduates talked with us about plans for future schooling. After celebrating with these wonderful learners, we wished them continued great success, and we bid them farewell.

Each and every adult who participated in our study, and all they had to say, became important to us as researchers and as learning colleagues. The CEI diploma program and its teachers shepherded participants through courses of study that helped them achieve dreams for personal development and enhanced opportunities. In many ways, it was also the path to Polaroid that made so much of this learning and opportunity possible for so many. Polaroid had hired many people without high school education over the years, and as economic and business forces began to change for the company, education seemed a better answer than layoffs or downsizing (although both would eventually occur at the Polaroid Corporation). No words could adequately acknowledge the generous contributions Polaroid and its many employees made in helping the adult workers learn, earn high school diplomas through the CEI program, and change their lives and themselves.

On the way home to Cambridge and Harvard, we shared our thoughts and impressions about the wonderful experience and the success of our learners and all program graduates. We wondered where they would be a year from now. We expressed our sense of awe at how much they had all accomplished and how meaningful the learning experiences had been for them as they worked through the program. We talked about the ways in which these special people had told us about learning that had made a genuine difference in their lives. We shall always remember these remarkable people, their proud graduation day, our relationships with them, and all that they have helped us learn.

SECTION I: INTRODUCTION

> The literacy teaching-learning process is many things, but in the final analysis, it is an interpersonal relationship charged with emotion (Brookfield, 1990; Daloz, 1986; Wlodkowski, 1985). (Quigley, 1997, p.103)

In the prior chapter, we examined three main ways in which the cohort provided a consistent and enduring holding environment that supported the *academic learning*, *emotional well-being*, and *cognitive development* of the adult learners who participated in the CEI Adult Diploma Program. Our intention was to highlight how the interpersonal relationships formed among cohort members generally and in collaborative learning groups specifically served to enhance learning and, in many cases, facilitate development. By carefully exploring the cohort's rich elements we highlighted some of the reasons why it was a highly effective holding environment and how it supported and gently challenged adults as they engaged in the learning process.

In this chapter we will shift our focus toward illuminating the powerful ways in which learning in the program—with the support of fellow cohort members, teachers, and programmatic features—helped these adults re-create themselves and generate new goals, new skills, and new ways of knowing. Our findings teach us that the cohort and other features of this program supported and challenged these learners as they grew to *think* differently about themselves in their roles as learner, worker, and, in some cases, parent. While our primary purpose in Chapter Six was to illustrate how the interpersonal relationships formed among cohort members supported learners' development, in this chapter we aim to illuminate some of the ways that learning in the program changed these learners and their lives as workers—as they were "trying to get ahead."[1] We will discuss both the changes learners noticed in themselves and those documented in their ways of knowing—which shape how they understand their experiences and themselves.

While we are not suggesting that *all* of the changes to be discussed are attributable *only* to having a consistent and enduring cohort as a holding environment, we believe the cohort—as a program design feature—was one powerful contributor to remarkable changes in the learners. In this chapter we suggest that just as peer support was an important contributor to change, teacher–learner relationships stand out as an additional important support for these learners. Thus we will address how these relationships seemed to facilitate learning from the students' perspectives. Importantly, we will also show how learning in the program changed the ways in which learners were able to *enact* their roles as workers and parents. Our intention is to highlight specific types of changes in learners' conceptions of their motives and goals for learning, the teacher–learner relationship, and their role as workers, which they attributed to their experience in this diploma program.

There are two specific types of changes we will illuminate. First, the program supported *changes in the amount or type of skills or knowledge learners possessed*. Second, the program served as a dynamic transitional space that supported and challenged learners as they developed their *capacities of mind—these changes were transformational in nature*. Remarkably, *one half of the learners at this site demonstrated this type of developmental change*. This kind of change is not only about a change in the amount or type of skills or knowledge a person possesses, it is about a change in the very way a learner understands herself, her world, and the relationship between the two. Transformational changes are those that alter the *shape* of *how a person knows*—changes that enable a

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[1] We acknowledge Jeff for this phrase which he used to describe how the program helped him at work and in life. We thank Jennifer Berger and Maricel Santos for their contributions to data analysis for this site.

person to take a broader perspective on herself (seeing and understanding different aspects of the self) and others (Cranton, 1994; Kegan, 1982, 1994; Kegan & Lahey, 2001; Mezirow, 1991). In this chapter, we will explore both types of changes, highlighting the learners' perspectives on how they experienced these processes of change.

First, we will show how learners who demonstrated different ways of knowing made sense of their goals and motivations for learning in the program and how, in many cases, these changed and expanded during the program. For example, many participants began the program with the single hope of earning a high school diploma (an external requirement) and, during their participation in the program, reported feeling greater self-efficacy as learners and workers and discovering new lifelong learning goals. Second, we will illustrate how learners with qualitatively different ways of knowing perceived teacher–learner relationships and how they made sense of what it means to be a good teacher. We will also show how, in some cases, learners' conceptions of the teacher–learner relationship changed during the program, as many of these adults increased their capacity to reflect on their own beliefs and assumptions. In this section, we will also highlight how learners with different meaning systems construct knowledge and the value of education—and how their conceptions changed during the program.

Third, we will present learners' initial constructions of their role as workers, their relationships with their supervisors (i.e., constructions of authority), and of the context of their workplace. We will also illuminate how, in some cases, their constructions changed as they engaged in the learning process. In this section, we will illustrate how learners made sense of the ways in which learning in the program transferred to their work and helped them develop greater capacities for managing the complexities of work and life (e.g., how learning in the program facilitated skill development, work-role enhancement, and other forms of personal empowerment). Since many learners told us their participation in the program not only influenced how they enacted their roles as learners, but also as workers and parents, we also will present participants' perspectives on the changes they noticed in themselves across roles.

While goals for adult basic education programs range from helping adults become better prepared to participate in the workforce, to developing skills, to engaging in social and political change (Evers, Rush, & Berdrow, 1998), our study infuses these goals with a different kind of understanding. While each of these goals is valuable in its own right, we suggest that it is also important to consider how learners are making sense of the practices these programs provided to better support learners as they reach for their goals. Like our colleagues at the National Institute for Literacy, we believe this kind of understanding will promote more effective teaching and learning, allowing us to enhance our address to the diverse learning needs of adults in ABE programs (Stein, 2000). Moreover, we contend that the lens of developmental theory helps us better understand how learners make sense of their improved competencies and often demonstrate a new sense of personal empowerment. We, like other researchers who have examined ABE learning contexts (Quigley, 1989, 1992, 1993; Skilton-Sylvester & Carlo, 1998; Stein, 2000; Taylor, 1996), maintain that ABE classrooms are not just places where adult learners gain skills (e.g., to better express themselves in English or improve math competency), but that they are also dynamic holding environments where adult learners can grow to better manage the complexity of their lives and their work. Later in this chapter, we will discuss the urgent national call for more effectively supporting workers in developing new skills, competencies, and capacities in order to meet the demands of the 21st century workplace.

Throughout this program the participants told us about the ways in which they felt they had changed as learners, workers, and family members; most participants noted increased feelings of confidence, and some remarked that they were experiencing "lots of changes." Simply put, we will not only illuminate the changes learners noticed in themselves, but also show how the *shape* of their thinking changed with regard to their 1) motives, goals, and future aspirations for learning, 2)

expectations of their teachers, and 3) relationship to their work. Before turning to this exploration, we provide a brief discussion of the context of Polaroid.

**The Polaroid Corporation as a Workplace and the History of the
CEI Adult Diploma Program at Polaroid**

In November 1997, our research team met with the Polaroid Corporation's workplace education manager, Steve Williams, to set the final details of our research partnership. At that time, Mr. Williams explained he was part of the Individual and Organizational Effectiveness Training Group (a division of Human Resources). There were five teams in his division: 1) Leadership Development, 2) Product Development, 3) Technology Education, 4) Process Improvement Group, and 5) Workplace Education. Workplace Education, he said, was responsible for all programs offered to "nonexempt/hourly wage" employees; the learners participating in our study would come from this group. The Workplace Education group managed both corporate programs and outreach at Polaroid.

Mr. Williams' group developed a "Star Model" for skill competency development for Polaroid's nonexempt employees. The five components of this model are team participation, task management, functional, high performance workstyle, and information. Each component hinges upon a set of core skills. Table 1 describes the core skills, which are the skills associated with each component of Polaroid's "Star Model" for success.

Table 1: Polaroid's Competency Development "Star Model"

Component	Skills Set
Team Participation	• Works well with diverse team • Active listening, feedback skills • Negotiation • Basic conflict management techniques • Teaches others, gives presentations • Problem-solving skills • Responds to customer needs
Task Management	• Organizes work, ranks priorities • Identifies and communicates resource needs • Record keeping • Acquires, stores, and allocates materials • Meets deadlines
Functional	• Knowledge of basic work processes, procedures, customers, and products • Chooses right tool, procedures for job • Maintains, troubleshoots equipment & materials • Basic quality tools (SPC, data collection, etc.) • Basic financial understanding • Technical proficiency • Safety and environmentally aware
High Performance Workstyle	• Self-motivated • Fast and willing to learn • Efficient • Resourceful • Results oriented • Collaborator • Conscientious • Flexible • Ethical
Information	• Acquires and uses available information • Collects, organizes, maintains, and reports data • Uses computers to process/acquire/communicate information • Obtains information via basic questioning • Uses data to solve problems

Like many organizations across the nation, Polaroid hired many employees in the 1970s who did not have core skills. In 1997, when we met with Mr. Williams, approximately 5 to 10 percent of Polaroid's employees lacked these core skills. These employees and others hired more recently who also lacked these skills were invited to apply for the CEI Adult Diploma Program. We were told that many of these workers were from diverse backgrounds and without well-developed English skills (most were non-native English speakers). Mr. Williams also stated that occasionally workers from manufacturing teams who participate in the CEI program and complete it are promoted to "team leader" positions, or become "coaches" to other workers.

Polaroid had offered this program for two years prior to the start of our research study. During the first year of the program, most students were North American. In its second year, most students were ESOL learners—similar in racial and ethnic background to the learners in the 1998–1999 cohort. During the program's third year, Polaroid and CEI initially agreed to extend the program from a 9-month to an 18-month program because they discovered it was difficult for ESOL learners to "do it all" in nine months. However, in December 1997, the Polaroid Corporation decided to downsize its number of employees. Eight hundred local workers were laid off. This new development delayed the start date of the program, and the program duration shifted from a hoped-for 18 months to 14.

As mentioned in Chapter Six, Mr. Williams told us Polaroid's executives and managers were committed to supporting workers who wished to enroll in the program. In their view, the $5,000 investment required for each employee to participate demonstrates the corporation's commitment to education. Another form of support is that diploma program classes took place during the work day, and most learners were not required to "make up" the time they were away from their job sites (i.e., most learners had paid release time). Polaroid was also committed to supporting learners through completion of this program. Even though two employees, Veronica and Rita, were laid off from their positions at Polaroid during the second trimester of the program, Polaroid continued to financially support their participation in the diploma program.

Mr. Williams noted that he and others at Polaroid took pride in a "progressive" workplace. Historically, the program enjoyed a 99 percent retention rate. During the year of our study, 15 of the 16 Polaroid participants successfully completed it, as did one of the three workers from Polaroid's subcontractor (a nearby manufacturing company) (see Appendix A). In Chapter Six, we discussed issues relating to contracting with the Continuing Education Institute to provide adult diploma program classes, the CEI program design, and the CEI curriculum.

Table 2 presents an overview of the cohort learners who completed the CEI Adult Diploma Program and highlights sample characteristics as well as the changes we assessed in learners' underlying meaning structure from program start to completion. As mentioned in Chapter Six, "Δ" denotes a change in a participant's way of knowing; where no "Δ" symbol appears, our assessments did not indicate a change in a person's way of knowing. Throughout this chapter, we have grouped learners according to our initial assessments of their way of knowing to highlight patterns and to illuminate changes in their meaning systems.

Table 2: Polaroid Cohort Learners—Professional/ Personal Characteristics and Developmental Assessments[2]

Name	Gender/Age @ Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learners & Their Work
Bill	Male Late 40s	United States	Instrumental 2 to 2(3) Δ	Bill was a gregarious, American-born man who worked on the shop floor at Polaroid. His responsibilities included supervising others. Someday, he wanted to be

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[2] Throughout this chapter, we will discuss Rita's meaning making in sections where we examine learners who make sense of their experience in the Socializing way of knowing. Also in this chapter, we will discuss Jeff's meaning making in sections entitled "Socializing/Self-Authoring and Self-Authoring way of knowing."

				the "boss" at work. Bill dropped out of the eighth grade and was eager to earn his high school diploma. He thought that it would help him at work (in terms of eligibility for promotions), and also help him to be a good role model for his children. Bill was married, and he and his wife (who also worked) shared childcare responsibilities.
Renada	Female N/A	West Africa	Instrumental 2 to 2(3) Δ	Renada, who had lived in the U.S. for more than 30 years, worked in a Polaroid lab administering tests and processing film. She needed to make up the time she missed from work while attending program classes. Renada thought that the program would help her to improve her English, which would help her at work, and in life. She was divorced and had two children in their mid-20s and one teenager.
Sal	Male Early 30s	West Africa	Instrumental/ Socializing Transition 2/3 to 3/2 Δ	Sal, whose first language was Creole, worked on the shop floor at Polaroid. He was married and was the father of an elementary school age child. He wanted to earn his diploma because he thought learning was important and it would help him improve his English. Sal considered himself to be someone who was always learning on the job and in life.
Hope	Female Late 50s	Caribbean	Instrumental/ Socializing Transition 2/3 to 3/2 Δ	Hope, the oldest learner in the sample, lived in the U.S. for more than 30 years. She worked for Polaroid for more than 10 years and was very proud she was selected to go abroad to teach others how to work her machine. She held several different jobs at Polaroid. Hope valued education and thought a diploma would help her better express herself at work and in life, and improve the skills she needed for work. She was married and had two adult children.

(Table 2 Continued)

Name	Gender/Age @ Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learners & Their Work
Teresina	Female Late 40s	West Africa	Instrumental/ Socializing Transition 2/3 – 2/3	Teresina had lived in the U.S. for more than 10 years. She worked on a machine on the shop floor at Polaroid. She had a high school diploma from her home country, and her first language was Creole. In addition to wanting to earn the "piece of paper" (diploma), Teresina also wanted to improve her English skills, which would help her at work. She was married and had two toddlers.
Angelina	Female Mid-30s	West Africa	Instrumental/ Socializing Transition 3/2 – 3/2	Angelina had lived in the U.S. for more than 15 years. She worked with a team on the shop floor. She was responsible for writing reports and communicating with others in her job. Angelina needed to make up the time she missed from work when she was attending diploma program classes. She felt that earning her diploma would help her to become a better team member and would help her improve her English. She was married and had two elementary school age children and one teenager.
Helena	Female Late 40s	West Africa	Instrumental/ Socializing Transition 3/2 – 3/2	Helena had lived in the U.S. for more than 30 years. She worked on computers doing film processing at Polaroid. Helena completed eighth grade in her home country. She was eager to earn her American high school diploma and thought the program would also help her to improve her English, which would help her at work and in life. She had two children in college and was divorced.
Veronica	Female Early 30s	West Africa	Instrumental/ Socializing Transition 3/2 – 3/2	Veronica, who lived in the U.S. for 15 years, worked for Polaroid on the shop floor and was laid off during the second trimester. She also worked as a salesperson at a company during the program. Veronica wanted to earn a diploma because it would help her to improve her skills, enable her to better support her children, and help her to improve her English. She was married and had a pre-teen and teenager.
Rita	Female Early 40s	West Africa	Instrumental/ Socializing Transition to Socializing 3/2 to 3 Δ	Rita immigrated to the U.S. when she was in her 20s. She worked in the camera division and then in the mailroom at Polaroid, until she was laid off during the second trimester. Earning an American high school diploma was Rita's "dream" for a long time. She felt it would help her to be a better-qualified, more skilled worker, a more effective parent, and a more effective communicator. Rita also wanted to improve her English. She was married and had two children (one preteen and one teenager).

(Table 2 Continued)

Name	Gender/Age @ Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learners & Their Work
Pierre	Male Late 40s	Caribbean	Socializing 3 – 3	Pierre had lived in the U.S. for more than 15 years. He worked in quality control at Polaroid and was proud of the work he did. Pierre felt that earning his diploma would help him at work, and importantly, that it will help him to improve his English. He was divorced and had five children.
Tough	Male Late 20s	Asia	Socializing 3 – 3	Tough had lived in the U.S. for two years. He had a degree in architecture from his home country, but was not able to find work in that field when he arrived in the U.S. He worked at the same nearby manufacturing company ever since arriving in the U.S. At work, he was responsible for various administrative tasks. He was not married and did not have any children.
Christopher	Male Late 30s	Caribbean	Socializing/ Self-Authoring Transition 3/4 – 3/4	Christopher lived in the U.S. for ten years. He worked with a team and also independently on a machine, which made film at Polaroid. He wanted to become better educated and saw education as a key to "survival" and to moving ahead. Also, he very much wanted to improve his English. He had never been married and was the father of two children.
Paulo	Male Early 40s	West Africa	Socializing/ Self-Authoring Transition 3(4) to 3/4 Δ	Paulo had lived in the U.S. for more than ten years and he worked in several different positions, for all those years, at Polaroid. During our study, he worked in dome lamination. His work included report writing, giving oral presentations, and collaborating with supervisors and engineers. Paulo wanted to earn his American high school diploma because it would help him with his work and with accessing information so he could make more informed decisions. He also wanted to improve his English so he could communicate better with others at work and in life. He was married and the father of two college-age children.
Daniel	Male Early 50s	West Africa	Socializing/ Self-Authoring Transition 3/4 to 4/3 Δ	Daniel had lived in the U.S. for more than 20 years. He worked as a lead technician at Polaroid, working with blueprints. Daniel was responsible for teaching those who worked for him. He wanted to earn his American high school diploma and thought that it will help him at work and in life. Daniel also wanted to improve his English. He was married and the father of two adult children and two preschool children.

(Table 2 Continued)

Name	Gender/Age @ Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learners & Their Work
Magda	Female Early 50s	West Africa	Socializing/ Self-Authoring Transition 3/4 to 4/3 Δ	Magda had lived in the U.S. for more than 25 years. At Polaroid, she worked on computers (taking measurements and analyzing data). Her work involved writing reports and using math. Magda felt the time was right to earn her diploma and it would help her improve her skills and English. She was married and had four children.
Jeff	Male Late 40s	United States	Self-Authoring 4 – 4	Jeff, originally from the South, moved north when he was a teenager. He made batteries at Polaroid and enjoyed his work because he liked to challenge himself. He worked with different machines and found that very interesting. Jeff wanted to earn his diploma and thought that it was "an important piece of paper" for job enhancement. He dropped out of high school in the eleventh grade. Jeff was divorced and had two adult children.

As a dynamic holding environment, this program supported and challenged learners as they gained skills and knowledge—"informational" learning—and also as they grew to experience understand the world in new ways—"transformational learning" (Kegan, 1994). This program served as a transitional space in which learners developed in important and life-changing ways.

Context: Research on Adults' Goals and Motivations— Learnings from the Field

"A student's own motivation is truly the key to success." (Comings, Sum, & Uvin, 2000, p. 29)

It is widely known that one of the most prevalent problems facing the field of Adult Basic Education is learner retention (Beder, 1994; Quigley, 1997; Horsman, 1991). For example, Quigley cites a federal study (from 7/1/93 to 6/30/94) that showed the dropout or attrition rate in federally funded basic literacy and GED programs to be close to 74 percent. Recently, ABE program directors across the nation have been asked to improve their program retention rates; however, there is a lack of research investigating this problem (Quigley, 1997).

Researchers and practitioners alike acknowledge that adults learners who enroll in ABE and ESOL programs come from diverse cultures and countries, vary in their expressive English skills and educational backgrounds, and have diverse reasons for enrolling and multifaceted goals (Brod, 1995; Comings, Sum, & Uvin, 2000; Quigley, 1997; Valentine, 1990). Valentine (1990) examined ESOL learners' motives for enrolling in ESOL classes in Iowa and discovered seven themes that highlight why this group of learners decided to enroll. Their reasons for enrolling included:

- Self-improvement and improving personal effectiveness in society

- Being able to help their children with homework and able to communicate with their children's teachers
- Improving eligibility for a job or to participate in job training
- Being able to use English in daily interaction with others (e.g., going shopping and using the telephone)
- Experiencing satisfaction in knowing that they can learn a language
- Improving communication skills (e.g., reading and writing)
- Being better able to help others from their native country

While Valentine's work (1990) contributes to our understanding of ESOL learners' initial *motives* for enrolling in their ESOL classes, a recent study conducted by John Comings, Andrea Parrella, and Sondra Cuban (April 2001) adds to her work by investigating learner *persistence* in Pre-GED programs in the New England area. Their goal was to better understand how to help students persist in these programs. Through their qualitative investigation, they found students who were more likely to persist in these programs were

- over 30 years of age;
- immigrants;
- parents of teenage or grown children;
- had a history of prior self-study.

Importantly, these researchers discovered that previous negative school experience did not appear to affect persistence.

ABE scholars (Quigley, 1997, Brod, 1995) are currently appealing to researchers and practitioners, asking them to learn how to improve retention rates in ABE programs by focusing on what seems to work for learners who persist in these programs—referring to persisters who have completed programs as "successful learners" (Brod, 1995). They see these learners as an advertisement for a program and a rich source from which to learn about how to improve retention rates. Quigley (1997) makes a specific plea for researchers to focus on how learners make sense of their experiences in ABE programs to improve policy and practice. He maintains that the "voice consistently absent in many policy and practice decisions is the voice of the learner" (p.193). Gowen (1992) echoes Quigley's call and urges researchers to focus on "listening carefully" to the voices of learners; these voices, she contends, will help improve classroom practice and program design. More specifically, Quigley recommends using qualitative methods to better understand the complex life experiences of those who stay and resist dropping out in ABE settings (1997).

Our qualitative study responds to these calls by investigating how learners *make sense of* their motivations and goals for learning. In our study, many of the adult learners enrolled in this diploma program in a workplace context for reasons similar to those voiced by the ESOL participants in Valentine's (1990) study. Initially, a wish to be eligible for job promotions was the most common reason for enrollment. Given the longitudinal nature of our study, we were able to ask learners about their goals and motivations at four points during the 14-month program, which allowed us to track how their goals and motivations, and their thinking about them, changed over time. While many of these learners voiced similar goals, they made sense of these goals differently, depending on their way of knowing. We also learned that many of their goals changed over time. In the next section, we turn attention to illuminating *why* these successful learners who completed the program were motivated to enroll in the program, *how* they made sense of their goals and motivation—and how their thinking changed over time.

SECTION II: "I'LL HAVE MORE OPPORTUNITIES ON MY JOB": LEARNERS' MOTIVATIONS AND GOALS FOR LEARNING—STORIES OF CHANGE

My education [shows my children] that I am older than them, but I still try to learn. That way they have encouragement from me that education is very important for them to continue their education, to never quit learning, to never give up their dreams, because life is full of opportunity. They will learn this message from me because I don't want them to think I didn't go to school because I didn't want to**. I wanted them to think, Mommy worked very hard, she went to school at age 41, and she graduate at age 43 from high school. That makes me feel very proud, and I think they will feel proud too**. Because any of these things, they are something, "Is your mother graduate?" And they say, "yes." Even if I don't know everything like them, at least **I am American graduate**. That makes me feel so good. (**_Rita_,** Socializing Knower, June 1999)

My reason to come to this class most is writing. . . . I didn't have a problem with reading, much. Also the math, I learned a lot. Especially on the tests, like when they give the fractions, and decimals, something like that. It's fun, once you know what you're doing, and stuff. And also it's different, we have to change like we have to do [math] **the American way**, which is, it's not that difficult. . . . Most case he [John, the math teacher] . . . want[s] us to learn that way [the American way], because . . . this is a class so we can get used to the American way. . . . We explain to him, and he, [in] some class[es] . . . he wouldn't mind for us to do our own way. But he suggests, and I believe, getting to know the American way, you know, it's better. Which I think it's good to know. I want to live in this country, now I have to try to do everything. I think I'm proud to be in this class, and I look forward to doing more and more than what I have learned. **I know, if I have done this, years ago, probably today I was better person, because the more you learn, it will be better for you.** (**_Daniel_,** Socializing/Self-Authoring Knower, Focus Group, September 1998)

Why were these learners motivated to enroll in the CEI Adult Diploma Program? How did they understand the value of education? How did their thinking change over time?

During our first set of interviews (March 1998) with Polaroid cohort learners, we invited them to tell us about their reasons for enrolling in the program. At that time, we also asked about how they understood the value of education and, specifically, what earning a high school diploma meant to them (see Chapter Two for descriptions of interview protocols). We revisited these questions during our next three sets of interviews (September 1998, February 1999, and June 1999) and asked learners to respond to them. Our aim was to learn how and if their thinking about these issues had changed. In many cases, we discovered the meaning they ascribed to the value of education and specifically what a high school diploma meant to them had changed, as had their aspirations for future learning. Importantly, we heard learners express new confidence in their abilities in their roles as learners, workers, and parents. They attributed this increased confidence and self-efficacy to the ways their learning in the program influenced how they thought about themselves.

We will first present a brief overview of learners' motivations and goals for learning in the program. Then we will illuminate how learners across different ways of knowing made sense of their motivations for enrolling and goals for learning in the program, the value of an education, and the ways their thinking about these changed during the program. We will also examine how learners who made sense of their experience with a particular way of knowing understood these themes.

Initial Motivations for Learning: "Getting the Piece of Paper"

Initially, all learners told us they enrolled in the CEI program to achieve a common goal: earn a high school diploma. Unlike learners at the other two research sites discussed in Chapters Four and Five, where the explicit program goal was to prepare learners for enrollment in a GED program or help them learn English as a second language (i.e., the family literacy site), or to prepare learners for entry into college-level coursework (i.e., the community college site), learners in the Polaroid cohort were all working toward a single goal.

Some learners were also motivated to enroll in this program because they would receive "credit" from Polaroid—and their supervisor—in the form of points in Polaroid's "Applied Knowledge Program" (AKP). These learners were interested in developing better skills that would enable them to do their jobs more effectively. Most of the learners also felt the communication skills they would learn would help them achieve their goal of becoming "better team members" at work. For some, this meant becoming more skilled at pronouncing words; for others, it meant expanding their vocabulary. Several learners told us about their experiences of being "passed over" for promotions because they did not have "the piece of paper" and their hope that with a diploma they would be eligible for such promotions. We will later examine how learners across ways of knowing made sense of this experience differently.

Most learners expressed regret or shame about not having completed their high school education earlier in life—whether in the United States or their home countries. Regardless of their way of knowing, many looked forward to being able to "check the box" on applications and various forms indicating they had earned a high school diploma. Throughout the program, learners expressed hope about how a high school diploma would make a difference in their lives.

While learners' initial reasons for wanting to earn this credential or as many of them called it, the "piece of paper," varied, most seemed sure they wanted it and at the same time apprehensive about being in school again as an "adult." Just as Valentine (1990) discovered, we learned that many learners wanted to earn a high school diploma initially because they believed it would provide greater opportunities for promotions at work or greater chances of being considered for other kinds of employment outside Polaroid. Many had additional goals based on how they thought earning a diploma would help them in their lives. For example, in addition to wanting to earn an "American diploma," all of the non-native speakers of English also wanted to become more proficient speakers of English. Several learners discussed their wish to earn a diploma to be good "role models" for their children, and many, like Rita, thought earning a diploma held the potential both to inspire their children to continue with education and to model their own value of education. Several learners hoped to become better able to support their children's learning: They expressed a desire to help their children with homework and felt learning in this program would enable them to do this.

Many learners viewed the diploma as an "opportunity" and, as we will show, made sense of this differently. We will also examine how their thinking about the meaning of a diploma and the opportunities it provided changed during the program. Several non-native speakers of English shared their perspective that earning a high school diploma would help their efforts to adapt to the American culture. Speaking better English was a very important goal; several of these learners believed an American high school diploma would help them move forward as more capable people in America.

Though their reasons for wanting to earn a high school diploma varied, as did the sense they made of its value, this common goal brought them together.

Moment of Readiness: How Learners Understood Managing the Multiple Demands of Adult Life

> Essentially, an educator can do nothing to ensure transformative learning. Learners must decide to undergo the process; otherwise, educators indoctrinate and coerce rather than educate. (Cranton, 1994, p. 166)

Why, at this point in life, did these learners enroll in this program? Mary, CEI's program administrator, told us that after working with adults for more than ten years, she believed she understood what it takes for adults to successfully complete CEI's Adult Diploma Program: "Timing is everything." To Mary, this meant adults needed to be at a point in their lives at which they can invest the "time and energy" in academic work while balancing the multiple demands as parents and workers.

Many learners told us how the educational system in the United States differed dramatically from that of their home country. Some voiced regret about not having completed their education in their home country or upon their arrival to the United States. Some non-native learners told us that in their home country, a person needed to pay for his high school education and only the wealthy enjoyed such advantages. Several of the women in our sample told us that in their home country, they did not enjoy the same luxuries of education that men did. For these learners, there was a cultural expectation that they "stay at home" and help support their families by working either within or outside the home. Other learners made a decision not to pursue their education when they arrived in the United States because of their life circumstances. Both women and men in our sample talked about the need to work to support their families when they arrived in the United States. These learners said their first priority was to support their children and spouses, and their children's education, before thinking about themselves and their own education. A few learners did not voice regret about postponing their education. These learners told us they made a decision to wait until they would have the time and resources to continue with their own education.

Bill and Jeff, two learners born and raised in the United States, talked about how their prior educational experiences affected their decision to leave school and begin working at an early age. They shared stories of negative learning experiences in school; it was hard for them to remember *any* positive formal schooling experience. Each talked about feelings of shame about having not yet completed a high school education and, at the same time, voiced their determination to do so *now*. At the start of the program, Jeff told us that a high school diploma "is something I've been wanting for 20 years."

Many learners, both native and non-native speakers of English, talked about prior unsuccessful attempts to earn their high school diplomas. Upon entering the program, learners repeatedly stated, "It's my time," meaning that after having worked long and hard at supporting others (both emotionally and financially), it was time to focus on their own learning. For most learners, this meant managing multiple responsibilities as workers, parents of school-aged children, and caretakers of family members while also fulfilling their obligations as learners. Several learners with grown children felt better able to meet their multiple demands because they no longer had young children at home.

For example, Magda described her decision to enroll in the program and reflected on how the timing was right for her now that her children were grown. At this point in her life, she felt she had more "freedom" because she no longer had smaller children in her care: "That's why I took this

course at this time. I didn't do it the last time because right now I have a lot of freedom." Magda compared her situation to that of other people who have little children: "I see from other people, they have little children . . . they cannot even do their work." In the third interview, Magda again emphasized the "good timing" of waiting to earn a high school diploma until her children were grown. In response to the interviewer's questions about the most meaningful experience of the program, Magda focused on her sense of accomplishment at having been able to make time to study.

> So, I wanted to [earn my high school diploma] for a long time, but I couldn't because I had younger children, it was difficult [for me to do it] . . . I knew I would really give up. I wouldn't finish it. That's why I didn't do it. But now, I think was the time. And if I finish it, and hopefully I will, I think it's a great accomplishment. (PI #3, p. 4)

Magda understood her participation in the program as a choice she made for herself. Magda was aware of the challenges associated with raising young children and going to school at the same time. Had she enrolled when the children were young, she felt that she would have "[given] up," that she "wouldn't have finished [the program]."

Daniel, like Magda, recognized how difficult it would have been for him to balance school with his other responsibilities. In a focus group we held after the learners completed their first trimester in the program, Daniel echoed Magda's feelings about the importance of timing in making his decision to enroll in the program.

> The reason I didn't take it before, I was too busy, also my job, also my house, and everything. Raise the family, it's tough to force to take a course like this. But it was something I should have done. I regret that I didn't do it before. But I'm glad it's not too late. (Daniel, Focus Group, 9/1/98, p. 6)

In contrast, other learners still raising younger children spoke about the challenges of balancing their responsibilities as parents, workers, and learners. For example, Bill, Rita, and Veronica had school-aged children at home. For Bill, finding the "time" to do all that he needed to do was a challenge. In September 1998, during one of our focus group discussions, Bill shared his experience of balancing the multiple demands.

> I hate doing any homework. I have no **time** for it, sometimes. Some weeks they give you a little more than extra, but it's [hard]. I have five kids at home. And I have five kids going to four different schools and five different directions all week long. My wife works a different shift than me, and I just have no time to do it. I got a big incomplete on the reading [assignment]. I got to make up a bunch of stuff, too, on the Writing class. [Writing classes took place on some] days I just didn't get here. I made all my math [classes], though. I'm missing one, I think. But I'm missing about six or seven or whatever of the other ones. And now I'm making up time, and I just ain't got time.
>
> I'm trying to [make up my assignments], but I'm having a difficult time, you know? I was almost at the point of saying, "See ya." Well, you know, they want me to do all this stuff, make up this stuff I made, you know, and I'm passing all [the subjects]. My journal was complete. I'm talking about the writing class. And now

she [the English/Writing teacher] wants me to do a bunch of makeup stuff. I had
trouble doing homework, you know, so doing makeup stuff is just very difficult for
me. I mean, there should be a little less. I mean, I know we only get two days a
week [in program classes], and only 14 months to [complete the program and] do
what other people [do in] four years.

For Bill, as was true for several learners, finding "time" to fulfill and balance multiple responsibilities
was a struggle. Although Bill, like many other learners, considered leaving the program, he did not.
He cites the support of his program teacher, John (the math and science teacher), as a critical source of
support. Bill thought John really cared about him and encouraged him (i.e., gave him the courage) to
persevere.

Although learners expressed initial trepidation about being able to do all that would be
required of them in their various roles as learners, parents, and workers, most told us that they
believed that "working hard" and "focusing" on their learning would help them accomplish their goal.
As Pierre said before the program began, "I don't know if I can make it, but I'm going to work hard to
make it." In the following sections, we will examine how learners conceived their motivations for
learning and the value of education and how, in many cases, their conceptions of these goals, and
sometimes the goals themselves, changed during the program.

Learners' Conceptions of their Motives and Goals for Learning and the Value of Education—Changes Over Time

The Instrumental Way of Knowing

A GED is if you just can read a book, study one subject for an hour to take a test,
and write it out. But to get a diploma, you've got to go and experience all the
aspects of what the subject is, **you've got to learn a lot more, you've got to just
know more.** You've gotta go for a long time. I can take a GED test in one
afternoon. But to get a diploma, I've got to go for a whole year and a half. (***Bill***, PI
#1, p. 25)

Two learners, Bill and Renada, were motivated to earn a diploma because with that "piece of paper" in
hand, they thought that they would have better chances for job promotions and also be better models
for their children. At the start of the program, they did not yet reflect on the larger more abstract
(general) meaning of education; instead, they had a concrete understanding of what a diploma and
education meant. These learners experienced their behaviors (e.g., earning a diploma) as linked to
direct consequences (e.g., getting a better job or a bigger salary). In other words, they see a cause and
effect relationship between "getting a diploma" and its "opening a door" to a better job or to college.
At program entry, they made sense of their experience at the Instrumental way of knowing. Toward
the end of the program, although they still had concrete reasoning about what an education meant to
them, Bill and Renada began to reflect upon the more abstract meaning of issues in their lives. Both
grew to demonstrate the emergence of a Socializing way of knowing.

For example, at the beginning of the program, Bill stated his view that becoming educated is
about doing work. He compared "getting a diploma" to a GED and demonstrated concrete thinking
capacities, as his words tell us. For Bill, a GED was not as valuable as a diploma—a diploma takes
more work to get (a behavior) and therefore is worth more in terms of what it will do for him (a
consequence). He knew that a diploma is better than a GED because "you've got to learn a lot more,"
"know more," and it takes more "time." Bill saw education as accumulating a set of facts or skills that

will lead him to his goal, a high school diploma. He did not think about education in terms of a larger purpose or orient to an internal psychological experience of the meaning of becoming educated. Initially Bill discussed his motives for enrolling in the program as related to wanting to have opportunities for job promotions (and a higher salary). Like many other learners, he also wanted to be a good model for his children. He told us he believed earning a diploma would motivate his children to continue their education.

In the last interview (June 1999), Bill recalled that when he started the program, he just wanted to complete the program, as if doing so would lead to little more than receiving a diploma, which in turn would lead to more and/or better job opportunities. He remembered, "At the beginning . . . I just wanted to get it and get out." But in the final interview, Bill shared his newer thinking, which marked a change in his understanding of how education and his participation in the program helped him to have a better appreciation for others.

> I have a better appreciation for people who come from poor countries and third world countries or whatever, but as I said, I've seen a 100 percent improvement in their reading and just the way they talk to other people. A little more confident. (PI #4, p. 3)

During the first three interviews, Bill told us he thought his children would want to graduate from high school because upon seeing the party he would throw for himself, they would wish to have the same kind of celebration in their honor when they graduate from high school. However, we noticed a change in the way Bill conceptualized the *reward* of finishing the program in our last interview with him. Graduating was no longer about having "a big party." In fact, Bill, his wife, and his children would attend an extended family reunion dinner in lieu of a graduation party for Bill. At that time, Bill's achievement was completing the program (an internal rather than an external reward). When asked during the final interview if he would be inviting his extended family to the graduation ceremony, Bill explained,

> No, no. I didn't invite nobody [to the graduation]. I'm taking my immediate family because afterwards we're going to, my nephew put together a family thing, not knowing I was graduating, just to get the family together because they haven't seen each other in years, we haven't seen each other in years, so we're all getting together. So I told him I was graduating the 26th, so he put the party together for the 27th, from 2:00–4:00. And that's when I graduate. . . . I said, so, tell them we'll meet at 5:00 . . . they're all old, they have no babies, I'm the only one with young kids. So I'm the only one that's being put out. They wanted meet at 2:00. I said that's crazy, meet at 5:00, so I'm hoping they all meet at 5:00. Even if they meet at 2:00, there's be an hour before they sit down, there's like 25 of them, then there'll be another two hours, they'll sit talking and eating. So I'll be there just before they finish. But I haven't seen a lot of them in a long time, so. [*That'll be fun.*] Ya, except it's gonna cost me a mint to take my seven out to dinner. (PI #4, p. 7)

Also at this time, Bill reflected on how he feels "stuck" in his position at Polaroid, voicing regrets about not having earned a high school diploma earlier because he feels he could have "done a lot better." This seems to reflect the cause and effect relationship Bill sees between earning a diploma (the cause) and job advancement (the effect). At the same time he shared an additional motive of wanting his children to "do better" than he had.

I mean, I quit school. I hung around; I joined gangs. It's the pits, you know. I mean, at the time I thought it was the best thing in the world, to hang around the corner . . . and, you know, just party all the time, and stuff. But the party ended, you know. And all the sudden, I'm old and I'm older, and, you know, I'm still stuck in a job that—you know. I mean, I bought a house and everything, but I could have done a lot better . . . and I know they can. The values are, I want them [his children] **to do better**. . . . As I said, my mother and father got divorced, and I went through some bad times with them fighting, and stuff, but, if my wife ever leaves me, I'm gonna have to pay alimony for five kids, and I don't want to do that. [Laughs] So, it's important to keep everybody happy. [Laughs]. No. Yeah. **I don't know how I got the values. I just want 'em to do good**, and, you know, I don't want 'em to be a bunch of losers, you know.

Bill had a concrete understanding of the relationship between earning a diploma and having more job opportunities (e.g., getting unstuck in his job). This reasoning is also evident in the way he conceptualizes the relationship between "keeping everybody happy" and not having to pay alimony (both demonstrate an Instrumental construction). But, at the same time, we see a change in his thinking that shows his newly emerging Socializing way of knowing. While Bill does not yet talk more abstractly about what he would like his children to do or the source of his values, he demonstrates the emerging capacity to orient to others' feelings when he talks about "keep[ing] everybody happy"—although he mainly talks about this in concrete terms.

Like Bill, Renada changed her conceptualization of education's value during the program. She, too, saw the diploma as a "piece of paper" that would enable her to "get a better job." Although all learners in the sample spoke about the relationship between earning a diploma and having more opportunities at their workplace, they made sense of this relationship differently. In the initial interview, Renada, a non-native speaker of English originally from West Africa, shared her motive for wanting a diploma: so that she can go somewhere:

Well, I always want to learn more and to have my diploma because, right now, I know if you don't have enough class to have a diploma, you can go nowhere. If like I want to bid on a job, or something like that, they ask for a diploma. High school or college. That's why I want to learn. (PI #1, p. 6)

Similarly, in this first interview Renada discussed another motive for earning her diploma; learning in the program will "make my job easy" and it will help her "to communicate." Like many Polaroid learners regardless of their way of knowing, Renada wanted to be in the program "to get more skills." Renada talked about gaining more "skills" that are concrete in nature.

But at the end of our study, Renada wanted to continue her education. When we asked her why this was important, she said she planned to take "some writing, reading" and perhaps computer courses to help her at work and in life. This mattered to her because

It helps you a lot of things. At work, you can communicate, you can write and read, computers. Now you need to know. They say, yeah, I can explain myself better. I'm glad, I'm happy. I almost give up because it was hard for me to write a lot [and because] my son sick, things, life [is] not easy. **Oh, I feel very proud of myself.**

> **Then I see now I'm willing to continue and to do some classes, and take course college**.

Renada wanted to continue pursuing an education by taking courses. This was a change from the way she initially conceived her goals for learning. Renada was beginning to orient to or talk about her internal, emotional experience of what it meant to have completed the program ("I feel very proud of myself"). While she continued to demonstrate an Instrumental way of knowing, she also demonstrated the emergence of a Socializing way of knowing.

The Instrumental/Socializing Transitional Way of Knowing

> So, and if you want something very badly, you'll make a way to get it, if you want it. (*Hope*)

Seven of the 17 cohort learners demonstrated both an Instrumental and Socializing way of knowing fully operating. At program completion our assessments indicated that Sal, Hope, and Rita demonstrated evolution in their underlying meaning systems (see Table 3).

Table 3: Learners with an Instrumental/Socializing Transitional Way of Knowing

Learner	Region of Origin	Way of Knowing at Program Start & Finish	Initial Motive For Enrolling in the Program
Sal	West Africa	2/3 to 3/2 Δ	To enhance his skills and gain a high school degree.
Hope	Caribbean	2/3 to 3/2 Δ	To learn to better express herself and earn a high school degree.
Teresina	West Africa	2/3 – 2/3	To become eligible for job promotions and earn a high school degree.
Angelina	West Africa	3/2 – 3/2	To "get AKP credit" from her supervisor, be able to move up in the company, and earn a high school degree.
Helena	West Africa	3/2 – 3/2	To increase her eligibility for job promotions, have access to other types of positions, and earn a high school degree, which she felt would change the way others viewed her.
Veronica	West Africa	3/2 – 3/2	To enhance her job security, be eligible for other kinds of jobs, and earn a high school degree.
Rita	West Africa	3/2 to 3 Δ	To be able to go to college, become an "American graduate," be proud of herself, and have her children be proud of her.

While these learners share the same kind of concrete reasoning for valuing a diploma and education that Bill and Renada demonstrated, they are at the same time beginning to orient toward an increased awareness of and ability to report on their internal, psychological life. In other words, they orient more to their own and others' internal psychological experiences.

For example, these learners had a more abstract understanding of the value of education. Many talked often about how important it was for them that family members and supervisors were "proud" of them for participating in the program. Some of these learners voiced that they felt other people "respected" them more *because* they were working to earn their diploma, stating they felt that others *treated them* differently because they were earning a diploma. They also demonstrated the capacity to look ahead and see more opportunities that would be available to them with a high school diploma (although they often discussed these in a concrete context). In other words, learners with this way of knowing had an increasing capacity to think abstractly; a few talked about the other applications of their learning in the program to their life (however, this was mostly discussed in a concrete context).

Most of these learners, like Bill and Renada, talked about how an education was important to them because it enabled them to be better "role models" for their children. They wanted their children to be proud of them because they were earning a high school diploma. As the Socializing way of

knowing emerged, however, education was no longer simply a means to an end, and as learners began to shift their construction of what an education meant, they often spoke about the value of learning for its own sake.

For example, Sal shared his initial motive for enrolling in the program, "I want to gain my degree, my high school diploma, and then I want gain more stuff to help me with the job at Polaroid, or someplace else, outside company." During this and the two interviews that followed, Sal demonstrated an Instrumental construction of knowledge. To him, ideas were things that you get and give. Increases in knowledge amounted to having more skills and facts; he could accumulate these. He also mentioned right and wrong answers repeatedly, illustrating a concrete conception of education and knowledge in which knowledge can be right or wrong.

But in our final interview, Sal seemed to understand bigger applications of his learning, which marked an important shift in his meaning system. At the end of the program, Sal shared his thinking about how increasing his skills helped him to know "which thing is right and what things [are] bad to do." In response to the interviewer's question about how having skills helps him know what the right and wrong thing to do are, Sal replied,

> Because you know things when you have a skills, so you're gonna know **which** thing is right to do and what things is bad to do. [*How?*] Well, it depends what, what thing you do, and then, what skills you have. Just for example, I have electrician skills. So, so that helps me to do or to direct what to do, how to work with electric, in electrician field, for example. How to tell people what to do.

Sal constructs knowledge as a kind of possession, an accumulation of skills. Knowledge is right or wrong, and it helps a person to meet concrete goals (telling "people what to do"). At the same time, Sal was now able to recognize bigger applications of his learning. When asked in the same interview if he learned anything other than skills in school, he said,

> Well, school is not just about skills or learning, this is all—all bunch of things— all . . . is not just that. 'Cause anything . . . we do, I think, is being learn in school. Everything we do . . . [in] everyday life, most, I would say, 98, 100 percent of them been learn in school . . . [*Is there anything else about it that makes you feel successful or proud?*] I learn a lot by doing this in this program. I learn . . . how to do the job interview, how should do the essay, how to do a thank you letters . . . that's many things about [finding a job]. On this last semester, we've been doing a lot about the job. How to answer question, you ask a question on the job interview, and things like that, how to dress up to go to interview. And then, where to find a job, where to look, which is the better way to find a job. . . . So, it's a lot of learning. [I've] learn[ed] how to reading better than before [and] writing.

At the end of the program, Sal also discussed how learning in the Life Employment Workshop class made a difference for him in terms of learning the skills he would need to apply for a different kind of job, inside or outside Polaroid. We see that at this time, Sal conceived learning as not just about skills but thought everything we do in everyday life is learned in school. Sal also had a sense of how combining different kinds of information he learns from authorities (such as Judith, the Life Employment Workshop teacher) helped his thinking, and he demonstrated the capacity to think abstractly (evidence of a Socializing way of knowing). At the same time, Sal still focused on how he

was learning what the "right and wrong things" to do are—how to do a job interview the right way and how to follow the accepted rules for behavior (e.g., dressing for an interview, writing essays and thank you notes). This demonstrates an Instrumental way of knowing.

Sal articulated a commitment to education when he explained education in his home country. In his view, people in his country are too committed to education, so much so that it is like a "religion." He recognized that different people have different commitments and told us he knew his views about the value of education. When asked why he felt the way he does and why other people felt the way they do he could not elaborate. However, when asked just before graduation what he found most valuable about earning his diploma, Sal said,

> Well, what I like about it, because with this diploma, I can be prepared to enter the college. To . . . move on **onto another step with my job, to get a better job.** Because without the high school diploma, I don' think I'd be able to get into the college easy. I probably would, but it's probably hard. I would, you know, this my hope [to go to college]. I'm not sure when, but I would, I will go to college. [*Why would you like to go to college?*] Well, to improve my education, and to get something, less than three or four years. Like an assoc[iates degree]. Well, I'm not sure, I just . . . [it] is the sort of thing that I want to think about. [*What do you mean by that?*] Well, to get a better education than this, the one I have now. And then to up and get, or find a better job than what I'm doing now, **and to make a better life**.

At the end of the program, Sal understood his high school diploma as a steppingstone into college or a degree that will help him secure a better job. When asked if there was anything else important to him about getting a better education, he explained how an education will not just help him "get a better life," it will help him be "a better educated person."

> There is a lot. It's not just to get a better life, you get a better educated person. [To] knows things better—wrong and right—what to do, times when you do things, and when you need to do it. . . . Think better. Yeah. [It will help me know] the right direction and, you know, wrong direction. I think with the more, with more education, that's how it be better. . . . 'Cause while you've been at school, you've been learn all the things, what to do, how to do [things]. You're doing better in the class and the tests, on the tests you, so, I think that's the sort of thing, when you get them all together, . . . that's the thing that direct you, on what direction. That's what I think. . . . Yeah. All the skills you learn, you need it, . . . when you get all this, you combine all this information together . . . when you do things, all those gonna help you. They will help you thinking.

Sal now saw the diploma as being about more than helping him develop individual skills he needs for his work. He viewed it as something that will help him become a better person. We see he can put things together and see a whole larger than its discrete parts (i.e., all this learning helps him become an "educated" person). He could now elaborate on what a "better life" meant to him, and at the same time, he explained what it meant to be a better "educated person" in concrete terms. Sal's thinking evolved to demonstrate that the Socializing way of knowing was now predominantly organizing his meaning making.

In contrast to Sal, who spoke often about how earning a diploma would increase his chances for job promotions (especially initially, but also throughout the program), Hope rarely named the

diploma as a key to promotions—in fact, she did not mention it until the last interview. In her first interview, Hope, who was born in the Caribbean, spoke powerfully about how earning a high school diploma—a "piece of paper"—would help her move forward in her life. She emphasized that that her husband told her that with a diploma, she would be "dangerous." For Hope, this meant that with all that she would learn in the program, her husband thought she would become more able to understand and explain herself and her thinking to other people both at work and in her private life. Like many of the non-native English speakers, Hope talked with us about how the educational system was different in her home country, where a person had to pay for an education after the fifth grade. For Hope, an education had real monetary value in her home country: "The diploma program, a lot of people say it's just a piece of paper. . . . But to me, where I'm from, you have to pay for high school. You don't get high school free." Like many learners in this program, Hope had had prior educational experiences that shaped her expectations for the CEI program.

Hope's high value of education helped her keep the "promise" she made to her mother about helping her brothers and sisters earn a high school education. Ever since she arrived in the United States, she has financed her younger siblings' high school education in the islands. Now, she observed, "I think it's, this time it's for me." Although Hope valued education and appreciated that it "costs money," there were other reasons she cared about it. There was some sense in her of wanting to be able to learn to "ask questions;" to question without fear was a key theme for Hope and other learners throughout their time in the program.

> To me, since we had to pay for high school, I recognize that it's more than a piece of paper because its something I earned, because I want it, I want it. Kids go to school up here because they have to. If they didn't have to, they wouldn't have to. And they only go because they, they are supposed to go**. But I'm going because I want more than the high school diploma. It's something that I learned to explain myself more freely, and don't be scared to say a question, or ask a question, and ask it the right way, or repeat anything the right way. 'Cause sometimes because you have an accent, things come out differently. And people look at you funny**. [*That's painful.*] Yes, it is. And sometimes you want to say something, and you don't say it, and then the person over there said the same thing, and you had it in your mind, but just because you're scared of, you say, you don't say it. I've had that happen to me. I would write it out, and just because I scared to talk, I wouldn't say it, and then the person over there came up with the same idea. (PI #1, p. 8)

In talking about how an education will help her, Hope said she thought it would help her express herself "more freely." However, she was not yet able to talk about what this would mean to her in a more abstract manner. Hope's concern with how other people will evaluate and treat her demonstrates a Socializing way of knowing. At the same time, Hope voiced concrete concerns about what it meant to her when she was "scared to talk" at work in a team meeting—that "the other person over there came up with the same idea."

Hope, unlike most learners, only named the diploma as a key to a new job in the final interview. At that time, she made an explicit connection between the value of an education and the opportunities it could provide both in terms of greater work opportunities and being a step toward "higher learning."

> I wanted the diploma. **Because I see it's an opportunity for me to get ahead in my job. And if I want to go higher, for higher learning, I could**. . . . It's up to you . . . what you want to do with it, when you get it. . . . [I] don't care what kind of encouragement teachers and professors give, it's what you want. Cause if you don't have certain **technology**, and . . . certain jobs are not opened to you. So, if you can get it [a diploma], I think you should make the best use of it, and get it. (PI #4, pp. 11 & 15)

Hope, in this last interview, not only sees her education as something that will provide her with greater opportunities at work and enable her to continue with her learning, she also talks about her *own* role and responsibilities in making these possible.

Helena, originally from West Africa, went to school up until the eighth grade in her home country. In the first interview, Helena shared that when she was growing up, "a lot of people don't care to put like women in school much, so they don't care about that." Helena's view of education was different from the one she held as a child—and she did all that she could, she told us, to encourage her children to attend a "good school." In her words, "I always want my kids to go to that school [a selective college]. All the time." At the time of the first interview, her daughter was close to graduating from [that selective college], and her son was about to begin an undergraduate program in another state. Helena thought that continuing her education was an opportunity to be a good role model for her children. In the first interview, when asked about how she was feeling about beginning the CEI Adult Diploma Program, she enthusiastically replied, "I look forward to everything." She then shared her view that education is important for work. Like many of the other learners, she thought having a high school diploma would give her access to jobs she would not otherwise be considered for:

> Because see, first now, see the job I have now, you see I don't have that before, I never had this job. Never, because [for] everything, you have to have a high school diploma. Everything. Everything. **If you don't have it you never gonna get any job better.**

In this first interview, Helena also spoke of "getting the piece of paper" as a source of motivation and of her awareness of the relationship between a diploma and eligibility for different kinds of jobs. The context in which she discussed her concerns was concrete and served as the underlying foundation on which her more general (abstract) concerns rested.

> You know the best part . . . I gonna learn more. I must understand better, so then when I go someplace, they say, "You have a high school diploma?" I say, "Yes." Every time I say that paper I have I just put in the paper. Because now everywhere you go, I don't care where you go, first thing they ask you. (PI #1, p. 14)

By the end of the program, Helena's motivation for earning a diploma had changed. Rather than seeing the diploma *only* as something that would help her increase her eligibility for promotions, Helena talked about how learning in the program *made her* want to learn more and want to "continue to go to school." Her cousin's encouragement helped her have the strength to apply to the program, she said, and her sister's support made a difference to her while participating in the program.

> So my cousin told me to go to, take this program. I told my cousin, "No, I don't want to because maybe they gonna be hard for me." She say, "Try, try, give it a

chance, maybe you pass." I was in a school when I take tests, so when I pass, so I
continue the class. I say, "I don't know if I gonna make it, I feel so scare[d]." . . . I
never gonna give up, I say I gonna keep going. Then I try so hard do my homework,
we work together school, so I go home, sometime I call my sister on the phone when
I do some homework, when I'm reading to her, you know, I ask her if it make sense,
she say "Ya it make sense." So now I'm done. I'm very excited. It makes me very
happy, it make[s] me [want] go to school more and more, learn more things. . . .
Never, never, never, thinking I gonna have high school diploma this country, I never
think that. Never. So now I have it, make me very happy, then **I gonna continue
go to school.**

During the program, Helena developed an appreciation for the process of going to school,
and she was excited about getting her diploma. She was excited and very happy about completing the
program—so pleased that she would like to continue school. Helena constructed the value of
education as more than just getting a diploma and being able to get a job (although these concrete
concerns were also important to her). In sharing more about why having earned a diploma made her
happy, she revealed deeper reasons for wanting to continue with her education.

Because now, first thing you look for job, anywhere, if you want high job, Polaroid,
first thing they ask you for high school diploma, so if you don't have, don't even try
for the job, they don't give to you. . . . One time I looked for part-time job, they say
do you have your high school diploma, I say no, they say, no, you have to have your
high school diploma. They [don't] even call me. So now I want reading more and
writing and math. **I want to continue go to school**. . . . Reading and writing and
having practice, more practice. . . . Because for practice. I learn more, more, more,
more, more you learn, more better for you. Like this morning, my manager, he told
me, when he retire[s], he [will] go to school. I ask him why you go to school when
you retire, you don't need to go to school. He told me Helena, never late. I say, you
should go to school now, I say, if I retire, I don't need to go to school. He say, yeah,
you retire, you still go to school. He says a lot of people in this who retire in this
country still go to school. Because they [inaudible] he's American. So I think you
don't need this, but I think, he don't need it, so he say, he continue. . . . It's great if
you want to go to it. But for me, I say he don't need it**.** Because he born here, he
speak English. So he has education, everything, I think why he need to go to school.
He say, Helena, the more you learn, the more better for you. I say, that's what he
told me this morning. He want to learn more, more, they say more you learn, the
more better for you.

Helena shared her thinking about what was important to her about continuing her education
after the program: "having more practice." Practicing seems to denote an abstract way of thinking
about learning as a process that is ongoing rather than just learning to "get a diploma" (demonstrating
a Socializing way of knowing). At the same time, she does not understand why her supervisor, an
American, should continue with his education after he retires, i.e., if he is going to retire, why would
he want to continue with his education? (an Instrumental construction). What her supervisor told her
seemed to make her think more about learning—and also was a source of inspiration for wanting more
"practice."

Toward the end of this last interview, Helena spoke about the value of education, especially given the requirements for working in today's society. She emphasized the pleasure she would derive from being able to "check the box" on her job application to indicate she had a high school diploma. This was not only important to Helena but to many other cohort learners as well. Helena told us why education was important to her at this point in her life.

> Especially now, you don't have it, forget it. Because the first thing when you go anywhere, you filling out the paper, you have to put how much school do you have. First thing you have to do. You go to hospital, to take your kids, anywhere you go, you have to put how many education you have. . . . **Then when they see you have education, they respect you.** So if you don't have education, like if you look for jobs, when you just walk and go away, they pick it up the paper, throw it in the trash [if] you don't have no education. [*So, do you think, beside from jobs, that people respect you differently when you have an education?*] **Oh, ya. They do. Because sometime like if . . . like people, have that language, so maybe if you don't speak English, they think you stupid. That's the way they think, if you don't have the patience, you don't speak English, you have accent, they think you stupid.** You see it . . . they think you stupid, you don't know nothing. [You] have to really be careful. I see that even in store, like if you see something on sale, you have to watch them . . . maybe if you don't check, they put, they don't take money from the thing on sale. It happened to me. [*So you think they treat you badly, they try and cheat you because they think they can?*] Ya, maybe they think you can see nothing.

Helena voiced concrete concerns about having the diploma and what that will do for her; for example, she has to indicate *how much* education she has on different forms she needs to fill out in her daily life in her role as a worker, parent, and human being. Importantly, Helena, at this point, also talked about her concern for how other people *view her and treat her*. Feeling respected by others mattered to Helena in a personal way. She observed people treating her differently when they saw that she doesn't speak English (i.e., "they think you're stupid"). Helena can see that people think she's stupid, that they think she "don't know nothing." That Helena can and does observe this in her relationships with other people and that it clearly bothers her demonstrates a Socializing way of knowing.

The way Helena understands the importance of other people's evaluations of her and how they matter to her is emblematic of Socializing knowers who place ultimate importance on other people's opinions and evaluations of them. In fact, when a person has a fuller Socializing way of knowing, other people's opinions and evaluations of her *define* her. Simply put, a person who demonstrates a fuller Socializing way of knowing *derives her self-worth* from other people's evaluations and opinions of her. As Kegan (1982) eloquently puts it, individuals making meaning with a Socializing way of knowing experience other people's opinions of them in this way: "You [the other person] are the other by whom I complete myself, the other whom I need to create the context out of which I define and know myself and the world" (p. 100). While Helena was aware of how other people treated her and was bothered by their response to her, she described it and talked about it in concrete terms rather than reporting or expressing subjective states. This points to an Instrumental way of knowing alongside a more pronounced Socializing way of knowing.

The Socializing Way of Knowing

Two learners, Pierre and Tough[4], made sense of their experience at both program start and completion solely with a Socializing way of knowing. Rita, who had both an Instrumental and Socializing way of knowing at the program's start, grew to demonstrate a fully and singly operating Socializing way of knowing.

These learners, all of whom were non-native speakers of English, talked often about how education and program learning would help them express their thoughts to other people. Being understood by others, they told us, was important to them; they defined themselves in terms of other people's perceptions of them. With this way of knowing, a person is "made up by" (Kegan, 1994) valued others' opinions and evaluations of them. It was important to them that their children were proud of them for earning a diploma, and many also spoke about *how* this process of becoming better educated would help them be a better "role model" for their children. They believed their enrollment in the program and pursuit of a high school diploma would model their value for education and encourage their children to want an education. Doing this would "pass on the value of getting a good education" to their children. When asked where their value for education came from, several learners told us that they got their values for education from their parents or home country. They looked to important others to define and hold their values (demonstrating a Socializing way of knowing). These learners identify with meeting cultural and social expectations, and, in a real way, they understand the opinions that important others hold of them *to be the opinions they hold of themselves*. They derived their *own* sense of worthiness from other people.

For example, Rita enrolled in the program because she wanted to improve her ability to communicate both in the Polaroid workplace and other areas of her life. As stated previously, Rita was laid off from Polaroid in the second trimester of the program, but continued to participate in the program. In Chapter Six, we illuminated how Rita's learning goals developed and evolved and how the program helped her envision future career and educational possibilities.

Rita, who was born in West Africa and lived there until she was in her early 20s, entered the program with the certain knowledge that she wanted to go to college, and she saw her participation in the program as a "first step." In the first interview, she explained,

> I understand better, you know. So, when I passed the test I said, "This is my first step." Is go to school and have my high school diploma. Then, second step I will see you in UMass.… If I graduate, believe it or not, if I'm still healthy, if everything is still okay, you know, there is no sickness around. You know I don't have many problems, like physical or no mentally, I will go to college. [*What would you like to study?*] I don't know yet. But I wait until I get my diploma. **That is the first step I want to move on**.… I will. Someday. My dream had to come true. . . . (PI #1, pp. 1–2)

However, during one of our focus groups in February 1999, Rita shared new and expanded thinking about the value of education. Here, she spoke about why an education was important to her—"for myself, number one, and, number two, for my kids."

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[4] Henry, who did not complete the program, demonstrated a Socializing way of knowing (i.e., 3) at program start and grew to demonstrate hints of a Self-Authoring way of knowing (in July 1999, after the program ended).

I'm still learning every day because every time I think about this school and I pick up the book and I review what learned before, at least it will refresh my memory. **And what I have in my mind after I graduate, is that I'll go to college, at least for two years**. And I am mom of two and I got a husband and a house to take care of. . . . **And I want to get my high school diploma for myself number one and number two for my kids because they also ask** me why I didn't have high school diploma before, and why I dropped out. And it's hard for me to make them understand in old country you go up to 12th grade there, when you reach 12 years old you can't go to college, that's the end of it. They think I was dropped out, you know, and I say, "It's never too late. Mommy will have a high school diploma." It's very hard for any of us in here [the program] that has family and that have work. You have to do everything yourself and then to go to school is very hard, very hard. But never too late, we should focus on ourselves. I pray every day when I got up, I say, "Lord, please help me achieve my goals."

Rita, like learners across various ways of knowing, emphasized the challenges of balancing her multiple roles. She spoke about having young children she wants to care for and wants to be proud of her. Rita oriented to their perceptions of her, deriving her sense of worthiness and inspiration from them. We see that Rita looked to a source of authority outside of herself (demonstrating her Socializing way of knowing). Education was important to her because it was important to her and to her children.

In the last interview, Rita proudly referred to herself as an "American graduate" and emphasized once again how much it mattered to her that her children were "proud" of her. Rita seemed to be talking about how educating herself helped her better fulfill her role as a parent. When asked why education was important to her, she replied,

My education [shows] to [my children] that I am older than them, but I still try to learn. That way, they have encouragement from me that education is very important for them to continue their education, to never quit learning, to never give up their dreams, because life is full of opportunity. They will learn this message from me **because I don't want them to think** I didn't go to school because I didn't want to. I wanted them to think, Mommy worked very hard, she went to school at age 41, and she graduate at age 43 from high school. That makes me feel very proud, and I think they will feel proud, too. Because any of these things, they are something, "Is your mother graduate?" And they say "Yes." Even if I don't know everything like them, at least **I am American graduate**. That makes me feel so good.

Rita also voiced her concern for what her children will think of her and stressed the importance of passing on the values she had acquired to her children—she wants them to keep learning, not give up their dreams, and to be proud of their mom. In so doing, Rita also demonstrated abstract thinking.

Having experienced what an "education is" in the CEI Adult Diploma Program, Rita felt better able and prepared to encourage her children to continue their own education. She, like other learners in the sample, spoke about the importance of being able "to check the box" on applications indicating that she has earned a high school diploma. Rita shared the ways that mattered to her. At the end of the program, she told us she now "knows" the "difference between go[ing] to school and go[ing] to work," and said,

To check, if I looking for a job, I will check that box. And if I read something, at least I will understand what I'm reading. If anybody talk about school and math, science, American history, I know what they talking about. And I want to encourage my kids to go to school to study, to read a lot, to read a lot of books, that way they will learn because if I don't know what education is, I would not encourage them to go to school. I know the difference between go to school and go to work.… **When I started this program I was so low self-esteem that I, when I start, I didn't know which way I'm going. . . . I used to read something, and I don't understood, and I felt so bad**. **My children were smaller, and they didn't understand everything.** But now, thank God, I speak English with accent, but if I read any paper, I know what, and I think it because the root of the school, the education. [*What's the best part of being able pickup any paper and read it?*] **It make you feel so good**. Before I used to be shy, [not] open up my mouth, because I used to speak English with a terrible accent, very bad accent, but you know, **I go to school and learn how to do other things and I learn how to put the words together, spelling—that makes me feel good.**

Becoming an "educated person" was also very important to Pierre—this was one of his main motives for enrolling in the program. For Pierre, originally from the Caribbean, this meant being better able to express himself in English. Improving his expressive English skills was important to him because he wanted to "help" others learn (especially children in his home country) and also because learning English, in his view, would help others understand and respect him. Pierre, a Socializing knower, compared himself to "educated people" and longed to be someone he considers an educated person. "Educated people," in his view, "help" rather than "criticize" people who are less knowledgeable. Another goal that initially motivated Pierre to enroll in the program and continue his education was to learn to express himself better in English to more fully engage in communication with others. Pierre told us it was important to "be understood" by others. Although he did not expect to sound just "like American[s]," he wanted people to hear and understand him when he spoke. This was a pervasive theme in Pierre's interviews.

Pierre thought enrolling in the program and learning would allow him to "grow" in his job and "move forward" in his life: "In order to grow in my job, I must find myself more education, and I can move forward to help myself and my job also." In the final interview, Pierre spoke more about how his education in the program had enabled—and would continue to enable—him to be a more "helpful" person.

[An education] give you sense to communicate, understand better, and solve problem quicker than possible. Have some problem, the idea come so quick, and that's all. **And people try to depend on you because you understand, you can bring an idea to make them easy for them.** Because with your education, [you have] a way you solve problem quickly, quicker, and anything happen and you, tell them, you think about it, and come in with an answer. [*What is important to you about other people being able to depend on you?*] **How helpful you are. . . . You cannot be a helpful person without an education.** [With education] **I will make things easy for everybody.**

In Pierre's view, an education was required to be a "helpful person." Both of these were important to him because he wanted to "make things easy" for other people in his life.

In this interview, Pierre explained why other people's opinions of him mattered. "People judge" who he is, he said, based on how he speaks and whether or not they can understand him. When asked what was most important about having other people understand him, Pierre softly replied,

> **The way you sound, the way you ask them, the words [you say]. . . . [It] is good [when people understand me].** If somebody talk to me I don't understand what he said, I don't have to pay no attention, and especially if you speak English to me, and **I don't hear what you said, it don't make no sense to me, you talking for the air, not talking to me.** . . . I think is better for me to speak little English, so when I communicate with you, you hear, you might hear the sound, this guy is not American, but I hear everything you said. And I, but you hear everything I said. . . . **As long as you communicate well, people don't care where you came from.** [*So it's what people are thinking about you is what matters.*] What's come to your [mouth] is how your mind sound. . . . **The way you sound, that's the way people judge.**

Pierre was concerned about how other people evaluate him and view him. As a non-native speaker of English and a Socializing knower, this was a clear and present issue for him—and he *felt* this issue deeply and personally. Pierre's feelings of self-esteem were directly tied to his English speaking skills and the way he thought other people perceived him. He wants the respect of other people and thinks his expressive English skills prevent this from happening. Pierre felt that other people evaluate him based on the way he spoke, which in his view reflected how his "mind sounds." How his "mind sounds" seemed to be equated with who Pierre felt he was as a person.

Pierre's case points to an important and difficult experience that learners who are both non-native speakers of English and Socializing knowers may have. Perhaps these learners cannot see themselves as competent if *others do not see them* as competent. At the same time, these learners know others cannot find them competent if they cannot express themselves and their knowledge well in English. Because these learners derive their sense of self from other people's evaluations of them, they may not recognize that other people's failure to understand them does not mean they do not have valuable things to say. This is especially painful and difficult for these Socializing knowers.

The Socializing/Self-Authoring & the Self-Authoring Way of Knowing

> What you do with knowledge after it's given to you is of your own choosing.
> (*Jeff*, March 1998)

At the start of the program four of the 17 participants demonstrated a Self-Authoring way of knowing in combination with a Socializing way of knowing. As shown in Table 2, by the end of the program, three learners (Paulo, Daniel, and Magda) had evolved in their way of knowing. As stated previously, Jeff, who demonstrated solely a Self-Authoring way of knowing at program beginning and end, will be discussed here and throughout this chapter.

Many of these learners, such as Rita and Pierre, were still concerned how other people evaluated them—they did not want other people to see them as "stupid." For some of these learners, external sources (i.e., people outside the self) were still the ultimate source of knowledge. In this section, we will first highlight some themes apparent in our data that illustrate how a fully operating

Self-Authoring way of knowing showed itself in these learners' constructions of their motivations for learning and the value of education.

These learners, unlike others discussed so far in this chapter, spoke about education as a *process* that would allow them to benefit from opportunities in life. All understood the educational process providing more access to different sources of information so they, in turn, could make *their own* decisions. Rather than looking to an external authority to decide what to do, these learners wanted to make their own decisions. They understood the teacher as one source of information and thought of themselves and each other as another. All of these learners voiced a learning goal of wanting to better understand concepts and processes so they could make their own decisions.

One of the key themes apparent in their initial motivation for enrolling in the program was the program as an "opportunity to grow." Over time, all of them talked about how learning in the program and how continuing their own educational processes helped them "feel strong." Each assumed some degree of responsibility for supporting their own learning and in most cases saw *themselves* as a critical source of support to their learning. This is not to say these learners did not experience the teacher's help as supportive—they did. However, all also voiced that education would allow them to do more things for themselves, and they were excited about being able to live their lives more independently. Additionally, these learners showed a capacity to take a larger perspective on the complexity of their own and other people's learning experiences in the program.

Like learners making sense of their experience with other ways of knowing, these learners talked about how their education would help them be eligible for greater opportunities at Polaroid. However, they understood salary increases as a means to help them help their families achieve their larger goals. For example, Jeff sought different sources of information to support his own learning and also saw himself as a source of information. However, Jeff made his decisions by considering (or taking a metaperspective on) all sources of information, taking a little bit from one place, a little bit from another place, and using his own knowledge as well as turning inward to make a decision. In other words, Jeff turns to himself for *his* sense of what and how to decide; in his words, "What you do with knowledge after it's given to you is of your own choosing." He had the capacity to develop theories about how things work (e.g., education and learning). Jeff has a strong sense of self-containment, a sense of really knowing what he thinks and how he thinks things work, as illustrated in Chapter Six.

Christopher, originally from the Caribbean, shared his strong feelings about the value of education in the first interview. He understood education to be a "key" to survival, to moving forward in his profession, and as a path to being someone in the world—or not being no one.

> I'm here because I didn't get a degree in [his home country]. It's different [there] . . . without education you cannot go anywhere. . . . So you need it to survive, to accomplish some things in life. **Without a good education people aren't going to be able to make any good decisions about making progress. You know, so I'm here, if I get a diploma, so I can learn. I can go someplace. I can move on. I can move forward.** . . . So I can put myself in a college where I can learn something for the rest of my life, you know what I mean, like to be a professional in something, whatever. . . . There's a lot, but, I can't sit there. I can't mention all of it, but there is a lot. It's not private thing, **but there's a lot in my mind**. That's the reason I want it. I want it so bad. I want it so bad. . . . The most important reason, I want it just because **without a diploma for me**, in [his home country] or here,

you're nothing. . . . Holding a job, getting paid . . . still don't count for me because you need a degree, you know, that's the way I see it. . . . No matter if I'm making $100 an hour, $200, it doesn't count to me. So, all I need is something with a piece of paper, something valuable, you know, a good document, you know what I mean? . . . **It is more important than money. . . . It's like a key, I can open the door, with a diploma is how I see it.** I don't see the money for now, I see the diploma, you know. After I get it . . . I can decide what to do. [*You can use the key and open the door.*] That's right, open door, you know. (PI #1, p. 2)

Here, Christopher talked about the value of education and connected it to the larger opportunities it provides. He pointed to the relationship between education and decision-making. With an education, he said, he will be better able to make good decisions. One of Christopher's motives for enrolling was that he wanted a diploma, but not just in and of itself. He saw it as a steppingstone and the *process* of education as one that it will help him *develop himself.*

Another important factor in Christopher's wanting to get an education was not wanting to ask for help anymore; he wanted to be better able to help himself. This theme of yearning to be more self-reliant was prominent in all Polaroid learners who made sense of their experience with this underlying meaning structure. In this first interview, he made the connection between becoming independent and being happy.

I feel so happy when, you know, I can help myself, when I can do things. . . . You have to help yourself**. So, if I can do something without asking people, I'll be glad. But that doesn't mean I'm selfish; I don't like asking questions**. But I'm happy when I can, you know, do something for myself. **Show me what I can do. Demonstrate. Helping myself solving problems. I think it's a good thing for me, you know what I mean, so I don't have to worry. I feel happy. (PI #1, p. 8)**

In February 1999 (during the third trimester), in response to a question about how the learning in the program is helping him at work, Christopher reported a change in his ability to perform his work. He felt he had become better able to work more independently—without having to ask as many questions. He attributed this change to learning in the program. This was important to Christopher because, as he said, "I don't like asking for help all of the time. . . . I feel freer when I can help myself. I feel freer whenever I can help somebody."

Just before graduation, Christopher elaborated on how he understood the value of education; he explained,

So, I believe, I strongly believe in having a diploma. **And having a profession**, things to do, so working someplace 40 hours, 40 years of my life. So by working 40 hours, you have a job, things good. I'm lucky. I get a job, but it is not that. **I need security things, like a passport, you need a passport to travel, you need a diploma to succeed, I think.** You [need] something you can count on, something you can demonstrate, something you don't have to worry about, so like going places filling out application, I will do that too, but [the diploma] will be more **for me**, than not have any. [*So having a diploma makes it easier for you to get a job?*] Not really to get a job, just to move on. . . . You need a diploma to get promoted, that

> you have good skill, things like that, to have that stuff. For now I don't see [getting] promoted with my high school diploma, I just see [it] as for me just to push me forward and to continue doing my future . . . what I want to do for my life, so with the diploma, I think I will be able to what I want to do if **I put my mind to it**.

Christopher now conceptualized the diploma as being like a "passport;" he viewed it as something that allows a person greater *access* to opportunities. He was able to see himself in relation to his context and not be completely defined by it. Christopher understood his diploma as something to "push me forward and to continue doing my future." This understanding suggests that, at this point, he saw the diploma as a tool—something he could use to help him with his larger learning and life goals—not something that defined him (a Self-Authoring construction).

Daniel, like Christopher and other learners making sense of their experience in this way, referred to an internal source of motivation that helped him to continue learning in the program even when he felt discouraged. In his words, "The important thing you have to have that feeling inside of you that you've got to keep going." In the third interview, Daniel, originally from West Africa, reflected on how he experienced himself as a source of encouragement. At this time, he also reflected on the internal changes he noticed in himself.

> Overall I feel better. I feel more encouraged. Like in the beginning I was thinking maybe I'll have my diploma and all of that and I'll be able to get another job . . . and things like that. But I even encourage myself to maybe study more, something else later.

Daniel sees himself, rather than an external authority, as a source of motivation. He had a new perspective on how he thought differently about his motivations at the beginning of the program. At the start of the program, he thought about immediate benefits, i.e. getting the diploma, getting another job, but at this time—toward the end of the program—he was considering continuing his studies (like Pierre who spoke of "doors" opening as a result of learning). In June 1999, Daniel talked more about what education meant to him. Before this program, he felt "ashamed" to tell others he did not have a diploma. At this time, he reported this had changed, and he was no longer "afraid to speak up to anybody." Daniel was proudest of "learning a lot" and being able "to speak up more clearly." This made him "feel more open."

Paulo, like Daniel, was also from West Africa. Also like Daniel and other learners making sense of their experience in this way, he recognized that having a high school diploma would make him more eligible for promotions. When asked in the first interview why he decided to enroll in the program, Paulo shared his motivations and goals for learning: to have a better future and make a better place for his children.

> To have a better future. Because now we are work, so I have to have a lot of knowledge about the teams, like reading, write. Because I have to write information. I have to talk to engineers all the time. I have to talk to all the peoples, so I have to be able to speak better and read information better, so this way I try. **Also because of to help my kids. To help my kids, and myself**, to pay my bills . . . or to go to the bank for some loans to buy a house or something like that. **If you can speak yourself, that's another reason too**. Because a lot of people I talk to don't believe I . . . haven't had a chance to go to school, I think I stopped in '87 or '86, because I started working over here in '86. (PI#1, p. 2)

Paulo also had a goal of wanting to "grow" himself and to ask others for support in helping him to grow. In this same interview, he shared, "I teach myself. This way, I think the school will be very good for me to have somebody to help me grow up, and I try to grow myself too." Paulo was able to take a perspective on himself; he knew that he wanted to grow himself, and he knew he needed some help doing it.

In the last interview, Paulo spoke more about the value of education, and we noted an important change in his way of knowing. In addition to sharing his understanding that education leads to "opportunities," Paulo talked about the acknowledgment he received from his supervisors, engineers, and plant managers who congratulated him the week before at a celebration party Polaroid held in honor of the workers' achievement and upcoming graduation. Paulo explained,

> Because when you don't have education, you do lot of things wrong. You lose opportunities. Not just you do something wrong, **you lose lots of opportunities.** Because since I started this program I start a little better, and start to read some information, I started to [learn] something on a computer, I have about four or five promotions at Polaroid. I have one last Friday. . . . **Because of my supervisor, my engineers and my plant managers** come over to the school last week [for the party in celebration of the learners' accomplishments]. When I will tell **them thank you for the opportunity they gave me to come to school and to show my perform[ance], with my results, so this feel very, very, very happy.** . . . The next day my supervisor called me into his office, and told me "Okay, I give you 4.6 percent [raise] because you do good, you have education and do the things better." So. **So this give me a lot of motivation to continue.**

While Paulo discussed getting a raise and a promotion at Polaroid, he talked about it in a way that framed within the larger context of what it means to him to have his good work (performance) recognized at work (demonstrating his Self-Authoring capacity). He also stated his understanding of the relationship between education and opportunity. Not having an education is about losing "opportunities," not just doing something "wrong." Paulo had a perspective on himself and his experience (what he has accomplished in the program) and talked about feeling very proud and happy of *his* accomplishments and the changes he noticed in himself, which he attributed to program learning. At the same time, Paulo spoke about how the recognition he received from his supervisor "*gives* [him] a lot of motivation to continue" (demonstrating a Socializing way of knowing).

Unlike other learners, Jeff did not speak very much about his goals during the first interview. At that time, he told us he thought education is important for being a more competent worker and emphasized that the high school diploma is "an important piece of paper" to have. In his experience, employers wanted "to know where you went to school." Jeff reflected on how earning a diploma was important in his role as a Polaroid worker and briefly mentioned it would help him in terms of Polaroid's "AKP" program. At this time, Jeff also spoke about his formal school experiences as a child and teenager and said many were negative learning experiences. However, he contrasted the feelings he had about going to school as a teenager with the sense of excitement he felt about continuing with his education at this point.

At the end of the program, Jeff shared that in deciding to enroll in the program, he knew that he would have to focus his energy, time, and attention to achieve the goal he had held for 20 years.

Earning a high school diploma so he would be able to continue his quest for learning was a priority in his life.

> I've been spending all my time, all my thoughts have been, I been here for the last 18 months. This was my main goal—one of my goals. . . . It's something I've been after for the last 20 years. I started 18 months ago, but think back, I honestly started 36 months ago because I took this course before and started, and I think it was like two months, I quit. Well I didn't quit, but other things came up. And for me to deal with those [things], I couldn't deal with this and get the full satisfaction, but then after I got the other stuff straightened out, I realized that I had made a mistake by not sticking it out and working through. And finishing 36 months ago. That I realized I made a mistake already. That when I applied for the course this time, **that was my main goal, my main focus, was to put everything into this and finish.**

Jeff reflected on the decisions he made to achieve his goal. He had a perspective on his goal of finishing the diploma program and conceptualized it as bigger than just the last 18 months in the program. He took full responsibility for his own process and his decisions. He had the capacity to look to his own internally generated values and prioritize the importance of enrolling in the program.

> Like you just said, there it is, focus. I had to focus solely on this. Because at the time, **this is more important**. . . . Because this is something I've been wanting to for the last 20 years. **The other thing can wait.** . . . No . . . it wouldn't have mattered [if anyone challenged my decision]. . . . I'd finish this, I did finish this.

> Jeff looked inward to determine what he wanted to do. He had a strong sense of self-containment that illustrates he knows what and how he thinks about things (and what is best for *him*). Other issues arose for Jeff at work and in his personal life while he was deciding to enroll in the program, yet he knew he had to push them aside to focus on finishing school. Being able to control his own thinking in this way—to push issues aside in his mind and focus on what is most important to him—suggests that he was in charge of his own internal process—he's running it, it is not running him.

> In this section, we have illustrated the common and different goals and motivations learners had for enrolling in the program and their similar and different understandings of education's value. For example, many learners initially wanted to earn a high school diploma because they believed it would help them have greater opportunities for promotions at work. All of the non-native speakers of English held an additional goal (which they reported accomplishing) of wanting to become more proficient speakers of English—in addition to achieving their goal of earning an "American diploma." We have shown that several learners wanted to earn a diploma because they felt it would help them be good "role models" for their children. They thought earning a diploma would inspire their children to continue with education and also model their own value for education. Several learners reported being better able to support their children's learning because of what they learned in program classes.

> We also illuminated changes in learners' conceptions of their goals and the diploma. Many learners came to see the diploma as more than "a piece of paper" that would make them eligible for job promotions. Some spoke about how the process of earning a diploma changed the way they thought about the value of education. All of the non-native English speakers told us they were better workers because they could express their ideas more clearly both at work and elsewhere in their lives.

Several of these adults told us they felt better able to live in America because of the learning processes they experienced in the program.

Significantly, all participants told us they wanted to continue learning after completing this program. For some, this meant taking more courses, such as writing and computer classes. For others, it meant using the diploma as a steppingstone to higher education or gaining entry into a specialized certificate program. Several learners talked about how earning a diploma helped them be more self-reliant; they reported being better able to learn independently and voiced their desire for becoming lifelong learners.

We have shown not only how learners made sense of their goals, motivations, and aspirations in qualitatively different ways, but also how these evolved as learners participated in the program. Importantly, we have illuminated how many learners' conceptions of their goals and motivations changed as they began to make sense of their experiences with new underlying meaning systems. Understanding that learners make sense of their goals *differently*—depending on and through the lens of their meaning system—can help us better offer them support and challenge as they participate in ABE programs. For example, creating opportunities for learners to reflect on their goals (both orally and in writing) and perhaps even share these with teachers and/or classmates might help them—and us—better understand what is most important about program learning to each adult. We will discuss this in greater depth in the final section of this chapter.

SECTION III: "GOOD TEACHERS UNDERSTAND THEIR STUDENTS"—A DEVELOPMENTAL VIEW OF THE CHANGES IN HOW LEARNERS CONCEPTUALIZED TEACHER–LEARNER RELATIONSHIPS

What were these learners' expectations for how their program teachers could support their efforts to learn? How, if at all, did their conceptions of what makes for a good teacher change over time?

Here, we will illuminate learners' understanding of the teacher–learner relationship by focusing on how learners understand the teachers' role in their learning process. We will also show how some learners' understandings of this relationship *changed* during the program. Our intention was to understand not only how learners perceived the teacher's work in the classroom, but also to understand the kinds of supports these learners wanted (and expected) from their teachers and considered helpful to their learning. This section, like others in this chapter, is organized by grouping learners according to the underlying meaning system so that we can highlight common patterns in learners' expectations of their teachers. To do this, we first present common themes in how learners who share a particular way of knowing conceptualized the teacher–learner relationship, and then we present excerpts from interviews to illuminate how they made sense of these themes—and how their thinking changed over time.

In our research with this diverse group of learners from different cultures and with different levels of English proficiency, familial background, and values for education, we often wondered how cultural expectations of a teacher's role might influence learners' understanding of their relationships with their teachers and of the teachers' authority. For example, some of our participants came from countries where teachers were highly respected and the ultimate source of knowledge. We wondered how and if cultural expectations might factor into what learners were able and willing to share with us. We also wondered how learners' previous educational and school experiences both here in the United States and in their home countries might shape their experiences in the CEI Adult Diploma Program.

Recent research highlights the need to examine the teacher–learner relationship by focusing on learners' perspectives so that we can better understand the assumptions and expectations learners bring to their learning experiences in ABE classrooms (Quigley, 1997; Taylor, 1996). We suggest that there are important implications for understanding not only learners' expectations for their teachers, but also how learners *make sense* of the their expectations and their relationships with their teachers. In other words, what constitutes support for a learner who makes sense at a particular way of knowing may be experienced as challenge to another learner making sense with a different way of knowing. How might teachers benefit from a deeper understanding of the ways in which learners experience their good and noble efforts to support them?

Importantly, we will show how learners' conceptions of this relationship changed during the program. As Tinberg and Weisberger (1997) remind us:

> Our job as instructors is to both gain a "reading" of where our students are and then to reach out to them in a way that helps them move beyond where they are to where they need to be. (p. 46)

While Tinberg and Weisberger emphasize the benefits of employing constructive developmental theory to better understand learners' experiences in community colleges, we suggest that this lens is equally valuable for understanding learners' experiences in ABE programs. This theory helps us think about how to create learning programs that are dynamic holding environments for supporting learners as they grow from one way of knowing to another.

Most learners, regardless of their ways of knowing, entered the program expressing worries about whether they would feel "comfortable" in the classroom context. Some were "scared" they would not be able to achieve their goal of earning a high school diploma, while others voiced a longing to feel "comfortable asking questions" when they did not understand what the teacher said. Many learners expressed a hopefulness that their teachers would not think they were "stupid" because they could not express themselves well in English (upon program entry). During the program, participants reported feeling "more confident" in their abilities to ask questions, to speak "in front of classmates," and to complete program requirements. All learners entered the program with hopes and expectations about how the four program teachers would support their learning. Table 4 illustrates the ways in which participants across ways of knowing understood the teacher-learner relationship.

Regardless of their meaning systems, participants voiced some common expectations for their teachers' support in their learning. For example, the majority of learners in this sample as well as in the other two site samples thought it was important that teachers "be on time to class" and "speak slowly" so they could understand. However, adults made sense of these experiences differently, depending on their way of knowing.

Table 4: Learners' Constructions of the Teacher–Learner Relationship

Way of Knowing	Learner Expectations for a Good Teacher	Sample Quotations
Instrumental Knowers	For these learners, good teachers are those who show them how to learn. Good teachers *give* them their knowledge and the rules they need to follow to get the right answers. They have learned something because they can do it (demonstrate a behavior) and because they get a good grade (a consequence).	Good teachers "give you that little push," "make me learn," and "explain how do to it, ask you write it down, and you write down exactly how to do it. Then we'd do it."
Instrumental/ Socializing Knowers	For these participants, good teachers explain things to help them understand. Good teachers help them learn by showing them how to do things. Good teachers have rules that they need to follow so they can do things the right way. Good teachers give learners their knowledge; they tell them what they *should* know. These learners know they have learned because they can do something and because the teacher tells them so.	Good teachers "teach me all the time" and "show me the correct way to speak so that others will listen." They "make you understand, like if I don't know something, I ask her, 'Can you repeat it?' Then she explains again." Good teachers say "I have to do it this way because if I don't it's no good." They "make me do writing, speaking. She's good, she's always there."
Socializing Knowers	For these learners, good teachers are those who care about them. Good teachers explain things to help them understand and they really listen and support them. Good teachers *know* what is good for them to know, and they tell them what they *should* know. They describe good teachers as having certain human qualities; good teachers are kind, patient and encouraging. These adults can feel, inside, when they have learned something and the teacher acknowledges them in that.	"If you don't have a good teacher, you're not going to be self-confident." "If [the teacher] doesn't teach you the way you learn good, that doesn't help you." "I ask the teacher to explain to me how I'm going to do it."
Socializing/ Self-Authoring Knowers	These participants think that good teachers explain things well and help them understand. In their view, good teachers care about students as people; they understand participants' background and that helps when they are learning. Good teachers listen really well and are knowledgeable. Good teachers know what these adults need to learn, and these adults, themselves, know what they want to learn (they feel that they have knowledge inside themselves). They describe good teachers as polite and patient and believe that good teachers help them learn what they need to know in order to pursue their own goals. Good teachers listen to their feedback so that they can improve their teaching.	"I like a soft person . . . who consider when you are asking a question, they answer you, they don't ignore you. That's the kind of person I like to be a good teacher. So they really understand people. They care for their students." Good teachers "keep explaining things in different ways, they show you different ways to learn. I like that technique." I can ask a good teacher "for help with what I know I do and do not understand. . . ." "I think it's very tough for a teacher to teach and listen and explain all the time." Good teachers "do their jobs and help me to do better, I'm proud of that."
Self-Authoring Knowers	For these learners, good teachers are one source of knowledge, and they see themselves and their classmates as other sources. They offer feedback to teachers to help them improve their practices and expect good teachers to listen to feedback. Good teachers use a variety of teaching strategies. They help learners meet their own internally generated goals. These participants *know* that they have learned something and when they have, they can then think of multiple ways to teach what they know to others.	Good teachers "understand their students." "No matter how good a teacher you have, if you don't really want to learn, you're not going to learn nothing." Good teachers "make learning interesting. It has to be interesting to the student." "What you do with knowledge after it's given to you is of your own choosing."

The Instrumental Way of Knowing

> [John, the teacher] used words and **he'd make us write them down, then he'd explain something**. **And he explained how to do it**, you know. And then, he'd make you write it in columns; **you'd write down exactly how to do it.** (*Bill*, March 1998)

Two Polaroid cohort members, Bill and Renada, made sense of their experience in a way that solely reflects an Instrumental way of knowing. First, we will illuminate the commonalties in how they understood what it meant to be a "good teacher" and the teacher's relationship to their learning. Next, we will present interview excerpts to illustrate how they constructed their expectations of and their relationships with their teachers and how these changed during the program. Significantly, upon completing the program, both learners grew to demonstrate an emerging Socializing way of knowing.

Both Bill, a native speaker of English, and Renada, a non-native speaker of English, understood the teacher to be the central authority in the teaching and learning process. For these knowers, it was the teacher's job to *give* learners what they need to learn to master academic content. It was also the teacher's responsibility to teach learners the appropriate steps to follow to succeed in learning. They considered good teachers those who give clear and explicit step-by-step directions for how to proceed with in-class or homework assignments. Like others with different ways of knowing, they told us that teachers support their learning by speaking "slowly" and "clearly." For Bill and Renada, good teachers were willing to take time to "explain" and re-explain if needed (even if it took several different types of explanations). They felt best supported in their learning when teachers used direct, concrete teaching approaches and then gave them multiple opportunities to apply their learning. These learners were preoccupied with learning the rules to follow to demonstrate skills they had learned. Good teachers, they told us, are those who can give them the right skills, facts, and ways of solving problems so they can, in turn, "get the right answers." With this way of knowing, a person constructs knowledge as something that is right or wrong. Teachers give learners knowledge (which is understood as an accumulation of skills and facts—more skills and more information equals more knowledge). For these learners knowing the "right way" to complete academic tasks yields learning.

Bill and Renada assessed their success by grades and test scores assigned by the teacher. They knew they learned something when they were able to perform a task on their own (learning is defined by demonstrating) and when the teacher, an external authority, gave them a good grade. A teacher's job, from their perspectives, is to "give me" the information I need, or to "show me the steps I need to follow," so that "I can do it." This is how they know they have learned something—they can demonstrate a behavior. Teachers are the authorities who have "right" skills and knowledge to be given to learners. As authorities, they evaluate learners' work. It is their job to "correct" learners' mistakes; help them pronounce words; fix their spelling, grammar, and sentence structure; and teach them the rules they need to know to solve academic problems. If a person follows the teacher's rules or directions and does "what they are supposed to do," an Instrumental knower feels she should get a good grade (i.e., the external reward). Learners with this way of knowing told us that if they put the time into their studies, the direct result would be learning the skills that had been taught.

For example, in the first interview, when an interviewer asked Bill what makes a "good teacher," he paused and said "That's a toughie." Bill continued by talking about his prior school experiences, in which he said he did not learn anything. He then stated what makes a good teacher.

> A real good teacher would, given the time, would explain something to somebody completely. I mean, they're not gonna, um, I know, like in school right now, you've

got a teacher, she's got 40 kids, she can't go to everyone individually and do it, boom, boom, boom. And this teacher here is gonna have what 17, 12 of us? . . . I know she can't come and say, sit down with some of the people who can't speak English and explain things to 'em a hundred percent, because it will make everybody start getting bored, waiting. But a good teacher will be able to either take that person aside at the end of class, talk to them, or give them that extra 2–3 minutes just to explain that one thing that they don't get. A good teacher would do that. Be able to explain it. You know, right then and there, without keeping everybody waiting, and waiting, and waiting. I guess that's what I want to say. Either you get it or you don't, you know? Some people need extra help, of course. Especially the people who don't speak English. 'Cause that's the only problem that I see with it, as far as "I don't understand." Like if I went to [another country], I wouldn't understand either. So I understand that they don't understand a lot.

For Bill, good teachers are those who are able to "explain" concepts very well to their students. Although he realized that non-native speakers of English had different learning needs, Bill nevertheless wanted the teacher to attend to *his needs for learning*. Bill seemed to focus on his concrete needs to learn from the teacher in the classroom. Bill did not yet orient to or relate to an inner or abstract experience of what comprises a good teacher (evidence for this is the absence of such language).

During our first interview with Renada we asked her about the qualities of a good teacher. For Renada, good teachers are those who "try to give" her the information she needs to be able to demonstrate a particular skill. She told us that "good teachers" make "good students," demonstrating that she understood the teacher–learner relationship in a cause-and-effect way. In other words, she thought that it is the teacher's responsibility to transmit information or "give" information to the learners so they can then demonstrate their ability to *do* the academic task or demonstrate the behavior on their own. For both Bill and Renada, teachers who "explained" a concept well and repeatedly, and those who gave clear and explicit directions as to how to accomplish tasks, were the best kind of teachers—the kind that *made them learn*.

Our second series of interviews took place after learners had completed their first trimester in the program. At that time, we invited Bill to tell us how the teachers in the program were supporting his learning. Bill shared a story about how John, the math teacher during the first trimester, had "made learning fun" by both "bringing things in" to the classroom that helped learners to grasp mathematical concepts and by having a lot of "energy." As part of a math lesson (which we observed), John gave groups of learners M&M's and invited them to calculate the percentage of different colored M&M's in the bags of M&M's he gave to the groups. After they had finished doing the calculations, learners ate the candy—a reward that also made learning fun, from Bill's perspective. Bill spoke about the ways John supported his learning.

He brought in the M&M's [in math class]. He . . . brought in things, you know, it wasn't just all the same, it wasn't just, "Okay, here's the math. Go ahead and do it." You know . . . he'd **explain** things, and you know, and John was good. He'd talk to you**, and he'd give you the individual attention if you needed it**. You know, and he'd run around that room—John had a lot of energy, you could feel him. He'd run, you know—he'd go from every person, one-to-one. And then [he would say], "No! Come on, you know how to do this!" You know, it ain't like, "Oh, now we've

showed you this. If you can't get it, we'll have to have some extra work or something," you know? John will say, you know, "Come on, you can do this! Come on! Try it!" And then [he would] . . . help ya, just to **give you that little push**. Yeah, he was good. I liked him.

Bill emphasized how important it was to him that John made learning "fun" and that he had an "energy" which he brought to the classroom. He tells us that what made John a teacher who supported his learning was John's willingness to invest extra time to help him by giving him the explanation and "extra attention" he needed to learn. When asked about the kinds of supports John provided that facilitated his learning, Bill listed the *behaviors* that John exhibited in the classroom (going around the room with "a lot of energy," "making learning fun," and "explaining"). Bill also mentioned that John provided a source of external motivation for his learning; it seems that John's patient way of explaining and repeating explanation gave Bill the external "push" he needed to learn. The "push" seemed to be experienced by Bill as encouragement and a form of support.

Toward the end of this second interview, Bill told us more about how a good teacher facilitates his learning. He points to a variety of John's behaviors that helped Bill to learn—or in Bill's words, "made [him] understand."

He made you think. And he used words and **he'd make us write them down, then he'd explain something. And he explained how to do it,** you know. And then, he'd make you write it in columns; **you'd write down *exactly* how to do it.** "Take the top number. Subtract it." Blah-blah, whatever—divide—add—and then, then you'd get that problem right. And you [would learn] how [to] do it—**when you do it on your little quiz.** He made us take quizzes every day, you could use your notes, go back and look at your notes. Go back and see which one you did. See how you did it. **And then we'd do it.** . . . And then he'd say, "Okay, let's try it without the book." And then we'd do it at, for, without the book, and he'd show us one or two. "Class, who'd I say can do it?" "Okay." And he'd cover the thing. "Alright. Go ahead. Here's the problem." And he'd put a problem up try and explain exactly what you did right and wrong. He was an enthusiast.

Bill explained how John's behaviors supported his learning process; he "explained" things to Bill and Bill's classmates, he used "words" that made learning "fun," and he *made* the learners write down "exactly" how to complete the math problems. This step-by-step procedure, along with clear instructions and repeated explanation, was supportive to Bill's learning. Bill experienced John's teaching practices, which included scaffolding learners by allowing them to use their notes when first completing quizzes and later asking them to complete the quizzes without the notes, as a supportive way for John to teach. Bill articulates a set of observable behaviors that good teachers exhibit.

Both Bill and Renada felt supported by the teachers' efforts to make themselves available for extra help after class and sometimes on weekends. During the third interview, Bill described a time a few weeks earlier when he was seriously considering "quitting" the program. He told us how John, the math and science teacher, "made [him] stay."

He said to me, "Don't quit." He told me to come back, "You're doing good. We appreciate your being here." . . . I enjoyed the hell out of his math class. . . . I hate homework, but I enjoyed math class. I like science. I hate science—it was just him. **He made me want to be there**. And he offered to help me fix my computer. He

said "I'll take a look at it. I'm not promising nothing." He's **offered to be there Saturdays for us**—"I'll do whatever I can, come to my house." He gave us his home phone number, "If you ever need anything at all, call me." To me, he's been like, he's been real good. . . . [He] **made me come back**. I said, "Okay, I'll just give it another shot." [*Why do you think him saying that mad such a difference to you?*] **I don't know. I don't know**. He could have said to me, "Well, you know, it's too bad you have to, if you have to, it's too bad." Reading from the script. He could have said what everybody else probably would have said as far as I'm concerned. "Well that's too bad," but he come right out and said "Don't, don't quit. Come on, stick it out. We can work something out." **It was important to him that I stay**. **He gets paid whether I'm there or not.** He didn't think like that, as far as I'm concerned. He thought come back, this is important for you to be here. **It was important to him for me to be there as far as I'm concerned**. But then again, if none of us are here, he wouldn't have a job, right?

When we asked Bill to tell us why John's encouragement meant so much to him and why it helped him to continue in the program, Bill responded by saying, "I don't know." He then focused on the concrete reality that John, as a teacher, "gets paid whether I'm there or not." While Bill described this experience in concrete terms, he said he felt it was important to John that he stay in the program. Bill was beginning to acknowledge the relationship itself as being important—which marked an important change in how Bill understood the teacher–learner relationship (a newly emerging Socializing way of knowing was evident).

Also, during the last interviews with Bill and Renada just before graduation, we noticed subtle but important shifts in their understandings of what makes for a good teacher. For example, Bill's understanding of his relationship with his teacher, Judith, was also shifting. Bill was beginning to view Judith, the Life Employment Workshop teacher, as an external authority whom he relied upon *to judge himself and his ability as a student*. Bill's changed construction of what makes for a good teacher demonstrates that he no longer only held the expectation that teachers were transmitters of knowledge, creators of rules, and instructors who gave him "the right way" to complete academic tasks. At this point, the teacher's opinions about him mattered in a way they had not previously (he was beginning to grow toward a Socializing way of knowing).

For example, in the last interview, when we asked him about the best way for him to learn, Bill responded by telling us that Judith had told him he "never learned how to learn" when he was in school. He seemed to look to Judith as a valued other—someone whose opinions were beginning to shape the way Bill viewed himself as a learner. Judith's feedback seemed to matter to him in a new way. Later in this interview, Bill talked more about what he thought made a good teacher and spoke about the ways in which the teachers supported him. In this passage, he illuminates his new understanding.

A really good teacher? One who stays on you a little. I mean, they can't just, I know they're talking to 16 of us, but these teachers, every one of them, make **a valid effort to take care of us one at a time.** . . . There was [no teacher] who said, "Well I, we can't do this, there was always somebody that would give you extra [help], they'd come early, they'd stay late." Every one of the teachers helped you; no matter what you had to do, they'd help you. Even if you weren't, **not just**

> **because you were in their program or nothing, just cuz they wanted you to learn**. **And that's the way I felt about them**.

Along with the list of teachers' *behaviors* that helped him meet his learning needs, Bill made it clear that he "felt" teachers were helping him and other learners not only because it was part of their jobs, but because they *cared* about the learners. For the first time, we note glimmers of Bill's newly developing capacity to construct his relationship with his teachers not simply in terms of what the teachers can do for him. Bill's thinking demonstrates a change from his earlier thinking in that he not only described what the teachers did for him (i.e., their behaviors), but also spoke about their generosity in continually supporting learners. He tells us he knew the teachers went beyond their formal roles by offering learners many different kinds of support, and he also voiced the concern he "felt" the teachers had for all learners in the program. This demonstrates the emergence of a Socializing way of knowing.

Renada also demonstrated a change in her thinking, which we noticed during the last interview with her. When Renada spoke about the qualities of a good teacher during our first interview, she said they are teachers who "try to give" to her, and "they try really hard to teach us." During the last interview, in response to our question about what makes a good teacher, Renada told us that good teachers are "friendly." Good teachers, in Renada's view, "Make you feel good when they come and they talk to you. So you learn, and you don't [learn] if your teacher is not friendly." Good teachers do more than provide learners the essentials to perform their academic tasks, Renada told us; good teachers made her "feel good," and she experienced this relational aspect of feeling good as support as a learner. Renada demonstrates hints of a capacity to recognize an internal or abstract psychological experience; she spoke about the relational qualities of the teacher–learner relationship (demonstrating the emergence of a Socializing way of knowing).

The Instrumental/Socializing Transitional Way of Knowing

> I really know that when I have a good teacher who asks you to ask a question and tell you what to do, and keep you free, and then get your mind relaxed and then do the material you were asked to do. (*Sal*, March 1998)

Seven of the cohort learners made sense of their experience with an Instrumental/ Socializing way of knowing (2/3 or 3/2). At program completion, we noted changes in the meaning systems of three of these learners: Sal, Hope, and Rita. We will first illuminate themes in how these learners understood their relationships with their teachers. Next, we will highlight the changes in their constructions as they participated in the program.

Like Bill and Renada, these learners wanted their teachers to explain things well and speak at a rate they could understand. It remained important that teachers provide concrete approaches to facilitate learning; however, they also looked to their teachers as *experts* who tell them what they *should know*. Teachers working with these learners can offer support to learners by assuming the role of an expert or guide who has patience and can help learners understand. While Bill and Renada saw the teacher as someone who "makes you learn" by teaching step-by-step procedures, these learners in transition to the Socializing way of knowing were concerned with the relational aspects of the teacher–learner relationship. It was important that teachers are "patient" and "nice," and that *they help learners to feel comfortable* rather than scared to ask questions when they do not understand. These learners spoke often about the importance of having a "respectful" relationship with teachers. Acceptance from the teacher was paramount, and it enabled learners to feel at ease rather than "ashamed" when asking questions. These learners

- see teachers as people who model good behaviors, and these learners seek their teachers' approval.
- understand that *both* teachers and peers can give support.
- want teachers to value their ideas and themselves, to really listen to them, and to care.
- place importance on how teachers treat students and on being respected by their teachers.
- value teachers' caring manner and connection to learners.
- are unlikely to critique or challenge teachers and/or their practices because this would be experienced as threatening to one's self—opinions of valued others, including the teacher, make up the way these learners feel about themselves.
- begin to voice feelings of "being proud" of their teachers.

Learners who make sense of their experience in this way internalize the perspectives of valued others. Importantly, these learners expected teachers *to help them understand*.

For example, Teresina demonstrated a change in the way she understood the teacher–learner relationship during the course of the program. While Teresina thought good teachers "make" her do her homework, she saw the teacher-learner relationship as mutual. During the first interview, Teresina told us that it was important to her that she not only learn from her teachers, but also that her teachers "learn something" from her. At the same time, Teresina said that good teachers exhibit certain behaviors (e.g., good teachers talk "clearly and slowly") that enhance learning. It was also important to her that good teachers are "patient" and do not "get mad" if a learner asks questions. Having teachers who were willing to repeat their teachings so she could understand a concept was important to her. Teresina also told us that good teachers help her "feel comfortable."

In the second interview, Teresina told us why she thought John was a good teacher; he helped her learn because he had "patience," explained things "clearly," and "repeated" what was said until she understood. In addition to naming the concrete behaviors that, in her view, make for a good teacher (e.g., good teachers "come to class on time" and "have everything organized"), Teresina valued the two-way nature of the teacher–learner relationship. For Teresina good teachers were those who are "going to understand me, and I understand the teacher. . . . She's going to repeat every question. . . . She has the patience to repeat [herself]." Teresina considered good teachers' concrete behaviors important and oriented to the reciprocal nature of the teacher–learner relationship.

When she was asked in the last interview what makes a good teacher, Teresina said:

> I think that [teaching] is hard job too, because sometimes you have students that don't care. They don't do the homework, they just go to play [in the] classroom. But the teachers, you have to respect them just like your mother or father because they spent their time to teach you something that's good for you later. Probably now you don't see the results [from] the teacher tell[ing] you to doing homework.

Teresina discussed the importance of respecting the teacher and had some capacity for abstract thinking. She compared the respect a person *should* give teachers to the respect a person *should* give her mother and father. Teresina thought good teachers were teaching her something that would be helpful later. In this passage, we see she appreciates her teachers' experience; she saw their work as a "hard job" and understood that they invested their time to help the students.

Instrumental/Socializing Learners' Focus on Teachers' Behaviors & the Relational Qualities of the
Learner–Teacher Relationship

Several learners who demonstrated this way of knowing not only talked about the importance of
having good teachers who "speak slowly" and "explain" concepts well but also oriented to good
teachers' interpersonal and abstract qualities. Good teachers are "patient," "kind," "caring," and
"honest." These learners spoke repeatedly about how their relationships with their teachers made a
difference in their learning. Their perspectives highlight the importance of the relational aspects and
human connections between learner and teacher;[5] Helena, Angelina, Hope, Veronica, and Teresina are
learners who spoke emphatically about how good teachers treat learners with "respect," "listen" to
learners, and "care" about them. Being valued and respected by teachers mattered greatly to them.
We present Helena's case to exemplify how this kind of caring served as a support to learning.

> Helena had formulated ideas and opinions about what makes for a good teacher.
>
> The problem, some teachers teach you good, but some don't. You know, like here,
> like, for three years, I don't like my teacher. I don't learn nothing. I told my
> friends, I say, "I don't like that teacher." Before I had two teachers, really good. I
> do really great. That one I have two years, I don't like him. **Because sometimes
> teacher doesn't care about you. You know, they don't teach you like to learn**.
> Like, when I started here [at Polaroid], I tell her [a teacher from a different program]
> I wanted writing, I wanted pronunciation, because I have bad pronunciation. . . . So
> [I] wanted all those kinds of . . . but sometimes she go to school, sometimes she
> don't; she don't call me. She supposed to give like two day week, and she changed
> for one day, she don't go every week. [*How about the one you learned really well
> from. What made that good?*] **Because she is all the time on time, she's all the
> time teach me. If she have something to do, she call me. But most times she's
> there, all the time.** (PI #1, pp. 11–12)

Helena spoke about the value she placed on the teacher–learner relationship and how she learned
better when it is good—when the teacher "cares" about her. In addition to naming good teachers'
concrete behaviors (e.g., being "on time"), Helena also discussed how she sees teaching and learning
as relational process built on respect. She echoed this idea in her subsequent discussion of a positive
learning experience.

> The way she talking, like, when I don't know, I don't say something right. She's all
> the time trying to tell me, "Oh you have to say it, you know, like this." Because a
> lot of time I speak I don't put "s." Sometimes I don't use the last "d." She told me,
> "You have to use it, you have to use it." . . . Cause she say I have to use it. I have to
> use it because if I don't use it, it's no good. If I don't use it I don't speak good
> English. Like, when you start writing, she say "The first letter you supposed to put

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[5] Hope and Teresina spoke about the relational qualities of their teachers. Initially, each demonstrated
a 2/3 way of knowing (Instrumental way of knowing was leading). Toward the end of the program we
assessed Hope's meaning making to be 3/2. Although we will not discuss excerpts from her data here,
she also talked about the mutual "trust" and "respect" that is essential between teachers and learners.
Helena, Angelina, and Veronica demonstrated a 3/2 way of knowing.

in capital letter." . . . Because I want to speak good English. I don't want to speak bad English, because you know, when you speak, people listen to you. (PI #1, pp.12–13)

Helena discussed the importance of learning to pronounce words the "correct way" and why it was important to her: so that "people will listen." She, like many of the Polaroid learners, voiced this desire and need. In stating why learning to pronounce words the correct way was important to her, Helena highlighted not only her concrete need to want to speak the "right" way, but also her interpersonal need: speaking English more fluently will enable her to make connections with people. A positive relationship with her teacher helped her feel "comfortable" learning from her. Helena's reference to "the way" the teacher corrects her seems to speak to a respect Helena felt from her teacher. She looked to her teacher as a valued authority guiding her learning. For Helena, a good teacher "cares" and helps her acquire the language skills she needs to have other people "listen" to her.

Helena, Veronica, Hope, and Angelina told us that good teachers "make you understand." In addition to helping learners acquire skills, good teachers, in Helena's view, are "always there." In this first interview, Helena echoed several key themes we heard from other learners who made sense of their experience in this way of knowing. Helena explained:

> Because she give me homework and **she give me, you know, she make me writing**. She speaking, we speaking. You know, she's good. **She's always there. You know, I like the way she teaches.** You know, some teachers you know make you understanding, like, if you don't understand something, **they make you understand it.** . . . Like, if I don't understand something. I tell you, "Can you repeat it again, I don't understand you." Then she explains again. (PI #1, p. 13–14)

Helena indicated that a good teacher helps her to feel comfortable so she can ask questions and gain an understanding of what she's studying. For Helena, learning was the result of a one-to-one exchange with someone who *cares* about her.

Like Bill, Helena stated that a good teacher "pushes" the student. However, Helena experienced and named the "push" teachers gave her as a demonstration of their caring.

> He's the kind of teacher, he **push**, you know, I don't mean he push too much, **but you have to let them . . . to teach you, push you little bit to make sure you learn**. Because some teachers doesn't **care.** (PI #1, p 18)

While the source of some of her motivation was external, Helena understood the teacher's "push" as a caring expression of interest in her and her learning. At the same time, a good teacher was also someone who could help learners meet concrete, practical needs by "show[ing]" the student what to do. In the last interview, she spoke about a good teacher as someone who requires a lot from students. Helena responded to the interviewer's question about the best way for her to learn by speaking about the teacher–learner relationship.

> I say the best way for me to learn if you have a good teacher to teach you. **To care about you, to care about you, then to teach you to make you understand.** Because like Judith [the Life Employment Workshop teacher], you have to learn from her, too. Because when she give you homework, you have to do it, you don't have no excuse. So that one make you learn more because like, okay, you go

someplace on the weekend and say, "Oh, I have to do my homework when I go to school," Judith is going to say something, because she don't play. So you have to do it . . . and she never forget that, yes. She collect all the homework we do. She collect the homework, you don't have no choice, you have to do. . . . For me, I think is a good teacher, I don't complain about that. **Because a teacher like that make you learn—like, if you have teacher don't care, so, you not gonna learn. I see they care, you learn.** (PI #4, p. 7–8)

Helena's case highlights how these learners in our sample, experienced "care" as an essential quality in the teacher–learner relationship. This caring was experienced as a support to their learning. Helena understood the teacher to be a valued authority, and she also saw a direct relationship between a teacher's caring actions and her learning.

The Socializing Way of Knowing

If you don't have a good teacher and you're not going to be self-confident. (***Rita***, September 1998)

While 11 cohort learners had this way of knowing operating in combination with other ways of knowing, only Tough and Pierre had a singly operating Socializing way of knowing at the program's start[6] and completion. Rita demonstrated an Instrumental/Socializing way of knowing at the program's start and grew to have a singly operating Socializing meaning system. First, we will present the themes that were consistent in how these learners made sense of the teacher–learner relationship, and then we will present learners' voices to illustrate how individuals made sense of these themes and highlight the changes in their thinking during the program.

One of the strengths of the Socializing way of knowing is that a person now has the developmental capacity to internalize and identify with the perspectives of others. These learners in our sample were not only interested in fulfilling their teachers' expectations of them, they also *identified* with their teachers' expectations of them. They did not have the capacity to separate their own expectations for their learning from their teachers' expectations. In other words, their teachers' goals for learning became their *own* goals. These cohort learners viewed the teacher as a source of authority; however, they experienced the teacher as a supportive and encouraging guide who "helped" them understand.

These learners valued the relational aspect of the teacher–learner relationship and spoke about good teachers as those who "cared" about them and took an interest in them as people. The teachers' genuine care and concern mattered—it facilitated their learning. They talked about good teachers as people who are "kind," "patient," and encouraging. For example, in the first interview, Pierre told us that good teachers are "patient" and able to "explain things clearly" to students. In the last interview, Pierre praised his teachers and provided specific examples of how they were helpful: Good teachers display certain types of behavior and have certain human qualities. For example, they "stay after [the program ends each day] to help" learners with work, and they correct written work and provide feedback. Pierre, like others who make meaning in this way, focused on the relational components that make good teachers: they motivate people to learn, and show they "care."

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[6] As mentioned previously, Henry exhibited a fully operating Socializing way of knowing at the program's start. In July 1999, we assessed his meaning making to be 3(4). He dropped out of the program after the first trimester, he said, because he was not able to secure a ride from his own nearby company (where he worked) to Polaroid's Norwood plant, where program classes were held.

Many of these learners spoke about the importance of having a respectful relationship with their teachers and how this facilitated their learning. For example, in the second interview, Pierre elaborated on why John was a good teacher—"he knows his job," and "he's explaining like he's at school also." Like other learners with this meaning system, Pierre viewed the teacher as another learner in the classroom and talked about how John's ability to "explain" made learning accessible to all learners. He observed that John provided "everything, every angle to find the result, he knows about it and explains everywhere." At this time, Pierre also told us he believed the teachers in the Polaroid program were of high quality saying, "I know a committee of this group know how the best ability to teach. So they're [Polaroid] not going to send us anybody. I know whoever came on board [as a teacher is going] to be good." Like other learners with this way of knowing, Pierre viewed the teachers as experts.

These learners voiced appreciation for their teachers' demonstrations of caring about them as people and "helping" them learn. They looked to the teacher—and their authority—to "know" when they had learned something and to tell them what they needed to learn. In addition to wanting teachers to be "patient" and give "clear and slow" explanations, these learners focused on the interpersonal relationships they had with their teachers, and their academic efforts were directed toward pleasing these important others. For example, it was important to Pierre that teachers were approachable, and he also seemed to value the teacher's ability to *know* what is good for him.

> **I think, to me, the teacher . . . has [to have] enough experience to figure out what's good for me**. Because first of all, I must be able to talk to the teachers, explain my[self]. Maybe she might explain me, or he or she might explain me something today, that teacher might think I got it the same time, it might take me two, three times to really . . . kept what he or she told me.

Pierre, like other learners with this way of knowing, expected the teacher to anticipate his needs and to know what is "good" for him. His perceptions of himself as a learner are connected to how the teacher *feels* about him. A good teacher understands he may need multiple opportunities to learn something and is willing to explain things several times. Also like other learners, Pierre appreciated when teachers gave him concrete examples to help him understand.

> Because I think the teacher would know also, but give me some, like any, like example, give me that building, and explain how that building start from the foundation to the roof. And now going to figure out if all the . . . **the idea might be good, but the phrases and the verb are supposed to be here, I put it here**. And here supposed to be past tense, I put the present tense, or things like that. (PI #1, p. 16)

In all of our interviews with Pierre, he told us he expected teachers to "know" what they are doing, so he felt he did not need to think a lot about their role. When asked in the first interview how teachers think about their "job as teachers," he replied, "Oh, I don't have no idea about that." He added that, over time, the teacher is "going to figure out the right way to make [you] learn." This illustrates Pierre's (and other Socializing knowers') conception of the teacher–learner relationship; he viewed the roles as learner and teacher as givens. His role was to learn from the teacher, and he expected the teacher to *know* what to do to help him.

When we asked these learners whether they might want to change anything about the program or their teachers' teaching, in only a few instances did they voice any criticism of their teachers or challenge their teaching practices. For example, the only criticism that Rita had about her experience in the program was that she "wished it were longer." Challenging or criticizing a valued other or authority figure is a threat to the self for someone with this way of knowing. However, there is an opportunity to offer these learners support by encouraging them to voice their thinking in classroom contexts. By supportively challenging these learners, they may grow, over time, to have greater self-authorship in presenting their ideas and opinions. We also observed that these learners talked less about their relationship with their teachers than the learners who made sense of their experience with other ways of knowing. One explanation may be that, as mentioned earlier in describing how Pierre understands other people's evaluations of him, at this way of knowing, a person is defined by the expectations and opinions of others.

For example, Rita did not talk specifically about the other teachers as much as the other participants did (i.e., those learners who made sense of their experiences at other way of knowing). Also, unlike most other learners in the Polaroid cohort, Rita did not seem to be particularly attached to any one of the program teachers. We also noted that she did not seem to favor one class over the others, as most learners in this cohort did. In our second interview, Rita shared her thinking about what makes a good teacher,

> **If you don't have a good teacher and you're not going to be self-confident.** Because if she, you came over here to learn. If she didn't teach you the way that you learn good, that doesn't help you. You're just like, you park your car in the parking lot, you walk in the building and you walk out. (PI #2, p. 15)

For Rita, a good teacher can *make* a student self confident; in her view, without a good teacher, you *won't* be self confident. Rita's feelings about herself are intimately tied to how a teacher feels about her. A teacher who does not teach the way Rita needs to learn is one who "doesn't help."

Rita looked to friends, family, cohort colleagues, and authority figures (teachers, CEI program administrators) for encouragement, support, and acceptance. In the passage below, Rita shared how she managed the struggles she encountered when learning new material in the program. Not only did Rita voice appreciation for the ways her teachers were available to help her by explaining how to "do it" when she did not understand, she also spoke about how important it was to know that her teachers and the CEI program administrators took an interest in her as a person. Rita experienced their willingness to help and support her as genuine demonstrations of care and concern not only for her academic progress, but also for her well-being. Rita voiced her appreciation in this way:

> Because we had troubles, especially with math, like algebra and those kind of trouble, all of us, and every time the teacher gave us the homework, we struggled at home. **Sometime I had to make phone calls to my friends**. Sometimes they didn't understand themselves, and I had half homework done and half undone**, [I] ask teacher to explain to me how I'm going to do it. But, you know, we did step by step until I learned all the process which, for me, is great.** . . . I didn't know a lot of thing about American history before because I never had a book to read, and I never ask nobody for a certain thing. But now, thank God, I learn a lot from them, and every time I had any question**, I always ask my teacher, and he always explain, and I think this is wonderful.** [Everything] with this program, with all the support from CEI because they help us a lot too, you know. **Every time they**

> [CEI people] **come over here, they always encourage us to step forward**. **If you
> have any problem, ask teacher, ask us.** We will be able to help you guys in any
> problem that you have, especially [Mary, the program director]. She always said, if
> you have any problem, pick up the phone, and give me a call. **You know, if you
> put all those things together, it would make a lot of difference, a lot of
> difference.**

Notice that Rita assumed greater responsibility for asking her teachers for help. The encouragement
she felt from her teachers and others at CEI seemed to provide the support she needed to continue to
seek help when she did not understand.

By the last interview, Rita elaborated on her thinking about good teachers. They were not
only people who could teach skills by offering "good explanations," they also needed to be role
models and friends.

> Explanation. Attendance**. Role model**. . . . And **friendship** because, you know,
> every time you have a good communication with teacher, **I think you learn better**.
> All of them was polite. And every time you ask them something, they always gave
> you a **good explanation**. I think that was very good for us.

For Rita, good relationships with her teacher facilitated learning—they were intertwined. She
perceived these interpersonal connections as important supports.

Rita's case is emblematic of how learners with this way of knowing placed importance on the
relational aspects of the teacher–learner relationship. Most viewed their teachers as "friends" and
defined good teachers as those who cared about them as people. They connected the teacher's actions
to their ability to make progress toward learning goals.

The Socializing/Self-Authoring Way of Knowing & Self-Authoring Way of Knowing

> The teacher can describe their job by saying "I'm a good teacher . . . I'm patient,
> I'm kind . . . I'm friendly." So, teacher is really humble. . . . I don't know what to
> say anymore. Because the teacher must have more in their minds, you know what I
> mean, to see than I do because I don't know. (***Christopher***, March 1998)

At the program's beginning, four cohort learners demonstrated a Self-Authoring way of knowing
operating in combination with a Socializing way of knowing. Of these, three learners (Paulo, Daniel,
and Magda) changed their ways of knowing. Jeff, who demonstrated a fully and solely operating Self-
Authoring way of knowing at both the beginning and end of the program, will also be discussed in this
section. Table 5 shows our assessments of their ways of knowing at the beginning and end of the
program.

**Table 5: Learners' with a Socializing/Self-Authoring & Self-Authoring Way
of Knowing**

Learner	Way of Knowing @ Program Start & Finish
Christopher	3/4 – 3/4

Paulo	3(4) to 3/4 Δ
Daniel	3/4 to 4/3 Δ
Magda	3/4 to 4/3 Δ
Jeff	4 – 4

We first present themes that were consistent in how these learners made sense of what it means to be a good teacher and their understandings of the teacher–learner relationship. Next, we will present learners' voices to illustrate these themes and illuminate how their thinking about the themes changed during the program. One strength of this meaning-making system is that Self-Authoring knowers can take a perspective on interpersonal relationships—rather than "being made up by" relationships (Kegan, 1982).

These learners were able to see not only their teachers as authorities and sources of knowledge, but also themselves and others as sources of knowledge. Like many other learners, they respected their teachers and voiced appreciation for the ways their teachers employed different strategies to meet the needs of learners with different learning styles. For example, in the first interview, Christopher, originally from the Caribbean, told us that good teachers are "humble" and "patient," and have certain characteristics (i.e., good teachers "consider you," and "don't ignore you"). His understanding about what makes a good teacher highlights his orientation to the learner–teacher relationship—good teachers demonstrate that they "care" about the students as people and good teachers are knowledgeable.

> Humble, a humble person, not a rude person, not a rude teacher. I like a soft person . . . who consider when you are asking a question, they answer you, they don't ignore you. That's the kind of person I like to be a good teacher. So they really understand people. They care for their student. And then, I think that's it. [*I wonder how you think a teacher would describe her job or his job?*] An important thing, it's good to describe your job. Like, is something very serious for he or her, whatever. The teacher can describe their job by saying, "I'm a good teacher . . . I'm patient, I'm kind, you know, I'm friendly." So, teacher is really humble, you know what I mean? I don't know what to say anymore. Because the teacher must have more in their minds, you know what I mean, to see than I do because I don't know. (PI #1, p. 11)

In the third interview, Christopher elaborated on his understanding of what makes a good teacher. After completing two trimesters, Christopher was able to draw from experience to better explain his thinking. He discussed John as an example of a good teacher.

> [John] always shows you things on the board. And he's a talker. He's always talking. He's a good explainer. . . . He kept explain[ing] all of the time, all of the time. Really try to put it inside your mind. . . . **He shows you different ways.** . . . Like I'm doing tax, which is very good . . . he shows you a different way, which is a good technique for him, too, I think. Because it's a good technique to teach. Because sometimes if you really can't explain, you know, what you mean and demonstrate at the same time, that's a different thing. But this is a good idea, too

> . . . just to let people know. And then for you to learn, too, you know, if people really mean—I mean, understand what you mean, you know what I mean. What are saying, things like that, you know? (PI #3, p. 6)

Like other learners, Christopher appreciated John's ability to use a variety of teaching "techniques" so all learners could understand. As the above excerpt illustrates, he, like other learners with this way of knowing, reflects on how his teacher's teaching techniques are working in the classroom. All of these learners were also able to reflect to varying degrees on their teachers' teaching and offer constructive feedback to their teachers. As we discussed in Chapter Six, Jeff and Daniel shared with John how he could alter his good teaching practices to better meet the needs of the class. Not only do these learners reflect on their teachers' teaching practices, they also took a perspective on their fellow classmates' needs. Like Socializing knowers, these learners voiced appreciation for their teachers who used a variety of teaching strategies in their practice.

Unlike Rita and Pierre, who are Socializing knowers, these learners were concerned with meeting their *own goals* and standards for learning on behalf of what they see as their larger learning purposes. Many talked about how good teachers supported them in meeting their internally generated goals. They looked to themselves and their *own expectations* for learning and, therefore, took greater responsibility for their learning in and outside the classroom. For example, Christopher talked about how he understood his relationship to the teacher's authority before he entered the program. While he felt comfortable asking a teacher for help and telling her what he "does and does not understand," he could not "tell a teacher what to do. Because I'm only a student." Christopher recognized a power structure, but we did not probe his thinking to better understand why he thought it exists.

> **I don't think I can tell a teacher what to do**. . . . Because if I knew, if I knew. Because if I had to tell a teacher what to do while I'm here…maybe I can say to the teacher, "I don't understand this. I don't understand that." **I don't think I can tell a teacher what to do. Because I'm only a student, you know.** (PI #1, p. 11)

Later, at the end of the study (June 1999), Christopher talked again about the teacher and about his own behavior toward the teacher, making it clear that he knew what made a supportive learning environment.

> **I need a good teacher**. I always need a good teacher because I don't like to talk a lot, you know, so when I'm asking question, **I make sure my question is important**, you know. . . . If I want to ask a question, I make sure there is something to talk about. There always something . . . to talk about a question, but some of them doesn't make sense. **I always make sure mine is making sense.** . . . **A good teacher asks you . . . good question—make you more relaxing . . . you feel proud of yourself**. **You feel comfortable.** So, because the teacher is not "well," you know, he's not kind of person you're afraid of to approach to, to ask something, to talk something, to mention something—some kind of stuff. . . . This isn't gonna help. . . . When the teacher is not . . . a hundred percent friendly, . . . who is there for you. Some teacher, I don't know, I can see some [inaudible], **but not a hundred percent friendly** . . . **who is there for you**. Some teacher, I don't know. . . . **You need a good person to teach you, just to—to feel free**. And learning stuff. (PI #4, p. 20)

Like other learners with this way of knowing, Christopher looked to himself rather than the teacher to determine whether or not his questions were "important" and "good." He had an internally generated system for assessing this. At the same time, and like others with this way of knowing, he appreciated teachers offering help when he was struggling and also mentioned that a teacher's human qualities were important to him because they helped him decide whether he could approach a particular teacher. Christopher experienced this kind of support from teachers as helping him achieve his own goals for learning—which helped him "feel free." He demonstrates both a Socializing and Self-Authoring way of knowing in the way he constructs his relationship with his teachers.

These learners talked with us about their own ideas about (i.e., theories) what makes a good teacher and sometimes tested these theories in the CEI Adult Diploma Program classrooms. Christopher provides us with an excellent example. He had a theory about learning and teaching in the classroom, and during the third trimester (February 1999), Christopher shared his understanding of a teacher's role and what the teacher can and cannot do (i.e., what he has "figured out"). He had a perspective on school and the teacher's work, and he articulated it in the passage below. Christopher framed his larger perspective as a theory rather than as a series of stories without a guiding thread. Here, he carefully guides the thread for us all.

> **Because what I figured out—I think it's very tough for a teacher to teach and explain at the same time**. Okay, listen now, okay, we are talking now, alright? I'm talking now and then you listen and people listen to what we say. . . . So, by the way, when they stop me for a question . . . so my mind go to a different way now, I have to focus, you know what I mean? **I have to focus, to really focus very hard for not losing the things, . . . losing my mind before that question**. (PI #3, p. 17)

In this passage, Christopher demonstrates that he can both *hold* this kind of theory about thinking and *articulate* it as a theory (demonstrations of a Self-Authoring way of knowing).

Unlike those who looked to the teacher as the authority on what they needed to do in order to learn, these learners recognized that teaching is a complex process, and many were able to take a metaperspective on their classroom experiences. Several voiced appreciation for the additional time their teachers spent with them to help them gain information or learn processes so they could move toward their own larger goals (e.g., teaching them to navigate through the Internet so they could access information). Many of these learners understood how the teacher was helping them achieve goals they had set for themselves. They spoke about the ways they felt themselves "growing" as people and feeling "stronger" as a result of their experience in the program.

Daniel, like Christopher, had his own criteria for assessing whether a teacher is good; he described good teachers as "knowledgeable," "patient," and "polite." Also, similar to Christopher, Daniel believed that a teacher's personality can make a difference in terms of supporting learning. For Daniel, it was also important that teachers have a wealth of information to share—he understood this as being important to helping achieve his self determined learning goals. In the second interview, he talked more about why these human qualities were important for him to see in teachers.

> I think it's **to be polite and to first of all**, with the student, to be **patient**, a lot of patience. I think that's first. **First of all have the patience, especially with old people, and have to think how to more or less if you become my way, or something like that, the way you have to listen to me**. I think that's a good way to teach people, because you have to know how. There is a lot of people they don't

understand a lot of things, and very simple things. You have to go back and explain the other way around. **That's why I say patience is a lot, have a lot to do with . . . being a teacher, a good teacher**. Because I see, like I go back in what I told you before, I have people that used to do, that start work with me and I'm nice, nice person and everything, good attitude. In the beginning I say everything is okay, but I used to give them simple squares to cut, and you tell them you're going to take so many pieces, four inches this way, or like five pieces the long way. Say gee, but how are we going to get so many piece out of this? If I was nervous person or something like that I will get pissed off with that, say the hell with it. But that's why I say patience is a lot, and you understand how the people can pick up some things and stuff, and learn. And take advantage of it. . . . I've got to focus on their personality. Because a lot of people they can learn quick, some people they have a difficult to learn. (PI #2, pp. 17-18)

This passage illuminates what Daniel means by "politeness" and "patience," two qualities he valued in his own work as a supervisor ("I'm . . . nice person, good attitude"). Daniel, like all other learners with this way of knowing,[7] stressed that it is important for teachers "to listen to me." For Daniel, this need to be recognized seems embedded in a larger context than what other people think about him. In his view, listening to others requires skill—"you have to know how"—and a sensitivity to individual learning styles—"a lot of people they can learn quick, some people they have a difficult to learn." Daniel valued patience and the ability to understand in his teachers and in his own supervisory work.

Daniel also appreciated teachers who can get students to work hard. He referred to John and Margaret during the second interview when asked what makes a good teacher.

John is very polite, is good teacher. He got a good experience how to make you feel comfortable. And make you understand also. He have a lot of different ways to show us how to understand a lot of stuff. He is ready for any question I have, and got a lot of patience. And I think he's a good teacher. [*How about Margaret?*] No, never seen her in my life either. [*Anything surprise you about her?*] No. Yes, in the beginning when you met anybody and how you be, see how we're going to do and how she is going to be teaching us. But she is pretty good. She is very nice. And she has stuff she wants to force us. (PI #2, p. 3)

Although we are not sure what Daniel meant by "she wants to force us," he may mean that Margaret asked students to work really hard, thereby challenging them in a positive way. Here, Daniel reflects on the teacher–learner relationship and his classmates' needs (demonstrating a Self-Authoring capacity). Daniel did not seem to resent Margaret for the amount of work he and the cohort had to complete. In his view, Margaret was "strict."

Try to make you work hard. Yes. It give you support, and she give you support and she tries you to, to make you work hard and learn more . . . The way she tries to help us to express, everybody. I think she did good job.

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[7] Wanting to be recognized could be a demonstration of either a Socializing or Self-Authoring way of knowing, depending on how a learner makes sense of what it means to be recognized.

He appreciated how Margaret was able to teach students how to say things in English. He added,

> A lot of times we were so comfortable, if you, sometime if you say something she will show you that, and so you can say [it] this way, or something like that. She'll not, she got a way to show us so not to be, for us not to be offended. (p. 10)

When the interviewer asked Daniel how the teacher helps students not to feel offended, he replied, "I don't have no way to explain that." He did not yet have the capacity to fully take a perspective on why this happens. At the same time, he was able to understand the teacher's perspective *as separate* from his own and seemed able to imagine her teaching intentions. Daniel explains that he had to miss six weeks of class and make up the homework. Margaret gave him work to redo.

> I have to copy about all eight, eight of them. And she was a little strict also on one, in the end because some of those stories I have to write short. I don't have to go too long. In the past I used to write a little longer. And because the time-wise, I'm very busy at work, where I work. I have people that works with me and I have to be doing those, to coach them. And I don't have enough time for tons of homework. **But she was doing her job and tried to make me, force me to do better, which I'm proud of that**. (PI #2, 10)

Daniel's understanding of this situation is larger than how Margaret thinks of him. He locates the responsibility for her feelings in her, and the feelings of pride in *himself*.

In the last interview, when asked to share his thinking about what makes a good teacher, Daniel responded by discussing the connection he sees between good teaching and good supervisory work. At this time, we noted an important change in Daniel's construction.

> A good teacher you have to know how to explain. You have to know how to deal with different people. I think the teacher is being like being a good supervisor, you have to have a lot of patience, because especially if you, say you deal with the kids now, you have a lot of kids, they use drugs, they go to school, you don't know what kind of attitude they go to school with. So, you can go in there and sometime one of them, they come in . . . things like that and they think you're gonna, like, you get mad and things like that. There's a lot of teaching that you have to know people. You dealing with a lot of people, lot of different people and each one got a different attitude. It's tough for a teacher, being a teacher because this point, you know. But if you get good students, they learn good, and you know how to express yourself also, to explain, that makes a good teacher. Like an English teacher, he knows everything in the head, most things you ask him for something, he, bang, he tell you. (PI #4, 11)

Daniel's explanation is not grounded in his experience at Polaroid but extends to teaching in general. At the end of the program, he was able to articulate a fuller and different appreciation for the complexity of a teacher's work and the demands of the teaching job. In this last interview, his thinking about the teacher–learner relationship demonstrates an important change. For the first time, he talked about good teaching dependng on getting "good students." In his view, "no matter how good

teacher you have, if you don't really want to learn, you're not going to learn nothing." At this time, Daniel understood the motivation to learn as somewhat independent of the teacher's influence—an important change from his earlier conception of the teacher–learner relationship. He now assumed greater responsibility for his role in his learning process and seemed to have a deeper understanding of the complexities of his teachers' role in that process. This marked an important shift in his way of knowing.

Like Daniel and Christopher, Jeff also thought that good teachers employ different teaching techniques that help learners with different learning styles and needs. Like Christopher, he talked about the subtle qualities in a teacher's personality that make a difference. Although his ideas about what makes a good teacher remained fairly consistent during the program, we present his case to illustrate how he, with a fully and singly operating Self-Authoring way of knowing, understood this relationship. During the first interview, in response to the interviewer's question about the qualities of a good teacher, Jeff said,

> The person who's teaching has to, let's say, **make it interesting**. It has to be interesting to the student. You can just go in and say, "Well, today we're gonna do math, this is how you do it, you do it this way, you know, you add this number to this number," you know. [*So how does a teacher make it interesting?*] **Teaching but not teaching.** . . . Well, just like we're sitting here talking now, . . . just casual talk, stuff like that. You put a number up on the board and, you know, you got to make it interesting. **You got to keep the attention of the student.** [*Are there other things you think make a good teacher?*] **Well, personality and all that.** [*What's the right personality to be a good teacher?*] **There's a difference in sternness and looseness**. You can almost, some teachers you can almost, you're, that's it right there. . . . Just the way you look. . . . [They should be] stern, but casual, loose, you know. But yet keep control of the situation. (PI #1, p. 11-12)

Jeff initially answered this question about what makes a good teacher by stating learning is interesting when a teacher is "teaching but not teaching." He later revealed more about what he meant by this: Good teachers are "stern, but casual, loose, you know. But yet, keep control of the situation." Jeff demonstrates definite ideas about what makes a good teacher. When assessing whether a person is a good teacher, Jeff looked inside himself to decide and considered a variety of factors—including the context. He appreciated both a teacher's work and learners' needs.

In our last interview, Jeff mentioned that a good teacher can "explain things" to learners with different learning needs. He considered other factors when deciding whether or not someone is a good teacher, including personality characteristics, the context is which a teacher teaches, and a teacher's ability to meet the needs of learners with different learning styles, preferences, and strengths. Jeff observed the situation and considered the larger context in which teaching occurs. Also in this last interview, Jeff spoke about a good teacher as someone who "can, say, carry out directions and explain things . . . in an easy, simple format" so learners can understand. Jeff's assessment of teachers, their practices, and ability to work with students suggests a capacity to step back from the teacher–learner relationship to observe what they do. Jeff has his own way of determining what constitutes good teaching—and internally generated values he uses to make this assessment.

Jeff also has the developmental capacity to critique his teachers' practices and offer constructive feedback. He named several occasions when he did this because he thought his feedback might help teachers better support learning. For example, in the third interview, Jeff talked about

critiquing Kirk, a teacher, who arrived late for class several times. Not only did Jeff share this directly with Kirk, he also told the interviewer that he made people at CEI aware of Kirk's tardiness because this kind of information could help CEI improve the adult diploma program. In this same interview, Jeff told us how he decided to tell John that sophisticated mathematical concepts were being taught in a way that was not working *for the class*. In Jeff's view, the class was getting lost because John was introducing concepts without fully discussing details that were needed to enhance understanding. These two examples demonstrate Jeff's capacity to act on his own beliefs and values for the good of the class, himself, and the CEI teaching enterprise as a whole. This shows the extent of his understanding of the complexity and interconnectedness of the larger system and all the participants within it.

In this section we have illustrated how learners who have different underlying meaning systems understand the teacher–learner relationship generally, and what it means to be a good teacher specifically. We have highlighted how their conceptions of these were not fixed but changed during the program. We observed two types of changes. First, learners' notions expanded and possibly became clearer as they gained experience in the program. Second, many learners' conceptions changed as they grew to demonstrate new ways of knowing and, therefore, understand their experience in new ways. For example, we examined how Bill and Renada found it most important that their teachers provide clear explanations and step-by-step procedures to *make* them learn. These Instrumental knowers assessed their learning by their ability to demonstrate *behaviors* and by the grades they received from teachers. When learning, they focused on their concrete needs and felt supported when teachers *gave* them information and made efforts to provide extra assistance when needed. Importantly, at the end of the program, we marked changes in how each of these learners conceived the teacher–learner relationship. Both Bill and Renada began to recognize an internal and abstract experience. In both cases, we note the emergence of a Socializing way of knowing.

Learners who made sense of their experience with the Instrumental/ Socializing way of knowing, like Bill and Renada, also felt supported in their learning when teachers explained concepts well and talked slowly so that they could understand. However, unlike Bill and Renada, these learners expected their teachers to be good role models, and they saw their teachers not only as sources of support, but also as their peers. These learners wanted their teachers to value their ideas and themselves—and they felt most supported by teachers who really "cared" about them. Like Bill, Teresina, for example, initially told us that good teachers *made* her do her homework. However, unlike Bill, Teresina felt that good teachers also helped her *feel comfortable*. At the program's end, Teresina's understanding of the teacher–learner relationship changed. She grew able to talk more abstractly about these relationships, mentioning that a person *should respect* teachers, just as a person *should* respect her parents.

We also illuminated how Socializing knowers make sense of the teacher–learner relationship, and how their conceptions changed during the program. For example, we presented excerpts from Rita's data and showed, that as a Socializing knower, she was not only interested in fulfilling her teachers' expectations of her, but also identified with these expectations. In other words, we examined how the teachers' goals for Rita's learning *were her own goals for learning*. Like Teresina, Rita viewed her teacher as the source of authority; most important for Rita, however, was teachers' interest in her as a person. This kind of genuine care and concern from teachers facilitated her learning. Rita, like other Socializing knowers, expected the teacher to *know* what she needed to learn. Although Rita could *feel* (internally) when she had learned something, she needed the teacher's acknowledgement to feel complete. In this way of knowing, good relationships with teachers facilitated the learning process. Interpersonal connections are important supports.

We also discussed how Self-Authoring knowers not only saw their teachers as authorities and sources of knowledge, but also viewed themselves and each other as generators of knowledge. These learners, unlike Socializing knowers, were able, to varying degrees, to reflect on their teachers' instruction and offer constructive feedback. Like Socializing knowers, they voiced appreciation for teachers who employed a variety of teaching techniques and strategies to meet learners' needs. However, unlike learners with other underlying meaning systems, they were concerned with meeting their *own* goals and internally generated standards to advance their larger learning purposes. Good teachers supported them in meeting their own goals. These learners did not look to meet teachers' expectations for their learning but looked to themselves and their own expectations. Additionally, they took greater responsibility for their learning both inside and outside of the classroom. For example, Christopher, like other learners, talked about "growing" and "feeling strong" as he learned in the program. Christopher, like Daniel and Jeff, had internally generated criteria for assessing good teachers. Daniel, for instance, grew to understand his teachers' perspective as *separate* from his own during in the program. He developed a capacity to appreciate the complexity of a teacher's work and understood the motivation to learn, to a certain extent, as independent of the teacher's influence.

By carefully documenting both the *content* and the *shape* of learners' thinking about their relationships with their teachers and their expectations of their teachers, we have not only illuminated commonalities and differences in how these learners experienced these relationships, but also shown how their conceptions and understandings changed over time. We will now turn to the many ways in which the program helped learners change the way they enacted their roles as workers and, often, as parents.

SECTION IV: "THE PROGRAM DONE A LOT OF GOOD SO FAR—IT'S PUSHING MY THINKING PROCESS:"[8] LEARNERS' CONCEPTIONS OF HOW PROGRAM LEARNING MADE A DIFFERENCE IN AND TRANSFERRED TO THEIR WORK LIVES

I don't want my kids to quit school [that's] one of the key things. I quit in '68. I got a son who quit school in the 11th grade. [It] broke my heart. And I got four more coming up and I told them, "I'm going back to school." I got one son in the eighth grade. He wants to go to vocational school . . . he wants to work. He's got Cs and a couple of Ds. [And I said to him,], "This is great that you never failed." . . . But I'm hoping, when they see the graduation party I throw for myself, I'll tell them, "I'll do better . . . one for them, so hopefully that'll tell them, graduate." I'll help them buy a car, help them buy a dirt bike, anything I can do to keep them in school. . . . I'll keep you warm at night, I just want you to make [it through] school. I am 30 years later. It's tough. The program done a lot of good so far—it's pushing my thinking process. Everything was a joke [to me] before, now I do a lot of things. (***Bill***, Focus Group, 2/23/99)

At Polaroid, they don't give people jobs because you've been around 10, 20, or 50 years; they give you promotion [if you have a high school diploma], because the company wants to move ahead. . . . It's really good omen and appreciation for Polaroid to come up with that idea and choosing people willing to work to be and to learn. See, I think what's important [for work is] knowing how to speak [and] . . . [learning] technical [skills] to do that job with your best. . . . When we went to get jobs [in the 1970s], the big thing was did you graduate high school? It wasn't what [college] degrees do you have or stuff like that? . . . But now, today, it's almost what degrees do you have? Well naturally if you got a degree, you got a high school diploma. (***Pierre***, Focus Group, 2/23/99)

I like the course because finally, after 20-some years, I can go back on my resume and change the block [on applications] where it says "Do you have a high school diploma?" I had to put, no. But now, once this is completed, I can go back and say I want to change that to, yes, I do. A lot of people have asked me, it's like, "What are you taking, what kind of course are taking?" And I just tell them, "I'm taking a learning course." "Well what kind of course?" "It's a learning course to help me increase my knowledge and things like that." "Well is it this, is it that?" And finally one day I said, "It's just your average high school diploma course." "Oh really?" They were, like, they were shocked that I wasn't done, that I'm doing it. Basically there [at Polaroid], everybody there thinks everybody has graduated high school or has some kind of degree or something like that, which when you start talking there's a lot of people who don't have that paper. And some are scared to admit it. And even like us coming to the class here, some of them [other Polaroid employees not enrolled in the CEI Adult Diploma Program] still look at us [those in the program] like, it's funny to them. But it's not funny to us because we're trying

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[8] We acknowledge Bill, who said this when we asked him in June 1999 how and if the program had helped him at work and in his life.

to get ahead but they think that at our, I don't know everybody's age, but at my age why do you want to get involved to do that? (***Jeff,*** Focus Group, 2/23/99)

During the 14 months of our study, we had the privilege of listening closely to these learners as they told us about their role as workers and how learning in this program was helping them do their work better. One of our research questions focused on our deep interest in understanding how learners' experiences in the program might help them feel more competent and confident in their work. Before turning to this question, we will discuss some of the complexities of work in today's society.

Research on the Multiple Demands of Work in the 21st Century

Historically, particularly in Britain and Europe, adult education has been seen as a political movement—a movement toward freedom and liberation that is both personal and social. (Cranton, 1994, xi)

Researchers (Ciulla, 2000; Evers, Rush, Berdrow, & Berdrow 1998; Gowen, 1992) commonly cite three major changes that have led to current workplace conditions and three dominant themes that have contributed to such changes: "The shift to . . . technology requir[ing] highly skilled workers;" "significant shifts in the ethnic and gender distribution as well as the size of the future workforce;" and "the familiar contention that the nation is in the throes of a major decline in basic skills" (Ciulla, 2000, p. 8). Joanne Ciulla (2000) discusses the importance of work in our "work-oriented society" and notes the paradoxical nature of our culture—we live in a culture that "both celebrates work and continually strives to eliminate it" (p. xi). Work on today's shop floors has changed dramatically since Frederick Winslow Taylor (1911). While Taylor admired the skills of workers and craftsmen in his day, his goal was to design work so that "almost any person could do any job with maximum efficiency" (Ciulla, 2000, p. 93). Today, work requires more.

Recent national attention has been devoted to the complex nature of the 21st century workplace and the need to better support workers as they enhance their skills and competencies to meet the demands of the changing nature of work. In a study sponsored by the Massachusetts Institute for a New Commonwealth (MassINC, a nonpartisan research group), John Comings, Andrew Sum, and Johan Uvin (2000), with W. Neal Fogg, Sheila Palma, Maricel Santos, Lisa Soricone, and Mykhaylo Trub'skyy report that in Massachusetts, for example, one-third of the state's 3.2 million workers age 25 to 64 lack the "basic technical skills" required to meet the demands of the modern workplace (Vaishnav & Greenberger, 2001, p. 1). Of these, 58 percent have a high school diploma, and, 17 percent have limited English skills. Sadly, they also report that 1.1 million workers' jobs are at risk as companies across the nation require skills that they do not have—skills they need to be effective workers, given today's work culture and economic conditions. CEOs across the nation, and particularly in Massachusetts, are seeking employees who can "adapt to the rapid pace of modernization" (Vaishnav & Greenberger, 2001, p. 22). Comings et al. (2000) explain,

The main literacy problem of U.S. workers is not that of illiteracy in the traditional sense. Instead, it is a problem of limited skills that restrict workers' ability to perform higher-skilled jobs and take on more complicated duties that are required of workers in the New Economy. (p. 18)

Literacy in the 21st century workplace includes familiarity with technology and critical thinking skills, and these researchers contend that the health of our society depends on supporting workers—through education—to meet new workplace demands. This 21st century definition of literacy contrasts sharply with the early 1900s definition; then, individuals were considered literate if

they could write their names (Comings et al., 2000). Comings et al. (2000) assert that workers without multiple skill sets in today's information age will, if not sufficiently trained, lose their places in companies as new technological positions replace manual jobs. With the advance of automation and computerization, work in the 21st century requires more problem-solving skills and a new set of basic skills.

For example, Richard Murnane and Frank Levy (1996) conducted research to examine the minimum skills workers need to attain a middle-class job and found that the "new basic skills" include the abilities to

- read at the ninth-grade level or higher.
- use math at the ninth-grade level or higher.
- solve semistructured problems for which hypotheses must be formed and tested.
- work in groups with coworkers from different backgrounds.
- communicate effectively, both orally and in writing.
- use personal computers to carry out simple tasks, such as word processing. (cited in Comings et al., 2000, p. 2)

Similarly, Comings et al. (2000) maintain that the 21st century workplace requires more sophisticated oral and written language skills. They cite Victoria Purcell-Gates' (1995) research documenting changes in oral-language skills (growing in a positive direction) as literacy levels change. They report "oral discourse in the workplace is becoming more like the oral discourse in school, which is modeled on writing" (Comings et al., 2000, p. 3).

To improve the economic well-being of our nation and support workers as they strive to meet the complex demands and conditions of the modern workplace, we must attend to workers' learning needs. Research suggests "substantial productivity payoff to workplace literacy programs. They also help workers by teaching them the basic skills that often translate into opportunities to advance in their jobs" (Comings et al., 2000, p. 49). To help people be vital contributors at work and keep up with the rapid pace of change, there is an urgent need to focus on providing learning opportunities for our nation's workers. What specific kinds of changes do workers notice in themselves when they participate in educational programs? How do the skills workers learn in these programs translate to their work lives?

In today's workplace, skill and competence have multiple meanings. Evers, Rush, and Berdrow (1998) point to the lack of clarity in defining what skills and competencies mean. They cite Paul Attewell's (1990) article "What is Skill?" in which he defines skill as "the ability to do something, but the word connotes a dimension of increasing ability. Thus, while skill is synonymous with competence, it evokes images of expertise, mastery, and excellence" (p.433, cited in Evers, Rush, & Berdrow, 1998, p. 24). Arguing that skills are "not possessed in isolation," they suggest that "base competencies represent functionally related skill sets. All skills can be viewed on continua from low to high levels of competency" (p. 25). While we agree that skills "can be viewed on continua from low to high levels of competency," as Evers, Rush, and Berdrow (1998) suggest, we also contend that it is important to consider how workers with different ways of knowing demonstrate various skills and competencies so that we might better support and challenge working people as they strive to meet the increasingly complex demands of the 21st century workplace.[9]

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[9] In Chapter Eight, we present our developmental conception of competency and an analysis of themes related to competency across learners in our three sites to illustrate the intersection between skill/competency performance and way of knowing.

Like our colleagues at Equipped for the Future (EFF), we suggest it is important to attend to dimensions of workers' performance when constructing a developmental performance continuum. Stein (2000) names these dimensions as: "1) Structure of knowledge base, 2) Fluency of performance, 3) Independence of performance, and 4) Range of conditions for performance" (p. 59). How do workers with different ways of knowing make sense of their work? How might the skills and competencies they develop in this program transfer to their work life? How might learners with different ways of knowing demonstrate mastery of a particular skill? How, if at all, might learning within these programs help participants transform their ways of knowing? How might this kind of *transformational* learning help participants better manage their work?

In the next section, we focus on how learners who make sense of their experience with different ways of knowing experienced program learning as making a difference in their ability to do their jobs. We will examine how learning in the program helped learners *change* their relationship to their work. We will discuss how learners talked about transferring "skills" and competencies gained in the CEI Adult Diploma Program classes to their roles as workers and, in some cases, parents. In sharing learners' perspectives, we will focus on two types of change. The first type is the changes learners noticed in themselves and attributed to their program participation. These stories highlight how *these learners felt they had changed not only in terms of demonstrable skills and competencies, but also in terms of the way they saw themselves as changed*. The second type is *transformational change*. These stories illustrate how many of the learners grew to make sense of their work life with new and more complex ways of knowing.

First, we will highlight the themes linking learners who shared a particular way of knowing. These themes reflect commonalities in understanding their role as workers, their relationship to authority (i.e., supervisors), and the changes they noticed in themselves and in their abilities to fulfill their role as workers. All learners, regardless of their way of knowing, reported that the skills they learned in program classes helped them better perform as workers, and the great majority of learners also talked about other kinds of changes they noticed in themselves. As we discuss these themes, we present examples from learners' interviews to illustrate how they made sense of these themes.

For each way of knowing, we will present an example to illustrate in depth how the themes played out in the context of one learner's work environment, and sometimes within a participant's life outside the workplace. We aim to bring attention to the *changes* in how each learner grew able to enact her role. The selected cases represent the major themes and changes that learners who shared a particular way of knowing experienced during our study.

A Developmental View of Learners' Understandings of the Role of Worker, Relationships with Supervisors, and Transfer of Learning—Stories of Change

The Instrumental Way of Knowing

As stated previously, when Bill and Renada began the program, each demonstrated a fully operating Instrumental way of knowing (i.e., 2). Upon program completion, each grew to demonstrate hints of a Socializing way of knowing operating (i.e., 2(3)). Here, we examine how learners understood their roles as workers and how they thought the program helped them develop "skills" for becoming better workers. We will highlight the changes participants noticed in themselves as workers and attributed to participation in the program. Throughout this discussion, we will focus on how participants' thinking about their roles as workers changed during the program.

These Instrumental knowers talked about work and their role as workers in concrete terms. In general, they describe their role in terms of their behaviors at work and the requirements that work made upon them. Although both Bill and Renada were able to share details of their job histories, neither discussed work in more abstract terms. Nor did they discuss any conceptual links between their previous jobs and the work they were doing at Polaroid. Also, both told us how their learning in the program was helping them do their work "faster" and more efficiently. While all learners talked about improved efficiency, learners with other underlying meaning systems also reflected on more abstract ways in which learning in the program was helping them to perform as workers.

Role Construction

In her first interview, Renada told us about her job history at Polaroid. In so doing, she listed the different jobs she had held: assembling cameras, then repairing them, and then administering tests and processing film in the lab. Renada did not talk more abstractly about her work or how these jobs related to each other. Nor did she articulate any kind of conceptual links between her different jobs.

Both Renada and Bill considered work to be easier or harder based on the amount of effort they invested in doing their jobs. Their behaviors were linked to concrete consequences. Both thought about the tasks they did at work as having direct consequences in terms of rewards and punishments. For example, these learners were motivated to enroll in the program because, as Renada said, "I want to have my diploma to get a better job." For Renada, there was a direct cause-and-effect relationship between the things she did at work and the rewards and/or punishments she received. Neither Bill nor Renada talked about feelings of loyalty or deep connections to their company. They viewed Polaroid as their employer who paid them for the work they did. As Bill said, Polaroid "puts food on my table," so he continued to work for them.

When Renada, a non-native speaker of English originally from West Africa, talked about the way her job had changed over the years, she described two types of major (concrete) changes. First, people were being asked to do more work with "computers," which is "harder" to learn, and second, the recent layoff meant fewer workers were doing the work that more would have done in the past. Renada understood these changes in her workplace in terms of how her behaviors changed over time and how the job itself changed. During the first interview, she shared that in the past, "They show me, then I pick up . . . They show me how, I started doing alone. The more I do, the more I learn. To fix the cameras." In the last interview, she spoke about a change in how she needed to do her work.

> **Before is not like now**. Before, if you go to work, they show you how to do, put a [camera] together, but now, they change completely. Now you have to do more work in a computer. If you don't know how to write and read, it is more confuse.

Both Renada and Bill told us they learned how to do something at work by watching someone do it and then doing it themselves.

Second, Renada discussed the changes she noticed in her workplace after employees were laid off. In the second interview, she explained that this program would have been easier in the past because she would have been able to get schoolwork done during work.

> Work. Now, it's very busy because they give a lot of people layoff, so a few people have a lot of things to do. I don't even have time to study there. Sometimes before I have a lot of time, but we don't go to school. Now I need more time, but we don't even have the time. . . . Before you can take break and then you have time maybe to study a little bit. Now it's a lot of work**. Sometimes we work through the lunch and don't even take lunch. Busy. Everybody want, priority, priority, fast, fast. They want to see results**. (PI #2, p. 3)

Both Renada and Bill mentioned repeatedly that there was not enough "time" to do all that was needed to balance their roles as workers, learners, and parents. However, the context in which they mentioned these concerns differed. Bill talked about not having enough time "at home" to do all of his homework, while Renada focused on how her work environment had changed and, because of that, she no longer has "time at work" to do her homework.

Changes in Skills & Competencies

Importantly, Renada and Bill talked about how their skills had changed as a result of their participation in the program. Each said the skills they learned in diploma program classes were helping them change the way they did their work. Both said they had become better able to communicate their ideas because of the CEI Adult Diploma Program. Bill became "more aware" of his writing, and Renada talked about being better able to communicate her ideas orally. Each reported feeling better able to help their children with homework because of the math and English skills they had learned in the program. Their new math skills, each said, changed the way they were able to do their work (each reported they needed to do mathematical computations on the job). More skills helped them to be better workers.

Renada also noticed changes in her ability to communicate her ideas to others. She said people at work have told her that she "can explain herself better." Many of the learners, regardless of their way of knowing, reported improved expressive English skills during the program, and this was helpful to them in their workplace.

Changes in Relationships with Co-workers and Supervisors

Not only did Bill and Renada notice changes in themselves (i.e., mostly skill changes), but, at the end of the program, we also noticed changes in how they talked about their relationships with coworkers and supervisors. In both cases, hints of a Socializing way of knowing emerged and it was demonstrated in several ways. Bill began to demonstrate hints of orienting toward his internal or psychological experience when he discussed his relationships with his coworkers and classmates. Bill

also began to look to his teacher, Judith, as a valued authority. As mentioned earlier we noticed that Renada was beginning to be able to demonstrate some capacity for abstract thinking.

Bill and Renada named John, the math and science teacher, as a source of support to them. Learning in his class, they said, helped them to increase and improve skills that they then transferred to the workplace. Additionally, Bill said John provided emotional support and encouraged him to stay in the program when he was feeling discouraged and ready to leave. Renada mentioned other teachers in the program as being supportive to her skill development as well. As was discussed in Chapter Six, Bill experienced his cohort colleagues as supportive to his learning. He also mentioned his family as a source of support. Additionally, Bill named his coworkers as supports and alluded to the support of his supervisors, plant managers, and general manager because they offered him congratulatory wishes and a party when he completed the program. In the following section, we present Bill's case to illuminate how he constructed the themes we have discussed here and also to highlight how his thinking about his role as worker changed during the program.

Bill's Case: "Doing" a Job as a Worker

In the first interview, we learned about Bill's construction of work when he spoke about his employment history. He shared that, in the past, he was fired from many jobs "for being an idiot." Now, at Polaroid, he is in a position in which his responsibilities include supervising "some people." He told us that he "has a boss" and "does his job." As an Instrumental knower, Bill did not reflect on his role of worker in a more abstract way. In the future, he wants to be the "boss" himself, but he could not say why he wants to do this. He also shared that he might want to work in "waste processing" because he believed there was "good money" in that field. In a later interview with Bill, he expanded on why he might want to work in this field: "It'll clean up the world and leave it better."

During the third interview (February 1999), Bill talked about his relationship with his employer: "They pay me. I go to work. They put food on my table. They took care of my family for 20 years. So I feel I owe them something; that's why I go to work every day." Bill's construction of loyalty to Polaroid seems based on his expressed thinking that Polaroid pays him and thus takes care of him; therefore, he will continue to do his work. He has concrete, practical ideas about why a person works, or more specifically, why he works. Bill does not yet have the capacity to articulate more abstract reasoning about why work is important to him. He did not talk about any contributions that he felt he was making to the company by working in his position.

In the first interview, Bill talked about his relationships with both his boss and those who work under him. He told us that, as a supervisor, he knows those under him "take advantage of my good nature" by slacking off on the job. His boss, he shared, "always wants to fire" him but does not because "he likes it with me, 'cause I get the job done." Bill understands his relationship with his supervisor in a concrete way; his behavior, "getting the job done," causes his boss to "like" him and not fire him.

Bill also shared how he sees himself as a worker; "I've got leadership abilities anyway," he said, and contended it was his "job title," rather than internal qualities that "makes me lead, direct, assign." Bill does not discuss or orient toward the internal qualities that make him a "leader," but rather, describes the behaviors he demonstrates—"lead, direct, assign." Bill also told us he thought of himself as being "fairly educated in general knowledge" because he keeps up with current events (by reading the newspaper) and knows lots of trivia. Knowledge, for Bill, is constructed as a possession, an accumulation of facts (demonstrating Instrumental construction). Bill regretted his decision not to finish high school and thought he had fewer opportunities at work because he did not have a high

school diploma. He provided an example from a past experience at work where not having this credential kept him from being considered for a promotion.

> And there was an opening . . . so we had a department meeting. "Anybody that wants to fill in that vacancy, come see me and we'll talk about it." So I raise my hand. And he [the supervisor] says to me, "You know, I would have gave it to you if you would have finished that program." . . . He says, "If you had your diploma, I might have said, well, look, the guy just got his diploma, you know."

Bill, like other learners with different underlying meaning systems, talked about being passed up for promotions at work because he lacked a high school diploma. In some of these cases, the learners were asked to train the person who was offered the higher-paying position. All of these learners told us they believed that having "the piece of paper" would have made the difference in being considered for the promotion. At the same time, learners with different ways of knowing made sense of this experience differently. Bill described the experience of being passed up for the promotion and what it meant to him in terms of its concrete consequences. His construction of this work experience was centered on actual rewards and punishments.

When we asked Bill, at different points during our data collection, if and how program learning was helping him at work, he mostly focused on the concrete but important ways he was able to transfer learning from one context to another. He talked about how having learned "skills" in math class helped him to do his job. In the second interview, Bill said that he was able to do math on his own and that he no longer needed to use the calculator as often.

> I'll have a, you know, like an invoice coming in, and I'll just turn it over and it's, you know, 200 pieces, and I got 40 boxes with 35 pieces in each, you know, I just "Yup. Yup. Ok, that's right." Click. Before I'd run over to the calculator and added it up. Now I'm not.

Doing the math "in his head" helped him do his work more "efficiently" and "faster" (because he did not have to go use the calculator). Bill told us this new skill saved time. He understood the situation in terms of a cause and effect relationship (e.g., If I work more efficiently and do better in my job, the consequence will be a reward: an increase in my salary). In September 1998, when we asked Bill to tell us about any ways in which being in the program had made things harder for him at work, he replied,

> Harder? No. Not at all. Nothing. I had no problems at work. What I do for them is Tuesdays and Thursdays, I don't go to lunch. So, when I leave early, I feel like I'm contributing my time. So, you know, I don't take advantage of the time out.

Bill did not, at this time, see any ways in which being in the program made things harder for him at work. He understood this situation at work as a fairness issue; he repays Polaroid for the time he needs to participate in the program by not taking lunch.

Bill also reported new skills that he learned in the program helped him with writing at work, changing the way he was able to communicate with others. For example, he said that "now" (during the second trimester) he thought about putting commas in sentences, whereas he would not have done that before. Bill said this in the context of sharing how learning in the program helped him be more "aware of what [he's] writing." About the ways in which being in this program might have made things better for him at work, Bill explained,

> At work? No. Except that I'm more aware of what I'm writing. You know, as I said, I always use a calculator at work, anyway. But now, I'm doing simple projects just, you know, I'll be scratching on the side of the wall and before, you know, before, I would run to calculator. You know, now I'm not. So, it's helped me work by cutting down on my time at the calculator, I guess. I don't know. (PI #2, p. 51)

But in the last interview, Bill discussed the way in which this new skill, doing math in his head, was making a *different kind of change* in the way he did his work.

> So I think it made **me a little better employee**, less time running around, hanging around the office there. I stay out at my machines more, I do my inventories. I don't depend on the calculator no more. (PI #4, p. 10)

Significantly, Bill pointed to a change in his own orientation to his coworkers (this marked the emergence of a Socializing way of knowing (i.e., 2(3)). He spoke more often about his relationship to his colleagues (one of a very few times he talked about other workers). He talked about how people who worked for him gave up their breaks and filled in for him because he was in class and said that he wanted to write them thank-you notes. In Bill's words, "Guys who lost their breaks because I wasn't there, guys who went too late, lost their coffee and stuff because I wasn't there, so I'm gonna send them all thank-you letters." These and other examples illustrate a subtle but important shift in Bill's way of understanding his role as a worker; he is beginning to orient to his inner psychological experience (though the context is concrete). Not only did Bill demonstrate this growing orientation toward abstract psychological experience with fellow workers, he also demonstrated it with family members. For example, Bill told us he now thanks his children for waiting for him when he picks them up after dropping his wife off at work.

The Instrumental/Socializing Way of Knowing

Seven of the 17 participants demonstrated both an Instrumental and a Socializing way of knowing fully operating (2/3 or 3/2). At program completion, Sal and Hope demonstrated an evolution in their way of knowing, from 2/3 to 3/2, and Rita's thinking evolved to a fully and solely operating Socializing way of knowing (i.e., from 3/2 to 3) toward the end of the program.

Like Bill and Renada, many of these learners had a concrete orientation to their work goals. For example, they told us they wanted a diploma or a better position at Polaroid to "make more money." However, when asked if there were other reasons why an education was important, they talked more about what earning a diploma or being promoted at work meant in abstract terms. Many oriented to their inner experience and talked about the influence of work on their emotional states. Learners understood their role as worker and their work in a way that reflected their meaning system.

Role Construction

For example, in the final interview, Veronica, who was laid off from Polaroid during the second trimester, expressed her appreciation that the company had supported her participation in the program. Originally from a country in West Africa, Veronica said that she was "proud" she was able to complete the program, especially given the multiple demands of her life that year. She looked forward to securing another job and to continuing her education by taking computer classes to enhance her skills.

It's a big thing for me to have it. **I am so proud, even at home, my sister say, "We will all go with you, and then we will have a cookout, a party for you**." I am so happy, because I didn't think I was going to make it. I had all these problems with my house and all this tragedy, and everything, in the house, husband and kids, and work and family, it's hard. . . . I am so proud and happy I made it. **I would like to go into some computer classes. I wait until I get another job, because** I'm not working, so now I have time. I can't explain. I am happy inside of myself because I never knew I will get this far to get. **If I not working at Polaroid, I don't think I'll get my high school diploma**. So Polaroid . . . it's a good company. And I don't think I'll get another job like Polaroid.

Veronica tells us, "I am happy inside of myself," demonstrating an orientation to her internal experience and the influence of earning a diploma on her emotions. This points to a sense of self larger than a collection of concrete attributes and one that experiences an emotion internally. At the same time, her reasoning is concrete.

While Veronica, who was laid off from her job, felt appreciation for Polaroid, Helena felt that the company did not "care" about their employees. At the start of the program, Helena was worried about being able to find another job if she were to be laid off from Polaroid. But at the end of the program, Helena's thinking demonstrates a changed understanding of her work situation. She voiced new confidence in being able to find a new job if necessary. When asked why she no longer worried, Helena told us how she now understood her work situation.

I think if I lose my job, I find another one. I think, God help me. . . . Because, like if you worry, you can't think, you can' help it. So why you worry, I calm down. So this is the way I feel. It come. I say, why I worry, maybe never come to be. So I don't worry anymore. Because if it happen, gonna happen anyways. So if he didn't want to give me package [a severance], if I worry or I don't worry, they give me anyways. So then . . . nothing I can do about it the thing, why I worry. They don't care about me anyway, they want to give to me, they don't care about me. If they want to give you package to leave, they do it, they don't care you cry, you kill yourself, they don't care. So why I worry?

Helena was able to talk about her internal experience of worrying or not worrying about whether she would be laid off and about knowing that God would help her; she thinks more abstractly about her experience (demonstrations of a Socializing way of knowing). In the above passage, she shares her internal conversation about the pros and cons of her work situation, thus taking a perspective on her worrying. The possibility of being laid off from Polaroid has an emotional component to it for her—it is about more than losing a job or not. While Helena talked about Polaroid not caring about people, which demonstrates a Socializing way of knowing, her explanation is discussed in concrete terms, which demonstrates an Instrumental way of knowing.

Developing Skills and Competencies, Increasing Self Confidence, and Changes in Relationship with Supervisors & Coworkers

All learners making meaning in this way told us they enrolled in the program because they thought their expressive English skills would improve, and this would help them express themselves with supervisors and coworkers. Many said that with improved expressive English skills, they could be

"better team members;" this was important to them and to their work, they said. Almost all spoke about the need to improve their expressive English skills because of the changes in the workplace (i.e., they were aware how the recent layoffs were influencing their working lives). They believed improved skills would help them keep their jobs and create possibilities for promotion.

At the end of the program, all of these learners reported feeling better able to communicate with supervisors and coworkers, and they attributed these changes to skills they had learned in the program. Several said that they were "proud" of themselves, and that they felt better about not having to ask coworkers and supervisors for help as much anymore. They reported that learning in the program helped them better read the logs left by the previous shift and write notes to convey information to the next shift of workers. Improved expressive English skills, they said, helped them to no longer feel "scared" to ask questions, which in turn, seemed to empower them in their workplace and in the classroom. For example, Angelina was interested in improving her skills and felt this was especially important at Polaroid because, in their AKP, employees are rewarded by their supervisors for improving their skills. Demonstrating new and improved skills to her supervisor would lead to "getting credit." Angelina, like other learners across ways of knowing, voiced her need for this kind of credit in connection with her awareness of the changing nature of her workplace.

Learners making sense of their experience in this way talked about how they "pushed" themselves at work; they discussed how they looked to important others (supervisors and sometimes coworkers) to evaluate their work and tell them whether they were doing a good job. People's opinions of them and their performance mattered greatly. Earning approval from a supervisor was especially important; they looked to their supervisor for approval and to know they were doing a good job at work (i.e., an external rather than internal evaluation of their work). Many of these learners told us how much they valued their supervisor's support and approval and spoke about it repeatedly through the program. Angelina and Helena also talked often about how their supervisors encouraged them. This kind of encouragement became increasingly important to learners as they began to more fully demonstrate a Socializing way of knowing. As discussed earlier, people making meaning with a Socializing way of knowing take on other people's opinions and turn to others to know when they have done a good job and what should give them pride.

All learners said their "skills" had increased as a result of their learning, and this helped them at work. They most often referred to improved communication skills. Initially, many said that they were "afraid" to ask questions (at work and in the classroom); however, all reported this changed for them, stating that they were "afraid before" but "now" were no longer "afraid." Importantly, many said that *other people* at work told them they were better communicators.

For example, Teresina, a non-native speaker of English originally from West Africa, talked about how learning in the program had helped her communicate better at work; she noted a change in her own behavior. In the second interview, Teresina was feeling more confident about her ability to express herself in English, and she described how this new skill was helping her at work and in her relationships with coworkers and friends. Not only did she feel better able to express herself orally, she also felt better able to write reports ("do the paperwork"). In response to the question about ways the program has improved her work, Teresina discussed the difference between her work life before the program and how she experienced it at that point (September 1998).

> Before, I have a problem to talk in meetings. My job, they have meeting groups. You have to say something about the job. I have a problem. Very difficult. I have some ideas, but I don't know how. Now, I have a little problem, because I talk better English. I think this class I have this semester help me a lot. And to talk to

my friends. I have a lot of friends who speak English. Now, I talk to them better. If I have some problem now for making the papers at the end of the night, you have to make your paperwork, now I make better [papers] than before . . . about how the machine works, what problems you have. You have to put on the paper. That's called the paperwork.

In the last interview, Teresina told us that these improved skills helped her feel "more confident" about talking with other people at work. She also felt more confident using the skills she learned as a result of her participation in the program (most of these are "concrete" skills).

Another way Teresina said that her work life changed was that before participating in the program, Teresina did not ask questions during team meetings; she felt her "boss" would not listen to her because she did not speak English well. However, when she spoke about her relationship with her supervisor and how her improved communication skills were helping at work, she noted a change in herself as a worker.

Sometimes the boss talk about something, they can't [understand] you. But now, I know how to explain to him. . . . But before, if the boss see you don't talk very good English, he just . . . stop. . . . No. He won't give [me a bad evaluation], but he don't listen to me. Because I don't speak good English…. **Before I don't talk**. If . . . he [the boss] ask me something [I would say], "No. I don't have nothing to say," because I scared. I [*You were scared.*] But, no. **Now . . . if he ask me, someday I gonna tell [him] this, this, and this. . . . Sometimes [before] I have something to say about the job, but I keep my mouth shut because I think they gonna laugh at me if I say. But now I don't have this problem. After I came for this course, I understand better English.**

Teresina felt better about speaking in work meetings and sharing her opinion. She talked about having been "afraid" of people laughing at her at work (i.e., she was "afraid" of what other people would think of her) before learning to express herself better in English.

Teresina told us that her relationship with her supervisor changed because she was better able to express herself in English and understand what others were saying at work. Her newly developed expressive English skills seemed to enable her to feel more empowered in her relationship with her supervisor and to present her views in work meetings. At the end of the program, she spoke about how she understood this change.

Now he [her supervisor] **talks so lovely**, talks play. I say, now, he know I know better English, now. If he's tell me something, I [understand] to answer. [*Are you kind of angry at him, now?*] No. Doesn't bother me. No. No. Doesn't bother me, now. Because if he told me something, I gonna say the answer. I don't keep my mouth shut no more. I gonna say something. If I gonna joke, too, I know how to joke, too, just like him!

Many learners making sense with this way of knowing also spoke about how the program helped them in their relationships with coworkers. For some, this meant being able to explain their ideas more clearly to coworkers and also being able to do more at work—on their own. For example, Angelina, during the second through fourth interviews, talked about feeling increasingly confident when talking with other coworkers and her supervisor because she felt her expressive English skills

had improved. Learning in the program helped her with "writing notes" after completing her shift. These notes help employees communicate what has happened during their shift to employees on the next shift. In the final interview, Angelina talked about how these new skills helped her in relationships with coworkers and how these relationships had changed.

> Sometime [when I'm at work], I get stuck. I don't know what I'm doing. I don't want to ask her [a coworker], because they already tell me [how to do the procedure]. So, I feel kind of—I don't know exactly. . . . Because [I] don't want to ask her, because they already tell me so many times. But, I don't want to go forward, because I don't want to make a mistake. So it's kind of, [I get], sometimes, well, **I get upset.** . . . But, then I came back again to do [my work] everyday. Then I say to myself, "I'm going to do this now." Everyday until I learn myself. Then, now, I'm doing it everyday.

Like many learners, Angelina talked about how she learned to do more on her own at work and also how she was better able to understand coworkers when they "explained" procedures to her. She spoke about not wanting to have to ask coworkers for help after they had told her so many times, suggesting that she felt some embarrassment or fear they would be angry. Angelina voiced an implicit concern for what her coworkers thought of her and their reactions. At the same time, she is unable to articulate a fuller internal experience of what this was like for her. Angelina's case allows us to better understand how a person making meaning in a Socializing way of knowing is identified with the opinions others hold of her. Angelina's coworkers' responses to her have a tremendous impact on the way she sees herself as a worker.

Some participants spoke about how program learning helped them in other social roles. For example, Teresina spoke about how learning in the program changed how she was able to enact her role as a parent. In the last interview, she reported she was better able to help her son with his homework, and that she attributed this change to skills learned in the program. When asked if there were other reasons why earning this diploma is important, Teresina remarked,

> [The diploma is] very important to [me]. My kid in the school, he ask me for [help with] something, "Mama, show me how to read this, how to write." Now, I have to teach him to do, to write. [*Eighteen months ago, you couldn't help him so much?*] No. Because I don't [know] how to write something. I don't [have] every words, but the important words I have, I know how to write. Yeah. And he's, some, when he bring me something from preschool, I know I understand better.

Teresina spoke about how helping her child is important to her while discussing how she was better able to help him in concrete terms. After participating in the program, she reported feeling she "now" had the needed skills to help him with his writing and to understand the communications he brought home from school.

Some of these learners named their supervisors as a support as they participated in the program. Many also mentioned ways in which their family supported them as they began to learn new skills they thought would be helpful in being a better worker. Most of these learners talked about their struggles balancing the multiple demands of being a worker, a learner, and, often, a parent—and how they felt supported by their immediate and sometimes extended family.

Hope's Case: Demonstrating New Competencies at Work

> I just let my mind travel, move more fast and think much better because my building at work is going through a lot of changes. I have to learn two more jobs, and I'm not getting the training like we used to. We trained a long time ago, we used to go to the classroom. Now, it's on-the-job training, and this is new to me, so I have to open up my mind to because each night I go, I don't know where I'll be, or if I'll go to my regular job that I used to do, or do I have to go to the other two job. So I have to think different paperwork [in each job], so it's really did something good for me. (***Hope***, Focus Group, 2/23/99)

While many learners told us how the skills they were learning in the program helped them at work, Hope spoke specifically about how these skills helped her better manage the demands of her increasingly complex work on the shop floor. Hope's case illuminates how she understood her new work responsibilities and how she felt better able to manage the multiple requirements in her three different types of jobs.

In the first interview, Hope, who immigrated from her home country in the Caribbean 30 years ago, spoke with great confidence as she described her competency as a worker. At that time, she said she wished her "teachers" in the program could visit her "on the job" so that they would see how complex it was and how well she performed her tasks. However, in January 1999, after working for Polaroid for more than a decade, Hope was "told" that rather than doing the one job she had always done, she would need to do two additional jobs. The changing nature of the workplace demanded greater competencies from Hope. In the third interview, after managing her new and varied job responsibilities for several months, Hope shared her understanding of her relatively new situation and reflected on what it was like when she was first told about the change.

> Well, the first day when I was told to go downstairs and do the training, I was a little bit upset, but I didn't let my supervisor know I was upset. I kept it to myself. And then the person who was training us, I said to him, "do you have any paper or pamphlet for me to read?" They said no. They said "I'm showing you, and that's it." So I guess what it boils down to now is they want you to learn the job and it's not, you're shown and, then you can go ahead and do it while you are learning [and] ask questions. (PI #3, p. 9)

Although Hope thought herself to be a "hands on" learner earlier in the program, she asked for "pamphlets" to help her learn what she needed to know to feel more able to do what she was asked. She asked for the reading materials, she said, because she wanted to learn "the right way" to operate the machines in her new jobs. Hope "didn't let my supervisor know that I was upset" that there was no paperwork, but she approached the person who was doing the training to ask for help. At Polaroid, she stated, "Seniority use to count. It doesn't anymore." Now, what mattered, in Hope's view, was having the "skills" necessary to do the job—or jobs. In addition to the required "skills" to perform her new tasks competently, Hope needed to tolerate the ambiguity of not knowing which of the three jobs she would do when she arrived for her 11 PM to 7 AM shift after an hour-long commute from home.

In the third interview, Hope talked about the changes in her workplace, the changes in what was required of her, and why she was disappointed with her training. She also highlighted the ways in which learning in the program was helping her to succeed. "You don't have any paperwork, nothing

to go back on. So whatever they show you, you got to do. And I think this program, it gives me, my mind more thinking." Hope recognized that she had "come a long way" since beginning the program.

> **So I've come a long way with everything that was going on, and there's a lot of changes on my job.** . . . Well, there's last, week before last, I didn't know if I was going to have a job to go work. Told us there was going to be a layoff. So we didn't know who was going. And since January, I have to learn two more jobs. . . . So at nights when I'm going, I don't know if I'm going to my job that I was on practically 16 years, or I'm going to go on any of the other two jobs. And the way they are teaching us those jobs is hands on training. You don't have any paperwork, nothing to go back on. So whatever they show you, you got to do. And I think with this program, it gives me, my mind to more thinking. [*So you think the program has helped you with having this job problem?*] Yes, we just move in, because I can go in tonight and they say "okay go back to your regular job." I can go tomorrow night and they say go to [another job]. **I can do the new job, but not as perfect as the one that I have been on that I can go and know the basic**, I know what to do and if I'm making the product and it's not right, I know what the defects are. Well I think, my mind to think more **because before I don't think if, if I wasn't in this program if I could, I didn't say I couldn't handle it but I don't think I could go into it and get involved and get to know it as fast as I did**. (PI #3, p. 4)

In Hope's view, the program helped her "mind to think more" and this, in turn, helped her be better able to perform competently in her work. She also talked about how she thought the learning in the program made her better able to adjust to not knowing which of her three "jobs" she would do when she began work each day. She said that before participating in the program, she would not have been able to do this. At the end of the program, Hope said she had changed and noted the specific aspects of her life that supported her in making these changes—namely, the program, her teachers, and work.

> I appreciate the program, and I appreciate what Polaroid did. And . . . **I appreciate the time the teachers took with us, when we didn't understand, and show us, to let us understand. And [the teachers] didn't think because we are grown-up**, we should have known. **I'm proud of myself. And I'm proud that Polaroid gave us the opportunity** [so] **that we could . . . do it**.

Hope demonstrated a change in how she understood her role and her work. She grew to talk in more abstract ways about the appreciation she felt for Polaroid and to orient to her inner psychological experience (i.e., feeling "proud" of herself and "proud" of Polaroid), indicating that a Socializing way of knowing was now prominently organizing her meaning system (i.e., 3/2).

> Later in the interview, Hope reflected on the changes she noticed in herself. Like other learners, she no longer felt "scared" to ask questions. Also like other learners, Hope reported being able to "write better" and "explain" herself better after the program—and she emphasized that these skills helped her at work. The program seemed to provide a holding environment that supported Hope as she grew to better manage her work and her life.

> Mm-hum [I feel proud of myself]. And I know, I explain thing[s] much better, and

> . . . I write much better, now. And I think, I wouldn't say scared to speak up, but
> sometime I would say, maybe, I'm, I don't say the right word. But now . . . I'm not
> that scared anymore. I'm more confident.

Like many learners, Hope reported feeling more "confident."

Hope told us that she was proud of her accomplishments, and she talked about the ways the program helped her to "look ahead." In her words,

> I'm proud that, that what I started, I finished. And I want to be, if I start another
> program, I want to finish it, too. I don't want to stop in the middle. Unless they're
> circumstances that I have to. But if there is no circumstances, I'd like to finish it.
> Because when you start something, and you finish it. **It really make you look
> ahead, to see that you could do more than you thought you could do.** 'Cause if
> you can succeed at this, you, it may take a longer time for what you're going to
> start, but if you want it, you succeed. It make me feel that it's, It's never too late to
> get an education. And you're never too old. And there are a lot of **opportunities**
> out there. You just gotta reach for it.

Hope can now look ahead and see "more opportunities" for herself. She realized she "could do more" than she had previously thought possible.

The Socializing Way of Knowing

While we have discussed various features of the Socializing way of knowing in the previous section, here we will highlight how learners solely bound by this way of knowing understood their roles as workers, their relationships with supervisors, and how learning in the program helped them at work. Two learners, Pierre and Tough, demonstrated a fully and solely operating Socializing way of knowing at both program start and completion. Rita grew to demonstrate a fully and solely operating Socializing way of knowing at program completion.

Being understood *and feeling respected* by other people in the workplace (i.e., supervisors and coworkers) was of key importance to these learners. All demonstrated that they identified with other people's opinions of them or, as was the case with Pierre, other people's imagined perceptions of them. With this way of knowing, a person is "made up by" (Kegan, 1994) or defined by the opinions and expectations of valued others.

Changes in Relationships with Supervisors and Coworkers

Many of these learners, like those who demonstrate an Instrumental/Socializing way of knowing, talked about how their relationships with supervisors and authority figures mattered to them. When faced with a situation or dilemma at work, rather than turning inward to decide what they needed to do, they would turn to a supervisor, a valued authority, to see what they *should* do. Being understood and listened to by others, especially supervisors, was critical to these learners. In fact, when asked about aspects of their work and work competencies, they often replied by talking about what *other* people had told them about their job performance.

Pierre, a learner who rarely talked about his supervisor (perhaps because his boss left before the end of the program), was an exception. Pierre also rarely mentioned his coworkers during the interviews (except to say that one of the other learners in the program, Christopher, worked in his

department). However, Pierre mentioned that he appreciated the vote of confidence his "boss" demonstrated by signing the papers to approve Pierre's request to enroll in the program. Interestingly, Pierre could envision how he, as a worker, would be better able to support his boss with more highly developed skills.

> And my boss so happy for me to come and get that [diploma] because he knows what I'm capable, but just for a little thing to hold me back. So with that chance, with that opportunity, I could help him more. And he's so happy to . . . take money from his budget to pay for me and then I can get here. (PI #1, p. 4)

Pierre appreciated and valued his boss's approval, but unlike other learners with this way of knowing, talked about him as a major source of support or encouragement.

Changes in Constructions of Work

These learners oriented more to their inner psychological experience and spoke more often about the influence of work on their emotions. Most of these learners told us they needed "more education" to "move ahead" or "grow" in their jobs. All of these learners spoke about how earning a diploma would help them become eligible for promotions at work—education would help them in their jobs and to achieve other life goals. For example, Pierre, who grew up in a poor country where many people needed to work three jobs and earned a very low salary, "figure[d] out education, that's a strength for people's living. Without an education, life would be so hard." In Pierre's view, being able to "help" oneself means being able to "explain" oneself. Like many learners in our sample across ways of knowing, Pierre seemed to think a person who could "explain" himself well would enjoy greater chances of being considered for promotions and other benefits.

Changes in Developing Skills & Competencies at Work

These learners, all non-native speakers of English, said one reason they enrolled in the program was to improve their expressive English skills. They told us they wanted to improve their speech so they would be able to understand others and be understood by others. Most said they did not want their coworkers or supervisors to think they were "stupid" just because their English skills were not well developed.

> All of these learners spoke about feeling more "confident" as workers because of learning in the program. Many reported better communication skills as a result of their program participation. Rita, for example, spoke not only about the difference her improved reading and writing skills made in her relationships at work and at home, but also about being able to communicate more clearly. She wanted to share with others how highly she valued education. In the following passage, Rita reflected on her experience of being invited to deliver a speech to more than 60 children and their parents at her church. The skills she had learned in the program, she said, helped her have the confidence to do this. In the last interview, she recalled what is was like to share with members of her community that day.

> All the parents, all the parents, the church was full. I tell them to never give up their dreams. A lot of things I feel for them to reach and right now, all of them that's young, they have the whole world inside of their hand, they just can't see it right now, but couple of years from now they will open up and see the good of education. I regret myself that . . . I didn't go to school 20 years ago when I came to America. But I never give up my dreams, I always say someday I will go to school.

> Everything in this world [you] have to have an [education] for it. This was my time
> and this is not the end of it.

Significantly, at the end of the program, Rita was able to articulate an abstract vision for the future and
to see the world from the children's perspective as well as her own. She said it was important that
children, in general and her own, "reach" for their educational goals; she knew children may not be
able to recognize the value of education right now, "but couple of years from now, they will open up
and see the good of education." Rita was able to take her children's perspective, to stand in their
shoes, but with her own vision and perspective to recognize their potential and to realize they do not
know this yet. She understood a bigger picture of time, her life, and what was important to her, and
she could see it was part of the process of making her "dream" a reality. We marked this as an
important change in Rita's understanding of her experience (and a demonstration of her now solely
operating Socializing way of knowing).

Pierre, Rita, and other Socializing knowers shared a desire to improve their communication
skills at the beginning of the program and reported feeling better able to communicate with people at
work, and in the world, at the program's end. For example, most of Pierre's self-confidence was
directly tied to both his expressive English ability and the way he thought other people perceived him.
This is especially important because learners who make sense of their experience with a Socializing
way of knowing derive their view of their *own* competence with how others perceive their ability. For
non-native English speakers making meaning with a Socializing way of knowing, this seems especially
profound because they believe others find them incompetent when they have difficulty expressing
themselves. While all of the learners in this sample who were non-native speakers spoke of wanting to
speak English better, Pierre's case illuminates how this experience is understood from a Socializing
way of knowing.

In the following passage from the last interview, we see that Pierre wants the respect of others
and that he thinks his expressive English skills are keeping this from him. As a quality control person
at Polaroid, he needed to be able to "explain the negative and positive impact of every single thing" he
does at work.

> And my life doesn't mean money to, I know everybody work to make money. I
> want to feel comfortable because one thing, **without good English speaking here,**
> **you don't have good respect.** Somebody doesn't care about what somebody do,
> don't care about. In my job, because most people at the class, they were all
> machinery people, do one job. Okay. Start the machine. . . . Myself, I don't do that.
> I am on the quality team and I have to explain the negative and positive impact on
> every single thing I am doing. I have to explain, if I don't do it, why? And if I have
> to take [fluid], I have to know plus or minus, all that. I have to say, okay, I am
> going to increase the temperatures, what that does for that. So that means speaking.
> . . . And in my, I call my department, Talk Radio because you have to say something
> all the time. I call it Talk Radio because they are mostly talking. (PI#4, p. 15)

Pierre shared his view that "life doesn't mean money" (which would be an Instrumental construction).
He believes a person *must* speak English well to have "good respect." In his work, it is essential that
he speak and communicate with coworkers and supervisors "all the time." When asked what was most
important to him about having other people understand him, Pierre explained why being able to
communicate with other people mattered to him: "What's come to your [mouth], is how your mind
sound. . . . The way you sound, that's the way people judge." Pierre was concerned about how other

people evaluate him and what they think of him. As a Socializing knower, this kind of concern is of ultimate importance to Pierre because he derives his sense of self-worth from other people's opinions of him. Pierre added more about why being able to communicate well is important at work.

> And I go to a meeting, communicate with people, to know how to make word go, understand your word, have your idea go along, that's communication. All that.

Communicating with coworkers and supervisors was an important component of Pierre's day-to-day life at work. He reported that he, like other learners, felt better able to express himself and understand others as a result of learning in the program.

Rita's Case: My Supervisor is My "Hero"

Rita's case is presented here for two reasons. First, it is a rich example of how a Socializing knower understood her relationship with her supervisor (demonstrating her relationship to an authority figure) and how her understanding of this relationship changed during the program. Second, it illuminates many of the ways in which learning in the program helped learners enact their roles as workers.

Rita had been working in the mailroom for eight years when our study began. Despite her layoff from Polaroid during the second trimester, she maintained a positive attitude towards Polaroid, grateful for the opportunity to attend school. She understood why the company had to let people go.

> They [the company] don't make money, so why they keep all the people? The sales is very low. The top the sales was [another country], but last year was flat. This year is still flat, . . . so that's why the things go down, and they still go down every day. It's not ended yet, but it's a wonderful place to work. (PI #3, p. 8-9)

Rita talked very positively about her relationship with her Polaroid supervisor. She valued this relationship; it seemed to provide a safe, holding context that supported Rita. The qualities she appreciated in her supervisor were similar to those she ascribed to a good teacher: one who provides "explanations," is "friendly," and serves as a "role model." When we asked her during her first interview to share examples of positive and negative learning experiences, Rita spoke about her work in Polaroid's mailroom. As she described her work and work-related responsibilities, she spoke with confidence and pride.

Rita said she "always talked to [my] supervisor about someday I have to go to school until I get graduated." Rita's supervisor was a woman who offered Rita important encouragement. When asked who in her life has she learned the most from, Rita named her supervisor. She felt she could approach her supervisor for help and support. Even if her supervisor did not know how to help, Rita could depend on her to find someone who could. Rita thought of her supervisor as her "hero."

> Well, in this new job that I have right now for eight years, my supervisor has been helpful for me. Some time I say, "Manuela, I don't know how to do this, and I need help with a job that have to go out special mailing to go out twice a week." She didn't know how to do it, but she always got somebody from the other building to show me how to do it. She was my hero. Because you know when you need the help, and somebody help you politely, nicely, and talk to you nice, you don't know yet, but you will learn this job. You will do that with your eyes closed. Someday, you will teach somebody else how to do it. I used to say, "Me? I will never learn

this job." But it's never too late. If you always have faith in God, sooner you pray for, you know He is in your heart, anything is possible. (PI #1, p. 12)

Not only did Rita feel she could ask her supervisor for help with learning on the job at Polaroid, she could also ask her for help with homework. After Rita was asked what makes a good teacher, she discussed her supervisor's efforts to help her. "Explaining" was important to Rita—and she seemed to appreciate that her supervisor took the time to explain things to her when she was trying to learn. In her efforts to explain things to Rita, her supervisor was able to create a holding environment that both challenged and supported Rita in her quest for learning.

She helps me lots with my homework. When I was, I say, "Manuela, I have a problem with verbs and objects and stuff, I have a problem." She used to sit down and say, listen, "This is so and so, and this is so and so . . . " And I say, "Oh, now I get it." But she explains to me. But teachers sometimes they teach to you, "This is the north, this is the south, this is the west, and this is the east." When you turn around, you don't know which one is. My supervisor says, "Okay, you point to the north that way. You'll know that's north. You know the back is south. You now your left is west." Explaining it mean a lot. (PI #1, p. 14)

Rita's supervisor created a holding environment for her by helping with her homework, patiently explaining when Rita did not understand, demonstrating how to apply new skills, and "being there" when Rita needed emotional support and other forms of help.

In the last interview, Rita's thinking demonstrated a change in the way she understood her relationship with her supervisor. Rita's words illuminate how she now understood her relationship with her supervisor—a source of authority. Asked how she knows she is doing the right thing at work, Rita told us she knows something is right when the "supervisor says it is the right thing to do."

[*What if she says, that's the way I want it done?*] I will do it. [*Even if you know it's the bad thing to do?*] I will do it. **Because that's her decision, she's the boss.** [*So even though you know it's wrong, you'll still do it.*] I would bring the point one time to her, and I will show her the problem. I said, now going to do it, [inaudible] before we start. If he or she say yes I will do it. **But I won't tell her [inaudible] I don't think this could/will work.** But if you'd like us to continue with this, we will do it. **Because she's the boss**. You cannot go. It's like, if you don't listen to your boss, . . . it's like you go somebody else's house and you tell them what to do in their house, no, no, no, no. **When I go to work, my supervisor, tell me to cut this and put it cross the street, my job is to pick up the building and put it across the street**. If I can't do it, I'll try. [*Even if you think the building is just right where it is?*] **You never say no to any supervisor**.

Rita then explained her reasoning about why she would never say "no" to a supervisor.

You can make the supervisor get mad. A lot of times you have a raise, or you have promotion in the job, they will pull you down because you have bad attitude. I think attitude in the job is the worst thing you can have. [*So you think attitude is the worst thing you can have because it might cost you a promotion?*] Yes. [*Are*

> *there other reasons its bad to have an attitude like that?*] **You will lose a lot of friends. You will lose trust of your supervisor and co-workers**. So, you only gonna work for eight hours, doesn't worth. It's good to go to work and say hi in the morning and say goodbye in the afternoon without no problems.

Rita shows us what she understood to be the consequences for saying "no" to a supervisor: The supervisor "gets mad," "you will lose a lot of friends," and "you will lose trust of your supervisor and coworkers." In her view, doing what is expected of you and doing it with a good attitude will keep you in good standing with your supervisor, friends, and coworkers, and will protect your chances for raises and promotions. Rita talked about the "promotion" and "raise," but the other reasons—"losing friends" and "losing the trust of supervisors and coworkers"—seem more important to her than missing a raise or a promotion.

Rita's case also illuminates how she understood her program learning to be helpful to her at work. During the second interview, Rita spoke with new confidence about her newly developed competency in math. We mark this as a *change that she noticed in herself* because she did not report feeling this way about her math abilities before participating in the program. Rita described this "confidence" (locating it in herself) when she talked about how program learning was helping her to do things at work that she "never knew" how to do before.

> **I feel confidence of myself if I go work any plac**e that they give me, like shipping and receiving. Or I mean any job that they have the math that they require you to do the math. And I don't have anymore problem. But before I started this program, I couldn't do that job. Even if I got the job to do that. And I couldn't because I don't know which way I'll start. And especially on the calculator that we have right now is different. We didn't, it's different from what I had. To use . . . the percentage and stuff like that, I never knew those things**. But now I feel confidence doing any kind of job with any kind of math. It changed my life. It changed my life.**

Rita highlights the important ways in which building mathematical competency has "changed [her] life." Although many learners talked about how important it was for them personally and professionally to develop their "skills," Rita's experience helps us understand the meaning and importance of developing "skills" within Polaroid. These new skills, she reported, not only made her job easier but also gave her confidence to feel she could handle math demands in other jobs.

Not only did Rita voice her appreciation of Polaroid for making it possible for workers to participate in this program, she also said she valued this particular CEI Adult Diploma Program because it was longer in duration than most other educational training experiences offered to Polaroid employees. In September 1998, Rita told us educational/training programs at work are usually 36 hours long, and she believed this was *not* enough time to learn. When asked what was most important to her about the support she received, Rita explained:

> Because if she [the supervisor] didn't sign, I would never come into this class, you know? So when I tell her, well, they have this high school program, she say "Give me the paper. Fill out the application and give me, I'll sign for it." When I heard it would be like $4,500 I said "Manuela, but that's too much." She say, "You don't pay for it, why you worry about it?" I say, "If you pay for it, I will take it." But she always say, "Rita, you should go to school. Because Polaroid is big company, is

good company, God bless them. The best company in town." **If you don't want to work for Polaroid today, you want to work for another company tomorrow, at least you have your education**. And if you don't want to do what you're doing right now, you can move on and do something different. **Every time you learn a new thing is one high AKP levels, AKP stands for Applied Knowledge Skills**. Every time you learn something, your skills are going up. And don't think if you are doing the job, you are comfortable in that job, that is all about. Maybe today, but tomorrow you need education. Take a computer course, take something different that will change your life style. [*So their advice has been very helpful to you?*] Very helpful.

Like many learners, Rita mentioned the importance of the AKP at Polaroid. In fact, her supervisor reminded her that even if she were to leave Polaroid, she would "still have her education" (highlighting one of the company's intentions in offering the program). During this second interview, Rita explained other ways the program made things "easier" for her.

At work? [*or at home?*] Outside? Inside of myself? [AT WORK] Everywhere. Before sometimes when I'd say something at work and they'd say "Wait a minute, speak English." I'd tell them "English is my fourth language." And it's very hard for me to speak like you do because I never study like you. But if I study 20 years ago, if I went to school, believe it or not, now I would speak different**. Now sometimes when I tell them something they say, "Now you go to school." I say "Yes. And I will learn step by step."** But I will learn different things every day. . . . Before, if they told me write something, sometimes I say, "My goodness, I have a friend I say how you spell this, how you spell that?" **Now I don't have too many problems no more. Yes, it's easier.**

Rita observed concrete changes in her skills at work. For instance, when asked to write, she had fewer spelling problems. This focus on concrete skill development was important to her and her ability to do her work.

In the last interview, Rita spoke in greater depth about other changes she noticed in herself, which she attributed to learning in the program. She talked about feeling "confident" in her capacity to learn. Like others, Rita noticed an important change in herself; she no longer was "ashamed" to ask questions. When asked what was the "most important" learning she had experienced, Rita said it was learning the "history of America" and reasoned that she "should know" about it because she lives here.

I learn a lot that . . . before, that I never know. And I learn how to read and write, and I learn how to spell. I had a lot of problems before, I learn, and I felt so **confident** now to open up any book and read and understand what I read. Because, **before,** sometime I used to read, and then I don't know what I read and I was confused. **And then I was ashamed** to ask, people, "What is this?" Because they said, "You've been in America so long, you don't know what to do?" You cannot learn if you don't open the door. There is no way for you to reach your goal if you don't go to school. You might learn a lot from outside, but. . . . [*So what's the most important thing about the learning that you've done?*] The history of America . . . Because I live here, and I should know. If anybody asks me for anything, and I will

> be glad to answer them back. [*And why would it feel so good to be able to answer them back?*] **To be myself.** If anybody ask me right now, Rita, "What you been in these 18 months?" **I don't feel ashamed to** tell them I been in school for 18 months. Or if they ask me, "What did you learn in 18 months?" I will tell them, which before if they asked I would say, well, I never go to school, [and] that [felt] bad. . . .

Learning in the program helped Rita feel more confident about asking other people questions. Importantly learning in the program helped Rita and other participants answer other people's questions and better understand others. For Rita, this meant that she was able to "be myself."

The Socializing/Self-Authoring Transitional Way of Knowing & The Self-Authoring Way of Knowing

Four learners demonstrated a Socializing/Self-Authoring way of knowing at the start of the program. Of these, Paulo, Daniel, and Magda demonstrated new underlying meaning systems at the end of the program (see Table 2). In addition to these four learners, Jeff demonstrated a solely operating Self-Authoring way of knowing at both the beginning and end of the program.

All of these learners except Magda talked about how learning in the program helped them "feel stronger" about enacting their roles as workers. All seemed to take greater responsibility and ownership of their work. They had a clear sense of (and a capacity to reflect on) how learning in the program helped them access information they would then use to make *their own* decisions in their work life. They were excited about understanding how to make better decisions for themselves.

Unlike most other learners, when they spoke about increased self confidence they talked about how their learning made them less reliant on others and less likely to make mistakes. In many cases, like other learners in our sample, they also talked about how important it was that this program helped them feel more comfortable asking questions.

Constructions of Work—"Creating Opportunities," Working Independently—and Feeling "Strong"

These learners talked about how education and their learning in the program gave them more "opportunities" at work and in life. All shared a common goal—wanting to be "better educated"—and reported that this would help them in their work. They reflected on both the cognitive and abstract psychological experience of their work. Many told us that learning in the program helped them to feel "stronger" at work.

For example, one of Christopher's goals as a worker was to become better educated. As he said during the first interview, "The most important reason [for wanting the diploma], I want it just because without a diploma, for me, in [his Caribbean home country] or here, you're nothing." Additionally, he wanted to learn more to "feel strong." He explained that he thought an education would help him better fulfill his role as a worker. Christopher wanted to be able to make good decisions for himself.

> I feel strongly, I'm look inside, so I don't have to go to him [his team leader] next time. Because I feel so happy when, you know, I can help myself, when I can do things. . . . So, if I can do something without asking people, I'll be glad. But that doesn't mean I'm selfish; I don't like asking questions. But I'm happy when I can, you know, do something for myself. Show me what I can do. Demonstrate.

> Helping myself solving problems. I think it's a good thing for me, you know what I mean, so I don't have to worry. I feel happy. [*So you feel like you learned about this computer program by asking questions sometimes, but people weren't thrilled when you asked questions.*] Yeah. . . . They didn't say they want you to do it, you know, but budding angry, so you don't have to go inside people's mind to read . . . what they meant. . . . By looking at them physically you can see by the way they act. "Don't ask me anymore." . . . So, you can do it for yourself. So now, I just get angry about it. . . . Not to the people, to my self. I get angry, and I say to myself that, "Okay, I want to learn that stuff, for not asking . . . anymore." (PI #1, 8)

The desire to "feel strong" and not rely on others for help at work was important to Christopher. Wanting to work more independently was a common theme for these workers.

Christopher's desire to feel "strong" at work and work independently *changed* from a goal to an accomplishment he attributed to his learning in the program. In February 1999, when asked how, if at all, learning in the program helped make things better at work, Christopher replied:

> All right . . . at work, I'm using different equipment. . . . So now, [to use] the [latest] technology . . . you have to be educated . . . when you are very educated . . . I think, like, that, then you would be [able] to do all kind of things to moving things around with the mouse using the computer, writing the memos, things like that, you know, that will give you a high—put you in a high class [promotion] . . . where can do things for yourself . . . you don't have to ask for people [for help] all of the time. You know, if there is something . . . in front of you and then you can do it—what the paper says, and then I don't need to go to [anyone] for help . . . which is very good, you know. So that is what I'm saying. . . . So this class have me—start to build me up . . . so I'm learning things. (PI #3, p. 7)

This ability to work more independently contributes both to Christopher's sense of himself as a worker and his feelings about his job. He reported using what he learned in the program to better understand and perform his work at Polaroid. The better he understood the work—the process that the machine goes through or the process involved in making film—the more responsibility he was able to assume and the more he felt he could work independently. This sense of responsibility for his work seemed to gratify him. "I really love it," he said. Christopher said if he was able to do more at work, it would lead to a "high class," meaning he would be eligible for a higher position at work and would be able to work more independently.

Like Christopher, Paulo said education would help him feel "strong" and better able to meet the requirements of his work in dome lamination at Polaroid. Like all of the non-native speakers with this way of knowing, Paulo voiced a desire to improve his communication skills and thought improved communication skills would help him work more effectively. In the first interview, Paulo described the kind of writing skills his job required and explained what it would mean to write better reports.

> When I do my reports to the engineer, when I do the stuff, before I do small reports. "I found this and this and it's fixed." Now I say this fixed, coming through this one, this one, this way or that way. **You try to push your report**. . . . You know a little bit about how you write better. You know how the words that you say . . . [*So you say you're writing bigger words and more words and*

> *more detailed?*] Yes. In the beginning I write small reports. Because I know the words I put. **I have no idea how I'm supposed to be in the reports**. I know the things I'm supposed to put on the report, but I don't know how I'll write. So every time you learn, your report gets a little bigger. (PI #1, p. 20)

Paulo needed to be able to convey information to other workers, engineers, and supervisors in his written reports. His data highlights an important theme common to learners who made sense of their experience in this way of knowing: They all spoke about trying to "push" themselves to do better in their work. Doing their jobs well and pushing themselves (internally) was important to these learners. At the same time, Paulo was concerned about writing reports that would please important others (i.e., his supervisors and the engineers with whom he works).

Feeling "very, very, very strong" is an important concept in understanding the *changes* in Paulo's self-confidence and in his perceptions of improved competence as a worker. In the third interview, he explained why writing skills were important to him at work—the first time he talked about feeling "strong."

> Yes, the skills is very important to me. This is very important to me because now I'm making . . . account. **I write my reports; before, I went to the meeting, I write my reports, I don't know exactly what I going to say on a meeting**. In the day I make my paperwork, say everything, the defects I found on the material, if machine work is okay, so if I have some problems between this time and this time. So that's very important when you [are writing reports]. [*So it sounds like there are very specific skills that you have improved.*] Exactly. [*Has that, has your feelings about yourself, has that changed?*] **Yes. I feel very, very, very strong**. (PI #3, p. 3)

Paulo talked about how the skills he was learning in the program helped him demonstrate greater competence as a worker. He reflected on his internal experience and feelings of greater self-efficacy. Later in this interview, Paulo talked more about the changes he noticed in his life and what it means to him to feel "strong." Paulo explained:

> I feel strong because I know the program to buy the house four years ago, you see. But now if I go, I went there because I don't understand. The kind of strong I feel, is because now I can . . . [with] this program, I understand everything. you see. **I feel free**. . . . I feel free to explain anything to say anything to understand. That's the [inaudible] when you feel strong. When you help your kids look for good college, or you help your kids look for good school or better school than before. **So you feel strong**. When you go to the doctor you [don't have no confidence], so now you're confident with you and your doctor. So you can speak to your doctor. So your doctor tell you anything, you understand exactly; you go to dentist or you go anyplace else. So that's, you feel strong when you help yourself or your family. (PI #3, 11)

Paulo felt "strong" because he had a greater sense of being able to communicate with others—both at work and in life. Like other learners with this way of knowing, Paulo appreciated how program learning helped him change his behaviors and thinking. He turned inward and discussed his experience.

We learn that Paulo's understanding of "strong" is multilayered. Feeling strong means knowing he is able to buy a house, whereas he did not know what to do previously. Feeling strong means being able to communicate with people at work, being able to express himself orally and in writing. It also means being able to help his family, being able to speak to a doctor, and being able to help himself—being able to *be* more independent. Feeling "strong" helps Paulo "feel free." Importantly, Paulo reported feeling a strong internal *knowing* that he can do these things at this point in the program—he did not conceptualize his role as *carrying out* these important responsibilities. His understanding of "strong" goes beyond concrete tasks; it represents many things for him: self-reliance, greater independence, and freedom.

Magda, like Paulo, was from West Africa and also needed to write reports in her work at Polaroid. Magda mainly works on a computer; taking "measurements" and looking for "data" in the computer are some of her everyday tasks. She talked about "wanting to be able to do everything 100 percent" in her work. Giving 100 percent seemed related to Magda's desire to get things done efficiently. In the second interview, she explained why being efficient is important to her in her job. Asked if she thought her learning in the program helped her do her work at Polaroid, Magda said:

> Well, I think it matters, you know, because the more I know, the more efficient I am, but that is for me. It is good for me because I can demonstrate a lot of things and because you can get promoted. I can get a better job. I can get other things. (PI #2, p.9)

Magda indicated that learning mattered to her work for several reasons: She can be "more efficient," and she can then get promotions and different jobs. Magda's focus on her own efficiency emphasizes her concern for improving her abilities, to meet self-determined goals. Also, she has the capacity to engage in self-evaluation ("the more I know, the more efficient I am") and reported feeling her skills had improved, making her more effective in her work. Magda demonstrates a Self-Authoring construction, as she seems most concerned with her own abilities, not what others say about them.

Jeff, like Magda, talked about the importance of challenging, "interesting" work. For Jeff, what made work "interesting" was that work was always "different." "No five days are the same. It's always different. . . . Even though it's the same machine, and it never changes, but there's always something different. It's not repetitious." This illustrates Jeff's larger perspective on his work. In the same interview, when invited to talk about an important learning experience, Jeff discussed work.

> 'Cause it was an **interesting piece of machinery**. It was a new developed, a new machine. It was a high tech machine. It was a machine that was more automatic than manual. Most of your machines back in the old days were all manually, you had to do everything to the machine. The machines we have today, it's a half and half process, it's automatic and manual, but it's more automated than it is manual. [. . . *What made that good for you in terms of learning?*] 'Cause you had to know, it's hard to explain. . . . Yeah, it was **challenging**. It was something that kept my interest in learning the machine. [*It wasn't so easy for you?*] **Right, it's hard. Which makes it interesting to me**. (PI #1, p. 9)

Jeff shared his sense that work and difficult tasks are interesting. It is important to keep himself challenged at work. Work is stimulating when it is *not repetitious.* Jeff believed his work presented him with various challenges because "there's always something" different or some new aspect that

keeps him challenged. For many of these learners, the predictable nature of work helps them to feel competent.

Jeff felt in charge of himself (a Self-Authoring capacity) and of his work—he demonstrated over and over again how he was in control of his work. During the first interview, he said his last job was more interesting than his current one making batteries. In contrast to most other learners who reported they would need to consult a supervisor for help or seek directions/help from the computer if faced with a new defect (while were working on a machine), Jeff reported preferring to figure things out on his own.

Understandings of Relationships with Supervisors

Like Socializing knowers, many of the learners who made sense of their experience in a way reflecting the Socializing/Self-Authoring way of knowing still considered their supervisors' evaluations important; however, they reported they wanted to be *recognized* and *respected* by their supervisors. In other words, these workers *knew* they were doing well and performing competently in their roles as workers; for them, being "respected" by coworkers and supervisors mattered.

For example, in June 1999, Christopher talked about work and how he made up time if he was late for work because it was important to *him*—not because it was important to his supervisor. It was important to Christopher that his supervisor respected him, but also that he respected himself in this relationship.

> I just do it for, for myself, as a respect. . . . So I don't play with the time. I don't play with my supervisor, I respect him as a boss. You know, I do what he asks me to do. So, I know the time is time. I don't play with the time especially. I'm very sensitive about that kind of thing . . . I respect myself.

Daniel, a team leader at Polaroid, told us he assumed responsibility for supervising others. In his supervisory role, he believed that it was his responsibility to teach those who worked for him. He reflected on how his job as a supervisor required many of the same skills as teaching. For Daniel, being a supervisor was like being a teacher. In the third interview, Daniel spoke about how he understood the nature of his supervisory role.

> That's right, I teach every day. I'm the one that gives them instruction, I work with the blueprints. If there is any problem, I'm the one to solve it. And I deal with a lot of paperwork from different customers, paperwork from the government, from, some of them come from Europe, all over the world. All of this paperwork comes through my hands. I have to show people how, if they don't know how to do it I have to tell them how to do it. I have to show them the techniques how to do things fast or safe also. And I have all of that. That's my job. (PI #3, p. 15)

Daniel reflected on both the cognitive and abstract psychological experience of being a supervisor. He seems to know both his goal for teaching people (in concrete and more abstract ways) and that people skills are required in this kind of teaching. This passage illustrates how Daniel conceptualized what it meant to be a supervisor and the thoughtful and caring way he supervised.

Before the last interview, Daniel learned a few fellow employees had recently been awarded raises. In his view, this was not fair because these people were not really qualified yet he, who was qualified, had not received a raise. At this time, Daniel demonstrated a change in the way he

understood his and the larger situation at work. He was now able to admit to being angry (and owning his anger) and to reflect on what bothered him most—the unfairness of the situation. He recalled,

> When I found out that we been slow at my job, and I found out that a few people had raise. And I [didn't]. Two years ago, I do a lot of things. . . . I got a lot of responsibility, I try to I create different ideas, always active, and then you come to the point, and you see people getting raise that is not really qualified, then you feel mad. Feel angry . . . I been around everything, everybody push, push me here and there, as a matter of fact, the last few months, you know, they come back, everybody is looking for me, one need this, one need that. So I think you feel, unfair. For a couple of years I didn't get nothing [in terms of a raise]. I never been pushy for the raise at all, but when I see things like that happen, it makes me angry. Because what I do since I been working this company, I try to do my job and show that I'm doing a good job and improve myself, in a lot of things. That's why lot of things, lot of times you see a lot of supervisors, or whatever in charge of the job, they, when they play like that, it's like selfish.

Daniel had a perspective on the unfairness he saw in the situation; he saw himself as very competent and deserving a raise and was angry that he did not get one. Daniel understood this situation as involving more than extra compensation for the work he was doing or his supervisor's validation. Daniel wanted his good work recognized. We see that Daniel seemed to have his *own* standards of good work, and he was angry that he met them, but his supervisor did not recognize it. Like other learners making meaning in this way, Daniel cared most about *recognition* from his supervisor.

Daniel then stated that his work as a lead technician included supervising people. Treating those who work for him with respect was important to him—as was having them respect him.

> **I have people work for me. I recognize them, I show them respect them, they respect me also, and I put all my effort into what I do, I come up with different ideas.** I know how to train people in any machine, anything, I really have a lot of responsibility, but when it come to the point like this [not being recognized and getting a raise], **it makes you so angry, now, you feel like you go home and sit in there, relax, and forget about anything, just not to mention**. It's the way you been new things or old, you got a good feeling what you doing, and you see all the people around you, even they tell you, if you're not around, they're going to be in bad shape, and things like that. Then you see them do things like that [not give you a raise], it makes you. Even couple of people that work for me, went to talk to my supervisor. I didn't to her yet. And I tell them, why I didn't get a raise? [*They went for you?*] **For themselves, also**. Which they deserve. When I see them go to give somebody else money, I said you did good to go in there and tell her. And tell them, one of them come and tell me, I go in there and talk to her and tell her, can you explain what, how you evaluate the other person that you give the raise, did you see what I usually do? She told me that she get red and all that. I say that's a good question you ask her. . . . And like me, I was a lead, as a lead technician, they assume that they should be coming to me, and asking "How this person doing?" if they don't know how they doing, how they doing, and should be coming to me, how is this person, "You think they deserve a raise or something like that?" They never

do that. I've been [more than 20] years in the company, and I think, I see that one of the reasons this company goes down is it's so unfair things like that. **Because you should have seen people, I'm not talk about myself, but even the people that work with me, that I see that work hard, they see how expensive the part is we make and all that**, **they** should have seen, then they see, look close and see if these people deserve money better than the other ones. [*So do you also feel angry that these people who work for you didn't get raises too?*] **Yes. I feel more angry that. . . . For that, than myself. Because I know they deserve, they work hard.**

Daniel was angry not only because his work was not acknowledged by his supervisors with a raise, but also *on behalf of the people who work for him* because they did not receive a raise—a raise he believed they deserved. He shows he has a perspective on his relationships with those who work for him; he was able to separate himself from the situation and to act on his own behalf (demonstrating a Self-Authoring capacity). He sees his situation as separate from the others' and advocates separately for those who work under him. At the same time, Daniel does not take a larger perspective on his part in the larger process. The absence of any mention of why things work like this points to a Socializing way of knowing. In no place do we hear Daniel discussing a larger, overarching perspective that holds it all together. He is not yet able to see himself within the context of the situation.

Transferring Learning, Improving Competencies, and Increasing Self-confidence

These learners making sense of their experience in a Socializing/Self-Authoring way of knowing told us how learning in the program was changing the way they enacted their role as workers. They said they were now able to work more efficiently and with greater confidence. Here, we highlight three main ways they transferred learning—and changed the way they worked. These learners reported the program helped them improve their writing skills to make better and more informative reports, employ new mathematical and computer competencies in their work, and use the Internet to access information, which helped them in their work and private lives.

For example, in the second interview, Magda talked about having greater confidence in her writing and how this developing competency helped her at work. Before the program, when she had to write something on paper, she needed to look it over several times before typing it into the computer. Now, she was able to type directly into the computer. This made things "easier" for her and helped her feel more confident at work. Asked how learning in the program was helping her at work, Magda said,

> Yes, everything's better for me because I get a lot of mistakes when I write, and I can pick up my tenses, my verbs, and I couldn't before and also, like, when I use a lot of computers and a lot of the times when I spell or write mistakes or problems, then I used to write on a piece of paper and then look at it over and over to see if it's right, but now I can like just type it in. I still do some of the things, like a hard word, I put it next to the paper, and I look at it, but things that I think are normal, things like everyday things, I just type it in. That makes my life easy because that, and then I feel more confident. (PI #2, 6)

In the third interview, Magda described her increased *self-confidence* in reading and writing; she felt "more comfortable to do certain things or write certain things, or read." Before participating in the program, Magda said, she did not have problems with reading, but now she "feels better" about

being able to understand "certain words." In the third interview, we asked Magda if she noticed any changes in how she did her work. She replied,

> I've been doing it for so long that I, even then, I know what I was doing and, but again, this certainly see it more clearly. I knew what I was doing, I was trained to do them. But now, like, especially when I'm on the computer, when I read the, **I can be more confident to change things**. Before like I was a little bit intimidated. . . . But, you know, that, too, yes, it helps me in my job, too, yes. (PI #3, p. 9)

Magda makes an important distinction here between doing a job she was trained to do and doing a job that she feels more confident doing. The former seems to focus on what is needed to get a job done, while the latter involves deeper understanding. This improvement enabled her to recognize areas to fix but also gave her greater confidence she could change things. Magda recalled feeling "intimidated" and worried about doing "something wrong." It is important to keep these statements in the context of her work, as Magda does technical work in which "doing something wrong" could affect product quality.

Like Magda, other learners making sense of their experience in this way reported improvements in their ability to write more effectively at work—and they connected this new competency to learning in the program. Christopher, for example, spoke about his new ability to *know* when to "pause" when he was speaking and where to place commas when writing. Jeff also spoke about how the program helped him "better understand" the "meaning" of words and also how it helped him increase his vocabulary. All of these learners also reported feeling more comfortable about giving oral presentations. For example, Paulo talked about being able to speak more effectively in work meetings. "So, I go to the meeting. I say everything I want to say." Being able to talk about the defects he found was an important part of his job, and he felt better able to do this because of what he learned in the program.

Much like Magda, Paulo noticed his ability to write reports had improved, and he elaborated on how his improved writing skills were helping him at work.

> I do inspection on some kind of material supposed to go to outside for custom, so I have to write a report, so I used to inspect, but I don't used to write reports . . . I have to tell somebody else, "Oh, I found this kind of [defect], I know this kind of a [inaudible], but I don't know how I supposed to write on the paper." So now I don't have this kind of problem. (PI #4, 10)

Paulo felt able to do his work more independently. He no longer had trouble expressing his ideas in writing. Like several learners making meaning in this way, Paulo also reported greater competence and skill working with computers. In the second interview, he spoke about these changes in his skills and how they help in his work.

> I work on things for computers, the field for computer. I inspect sheet for sunglass. . . . So I'm very, very helpful. So my managers, my supervisors like the thing that I do now because I inspect the sheet. . . . I can do on a paper or on a [inaudible] one fourth is rejects. . . One fourth is rejects . . . I have to see on a computer how many is go all the way down, on a 500 [inaudible] one fourth rejects. Of 800, I found two feets rejects, something like that. I have to know a lot of reading, a lot of write . . . You have to write the names, you have to write the kind of the reject. I need a lot of help because I don't know exactly how to

> write those names, the rejects. **So now I don't have no problem** to write those kind of rejects. . . . I don't have no problems to put the rejects on the computers. I don't have no problem with to do my reports. I don't have no problems to go to the meetings and communication with my supervisor. (PI #2, p. 11-12)

This passage illustrates several aspects of Paulo's reported increased competence with computers—he no longer had any problems writing about work-related problems on the computer. He was able to explain his work's complexity and understood the importance of good writing/computer skills in his job. He also pointed out that his supervisors like what he is doing because his inspection work helps identify the rejects (i.e., helping to ensure product quality). Finally, like other learners with this way of knowing, Paulo talked about his increased ability to seek and find information from a variety of sources.

All learners making sense of their experience with this way of knowing reported how learning in the program helped them feel increasingly confident in their roles as workers. For example, Christopher noted how learning in the program helped him to feel more confident—to believe in himself—and said this was "a good feeling."

> We got graduate, we have a high school diploma. . . . People come and shake our hands, which is a good feeling. Make me feel very strong. Getting confident to yourself, to me, I think is know yourself, to believe in yourself. You have to believe in yourself. Doing stuff and doing different things. **It's like knowledge, you have to demonstrate inside your brain your mind, if you capable of doing such kinds of things**.

Christopher talked about pleasing himself and the importance of knowing himself, "demonstrat[ing] inside your brain, your mind, if you capable of doing such things." Learning in the program helped him because, as he said, he was now better able to think through a process. In this passage, Christopher seems to demonstrate that he was not reliant on anyone else's assessment or validation. The best thing about feeling that way was "you feel more powerful, you feel important to yourself, you feel you are somebody, you feel you are doing something good, you feel proud of yourself. That's what it is."

Jeff spoke about an important change he noticed in himself—an increased self-confidence in his intellect. Jeff told us this was an area in which he had never felt confident before. At the end of the program, he shared his new understanding of himself—he now saw himself as smarter than he had before.

> I guess, getting the satisfaction out of knowing that, some of the thing I thought I had forgot in math. . . . And different areas like that, and the English part, and stuff like that, the science part. It was gratifying to know that, once we started and got into the course, that a lot of the stuff was easier to pick up. I picked up really fast. . . . especially on the math. I surprised myself. . . . Because I thought I'd totally, I just, through the years, just disregarded math and all. And, yeah, I **shocked myself, knowing, when I found out I could do it, even though I hadn't done it for a long time**. . . . **There's more up there than I thought there was** . . . as far as knowledge . . . I guess it . . . kind of like, made me went to sleep or something like that. **But I guess it's like once you open something, it just pours out. . . . It's**

there. It's just getting you out, I guess**, which is what happened through this course.** (PI #4, pp. 1-2)

Throughout data collection, we asked these learners who or what they thought contributed to the changes they noticed in themselves. Many learners, regardless of way of knowing, named their program teachers as having helped them learn. Others also named specific pedagogical practices the program teachers employed(as discussed in Chapter Six). Several talked about experiences in the program (e.g., walking the Freedom Trail in Boston) as supporting their learning. However, unlike the great majority of learners who made sense of their experience with other ways of knowing, these learners named *themselves* as supports to their learning in addition to other people or program features.

Paulo's Case: Opening Up the World through Education and Access

I think everybody needs school. Sometimes some people be afraid to come to school because maybe it's been so long I don't go to school, maybe I don't catch nothing. But that's not true. You catch it. Every day you catch one thing or two, that's a lot on the end of the year. (***Paulo,*** March 1998)

Many people has laid off, so before I come to this course, I feel somebody talk about layoff, but now I don't feel like it gonna be me, because I know how if you understand to read or understand to write or speak English better, understand people. Since I started this course, I have more opportunity on my job, I have two promotion, and I keep wait another one soon because before I came there was no instruction, I read I can't expand, so now I can read, I can understand, I can write. I work on a fork machine, but before I started this school, everything I have to have somebody to write for me, inspection for special material, but I don't know how I write any information. So now I can write myself. . . . When I go to the meeting, so I have lots of thing to say, but I can say my piece, so now I don't have no problems. I learned a lot in the math . . . so now I don't have no problems, so not so on my job, so I help my kids on school, too. Again I feel very strong with the schools, so I can buy my own house, I know exactly how I budget my money better, I know how I can any kind of instruction before you buy the house, something so you have to know exactly what you have to do supposed to do to manage the house. So I feel very strong in this course so I think when I finish in the schools, I am not gonna stop. . . . I would like to continue. So I have computer, since I come to school, I know that better, computer, so I know that in school you have to know computer, but I enjoy, too, some place on the computer because I [know the] Internet. (***Paulo,*** February, 1999)

Paulo, who immigrated from West Africa in the mid-1980s and had been working for Polaroid ever since, had a very clear sense of how learning in the program provided him with greater opportunities at work, and more broadly, access to information in a way that he had never had before in this country. His case highlights a critical theme prevalent among learners with this way of knowing: education provides access to greater opportunities.

Learning in the program classes has, in Paulo's view, helped him communicate better with colleagues and supervisors at work and in other areas of his life. It has also helped him understand

and access information from a variety of sources, which has created more "opportunities" and enhanced his ability to make his *own*, more informed decisions. Like other learners demonstrating this way of knowing, Paulo felt his new knowledge and more highly developed skills have changed his work life. At the end of the program, he felt he was a more confident and competent worker, and a more empowered person who could navigate effectively within the American system.

Paulo's work as a team leader in dome lamination involved collaborating with his team and others, reading and writing, and communicating with engineers and shop floor workers. In the first interview, he talked with pride about his work and self-determined goals. Like all other learners making meaning in this way, Paulo viewed himself as competent in his role.

> I do very good at repair camera. So when they start a new camera. One goes in here. I'm the first one he invites to come with him to start to do a new camera. So I do new cameras, I know well about the new cameras, I work and help with repairs, until the cameras go upstairs. So, I'm the first to come for this kind of job. So associates with more experience can stay in this building or stay on an order. We have less experience, work in Bedford, that's too far. Go in Waltham, so I stay in this building. More experience. So when I come to N-2 up on different kind of job. When I come to N-2, I help on the same team. There's just a few different teams, so I say, okay, going to have a lot of chance, because a lot of temporaries work in this building. So we're supposed to replace the temps. Because the camera is supposed to go make on overseas.

Paulo was the first person consulted for camera repair (this suggests evidence of his competence in this job). He was highly motivated to achieve his work and life goals. He wanted "hard" jobs. This was how he got the "dome lamination" job.

> So when I come to the N-2, so I say, "I'm going to see the hardest job to do." The hard one. The hard one . . . I'm going to see the hard one because I don't like to do easy things. When I found out [about the job opening], I say to my supervisor, I say, "I'd like to learn to do dome lamination, or OEMs," . . . put the parts together, this is make sunglasses, make glass indoors for the planes. (PI #1, p. 15)

Paulo told us that two months later, he "bid for another job." He won this bid and succeeded in getting another job working with chemicals. Like other learners making meaning in this way, Paulo took initiative to learn on the job (e.g., learning to repair cameras during his "breaks" from work).

Paulo talked about how he needed to show his results to his supervisor and how this changed for him; he attributed this change to learning in the program. We think "results" in this context meant his grades, though he also used the term "results" when referring to more technical aspects of his work on machines. When the interviewer asked him in the second interview how he knows he has learned what he wanted to learn, Paulo replied,

> Oh, sure. Because every time I have results from my teachers, I show my supervise, she see, I'm going to school, I learn. I don't go to school just to take time and [inaudible] about the things I'm supposed to learn. So, I think my supervise feel happy to support me to come to the class because she is going to say, "Oh, you take advantage with the school." And it's helpful to me, I think, to

my supervise too because before I know I have experience for the job, but I don't
have experience to explain exactly the things I do. Sometime you must provide
[inaudible] on a meeting. So I have to tell my supervisor everything, how the
things going**. So now I don't have problem. If I don't see she before the
meeting, she don't mind because she know what I going to say exactly the
things going on.** So that's why it's very helpful. (PI #2, p. 15-16)

Paulo pointed to the ways in which learning in the program classes was helping him *and his supervisor*
at work. In his view, his improved communication skills enabled him to work more independently; he
reported being able to effectively communicate his ideas without assistance from others. It was
important to him to demonstrate to his supervisor that he was not "wasting time" while he was away
from work (i.e., he *was learning*). Also, it seemed he had an internally generated value for using his
class time—time away from work—productively. Paulo now had a larger perspective on his
supervisor's perspective (though it was unclear how much the supervisor's perspective influenced his
thinking); he shared, "I think my supervisor feels happy to support me."

Like other learners with this way of knowing, Paulo had an understanding of what was
happening at work and in meetings, and he had self-determined solutions that were initially hard for
him to offer because of his expressive English skills. In the beginning of the program, Paulo talked
about wanting to share his knowledge and ideas with fellow workers. However, he reported he did not
always have the language skills necessary to communicate his ideas (as though they were trapped
inside of him). In the second interview, Paulo noticed an important change in himself. He
distinguished between two kinds of experience: the experience of doing a job and the experience of
explaining (in English) things as part of his job. In the third interview, Paulo elaborated on how he
understood this distinction and how things had changed for him at work because of his improved
communication skills. "Before I know everything about the job I do, but I don't know say nothing
because I don't know how I say it, the words." With his improved ability to express himself in
English, he was able to "say everything I want to say" (he saw himself as having an internal source of
knowledge).

But before I know everything about the job I do, but I don't say nothing because I
don't know how I say it, the words. [I] feel a little shy I don't say things. Maybe I
don't want to say that because maybe I say it wrong. **But now I don't feel like
that. So, I go to the meeting. I say everything I want to say. And since the
programs, I have two promotion**. I wait for another one maybe for the end of this
month or the beginning (March). Because I do different kind of job, so I do [three
different kinds of] jobs now. I work on a machine. I do very specifically inspection
on materials. I work on elimination machine. Elimination machine. Make
windows for [plane]. (PI #3, p. 2)

Similarly, Paulo felt his writing skills had improved, and he discussed how this was helpful at
work. Before the program, he could see defects in products but was not always able to write what he
saw, and he did not know whether what he wrote accurately conveyed what he wanted to say. In the
third interview, Paulo reflected on the change he noticed in himself and his ability to do his work.

Before I work on a very interesting machine to inspect some sheet for some glass.
. . . But I don't know how I write my paperwork when I find a defect in a material,
or I don't know how I, that good I explained on a paper. **So now, I can explain**

> **anything on a paper, write myself.** . . . **Before, I have a lot of things to say on a meeting, but I can't say nothing because I feel shy to say something if I say it wrong**. (PI #3, p. 1)

The distinction between what Paulo knew and saw and what he was able to explain in English is implicit. We see that Paulo reflected on his job qualifications, demonstrated and actual abilities, and the changes he noticed in his work.

But in the last interview, Paulo talked about a change: he was now able to contribute his ideas in work meetings. At this time, we noted an important change in Paulo's way of knowing—he now demonstrated both a full Self-Authoring and a Socializing way of knowing operating alongside each other. Paulo spoke about his new way of contributing at work:

> Exactly the same thing happened to me. So one day I'll have a meeting with my supervisor to plan, to manage. So it was before, when I go to that meeting, I have lot to say, but I can't say nothing, I say just one thing, so I be quiet until finish. But now, I have good ideas, **I try to change a lot of things, like to change the, how we do the work, so, in my area,** I have a lot of other people, so I'm better at meeting. That's very important.

Paulo's improved communication skills changed the way he was able to express his thinking in meetings at work. He also noted how this helped him take greater initiative in making improvements at work—and this was satisfying to him. Not only did Paulo feel a greater sense of confidence and competence in his work at Polaroid, he also reported that the way he felt about himself positively influenced other areas of his life. Greater reading and English communication proficiencies gave him access to information and knowledge about many things (e.g., colleges, home buying, mortgages, community involvement). He felt he needed to understand various sources of information to weigh them and make his own decisions. During the last interview, he recalled what it was like before the program, when his English language and communication skills were not well developed.

> When you have to go someplace, you look all day for somebody go with you. So nobody can have a chance to go with you because work. So you feel . . . kind mad, "Why I don't understand for myself." Say when go to the meeting on the school, they say something's maybe good for your children, but you don't know if it's good or not.

Paulo also spoke about how his improved communication skills changed the way he was able to support his family. He was now better able to understand and communicate with others (e.g., parents and school officials) when he attended meetings at his daughters' schools—thereby highlighting how learning in the program not only helped him in his role as a worker, but also in his role as parent.

> This is very, very proud. . . . I go some kind meeting at school for my kids. . . . [Before I] go because I have to do, but I don't understand nothing, you know, I feel like I have a lot to say but I don't, I don't say nothing because, I don't, I'd be afraid to say something if I said it wrong. **But now,** I go to the meeting, and I understand the meeting. . . . This why I think this is very important. Learn.

Education, in Paulo's view, made it possible for him to make more informed decisions for himself and for his family. Paulo's experience points to the ways in which knowledge and education were empowering—they enabled him to make better decisions and gave him more control over his life. He spoke specifically about how his knowledge helped in his role as a parent.

> To help my kids, because I have daughter who is [in her early 20s] years old, she's gone to college for two years. And I have another one is [a late teen], she's on college for one years. . . . So, since I started this program I change . . . both their college, for the better one. . . . Because one is supposed to pay $15,000, and I see one is better, better, better**. And just for $3,000 more, I say the $3,000 more, so I had this promotion is another $2,000, so I can pay for my daughter for better college.** . . . All the time, I have good conversation with my daughters. So, they good girls. So, at least to me [inaudible] the cost is [inaudible] good, so that's the things that make me feel stronger, and buy my house, also. Because if you have your house, your kids will be free.

Paulo was able to decide to change the colleges that his daughters were attending because he had greater access to important information and a deeper understanding of that information, which then enabled him to weigh the information when making a decision. Additionally, his recent promotions at work, he said, provided him with greater financial resources to support his choices.

At the end of the program, Paulo reflected on the *process* of learning. It was important to him that he made his own decisions (he also said that he did not automatically trust someone else's decision-making). Paulo reflected on how he understood the value of education, and how it helped him with his decision-making.

> Just those kinds of **decisions I make**. But, whatever, if I work two jobs, I'd have money in the bank, but I don't know how I'd spend my money. **But when you have education, you start understand, so you can decide what you're supposed to do.** [*And you can have the information so you can make the decisions.*] Sure, if I have the information to make the decisions.

Access to information gave him what he felt he needed to make more informed decisions (demonstrating a Self-Authoring way of knowing). Education also helped him understand how to use money more thoughtfully and better support his family. Paulo appreciated the larger context of using money in an informed way. It was important to him to have knowledge and information to make *his own decisions* about how to manage his money and life. Being better able to understand different sources of information and use them to inform his decision-making changed the way he enacted his roles as worker and parent. This, in Paulo's view, helped him "feel strong" and also helped him work toward his larger, more abstract goal of helping his children "be free" by supporting their educational journeys.

In this section, we have illuminated how learning in the CEI program helped these learners develop greater skills and enhanced competencies at work and, in some cases, as parents. We showed how learners made sense of these changes through the lens of their individual meaning systems. Learning in this program *changed* the way they were able to enact their roles as workers. All learners reported greater self-confidence, improved efficiency in their work, and better communication skills. We have illustrated how learners across ways of knowing made sense of these changes and how, in many cases, learners changed the way they understood their roles as workers.

Learners in this sample who were Instrumental knowers focused on how developing new skills or improving their skills helped them demonstrate new behaviors at work. Learning in the program and earning a diploma would make them more eligible for better jobs or promotions (i.e., there was a cause and effect relationship). Socializing knowers, in particular, oriented to the ways in which their enhanced skills and competencies helped them to work more effectively and also focused on how their improved communication skills helped them understand other people (e.g., supervisors and coworkers) and express themselves better. As Socializing knowers are identified with other people's perceptions of them, being better able to express themselves was critical to them in their workplace and their lives. While Self-Authoring knowers valued their improved skills and competencies, they appreciated these as aiding their larger learning purposes. Program learning helped them have greater access to information needed to make their own decisions, which, in turn, helped them achieve larger, self-determined goals. Learning in the program made them "feel strong."

The CEI program design and curriculum explicitly and deliberately connected program learning and workplace needs (see Chapter Six for a description of the CEI program design and curriculum). The curriculum itself—and its emphasis on what CEI refers to as "pervasive standards" (i.e., communication, critical thinking, problem-solving, presentation skills, and computer competencies)—the design of the program (e.g., the cohort model and program classes taking place during work days), and teacher practices (e.g., employing collaborative learning) helped learners develop skills and competencies needed in the workplace.

Earlier in this chapter, we presented Polaroid's competency development "Star Model," which consists of five components and core skill sets (see Table 1). One component of this model is "Team Participation;" another is "High Performance Workstyle." Many CEI program features seemed to support development of these workplace competencies. For example, in all program classes, learners worked in collaborative groups—comparable to working in teams on the shop floor—in which group members taught one another while developing problem solving-skills and providing feedback on their work. These skills and competencies correspond with skill sets articulated by the Polaroid competency model (under "Team Participation"). As we have shown, many learners reported being better able to actively engage with their teams, a competency they attributed to learning in the program. All learners reported feeling greater confidence in their ability to do their jobs. And learners across ways of knowing reported program learning helped them do their work "more efficiently" and "faster." These are skills listed under "High Performance Workstyle" in Polaroid's competency model. Bridging ABE program curriculum with the curriculum of the 21st century workplace, we suggest, will help workers develop the skills and competencies they need to manage the multiple demands of modern-day work. We will explore this in detail in the next section.

SECTION V: SUMMARY AND IMPLICATIONS

Although most education is not consciously and explicitly directed toward psychological development, the process of education itself implies growth and development. Also, there is a considerable investment of the self in education. Even in highly technical or skills-based courses, the learner is concerned with questions that impact the self. (Tennant & Pogson, 1995, p. 191)

In this chapter, we presented some of the ways in which learners in this program experienced the process of education as affecting their selves. We focused on changes in: skills, knowledge, self-confidence, relationships, and ways of knowing. We did this by examining the powerful ways that

learning in this program helped these learners generate new goals; new skills and competencies; and, in some cases, new understandings of themselves and their work. Our hope was to illuminate how a developmental perspective can be a tool for better understanding how adult learners make sense of important aspects of their program experiences and how their learning influenced them as learners, workers, and in some cases, as parents. In so doing, we illustrate the *motion of change* in these adults' lives and broaden conceptions about supporting their educational processes.

Kegan (1982) explains the inherent value of employing a developmental framework in this way:

> The heart of a constructive-developmental framework—and the source of its potential for growth—does not lie so much in its account of the stages or sequences of meaning organizations, but in its capacity to illuminate a universal ongoing process (call it "meaning-making," "adaptation," "equilibration," or "evolution") which may very well be the fundamental context of personality development. (p. 264)

Kegan helps us understand the universal and ongoing process in which we all engage—meaning making, "a kind of species sympathy which we do not share as much as it shares us" (1982, p. 19). Understanding how a person is making sense of her world creates an opportunity to join her and offer support *in a way* that she will experience as supportive. We showed how these learners made sense of their improved skills and competencies—and often their new sense of personal and professional empowerment—through their individual meaning systems. We also illustrated how learners' conceptions of their goals, relationships with their teachers, and relationship to work changed during the 14-month period of this CEI Adult Diploma Program. Put simply, we have shown how learning in this program made a difference in learners' lives.

Our findings teach us that the cohort and this program—its teachers, tutors, curricula, and programmatic structures—served as consistent and enduring sources of support and challenge as these adults made their learning journey while balancing the demands of their roles as learners, workers, and parents. This dynamic, transitional holding environment was robust and spacious enough to support and challenge adults with qualitatively different ways of knowing as they grew and changed. Constructive-developmental theory sheds light on the importance of providing developmentally appropriate supports and challenges to learners' with a diversity of ways of knowing, and it helps us consider how to enhance classroom conditions to better facilitate adult learning. In this section, we will suggest some general and specific implications of our work for teacher practice, curriculum development, and program design that hold the potential to better support a wide range of learners in ABE/ESOL settings.

First, we examined learners' motives, goals, and future aspirations for learning while pointing to the different ways that learners across ways of knowing made sense of these purposes. Much like Valentine (1990), we discovered that learners articulated a range of motives for enrolling in this program, as well as a variety of goals for their learning; however, they made sense of these in *developmentally different ways*. Our work also explored how learners' goals and aspirations changed during the program—moving toward bigger goals and visions for their futures—and we highlighted how learners' ways of knowing, in many cases, changed. At the end this program, all learners voiced a desire to continue learning—though the contexts in which they talked about pursuing this goal varied. Given that learners can and often do expand their goals and aspirations while participating in ABE programs, how can we better support adults as they reach for new goals and expand their own sense of possibility?

We suggest employing a *plurality of approaches* in supporting learners as they work to achieve goals and encouraging them to contemplate alternative and perhaps more challenging goals. Realizing that learners' goals change over time—and the way in which learners understand their goals may change over time—has implications for curriculum development and teacher practice. As teachers, we can create classroom structures that will support learners as they develop the skills needed to create, articulate, and reflect on their own goals. As we have illuminated, it is also critical to understand that learners with different ways of knowing need developmentally appropriate forms of support and challenge as they engage in this process. We must meet learners *where they are* and provide appropriate scaffolding as they engage in goal-setting. This, in our view, constitutes a new kind of *learner-centeredness*—one that calls for attention to how learners with different ways of knowing experience and need different forms of support and challenge.

For example, developing curricula and creating classroom conditions in which adults are periodically invited to reflect on their learning, personal, and role specific goals (e.g., work goals and parenting goals) could support learners with different needs. This practice would create opportunities for adults to envision and reflect on concrete steps needed to achieve their goals. Learners might also be encouraged to formulate new (more abstract) goals after participating in this process. Teachers could also create forums in which learners could work (both independently and in groups) with teacher and peer support to outline steps for achieving goals.

This kind of curriculum for goal exploration, like the Life Stories exercise discussed in Chapter Six, would support and challenge learners with a wide range of needs. It would include both oral and written exercises (e.g., structured with guiding questions related to goals) that could be integrated into existing program classes. As discussed, learners with different ways of knowing need appropriate forms of support and challenge from both teachers and peers to benefit fully from this process. For example, while Instrumental knowers could benefit from supportive challenges that encourage consideration of more abstract goals, Socializing knowers, who look to their teachers for validation when setting goals, would benefit from encouragement to view themselves as able to author their own learning and life goals. Learning how to access the information they need in order to pursue self-generated goals might best support Self-Authoring knowers. We will share one possibility for how this curriculum for goal exploration could be woven into the fabric of ABE classrooms.

At the start of such a program, teachers invite learners to work independently by writing about goals in response to structured questions. Next, learners have an opportunity to share whatever goals they felt comfortable sharing with teachers and members of their group. As discussed in Chapter Six, collaborative group work offers both support and challenge to learners who make sense of their experience across a variety of ways of knowing. In this case, collaborative group work creates a context within which learners share goals, reflect on fellow group members' goals and questions (i.e., an opportunity for clarification of goals and possibly to broaden perspectives), and help each other develop concrete steps to be taken toward accomplishing goals. Teachers could also create forums (toward the end of the semesters) where learners are invited not only to revisit and assess their goals, but also to check in with teachers and peers, and also reflect independently by writing about their goals. Building curricula like this into program design and classroom practice holds the potential to better support and challenge the range of learners likely to populate ABE classrooms and to meet learners—wherever they are—as they strive to meet their goals. Such practices also hold the potential to enhance classroom community, which might help learners persist.

How might developing a better understanding of learners' expectations of their teacher—and the criteria they use to assess good teachers—inform teacher practice? In this chapter, we explored how learners with different ways of knowing understood the teacher–learner relationship and what it

means to be a good teacher. We highlighted how learners' conceptions were not fixed but changed during the program. The CEI program teachers seemed to enact their role in a way that provided multiple forms of support to learners, so the challenges of being "an adult" in school and managing the demands of this role in addition to others were not overwhelming. Not only were CEI teachers able to do this effectively, but learners appreciated their teachers who *understood* they were "adults going back to school." Some learners said they valued how their teachers made learning fun or interesting. Most talked about the importance of having teachers who cared about them as people or who were "there for" them.

One of our initial questions concerned how a learner's native culture, especially with respect to how teachers may be regarded, might influence what a learner was willing and able to share. In that section, we presented examples of how learners from the same home country and with similar educational experiences made sense of their relationships with teachers and understood what it means to be a good teacher. We have shown that a person's home country culture is a powerful influence in shaping expectations. And we presented cases that illustrated how two people can come from the *same* home country, live with similar expectations, and have similar prior educational background, yet demonstrate different ways of knowing. These examples illustrate that while culture strongly influences experience, *it is not the single "ruling" variable* shaping how a person understands an experience. We have also highlighted how it is *through the lens of a person's underlying meaning system* that he understands experiences of his teachers.

Bill and Jeff, for instance, were born and raised in the U.S. and dropped out before completing high school. Neither had histories of positive learning experiences. In fact, both had trouble recalling any positive experiences in past formal learning. However, despite sharing the same home country culture and similar prior educational experiences, each held different expectations for their program teachers and experienced the teacher–learner relationship *differently* in this program. Culture and personal educational histories are not the only variables that shaped their understanding of what makes for a good teacher. Their conceptions are significantly shaped by their ways of knowing, as we have demonstrated. Because of this, each needs different forms of supports and challenges from classroom teachers.

Recall that, as an Instrumental knower, Bill thought good teachers were those who told him *"exactly"* what he needed to do to get the right answer. To learn Bill felt that he needed to follow the teachers' rules to get a good grade (i.e., a cause and effect relationship). Jeff, a Self-Authoring knower, viewed good teachers as those helping him access information needed to make his own good decisions and achieve his self-determined goals. While Jeff saw the teacher as *one* source of knowledge, he viewed himself and his classmates as other sources.

Similarly, Christopher and Pierre share the same home country in the Caribbean and have lived in the U.S. for close to the same amount of time. Yet, as we have shown, they have different ideas about what it takes to be a good teacher, and they think about the responsibilities of the teacher and learner in qualitatively different ways. As a Socializing knower, Pierre looked to his teacher for validation and acceptance. While he could *feel* (internally) when he had learned something, he needed his teacher to acknowledge his learning. Pierre oriented to the relational qualities of the teacher–learner relationship (e.g., good teachers "show they care"). Christopher, a Socializing/Self-Authoring knower, respected and appreciated teachers who supported his learning. However, unlike Pierre, Christopher had internally generated criteria for assessing his teachers' instructional practice and for deciding whether his own questions were "good." Christopher felt best supported in learning when teachers helped him meet his own learning goals. As we have shown, learners' ways of knowing importantly shape their understanding of the teacher-learner relationship.

Finally, all of the other learners who completed this program, except Tough (who is from an Asian country) and Hope (who was from a different home country in the Caribbean than Pierre and Christopher) share the same home country in West Africa. Our exploration has shown that while learners shared some common cultural ideas about their own home country and its educational system, they discussed subtle differences in how they experienced these. By carefully examining both the *content* and the *shape* of learners' thinking about their relationships with their teachers and the expectations they held of teachers, we not only illuminated commonalities and differences in how learners who shared a particular way of knowing experienced their relationships with teachers, but we also illustrated how their conceptions changed over time. Realizing that learners have a range of expectations for how teachers can support their learning—and that learners make sense of these in different ways—can inform teaching practice and classroom design. To create optimal holding environments for learning, different types of support and challenges are needed—within any *one* classroom. Listening closely to learners' expectations for their teachers can help us understand their experience and better support them in what Kegan refers to as "the universal process" of making meaning (p. 264).

As we have illustrated, Instrumental knowers construct knowledge as an accumulation of facts. These knowers "get" knowledge from their teachers, which helps them to get right answers. Concrete supports and rewards support these knowers in their learning. Socializing knowers expect their teachers to *know* what is good to know. They feel best supported when their teachers care about them. Challenging or criticizing a teacher is experienced as a threat to the self for learners with this way of knowing, so challenge would take the form of encouraging them to voice their thinking in the classroom. By supportively challenging Socializing knowers in this way, they may grow over time to have greater self-authorship in presenting their own ideas and opinions.

Self-Authoring knowers value teachers who can help them to meet their own internally generated goals. These knowers evaluate teachers' suggestions for improvement and will offer their own feedback and suggestions, so teachers can improve pedagogical practices. Self-Authoring knowers understand the educational process as providing greater access to different sources of information so that they, in turn, can achieve their goals. Rather than looking to an external authority for approval or agreement in deciding what to do, these learners made their own decisions. Providing opportunities for self-guided learning and decision-making while connecting classroom learning with self-identified goals would support and challenge Self-Authoring learners.

Lastly, we explored how these participants experienced program learning as making a difference in their ability to perform their work and enact their role as workers. We examined how learners understood the skills and competencies they developed in this program as helping them better meet and manage the complex demands of 21st century work life, which calls for new skill sets (Comings et al., 2000; Murnane & Levy, 1996; Stein, 2000). Not only did program learning support the development of learners' skills and competencies, but also in many cases, learners grew to have a new relationship to their work.

Learners across ways of knowing reported feeling better able to manage the complexities of their work. The skills and competencies they named as improved align with the demands of 21st century workplaces (see e.g., Comings et al., 2000; Murnane & Levy, 1996; Purcell-Gates, 1995). Specifically, learners said they had

- Improved communication skills
- Improved writing skills
- Greater productivity
- Increased self-confidence (generally, and in delivering oral presentations)
- Greater appreciation for and ability to work with people from diverse backgrounds
- Enhanced ability to use personal computers and the Internet
- Greater reading comprehension
- Sharpened/expanded mathematical skills

Learners reported these skills and competencies helped them become better team members, more effective communicators, and more efficient at work. Significantly, all learners expressed a desire to continue learning after program completion. It appears that learning in this program not only supported learners as they developed and enhanced skills and competencies needed for work, but also stimulated an appetite—a craving—to continue learning within structured programs. Curricula that focus on personal and professional development as well as skill development create important and meaningful desires for more learning.

Because adult learners understand skill and competency development in developmentally different ways, it is critical that we shape ABE curricula in ways that recognize this developmental diversity and so link them to learners' lives as workers. Realizing that learners construct their roles as workers, relationships with supervisors and coworkers, and skill development in qualitatively different ways has important implications for program curricula and how we understand competency and skill mastery in the workplace.

Like our colleagues at EFF, we think about competency development as a developmental continuum. We hope our work sheds light on how a developmental perspective helps broaden understanding of competency and competency development (we present our developmental conception of competency in the next chapter). Infusing ABE curricula with linkages to learners' workplaces and real-life experience (personal and professional) can support and challenge a range of learners with different ways of knowing and help them transfer learning.

Rossiter (1999) recommends that instructors invite learners to write their autobiographies as a way to support and promote development.

> The idea is that the process of telling one's story externalizes it so that one can reflect on it, become aware of its trajectory and the themes within it, and make choices about how one wishes to continue. Thus, learning activities in which learners are encouraged to draw autobiographical connections, to work with their own stories, and to reflect on alternative plots for their lives are key to education that is responsive to individual developmental trajectories. (pp. 68-69)

To support development, Rossiter (1999) maintains that an instructor must be "intrusive" (p. 58) in learners' lives. Rather than framing this type of interaction as intruding on learners and their lives, however, we see it as helpful to better understanding how to support *and* challenge learners in ways that will feel supportive to their development. CEI program teachers did not appear "intrusive," nor did they "dislodge" learners in ways that Rossiter seems to recommend (p. 58), yet these teachers were able to effectively support learners who had qualitatively different underlying meaning systems.

        While educators may not assign autobiographies to students, it is developmentally helpful when instructors can relate assignments to learners' life experiences. For example, in addition to building curricula that helps learners develop skills, we previously suggested the importance of creating curricula aimed at supporting learners as they develop goal-setting skills and begin to reflect on their goals. Additionally, linking ABE curricula to learners' work and personal lives can support learners. These curricula need to be accompanied by appropriate scaffolding and support to meet a range of learners' needs. Instrumental knowers, for example, would likely find a skill-oriented curriculum better suited to their needs and would require different forms of support to engage with this process. Socializing and Self-Authoring knowers, who think abstractly about their experiences, would need other forms of support and challenge that we mentioned earlier, when given opportunities to reflect on the relationship between program learning and work lives.

        Reflective exercises similar in nature to the exercises CEI teachers assigned, would help scaffold and support learners in their thinking (e.g., the Life Stories exercise, and conducting research independently and in collaborative groups with support from the teachers—as was discussed in the Chapter Six). Other exercises (written and oral) that encourage learners to reflect on applying skills learned in class to real-life situations can also support learners' development (e.g., creating opportunities to apply math principles to help learners figure out financing for home buying, mortgages, etc.). These exercises would support and challenge learners as they unearth their assumptions, achieve a new relationship to their thinking, see new possibilities, and develop new aspirations. Creating opportunities in which learners are invited to share these exercises with teachers and classmates can not only support development of classroom community, but also help learners consider alternative ways of thinking.

        We suggest that educators need multiple ways to attend to learners' needs and a variety of curricula that help learners reflect on their learning by connecting it with their work and lives outside the workplace. Employing practices that support this kind of self-reflection can be developmentally helpful in two ways. First, a space is made for learners to reflect on their lives and develop a new relationship to their own thinking and assumptions. Second, educators learn how to better support and challenge learners in becoming more empowered workers who can meet the demands of the 21st century workplace. Creating these opportunities could enhance possibilities for them as learners and workers and for us as educators.

        In concluding this chapter, we revisit one notable finding. In addition to important and life-enhancing skill changes reported by learners, we find it remarkable, given the relatively short duration of this program, that fully one half of these cohort learners demonstrated a qualitative change in their underlying meaning system from program start to finish. Table 6 summarizes the changes we observed in learners' ways of knowing and the number of participants who demonstrated each type of structural change.

Table 6: Changes in Learners' Underlying Meaning System from Program Start to Finish

Way of Knowing	Number of Learners With This Way of Knowing at Program Start	Type of Change in Way of Knowing From Program Start to End	Number of Learners Who Demonstrated This Type of Change at Program's End
Instrumental Knowers (i.e., 2)	2	2→2(3)	2

Instrumental/Socializing Knowers (i.e., 2/3 or 3/2)	7	2/3→3/2 or 3/2→3	3
Socializing Knowers (i.e., 3)	2	3→3(4)	0
Socializing/Self-Authoring Knowers (i.e., 3/4 or 4/3)	4	3/4→4/3	3
Self-Authoring Knowers (i.e., 4)	1	4→4(5)	0

In Chapter Six, we illuminated some of the ways in which this program—and its features and conditions—created a dynamic and robust holding environment that was roomy enough to support and challenge learners with different ways of knowing.

We agree with Rossiter (1999) about the importance of balancing challenges with enough support to keep learners from dropping out of these programs; however, we suggest that the *forms* of support and challenge that facilitate learning need to be developmentally appropriate for learners. This does not mean, as Tinberg and Weisberger (1997) seem to contend, that it is necessary to create multiple lesson plans to attend to learners' needs. Instead, we recommend incorporating multiple and developmentally appropriate forms of support and challenge in teacher practice, curricular design, and ABE classrooms. Development and change, as demonstrated in this group of learners, occurred by meeting learners where they were and by carefully scaffolding them with a variety of forms of support and challenge (e.g., concrete and relational supports as well as access to information and opportunities for self-reflection). Cohort relationships, collaborative learning, teacher–learner relationships, curricula, pedagogical practices, and program structure seemed to work synergistically to support and challenge these adult learners across a wide range of ways of knowing. This dynamic and multifaceted holding environment held learners as they developed greater capacities to manage the challenges and complexities of their lives.

We hope this detailed exploration helps us *listen differently* to learners' voices. We also hope this work enables us to better understand learners' experience in ABE/ESOL programs and move closer to creating optimal learning environments in which adult learners with a range of needs and ways of knowing can grow to experience greater personal empowerment and job enhancement. For it is within these holding environments that we accompany adult learners by offering forms of support *and* challenge that ease and enrich their journeys for growth.

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