CHAPTER SIX

"Not I Alone": The Power of Adult Learning in the Polaroid Cohort

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Well, ... [in] math, like when they were talking about "x" equal that, [it was hard] because I didn't know what "x" and [what] all those things were. Not just me, alone, it was everybody else in the class—because it took us a long time ... to get it.... Because all that was, is new to me, so it took us a long time to—**not I alone**,¹ the other peoples [too] ... what's "x" and, but, we got it together.... I had never heard about "x" and all those things before—it's not just I alone. (Hope, September 1998)

SECTION I: INTRODUCTION

In 1997, our research team identified three Adult Basic Education (ABE/ESOL) programs that we assessed to be best practice programs that would enable us to examine the developmental dimensions of transformational learning. Best practice programs are commonly celebrated because they use effective methods for achieving excellent and targeted results, and because such model programs often set benchmarks or standards for other programs to emulate (Hammer & Champy, 1993). In our case, we selected the three programs because each had an established history of practices focused on learner-centered curriculum and pedagogical approaches that appeared to be developmental in nature (see e.g., Harbison & Kegan, 1999). Our aim was to explore, from the learners' perspectives and through our own developmental framework (Kegan, 1982, 1994), how adults experienced learning in these programs that intentionally built in a variety of supports and challenges to facilitate development in one of three social roles: learner, parent, or worker.

In Chapters Four and Five we illustrated how participants at the community college and family literacy sites differently experienced the supports and challenges their respective programs provided, and how the programs themselves served as holding environments for growth. In this chapter, we turn to learners at the Polaroid Corporation site who participated in an adult diploma program created and delivered by the Continuing Education Institute (hereafter, CEI) of Watertown, Massachusetts. Polaroid Corporation contracted with CEI for delivery of adult diploma program classes at Polaroid's Norwood, Massachusetts, plant. Sixteen of the 19 learners who began the CEI program were employees of the Polaroid Corporation, and three were employees of a nearby company who paid for them to attend. Two key research questions guiding our exploration were:

¹ We acknowledge Hope for this phrase which we use in this chapter's title. Hope repeatedly used this phrase when referring to her experience in the cohort.

- 1) What educational practices and processes contribute to changes in learners' relationship to learning and understanding about their roles and responsibilities as learners, parents, and workers?
- 2) How do learners' ways of understanding shape their experiences of and responses to an educational program dedicated to increasing their role competence?

We explore the first question in this chapter and the second in Chapter Seven.

All learners in this ABE program were working to earn their high school diploma. Importantly, and unlike the other sites discussed in this monograph, CEI's program design calls for the same group of learners to work together over time and within a set timeframe to meet all program requirements for earning a high school diploma. Toward this end, a group of learners attends the same classes together with the same teachers for two hours, two days a week, over a 14-month period. Also, and unlike other ABE programs, learners in the CEI program did not have an open-entry/open-exit option available to them. Instead, these learners were part of a stable group, which engaged in a shared learning experience directed toward accomplishing a common goal. We refer to this group as a cohort.² The *Merriam-Webster Dictionary* (1974) defines a cohort, a term with roots in the ancient Roman military, as: "n 1: a group of warriors or followers; 2: COMPANION, ACCOMPLICE" (p. 148).

As we see it, learners in this program were a cohort not simply because they were taking the same classes at the same time with the same teachers. Learners in this group *became—transformed themselves into*—a cohort. The experience of being a member of this cohort made an important difference of support to these adults' learning. They were indeed partners or warriors engaged in a common learning endeavor, which contributed to their forming a caring learning community, one in which learners supported each other as they participated in this program—*together*. Learners expressed a sense of belonging and a feeling that their fellow cohort members and teachers cared about them and their success. This group of adult workers evolved into a cohort and was, as many of the learners told us, "like a family."

We did not initially set out to examine the influence the cohort might have on participants' program experience, but we came to understand that being part of a cohort mattered importantly, and in *different* ways, to participants at all three sites, and especially to learners in the Polaroid-CEI program. We discovered that for Polaroid learners, membership in this cohort was one of the most critical supports to their learning. Our data show that sustained connection to fellow cohort members made a difference to individual learning in at least three very important ways. The interpersonal relationships that peers developed in the cohort made a critical difference to their *academic learning*, *emotional and psychological well-being*, and ability to *broaden their perspectives*.

This finding highlights implications for both program design and teacher practice. It suggests how ABE teachers might structure classroom environments to better support learners who make sense of their experience in qualitatively different ways. Some ABE teachers occasionally use group learning as a pedagogical approach to building classroom cohesion and/or facilitating learning (Garner, personal communication, January 2001). We also know that some program designers refrain from using the cohorts because of funding requirements (Beder & Medina, 2001), or because of the

² CEI refers to these groups of learners as a "class."

need for an open-entry/open-exit policy in their particular context, given their participants' needs and life situations (Beth Bingman, November 2000, personal communication). Nevertheless, we suggest that the benefits of building cohorts, or variations of them, into ABE program design have not been fully explored. Thus, this case study provides a compelling example of the academic and nonacademic benefits of cohorts in ABE settings.

In Polaroid's CEI adult diploma program, cohort members worked in collaborative learning groups in all five of their classes; we will show how this type of group learning among cohort members facilitated academic development and provided psychological support through social interaction. In so doing, we will demonstrate how the adult learners, who were making sense of their experiences through different underlying meaning systems, differently understood their work with cohort members both generally and in collaborative learning groups. We will suggest how the Polaroid cohort—a consistent and enduring community of learners engaged in a shared learning experience over an extended period of time—provided a holding environment that supported the academic development, emotional well-being, and cognitive development³ of the learners who participated in this 14-month program. The CEI program design features that kept all Polaroid learners studying the same subjects together in the same sequence and at the same times from program start to finish as well as the collaborative learning that infused all classes and the variety of forms of support and challenge offered to and given by these learners worked synergistically to transform this group of individuals into a *cohort of learners* who shared experiences, formed interpersonal relationships, and supported one another's learning.

Many who write about K–12 and university education stress the importance of cooperative and collaborative learning groups to enhance adults' learning experiences and to facilitate the development of critical thinking skills (Bosworth & Hamilton, 1994; Eble & Noonan, 1983; Pedersen & Digby, 1995). Researchers in the field of adult basic education have recently called for direct examination of classroom experiences through the eyes of the adult learners to explore what their experiences mean to them (Comings, Sum, & Uvin, 2000; Gowen, 1992; Quigley, 1993, 1997). Our discussion of the developmentally related effect of the cohort allows us to join and contribute to current conversations in three significant ways, among others that have been highlighted here and in this monograph.

First, Quigley (1997) and Gowen (1992) underscore the need to examine learners' experiences in ABE classrooms and to present learners' voices, which has previously been missing from the literature. Our study offers this "fresh perspective" by focusing on how learners' make sense of their program learning experiences (Quigley, 1997, p. 192). We will later point to important implications of our work for program design and teacher practice. Second, in March 1999, the Task Force on Adult Education developed program standards aimed at creating more effective ABE programs. They recommend instructional activities directed toward "engag[ing] learners in taking an active role in the learning process" and "incorporat[ing] grouping strategies and investigative tasks that facilitate the development of authentic communication skills. Techniques include cooperative learning, information gap, role-play, simulations, problem solving, problem posing" (p. 2). Our study documents the experience of adult learners who participated in a program that included these components. Third, Taylor (1996) highlights the value of using principles of developmental theory to

³ By academic development we mean theoretical and/or organized, systematic study within the context of the academy. By cognitive development, we are referring to development of the mind—the process of knowing.

inform and broaden our understanding of adult learners' experiences. She maintains that understanding the qualitatively different ways in which learners make sense of their ABE classroom experiences will strengthen classroom practice and program design. In this chapter, we bring these calls together to illustrate not only that cohorts are important educational and emotional supports for adult learners (i.e., holding environments for growth), but also that those supports are experienced *differently* by learners across a wide range of ways of knowing.

Drawing on Robert Kegan's constructive developmental theory (1982, 1994), we will elaborate on previous research and suggest *why* and *how* the use of cohorts in ABE settings and other learning contexts is differentially important to a variety of learners with different ways of knowing and learning. By considering the structure and process of a person's meaning system, Kegan's theory informs our understanding of how adults experience the cohort as a support to their learning. We argue that it is through the lens of their individual meaning-making systems that learners understand their experience in their cohort and their work in collaborative groups. Because each ABE class will likely be populated by adults who make meaning at different developmental positions, ABE programs that recognize learners' developmental diversity—and support these different students' growth accordingly—will be especially effective. The CEI Adult Diploma Program provides an excellent example of this.

The teachers in CEI's program creatively structured their classes so that interaction among adult learners in the cohort helped learners achieve their educational goals. By helping learners make good use of each other, this program was able to provide both the *challenge* that encouraged learners to grow and the *support* they needed to meet those challenges. Such combinations of challenge and support bring into being what Kegan (1982) calls the "holding environment." D. W. Winnicott (1965) originally used this term to talk about the special relationships created to support infancy. Kegan extended this concept throughout the lifespan. He writes:

This psychosocial environment, or "holding environment," in Winnicott's terms, is the particular form of the world in which a person is, at this moment in his or her evolution, embedded. Since this is the very context in which, and out of which, the person grows, I have come to think of it as a culture of embeddedness. "Culture" here is meant to evoke both an accumulating history and mythology and something grown in a medium in a Petri dish. (1982, p. 116)

Our research highlights that the developmental concept of a holding environment—in Kegan's terms, "the context in which, and out of which, the person grows"—has important implications for ABE teaching and learning practices, as well as for program design. And we assert that the cohort is a dynamic transitional space for growth.

These dynamic holding environments, which attend to *how* learners make sense of their experiences, serve to support and gently challenge learners' development as they grow better able to manage the complexities of their work as learners and in their daily lives. To grow, learners with different ways of knowing will need different forms of support and challenge from their surrounding contexts. Holding environments do not simply provide one form of support and/or challenge; rather, they must be shaped to meet learners *where they are*—in a developmental sense—and to provide appropriate supports and challenges to accommodate the range of ways in which learners are making sense of their experiences.

A good holding environment serves three functions (Kegan 1982, 1994). First, it must "hold well"—meaning that it recognizes and confirms who the person *is* and *how* the person is currently making meaning, without frustration or urgent anticipation of change. Kegan (1982) explains:

A holding environment must hold-where holding refers not to keeping or confining, but to supporting (even "floating," as in an amniotic environment) the exercises of who the person is. To hold without constraining may be the first requirement of care. (p. 162)

Second, and when a person is ready, a good holding environment needs to "let go," permitting and stimulating a person to move beyond his or her existing understandings to more complex ways of knowing—so that growth is promoted. Third, a good holding environment "sticks around," providing continuity, stability, and availability to the person in the process of growth. This means that whenever possible, the holding environment stays, or remains in place, so relationships can be re-known and reconstructed in a new way—a way that supports who the person has grown to become. While this third feature of a good holding environment may be challenging to provide in shorter-term programs, we believe that any classroom or program can include the other two features, namely high support *and* challenge. Both are essential for good holding. In our view, this learner cohort served as a context for growth that held these adults, each of whom were making sense of their learning experiences in developmentally different ways, by providing them psychological and emotional supports.

This chapter is organized to illustrate three main ways in which the Polaroid cohort served as a holding environment for supporting and challenging learners who made sense of their experience with different ways of knowing (i.e., different underlying meaning systems). We will demonstrate this in three distinct ways with case examples that highlight how adults differentially made sense of the cohort experiences and how, in some cases, adult learners' conceptions of the cohort changed during the 14 months of the program.

First, we will show how the cohort served as a holding environment for growth that was spacious enough to support and challenge adult learners with different ways of knowing in their *academic learning* (i.e., Kegan's 1994 concept of "psychological spaciousness"). We call this the *Learning and Teaching* function of the cohort. Next, we will illuminate the *Encouraging* function of the cohort, explaining how the cohort served as a holding environment for learners by providing a variety of forms of *emotional and psychological support and challenge* to one another. Finally, we will demonstrate that the cohort served as a holding environment for learners by challenging and supporting them as they *broadened their perspectives*; we call this the *Perspective Broadening* function of the cohort changed over time. Additionally, we will point to some possible reasons why two of the adult learners did not make full use of collaborative learning groups initially and how this changed over time. We close this chapter by highlighting implications for building cohorts into ABE programs for teachers, learners, and policymakers.

The following quotations from Polaroid learners⁴ illustrate a contrasting set of developmentally different responses that illuminate how learners with different ways of knowing

⁴ Bold font is used in learner quotations to highlight the structure of a learner's meaning-making. Also, in accordance with our confidentiality agreements, we have changed all adult learners' and teachers' names to aliases.

experienced the cohort and group learning. Listen to their voices.

Just hearing somebody talk [in front of the room] me, personally, I start to daydream, you know, and I drift away. But if you're in a group, you can't. You got to listen to everybody. You got to listen, you can't, you got no choice. (*Bill*, Instrumental knower)

So, sometime I get frustrated, especially when I was doing math and sometime I'll be tired. But [the teacher] say, "You say you don't understand, but you can't explain it, but you're getting it right." I said, "Okay, then, since it's **right, I'm not worried**." **But** [a classmate] **was a good encouragement.** She always said, "Hope, don't get so mad with yourself." (*Hope*, Instrumental/Socializing transitional knower)

We share a lot of ideas, especially when we have to work by group. You know, when we work by group of five, all of us learn from each other. And I think that was wonderful, to share, you know, with each other some ideas—different ideas. (*Rita*, Socializing knower)

One teacher and then one student can't do the job. You have to be diverse, a different group, a bunch of people. We learn from each other. We appreciate our work we done, so we appreciate our friendship. You know we've been very respectful too. So we learn to do that, because we're not kids. We are adults, so, we not make fun of people by saying stuff like if they don't know what to say, we polite. So we do appreciate each other. I will miss everybody after the class. (*Christopher*, Socializing/Self-Authoring transitional knower)

[In groups,] it was like, okay, you might get stuck here, on say four and five. [I'd say] "Well, okay, I did. I sit here and look at my paper, well, you did this, how about trying this?" and kindda explain. And then once they [people in his group] finished, we took our papers, and showed it to them, which they came up with the same answers we did. I think it was just the process of helping them, or her, get over that, and made it easier . . . I guess for them and me. . . . Well, like I said, we all have the same problem to work with. And why can I understand it, and you can't understand it. (*Jeff*, Self-Authoring knower)

This chapter explores how the cohort and collaborative learning are experienced differently by learners with different underlying meaning systems and places emphasis on the richness of the cohort as a holding environment that supports and challenges adult learners.

Context: The Literature Relating to Cohorts and Collaborative Learning

The Practice of Using Cohorts: An Historical Review

Although the practice of building educational cohorts in reform programs dates back to the 1940s,

their use was restricted, and eventually the approach faded from "mainstream preparation programs by the 1980s" (Basom, Yerkes, Norris, & Barnett, 1996, p. 100). During the period between 1940 and 1980, cohorts had varying degrees of success. Margaret Basom, Diane Yerkes, Cynthia Norris, and Bruce Barnett (1996) report that during this time, "the use of cohorts was positioned within a broader societal context characterized by reactive, authoritarian views of management in which school administrators were the autocratic leaders of schools and school districts" (p. 100). Many educational administration programs included the cohort model in their design as a way to strengthen collegiality among class members and as a tool to help with selecting students into a class. Basom et al., (1996) argue that programs designed with the cohort model were in sharp contrast to the social surroundings of that time and thus declined in number.

However, with societal shifts and changes in the nature of the 21st century educational systems, the practice of using cohorts is re-emerging in university graduate programs (Barnett & Muse, 1993; Basom et al., 1996; Hill, 1995; Teitel, 1997). For example, Basom et al., (1996) found that colleges and universities are adopting the practice of using cohorts as a "fashionable delivery structure for preparation programs" (p. 99). In considering educational administration graduate programs, many students choose programs that offer the support of membership in a cohort because they prefer to work collaboratively (Basom et al., 1996; Hill, 1995). In this context, groups set common goals, determine criteria for the activities they will engage in to achieve their goals, and establish their own criteria for assessing their success (Barnett & Muse, 1993; Basom et al., 1996; Hill, 1995).

In discussing reasons why educational leadership programs across the country are resurrecting the use of cohorts, Marie Somers Hill (1995) argues that the practice of cohorts helps educational leaders develop the skills they will need to work successfully in our changing and complex society. Hill (1995) writes,

To facilitate collaboration and networking, educational leadership graduate programs in many settings are deliberately organizing students into teams or cohorts that remain together through most or all of their program of study. (p. 179)

Like the cohorts that are re-emerging in colleges and universities, the members of the Polaroid cohort worked together over an extended period of time, shared a common goal, and engaged in collaborative learning groups. Although the Polaroid cohort shares many features of the current design of university cohorts, there are important differences.

Learners in the Polaroid cohort were not preparing to be educational leaders, nor were they required to create their own criteria for assessing their success in the program. Also, Polaroid learners were assessed by program teachers as individuals, rather than as a group. Despite these differences, there are important similarities between the practice of using cohorts in universities and the model used with the Polaroid CEI cohort. For example, researchers have found that university students who have membership in cohorts named the greatest benefit to be "increased feelings of support and belonging gathered from close ties with other students" (Hill, 1995, p. 181). This was also a benefit members of the Polaroid cohort named. In this chapter we will illuminate how these learners *made sense of* the variety of forms of emotional and psychological support and challenge—as well as the academic forms of support and challenge—the cohort provided. In so doing, we illustrate how the cohort served as a holding environment for growth.

Collaborative Learning: A Review of the Literature

Over the past three decades, researchers have explored the increasing role and benefits of collaborative learning in higher education and K–12 contexts (Bosworth & Hamilton, 1994; Eble & Noonan, 1983; Pedersen & Digby, 1995). We have recognized that learning is a constructive process and that students need opportunities "to formulate questions and insights as they occur and to test them in conversation with others" (Elbe & Noonan, 1983, p. 73). Bosworth and Hamilton (1994), in *Collaborative Learning: Underlying Processes and Effective Techniques*, maintain that, "In its self-authorized forms, social interaction has long been a part of traditional college education, particularly in medicine and the lab sciences" (p. 1). The interaction among colleagues who work together in learning groups not only serves a social function, but the process of conversation and activity among group members promotes active learning (Elbe & Noonan, 1983). While some teachers rely on the information-transmitting lecture form of educating learners of all ages, many are incorporating collaborative learning experiences into their everyday pedagogical practices with greater frequency. Educational researchers suggest,

Changing demographics, the information explosion, and increasingly wellarticulated theories of optimal learning conditions are transforming how we look at teaching in our colleges and universities. Collaborative learning is increasingly acknowledged as an effective way of engaging students with discipline-specific language and concepts, acquainting them with the social responsibilities of learning and the intellectual benefits of shared explorations for meaning, and retaining them by improving their performance and enjoyment of learning. (Bosworth & Hamilton, 1994, p. 1)

Jeanne Gerlach (1994) defines collaborative learning as "an umbrella term that encompasses multiple educational strategies and approaches involving both the teacher and the students in a joint intellectual effort.... They all center on the students' processes of investigation, discovery, and application, not on the teacher's presentation of the material" (p. 10, from Smith & MacGregor, 1992). Gerlach's definition of collaborative learning marks an important shift from Elbe and Noonan's 1983 conception of cooperative group learning, which was defined by two central characteristics: 1) "a process of group conversation and activity that promotes active learning," and 2) " a way for faculty to guide this learning process and to offer their expertise by structuring tasks or activities" (p. 2). In a lecture-transmission instructional paradigm, the instructor is clearly "the locus of knowledge and authority" (Flannery, 1994, p. 16). Similarly, Flannery (1994) maintains that cooperative learning is merely "the use of student learning groups to support an instructional system that maintains the traditional lines of classroom knowledge and authority..." (pp. 17-18). Flannery argues that a collaborative learning context, by contrast, is one in which "at least some aspects of classroom knowledge and authority can be developed or created by both students and teacher" (p. 18). A social component and an orientation to generating-not just absorbing-knowledge distinguish collaborative learning.

Sharon Hamilton (1994) presents a model for developing proficiency with collaborative learning methods. Her approach, which she offers as a developmental model, is based on her research in university settings with college-age students. According to Hamilton's model, the five stages of developing proficiency with collaborative learning are: 1) "learning rules, techniques and strategies, 2) applying what you have learned, 3) developing competence, 4) becoming proficient, and 5) becoming an expert" (p. 97). This general model of developing proficiency suggests that these are stages that all

learners move through as they become skilled at using collaborative learning strategies. Although Hamilton's model is helpful in the sense that it illuminates key processes that may be inherent in collaborative learning, we wonder about the kinds of developmental demands such processes might place upon learners who make sense of their experiences with different underlying meaning systems.

Furthermore, Hamilton (1994) provides helpful suggestions to teachers who wish to construct collaborative learning environments to enhance academic learning. To frame her inquiry, she describes three distinct models identified by John Trimbur (1993) and relates them to the characteristics, practices, and beliefs about collaborative learning she has observed within the field of higher education over the past decade. In so doing, she discusses how these three models can be applied to classrooms and recommends that teachers adopt one particular model that aligns with their teaching philosophy or personal style.

Each model has its own goals and suggested processes. The first, the "postindustrialist model" (Trimbur, 1993) of collaborative learning, "appears in classrooms in the form of group efforts to solve common problems formulated by an instructor whose curricular agenda determines group structure, time on task, goals, and anticipated answers" (Hamilton, 1994, p. 94). The second, the "social constructionist model," consists of "engaging students more actively in their learning while concurrently developing social skills of negotiation and consensus building" (p. 95). Finally, the third is the "popular democratic model" of collaborative development, in which the challenge for learners is "not to obliterate essential differences in the search for commonalties but rather to envision these essential differences . . . as catalysts for the making of meaning within specific concepts of the particular course" (pp. 95–96). Not only do these models have different goals, but each assigns different types and levels of responsibility to teachers and learners. Each model also recommends different principles for designing classroom environments and offers alternative ways to structure authority.

How might learners who make sense of their experience with different underlying meaning systems experience each of these models? What types of developmental supports and challenges might be necessary for learners to engage in any one of these models? How might learners benefit if teachers were to incorporate aspects of all three of these different models into their classrooms? How might ABE teachers who include collaborative learning in their classroom practices benefit from understanding the different developmental places adults in these groups are coming from?

In the CEI Adult Diploma Program, we observed how cohort members engaged in collaborative learning groups in all five of their academic classes in which classroom knowledge and authority were developed and shared by both the adult learners and the teachers. In this chapter, we will show how adult learners with different ways of knowing experienced the cohort and collaborative group learning. To set a context for this exploration, we will first present a brief discussion of how workers applied to this CEI Adult Diploma Program and some of the features of the CEI program design and its curriculum. The implications of our work for ABE program design and teaching practices will be examined in the final section.

The Process of Making an Application to the CEI Adult Diploma Program

Shop floor workers who had lower-level literacy skills or who lacked "core skills," we were told, were two groups of learners who could apply for admission into the CEI Adult Diploma Program. Another (smaller) group of workers who for various reasons did not complete or start their high school

education could also apply. Some learners told us they approached their supervisors and requested support for their applications to the program, while others were encouraged to apply by their supervisors. Regardless of whether a worker was approached by a supervisor or initiated the process, the supervisor's recommendation, stating that a worker was a good candidate for the program, was required. All interested workers were then invited to attend one of two "open houses," hosted jointly by CEI and Polaroid, to become familiar with program requirements. In October 1997, members of our research team attended one of these mid-afternoon open houses at Polaroid's Waltham, Massachusetts, plant and learned about the program, its classes, and its philosophy. The second open house was held at Polaroid's Norwood, Massachusetts plant. Workers from both of these plants eventually enrolled in the 1998–1999 diploma program.

If, after attending an open house, a worker was interested in enrolling in the program and received a supervisor's (and, therefore, Polaroid's) endorsement, the worker then took certain assessment tests administered by CEI. This assessment included testing for reading, writing, and math skill levels. All workers needed "at least a sixth-grade reading level" to be considered for the diploma program, Dr. Lloyd David, the executive director and founder of CEI, told us. If a worker does not have the appropriate level of literacy skills for entry, the person is offered support to enhance skills before being invited to reapply for participation in the program at another time. Polaroid offers an array of courses in writing, study skills, and mathematics to help workers develop skills. For example, Polaroid has an introductory math course, "Math Readiness," designed to build basic math skills and lay a foundation for future math courses.

The Continuing Education Institute's Adult Diploma Program

In January 1999, CEI's program was recognized in Vice President Al Gore's summit on "21st Century Skills for 21st Century Jobs." This summit focused on the importance of "upgrading knowledge and skills in the workplace." Dr. David told us that CEI's program was recognized as having "one of 20 model programs throughout the country selected as an exemplar of 'best practices' in workplace training and education." Specifically, CEI's model for "educating workers in 10 manufacturing companies in Massachusetts" was acknowledged and celebrated as a model for other states at this summit.

We selected the Polaroid Corporation as our site and believed that CEI's adult diploma program was a best practice program (see e.g., Harbison & Kegan, 1999, for a developmental assessment of best practice programs). After meeting with CEI professionals and reviewing CEI's program design and curriculum, we decided that this program met our selection criteria. In other words, it was a longer-term program (14 months), its approach to educating adult learners and curricula appeared to be developmental in orientation, and it provided multiple forms of support and challenge to adult learners (e.g., teachers, tutors, program staff, curricula design, and program structure). Also, the program's structure and curricula appeared to create a powerful learning environment for learners.

Michael Hammer and James Champy (1993) discuss how modern-day organizations that have best practices use "benchmarking" as a tool. They write:

Essentially, benchmarking means looking for the companies that are doing something best and learning how they do it in order to emulate them. (p. 132)

In their extensive review and analysis of best practice approaches in professional organizations, Anne Harbison and Robert Kegan (1999) discuss the process of benchmarking within the context of transformational learning. They explain,

Benchmarking within the context of transformational learning denotes an *outward focus of attention and curiosity*, rather than a competitive, zero-sum accounting of narrowly defined "wins" and "losses" or "market advantage." For program planners and administrators, there is much to be gained through generous collaboration regarding program innovation, successes, and new insights (Cranton, 1996; Brody & Wallace, 1994; Vella, 1995, 1998). (p. 26)

Not only did we believe this site would be one at which we could deeply examine adults' learning experience in an ABE program, we also believed it was one from which other program designers and practitioners could learn and gain new insights.

One of our research purposes was to understand how educational practices and processes might support changes in learners' relationship to their learning—and way of knowing. Specifically, we sought to examine how adult learners in the selected program research sites might undergo transformational learning while participating in these programs. We adhere to Kegan's (1994) definition of transformational learning:

An *in*formational stance leaves the form [of a person's way of knowing] as it is and focuses on changing what people know; it is essentially a *training* model for personal change. I would contrast this with a *tran*sformational stance, which places the form itself at risk for change and focuses on changes in how people know; it is essentially an *educational* model for personal change. The word education is built out of the Latin prefix *ex* plus the verb *ducere* ("to lead") and suggests a "leading out from." While *training* increases the fund of knowledge, *education*, leads us out of or liberates us from one construction or organization of mind [i.e., a way of knowing] in favor of a larger one. (p. 163–164)

In this chapter, we will explore how learners experienced both informational and transformational learning in the context of the cohort and collaborative learning groups in this program.

CEI's Adult Diploma Program Design

Since 1982, CEI has been offering its adult diploma program to adults who are at least 20 years old and who have not graduated from high school. Adult learners earn their diplomas from Cathedral High School, an accredited private high school in Boston. Classes meet two or three afternoons each week in a convenient location for a period of 10 to 15 months. Most of CEI's teachers have been or continue to be

K–12 educators. The Polaroid adult diploma program classes were held at the Norwood plant for two hours each of the two weekdays (Tuesday and Thursday) from March 1998 through June 1999. CEI envisions both immediate and personal/long-range benefits of this program (see Table 1).

Table 1: CEI's Adult Diploma Program's Immediate and Long-range Benefits

IMMEDIATE BENEFITS	PERSONAL & LONG-RANGE BENEFITS
Improve reading, writing, and math skills	Increase confidence
Open doors for higher education/college	Enhance productivity on the job
Improve communication skills	Expand opportunities for promotion
Improve study and organizational skills	Improve leadership abilities

In addition to providing classes, the CEI program offers learners tutorial and counseling services. Tutors are available to students after and sometimes before classes to provide additional assistance in learning. In a 1992 survey of 212 CEI program graduates, "32 percent had continued with their education, 49 percent had changed jobs, and 60 percent had increased responsibility at work" (CEI Program materials, 1997, p. 1). This survey also indicated positive changes in participants' skills and career opportunities six months after of completing the program.

CEI's Adult Diploma Program Curriculum

All adults enrolled in CEI's Adult Diploma program take five classes: Mathematics, Writing/English, U.S. History, Science, and Life Employment Workshop. The Life Employment Workshop is a course that focuses on career exploration. In the

1998–99 diploma program, John taught math and Margaret taught Writing/English during the first trimester. John taught Science and Kirk taught U.S. History in the second trimester. Judith taught the Life Employment Workshop in the final trimester. Many program classes focus on writing and development of research skills, and the writing classes have a specific focus on work-related issues.

CEI curricula—and every course in the program—emphasize what CEI refers to as their "pervasive standards" (Lloyd David, December 2000, personal communication), which are closely aligned with what our colleagues at Equipped for the Future refer to as "EFF Standards" (Stein, 2000). Sondra Stein (2000) discusses EFF's standards in this way:

The 16 Equipped for the Future Standards define the core knowledge and skills adults need to effectively carry out their roles as parents, citizens, and workers. The Standards have been identified through research on what adults need to do to meet broad areas of responsibility that define these roles as adults. (p. 17)

Dr. David acknowledges the critical influence of EFF's research on his own thinking about how the CEI program can better support the acquisition and development of skills that adults need to meet their responsibilities as workers and learners. Communication, problem solving, presentation, and computer skills are a few of the pervasive standards that infuse the CEI curriculum and program design. Each course emphasizes these standards as well as reading, writing, and critical thinking skills (CEI program materials, 1997, p.1). For example, in the Writing/ English course, students develop writing skills by engaging in various individual and group exercises in which they have opportunities that help them learn and practice: brainstorming, creating cluster diagrams, and developing a point of view. Students learn to improve their reading strategies by developing skills in generating questions, distinguishing between fact and opinion, making a storyline, and summarizing. In this course, students also enhance their critical thinking strategies by improving their skills in analyzing, classifying, evaluating texts, interpreting, and synthesizing.

CEI customizes the curriculum in accordance with participants' needs at their individual workplace (CEI Program materials, 1992, 1997). In the Life Employment Workshop class, in addition to engaging in the Life Stories exercise (to be discussed later in this chapter), students investigate such questions as "Who am I? Where am I? and Where am I going?" (CEI program materials, 1997, p. 2). Learners are also scaffolded through the processes of learning how to make job applications, construct resumes, and write a college entrance essay. This workshop aims to give learners an opportunity to learn new skills and to use and develop their skills.

Significantly, CEI classes and the program curricula are oriented toward reinforcing "teamwork concepts" (CEI Program materials, 1992, p. 4). All classes use collaborative group learning structures to facilitate and enhance adult learning. These structures, as well as other aspects of the CEI program design discussed previously, seem to reinforce teamwork and various forms of adult collaboration. In math classes, for example, we observed that adult learners often worked in groups of four or five to collaboratively solve mathematical problems. In Writing/English class, learners regularly worked in small groups to draft essays and then shared these with the entire class, which provided an opportunity to receive constructive feedback from teachers and colleagues. At other times—when working on their science reports, for example—learners worked in pairs to develop ideas, search the Internet for information, or critique each other's work. The CEI program and its inherent structure seem to reinforce the importance of the skills put forth and celebrated in Polaroid's Competency Development "Star Model" (to be discussed in the Chapter Seven). In our view, this program offers supports and challenges to learners as they work to develop these skills.

The 1998–99 Adult Diploma Program Cohort

In February 1998, before the CEI Program officially started, we met the courageous, motivated, and somewhat apprehensive adult learners who would eventually form a cohesive and closely bonded cohort, or as many of the adults came to refer to it, a "family." When we began our study, 19 adults had passed the CEI entry assessments in math, writing, and reading and been accepted into the diploma program. Sixteen of these learners, for a variety of reasons, had not attended high school in their native countries, one had earned a college degree in his home country, and two had dropped out of high school in the United States. Several learners had gained experience as adults in skill-oriented workshops or trimester-long classes (e.g., learning English as a Second Language or in multi-day workplace training programs). However, for many of the learners, this was their first experience in a formal classroom setting since elementary school.

Sixteen of these adults were employees of the Polaroid Corporation, and three worked at another nearby manufacturing company. However, before the second trimester began (September 1998) one Polaroid employee and two employees from the other company had dropped out of the program.⁵ Sixteen adults (eight women and eight men) completed the 14-month program and received their high school diplomas. We introduce the learners who completed the program in Table 2. We use the symbol, " Δ " to signify a change in a participant's underlying meaning system from program start to finish; where no " Δ " symbol appears, our assessments did not indicate this kind of change.

⁵ We were only able to interview one of the three adults who did not complete the program. This employee, from the nearby company from which three adults initially enrolled, told us he needed to leave the program because he no longer had transportation from his workplace to the Polaroid site where the classes took place.

Name	Gender/Age at Start of Program	Region of Origin ⁶	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learner
Bill	Male Late 40s	United States	Instrumental 2 to $2(3) \Delta$	Bill, born in the U.S., dropped out of school after the eighth grade. He later joined the military, where he felt he learned a lot about life. Bill was married and the father of four children ranging from preteen to teenagers. He and his wife both worked and shared childcare responsibilities. Bill enjoyed talking with other learners and felt that talking helped him learn. He struggled to find the time to do his homework while balancing his other responsibilities as worker, parent, and spouse.
Renada	Female N/A	West Africa	Instrumental 2 to $2(3) \Delta$	Renada had lived in the U.S. for more than 30 years. She and several members of her family of origin lived in the MA area. At home with her family, Renada spoke Creole/Portuguese. Renada was finalizing her divorce. She was the mother of two children in their mid-20s and one teenager. Renada wanted to earn an American high school diploma and improve her English.
Sal	Male Early 30s	West Africa	Instrumental/ Socializing Transition 2/3 to 3/2 Δ	Sal was married, and he and his wife worked. He was the father of an elementary school-age child. He, his many siblings, and parents lived in the same town. His first language was Portuguese. Sal wanted to earn his high school diploma and increase his chances for promotions.
Норе	Female Late 50s	Caribbean	Instrumental/ Socializing Transition 2/3 to 3/2 Δ	Hope was the oldest learner in our sample. She had lived in the U.S. for more than 30 years, was married, and had two adult children. When she first arrived from the Caribbean, she took the GED exam but did not pass all of the sections. She was eager to earn her high school diploma. Hope was the class speaker at graduation.

Table 2: Polaroid Learners' Descriptive Characteristics and Developmental Assessments

⁶ All of the learners who are from West Africa are from the same home country. Pierre and Christopher, who are from the Caribbean, are also from the same country. Hope is from another Caribbean country.

(Table 2 Continued)

Name	Gender/Age at Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learner
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 and had a high school diploma from her home country. Before this program, she attended high school in MA for two years but needed to stop because she and her husband shared childcare responsibilities. Her first language was Creole. She had two toddlers. A coworker encouraged her to apply to this program, and she was eager to earn her American diploma and improve her English.
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 and was married (her husband also worked). She was the mother of two elementary school-age children and one teenager. Angelina wanted to earn her American high school diploma and was also eager to improve her expressive English so she could be a better team member at Polaroid and could help her children with their homework.
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 completed the eighth grade in her home country and regretted that she was not able to continue her schooling there. She had a high value for education and encouraged her children to attend college. Helena was recently divorced. She had family in the Boston area who were sources of encouragement. Helena spoke Portuguese and Creole at home. Helena wanted to earn her high school diploma and improve her English.
Veronica	Female Early 30s	West Africa	Instrumental/ Socializing Transition 3/2 – 3/2	Veronica had lived in the U.S. for more than 15 years. When she first arrived, she began working and going to school; however, she stopped going to school when she married her husband. She was the mother of a preteen and teenager. Veronica enrolled in this program so she could help her children with their homework, develop better skills for work, and improve her English. She lived very close to several members of her family of origin.

(Table 2 Continued)

Name	Gender/Age at Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learner
Rita	Female Early 40s	West Africa	Instrumental/ Socializing Transition to Socializing 3/2 to 3 Δ	Rita had lived in the U.S. for more than 20 years. At home, she spoke Portuguese/Creole with her husband and two children (one preteen and one teenager). In her home country, she was not able to go to school after elementary school because she needed to work to support her family. Rita was eager to earn her American high school diploma and believed it would help her learn skills needed for work and improve her English. During the program's second trimester, Rita was laid off, but she was able to complete the program.
Pierre	Male Late 40s	Caribbean	Socializing 3 – 3	Pierre had lived in the U.S. for more than 15 years. He was divorced and had five children. Pierre's long-term hopes included helping children in this country learn French and Creole (the languages he spoke at home in addition to English) and returning to his home country to teach children. In addition to wanting to earn an American high school diploma, Pierre wanted to improve his English.
Toungh	Male Late 20s	Asia	Socializing 3 – 3	Toungh had lived in the U.S. for two years and had a degree in architecture from his home country. He worked a nearby company and was not married. Toungh's parents lived in his home country in Asia. He had one sister who also lived in MA. Toungh was mainly interested in improving his English and felt the math and science courses in the program were easy.
Christopher	Male Late 30s	Caribbean	Socializing/ Self-Authoring Transition [3/4 – 3/4]	Christopher had been living in the U.S. for 10 years. He lived with a family member whom he cared for after work. Earning an American high school diploma was, for him, a key to survival and to moving ahead in life. He enjoyed learning with cohort members because they were polite and respectful of each other. Christopher had never been married and was the father of a teenager and an infant.

(Table 2 Continued)

Name	Gender/Age at Start of Program	Region of Origin	Way of Knowing at Program Start & Finish	Descriptive Characteristics of Learner
Paulo	Male Early 40s	West Africa	Socializing/ Self-Authoring Transition $3(4)$ to $3/4 \Delta$	Paulo had lived in the U.S. for more than 10 years and had worked for all of those years at Polaroid. He enrolled in the program "to have a better future," to have more knowledge, to be a better worker, and to help his family. He wanted to earn an American high school diploma and improve his English. Paulo spoke three other languages in addition to English: Portuguese, Creole, and Spanish. 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 thought that this program would help him improve his skills at work and his English. He was married and the father of two adult children (in their early 20s) and foster father to two preschool children. Daniel spoke Creole, Portuguese, and Spanish in addition to English.
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. She was married and had four children ranging in age from late teens to mid-20s. She made the decision to wait to earn her high school diploma until after her children completed elementary school. Magda thought that earning a diploma would help her to develop skills needed for work and also help improve her English. It was also a step toward her own goals for lifelong learning.
Jeff	Male Late 40s	United States	Self-Authoring 4 – 4	Jeff was originally from the South and moved to the north when he was a teenager. He dropped out of high school in the 11th grade, and his previous learning experiences in high school were not positive. He was very happy to be in the CEI program. For a long time, he had a goal to earn his high school diploma. Jeff spoke English at home. He was divorced and had two adult children.

In 1998–1999 the Polaroid Corporation contracted with CEI to deliver the CEI Adult Diploma Program classes for a third year. The program was set to begin in January 1998, but layoffs at Polaroid and their unsettling effects on employee morale and the company in general led Polaroid to postpone the program's start until late March 1998. Polaroid's workplace education manager, Steve Williams, told us that Polaroid's executives and managers believed workers were now in need of a high school education to be better prepared to manage the demands of the modern workplace (we discuss the demands of the 21st century workplace in Chapter Seven). The majority of the Polaroid adult learners enrolled in the program were hired in the 1970s without high school diplomas. The Polaroid Corporation invested \$5,000 for each worker to enroll in the diploma program, even for the two adults who were eventually laid off during the program.

The adult learners in the 1998–99 cohort held a variety of positions at Polaroid, ranging from working in the mailroom to designing filters for car and airplane windows to making film and checking it for defects (this is discussed in Chapter Seven). The average age of these learners was 42 years, and the range in age was from 27 to 58 years old. The great majority of these learners had children and most were married. Participants in this cohort were, for the most part, older than participants at our other two sites and had lived in the United States for a longer period than participants at our other two research sites. These adults had lived in the United States for an average of 22 years, with the exception of Toungh, an adult learner from the nearby manufacturing company, who had only been here two years when he began the program. Like participants at the other two sites, this cohort had ethnic and racial backgrounds that made them a diverse and multicultural group. Two learners were born in the United States, 10 in the same home country in West Africa, three in the Carribbean, and one in Asia. Only two of the learners (those born in the United States) spoke English as their first language. Although Toungh had earned a college degree in his home country of Vietnam, the other adults in the class had, on average, attended school for only nine and one half years before enrolling in the CEI Adult Diploma Program. More than 80 percent of the adult learners were parents of school-age or college-age children. On average, their mothers had about four years of schooling. and their fathers had about seven and one half years in their home countries.⁷

The majority of these adults had lived in the United States since the mid-1970s. In program classes, we observed that many learners spoke with tremendous pride as they shared heart-warming stories of their arrival to the United States. Their eyes filled with tears as they talked about the courage it took for them to leave their home countries and families of origin to begin a "new life" here, in what they referred to as "the land of opportunity." Though their reasons for coming to the United States varied and their experiences since arriving were quite diverse, their shared goal of earning a high school diploma brought them together to form this learning cohort and "family." We will now explore the three main ways the Polaroid cohort served as a holding environment for learners with different underlying meaning systems.

SECTION II: "EVERYBODY THINKS DIFFERENTLY": THE COHORT AS A HOLDING ENVIRONMENT FOR LEARNING AND TEACHING

⁷ Please see Appendix A for a full description of this sample's demographics.

Yeah, sometimes when we worked in a group, that helps, because you may find out good idea from another student that you may need to write it down in your piece of a writing, or whatever you're doing. (*Sal*, 1998)

Although the great majority of the Polaroid learners valued the opportunity to work with colleagues in pairs, small groups (four to five people), and/or large groups (the whole class), they made sense of these experiences *differently*. In this section, we will present one case representative of each way of knowing to illustrate the qualitative distinctions in how learners understood the learner cohort and their collaborative work with fellow cohort members (see Table 3). Our intention is to illuminate how these adults experienced the cohort as a safe holding environment that supported their academic learning and efforts in this program. Where appropriate, we will point to how some learners' meaning making of these collaborative experiences changed—grew more complex—during the 14-month program.

Name	Gender/Age at Program's Start	Region of Origin	Way of Knowing at Program Start & Finish
Bill	Male/Late 40s	United States	Instrumental [2 to 2(3)] Δ
Норе	Female/Late 50s	Caribbean	Instrumental/Socializing Transition [2/3 to 3/2] Δ
Pierre	Male/Late 40s	Caribbean	Socializing [3]
Paulo	Male/Early 50s	West Africa	Socializing/Self-Authoring Transition [3(4) to $3/4$] Δ
Jeff	Male/Late 40s	United States	Self-Authoring [4]

Table 3: Selected Learner Cases for Illustrating the Cohort as a Holding Environment for Learning & Teaching

The Instrumental Way of Knowing

In this section, we present excerpts from the interviews we conducted with an adult learner who constructed his experience with an Instrumental way of knowing. Bill was one of two cohort learners who made sense of his experience at the fully Instrumental meaning-making stage (i.e., stage 2)⁸ at program start. At program completion, he grew to demonstrate the emergence of a Socializing way of knowing.

Bill's Case

You know, one-one-one is kind of blah, blah, blah, but when you get in the groups it was a little more helpful, I think. (September, 1998)

Bill was a gregarious, American-born, married man in his late 40s who was the father of four children who were preteens and teenagers. He worked in the film department at Polaroid. One of the two native English speakers in the CEI Adult Diploma Program cohort, Bill dropped out of school after completing eighth grade. After leaving school, Bill told us that he "bumped around between jobs" and was "fired from most of them." Bill then decided to serve in the U.S. Marines, which he felt taught him much about life.

Bill thought of himself as a learner who "learns by talking" and repeatedly told us that although he was able to complete his assignments when he worked at school, he had "a hard time concentrating" on his homework when he was at home. Although Bill's previous experiences in school had not been positive, he was highly motivated to earn his diploma. He spoke softly as he said that his oldest son "dropped out of the 11th grade" and that part of his motivation to complete the program was to be a "good role model" for his children.

⁸ Renada, another learner, demonstrated a fully and solely Instrumental way of knowing at the program's start and grew to demonstrate the emergence of a Socializing way of knowing at the program completion.

In April 1998, before beginning the CEI Adult Diploma Program, Bill stated that the best way for him to learn was "on the job." At this point, he equated learning with doing. Before entering the program, when Bill needed to learn something new at work, he said he would most often remember it after hearing it "once or twice." If that did not work for him, he would write it down so he had a better chance of getting it "locked in." Although he expressed regret about not earning his high school diploma earlier, he expressed confidence about his ability to learn in this program. He felt that "anything I really put my mind to," he eventually would be able to learn; "It ain't nothing I can't accomplish." Before entering the program, Bill recounted stories of learning on his own, "on the job."

At work, Bill learned mainly by himself, in isolation. After gaining experience in collaborative work during his first trimester in the diploma program (September 1998), however, Bill began to discuss a new and powerful way for him to learn. When asked what has been most helpful or satisfying about his classes in the CEI Adult Diploma Program, he happily shared:

I think when we had group sessions, you know? And we could talk about, you know—even in math and writing, you know. **We'd get together, and we'd all talk about [ideas]... It was more thoughtful a process of him** [the math teacher] and everybody else's ideas, then saying what your ideas were. You know, one-one-one is kind of blah, blah, blah, but when you get in the groups it was a little more helpful, I think. As far as writing, even math. Math we had some fun. (PI #2, p. 12–13)

In Bill's view, working with smaller groups (four or five) of his cohort classmates helped him to learn mathematical concepts and improve his writing because he was able to talk and share his ideas. Sharing his thinking and asking questions helped Bill clarify his own ideas, learn about other people's ideas, and get answers.

For Bill, learning independently or solely by listening to the teacher proved challenging. He relayed stories about how he learned better by having concepts "explained" to him, as opposed to merely reading about them "in books." He said it was difficult for him to focus when the teacher presented ideas on the blackboard. In contrast, learning in smaller groups helped the learning to "stick" for Bill. Being in a group allowed him to focus on what others were saying; their ideas helped him reflect on and express his own thinking. Another way of understanding Bill's preference for group work is related to the way he said he learned. For Bill, knowing comes from doing:

I don't like reading in books, but if you get explained to you [it's better]. And then you do a few [math problems] on the paper—you know, scratch it [mistakes] out, you know, without official forms, and then talk about it [in small group with peers]. ... **It's [the learnings] tend to sticks with me more.** And the ideas or thoughts. But staring at the blackboard, your mind tends to wander, you start thinking about, "Geez, four o'clock, another half hour, geez, where I gotta go. I gotta do this. I hope they [the teachers] call a break. I gotta, I want a drink of water." (PI #2, p. 27)

Bill oriented almost exclusively to the concrete outcomes of and hopes for his learning (demonstrating an Instrumental way of knowing).

Working with other classmates in a small group seemed to facilitate Bill's learning in another way—it almost forced him to give attention to the speaker in the group. He had a concrete orientation to working in groups—group work *made* him pay attention. On the other hand, Bill stated that when someone talked in front of the room outside of a group context, he was more inclined to "daydream" and "drift away."

Just hearing somebody talk [in front of the room] me, personally, I start to daydream, you know, and I drift away. But if you're in a group, you can't. You got to listen to everybody. You got to listen, you can't, you got no choice. I don't like reading in books. (PI #2, p. 26–27)

He did not like to do things alone that required him to focus inwardly. He preferred his attention to be outwardly directed, and he liked to be "talking."

While learners making meaning at a variety of ways of knowing might have a preference for group learning instead of individual learning, the *ways* Bill made meaning in group learning was through his Instrumental way of knowing. Adults with this meaning-making system have clear knowledge of their enduring traits—in Bill's case, it was clear to him that book learning was not his preferred way of acquiring information. He described this orientation as *external* to him, and therefore the solutions to this learning problem were also external. When people present information in ways not helpful to him, his "mind tends to wander," or he drifts away. Similarly, working in a group was effective for him for other external

reasons. He felt he had "to listen to everybody" and stated he had "no choice" other than to learn when he was in a group.

By September 1998, Bill realized that being in a group was also an opportunity to get outside validation about his thinking from peers in his cohort. He seemed to rely on this kind of validation to feel more secure about his learning. He enjoyed having the opportunity to talk when working in smaller groups and when working with the full cohort in large-group discussion. In his view, his classmates, "let me do most of the talking." Bill told us he experienced "standing up" and "talking" in small group or in front of the entire cohort as supportive to his learning. It seems that "doing most of the talking" may have been a way for Bill to feel more competent relative to his peers—most of whom speak English as a second language. Bill described himself as more competent at "doing school" when he was in the class doing group work.

Groups is it. I mean you could . . . in a group, most of the people I'm in a group with, you know, they don't speak too good English. So, they let me do most of the talking. (PI #2, p. 20)

Bill appeared to thrive in this environment, where he was invited to share his ideas verbally with group members and with the full class.

Working with cohort members in a small group served another equally important function for Bill: It provided him opportunities to learn how to correct his mistakes.

If you made [a mistake or], you ain't saying the **right thing, or was not telling the right story**, somebody [in the group] will say to you, **"Oh, I don't think that's right.**" And we'll [the group], we'll discuss it. You know, one-on-one-on-one, somebody will just, you know, you get to talking, somebody one-on-one, they might just let you say anything you want, and just let it blow over, you know? But out of four [people in a group], somebody's gonna say, "Well, wait a minute—didn't we mean this?" (PI #2, p. 22)

We see how working with cohort members was generally supportive to Bill. We also see that he constructed knowledge as being right or wrong. Bill was not yet able to see a larger purpose of the group's self-created learning. As an Instrumental knower, he did not yet conceptualize knowledge as having multiple right answers to questions. Instead, knowledge was external to him, something that others have that Bill could acquire from them. He had a desire to improve and wanted to know the right answers and the correct way to get those answers. Bill told us that working in a group was more helpful than working one-on-one because he had a better chance of learning the right answers. Group members also helped him correct his mistakes. Collaborating with fellow cohort members served a practical and functional purpose; he used group learning as an opportunity to get answers, improve his skills, talk about his questions, and encourage others to speak. Bill demonstrates the strength of the Instrumental way of knowing—he talked about the concrete outcomes and tangible benefits he derived from working collaboratively with cohort members.

Immediately before graduation from the diploma program in June 1999, Bill told us the best parts of the program were when he "got to talk" with others for learning purposes and work with peers in small groups. In Bill's view, working in groups generated opportunities for him to voice his ideas,

learn from listening to other people's ideas, gain validation, and work out questions in the company of peers. When we asked Bill in June 1999, "What do you think helps you the most when you're learning?" he responded,

Class participation, talking. I gotta talk. I can sit in a class all day long, and talk, talk, talk about things and change subjects, and go on to the next thing. But to put it down on paper, I get a mental block. Here [in small groups] I can do it, I sat here and wrote 10 pages of my essay. Sitting in class while somebody else talking, I'd be writing. And I wrote 10 pages of my own essay. I go home, I'd have two weeks, like over Christmas vacation, or whatever, I couldn't, I didn't put a word down on paper, I just can't, I say, I did it at the beginning, we went to the library a few times, and I did a little research, I wrote my book reports, at the library, but I couldn't get just nothing on paper, I just get this mental block. As I said, I wrote 10 pages. Here I can't get nothing. (PI #4, p.8)

For Bill, in addition to working with teachers (to be discussed in the next chapter), working with classmates in the cohort was the most helpful feature of the diploma program. This kind of learning seemed to allow Bill to discover, through speaking, what he believed and thought. Having the chance to articulate his thinking in the company of others appeared to help him come to new awareness and discoveries about what he and other people thought. Also, having the opportunity to share his questions and entertain alternative points of view or solutions helped him obtain the answers and solutions he needed to complete his assignments. Working with others enhanced Bill's chances of getting the right answers and learning the correct methods for solving math problems and correcting his grammar when writing assignments for his classes. Bill did not, however, orient to the internal emotional or psychological aspects of his experience. Instead, he understood and articulated his success concretely.

In Bill's meaning-making system, the Instrumental way of knowing, the cohort groups served a functional, utilitarian purpose: They were useful in helping him to meet his own specific concrete needs and behavioral goals. Other adults supported Bill by helping him obtain the needed outcomes for success in the program (i.e., right answers, right skills, and facts). He and other learners with this way of knowing valued the cohort and collaborative learning for instrumental reasons which seem to align with Hamilton's (1994) articulation of the goals for the "postindustrial model" (Trimbur, 1993) of collaborative learning. Not only did group members sometimes help him acquire the required and correct "answers," but they also listened as Bill shared his own thinking. Having the opportunity to speak his thoughts and ideas, to express his thinking in this way, seemed to support Bill's learning to do what he needed to succeed. Group learning experiences created a safe holding environment in which Bill was able to experience himself as a learner. The small cohort groups were places of collaborative learning where Bill could learn new ideas and use them to add to his own learning.

Transitioning from the Instrumental to Socializing Way of Knowing

In this section we present excerpts from the interviews we conducted with an adult learner, Hope, who constructed her experience in the transition between the Instrumental and the Socializing way of knowing (2/3 at the start of the program to 3/2 upon completion).⁹ During this time of transition, both

⁹ This type of evolution in meaning system is discussed in Chapter Three.

ways of knowing are fully operating, and a person has an increasing capacity for internalizing the perspectives of others. Seven of the 16 learners constructed their experience in this way; however, some had an Instrumental way of knowing leading (or primarily organizing) their meaning making while others had a Socializing structure leading.

Hope's Case

We try to help each other, or our classmates, you know, to explain the best way. Suppose you are a bit more far ahead and than other person. You try to help the other one [in the group who is] slow[er]. (September 1998)

Hope was the oldest Polaroid learner (she was in her late 50s when we first met her) in the diploma program cohort and the oldest learner at all of our sites. Born in the Caribbean, Hope made her way to the United States in the early 1970s and began sending money home to subsidize the education of her younger siblings. Although Hope only attended school up to the seventh grade in her home country, she spoke with pride when she told us that she "made a promise" to her mother that she would help finance her younger siblings' education. In her words, "I told my mother that I want them [her siblings] to do more than [me], don't work as hard as I do. They're still working hard." Now, after many years of sacrificing for and supporting her younger siblings, Hope felt it was her time to earn her diploma.

Hope's generosity of heart, spirit, and mind was apparent as we listened to her discuss her relationships with family members, friends outside the program, colleagues at Polaroid, and peers in the diploma program. She was very much oriented to helping others; in fact, she told us it gave her a sense of satisfaction. Like Bill, Hope also valued the smaller cohort groups for the practical purpose of helping her learn the correct answers. However, unlike Bill, she derived tremendous satisfaction from the process of giving help to other cohort members and receiving both emotional and practical help from them. Hope noticed and cared about the connections she had with other members of the cohort, yet the context for the relationship was still fairly concrete. She operated with both an Instrumental and a Socializing way of knowing. A Socializing way of knowing was apparent in that she was able to see the connections between and among her words and feelings when she described her relationships with cohort members. At the same time, she described her feelings in very concrete terms (e.g., about things happening to her, what a diploma means to her in terms of getting a job), with only brief references to emotion that does not really *describe* an internal psychological experience but only *suggests* one.

At work, Hope thought of herself as being a "good team member," a quality she felt only improved over time. In her familial relationships, Hope devoted herself both emotionally and financially to supporting her younger siblings. She also went out of her way to support friends in need. When one of Hope's friends needed dialysis, she collected metal can tops from fellow cohort members to raise money so her friend could "stay a little bit longer on the machine."

In the diploma program, Hope also helped her classmates and received help from them. The cohort members, in large and small groups, were supports to Hope's learning in a variety of ways. For example, not only did Hope look to her small learning group partners for "getting help" to learn the right answers and correct mistakes (e.g., in mathematics, pronunciation, and writing), but she also valued giving and receiving encouragement as enhancing her learning.

When we first spoke with Hope in February 1998, before the program started, she talked about being an adult going back to school. She felt apprehensive about her ability to learn independently (by reading) but confident in her capacity to learn in a "hands on" manner. Hope told us she hoped she would have the confidence to ask questions of the teachers and her classmates when she needed help, and she would not "be afraid" of other people's reactions to her questions and her accent. In her prior work and learning experiences in the United States, Hope admitted that she sometimes withheld questions, fearing that others would either make fun of her accent or not understand her questions.

To me, like, I'm not good at reading things, **but if it's put on the board, I think I absorb it more.** Sometimes I read, and I don't understand it completely. But if you show me, and I get it, it's there [in her head]. So, some people just read and everything is snapping. But for me it doesn't work that way. If it's hands on, I get it more because, I think, if you can have somebody [a teacher or classmate] . . . **and not be afraid to say you don't understand.** You have to be truthful with yourself, and don't say you understand when you don't. That [then] you'll be shown that you can get the understanding of it. **Cause if you're not truthful with the person who's teaching you, you're not going to get anything out of it**.

In Hope's view, she learned best by having another person show her how tasks needed to be done. Hope identified being "truthful" with the person who was teaching as central to her learning, but she sometimes hesitated to speak up because of her own fears. She expressed concern because she did not want other people to make fun of her, though the way she made sense of that experience was within a concrete context.

Hope wanted the classroom to be a place where it was safe for her to say that she did not understand. She spoke about her hope in this way:

But if it's something you don't understand, I think when you come to class, if you say you don't understand that, I hope it will be explained to you, so that you can understand it. And that you won't be scared to ask or look upon funny. Not the other people, maybe, other people plus the teacher.

Hope repeatedly voiced concern about how she was perceived by her classmates and especially by her teachers, whom she called the people "in charge." This orientation reflects a Socializing way of knowing, as she identified with and defined her *own* sense of self-worth from other people's opinions and evaluations of her. At the same time, Hope also demonstrated an Instrumental way of knowing through her focus on the concrete ways (consequences) in which not being able to ask questions would hamper her learning.

Her learning goal in this program was to develop a trusting relationship with the teacher so she could feel safe in asking questions that would help her learn.

And people may look on you like you're stupid, but if you want get something out of it, maybe you got to let they think you're stupid, by asking questions over and over again. And I hope the person who's in charge of the class don't get aggravated because you ask the same question over and over again because you don't understand. There got to be a trust that, you know, you don't understand and you ask the question, that he or she [the teacher] doesn't get upset. You have to have patience, and the teacher has to have patience. And if you earn that trust between the both of you, things will work out.

Hope was very concerned about how other people see her and treat her, which demonstrates a Socializing way of knowing. She worried about classmates making fun of her or seeing her as "stupid" because of her questions. Speaking about the trust that can develop between herself and her teachers and hoping that it is not betrayed requires at least a Socializing way of knowing. Hope focused on the quality of relationship with her teachers and how this could facilitate her learning. At the same time, the way in which she described the value of a trusting relationship between student and teacher was concrete. In describing the relationship, Hope emphasized how a teacher and student should interact: The student has to "have patience" and the teacher "has to have patience" for the student to be able to learn.

Hope was oriented to relationships with other adults in the cohort, and the way in which she understood the value of these relationships shifted subtly but importantly over time. She initially focused on her teachers as the primary support for her learning. However, after one trimester in the program, Hope began to include her cohort colleagues as another key support. In September 1998, Hope spoke about the importance of the cohort in terms of both emotional and practical support.

Especially when we, when we get into a group. Like, sometime[s] we go in [a] group of four, and each person would add a subject to write about to talk and then talk about. Then we'd get up and explain what . . . the topic was, and what is your conclusion. So that was very, a good experience for me, because if I make a mistake, the other person would be a good back—to back me up. (PI #2, p. 7)

The emphasis Hope placed on the value of the cohort remained important throughout the duration of the program. In the third interview, she spoke more about the emotional support she felt from the cohort.

It's like a family. Because like when one doesn't come in, we ask what's, like Veronica isn't here today and I ask, I ask Teresina what Veronica says she wasn't feeling well. And when I don't show up. The hardest part is . . . the math, the history, and the English, that's gone. I told [them] this "We're going to breeze through this and even if it gets harder. We'll make it because we'll stick together and help each other." (PI #3, p. 12)

We are struck by Hope's discussion of how the group became helpful to her. Not only did she discuss how cohort members helped her with learning mathematics and improving her writing skills, she also emphasized her caring interest in supporting fellow cohort members by providing them academic as well as emotional support.

Hope recognized the gift of working with other adult learners as they moved toward a common goal: earning a high school diploma.

I wouldn't like to change my experience, because this [experience of working with others in the class] is something I'll never forget. And although, maybe, after graduation we'll all be gone in different directions, maybe some of the people I'll go to school with—I'll never see them again, but they're going to be memories that we share, that I'll never forget. (PI #2, p. 9).

In Hope's view, the learners supported one another by sharing their own knowledge, expertise, and understanding. If one person needed help applying a formula to get to an answer in math or checking subject–verb agreement to craft an essay in English, someone else who understood was always available to help. In Hope's words,

Well, even not the small group [only], but between us [in pairs] sometimes when we are in there working together. And, see, some of us [are more] advance[d], and can help the other ones [with] general problems.

She elaborated on the value of giving and receiving help:

Well, like, we try to help each other, or our classmates, you know, to explain the best way. Suppose you are a bit more far ahead and than other person. You try to help the other one [in the group who is] slow[er]. (PI #2, p. 3).

Here Hope referred to how cohort members helped each other learn the "best way" or the correct way. She valued being able to depend on her colleagues to help her with concrete outcomes ("right answers"), such as when they helped her to find and correct her mistakes (concrete consequences). At the same time, Hope also had a sincere interest in helping others who were struggling with learning at times. Hope also spoke with pride about learning to express herself and to communicate more effectively with other adults. Significantly, she connected her increased self-confidence to the work she had been doing in groups. She grew confident in voicing her opinions and sharing her questions.

Hope often referred to the cohort as a "family." For example, she invoked this concept in her story about learning about algebraic equations in math class. The mathematical concept of "x" was new for the majority of learners in the cohort. Although Hope said she did not feel comfortable learning this new concept, she seemed comforted by not feeling alone in not understanding. Hope repeated the phrase, "not I alone," over and over while talking about the difficulties she encountered when trying to learn new concepts. She mentioned this mostly in reference to the struggles she and others had while learning math.

Well, ... for the math, like when they were talking about "x" equal that, [it was hard] because I didn't know what "x" and all those things were. Not just me, alone, it was everybody else in the class—because it took us a long time ... to get it.... Because all that was—is new to me, so it took us a long time to—not I alone, the other peoples [too] ... what's "x" and, but we got it together. ... I had never heard about "x" and all those things before—it's not just I alone. ... (PI #2, p. 3)

Although frustrated initially by the experience of learning this new and challenging mathematical concept, she spoke strongly when she said, "But we [the cohort] got it together," which in turn helped

the cohort feel comfortable. In June 1999, she reflected back on her experience of learning "the x" in math. Despite the challenges in math class, given Hope's lack of experience with algebra, she recounted, "But gradually I learned, and I think everybody learned. And we help each other." Not feeling alone and realizing that she and others in the cohort were together in trying to figure out how to work with this concept was a source of comfort and support for Hope.

For example, Hope admitted growing frustrated when learning how to solve equations with a variable in them in math.

So, sometime I get frustrated, especially when I was doing math and sometime I'll be tired. But [her teacher] say, "You say you don't understand, but you can't explain it, but you're getting it right." I said, "Okay, then, since it's right, I'm not worried." But [a classmate] was a good encouragement. She always said, "Hope, don't get so mad with yourself." (PI #2, p. 11)

We see evidence of a Socializing way of knowing operating in that Hope focused on the emotional nature of learning with other cohort members. Although she valued being able to depend on her colleagues to help her with the "right answers," she simultaneously showed loyalty to those in her group as well as an interest in helping them. Hope's words, "not I alone," present an image of her experience in and relationship to the cohort. For Hope, the cohort formed a cohesive group united in their pursuit of a shared goal. Cohort members were both sources of emotional support and colleagues who offered answers or practical assistance that could help them to achieve their short-term goals—getting right answers—and their long-term academic goal of earning a diploma.

After Hope's math teacher informed her she was "getting it right" even if she felt she did not understand, Hope was no longer "worried" about the procedure. For Hope, "getting the right" answer (i.e., the concrete outcome) mattered, as this enabled her to have success on the test. Hope mixed an appreciation for the help other cohort members provided with a more concrete valuing of needing to know the "right way" to get "the answer" to learn in math class. Hope thought it was important to help her classmates when she knew more than they did and to receive help from them when she did not. For Hope, learning in the cohort group served both emotionally supportive and practical functions. Hope's concern for taking care of others in the group and her desire to support the group's success is indicative of her Socializing way of knowing. At the same time, Hope understood the consequences of her learning in concrete terms, demonstrating of an Instrumental way of knowing. Hope spoke powerfully about learning with cohort members in small groups and the support it provided her and others right up to the program's end.

In March 1999, we interviewed John, who taught math and science to Hope and the other learners in the diploma program, to learn his perspective on changes in the Polaroid cohort learners. John had been teaching this particular cohort for two trimesters and knew the adult learners very well. When asked to what or whom he attributed the changes he noticed in the cohort learners, he discussed in detail how Hope had become "the voice of the class." There were many times, John said, when Hope assumed leadership by telling him, in front of the entire class, that his assignments were "too much work" for the adults in the class, given their work and family responsibilities. Although Hope was completing her assignments on time and earning good grades, she wanted John to understand how difficult the workload was for some of the other learners in the cohort. John proudly shared that Hope frequently voiced important feelings that other adults could not, for one reason or another, say aloud. John also thought that Hope took on a "big sister" role with several classmates in the cohort. He often noticed Hope helping other adults complete their assignments. Hope worked with her classmates oneon-one or in small groups both during and after program classes.

John's stories attest to Hope's concern for her classmates and her increased confidence in speaking up to the teacher—the authority figure in Hope's view—on behalf of her own and her colleagues' learning. John created a classroom, a holding environment, in which it was safe for learners to express their thoughts about his pedagogical practices, enabling learners to share authority, take risks, and test new behaviors.

Hope's case is emblematic of how learners who demonstrate this way of knowing experienced working with cohort members and the cohort as a support to their academic efforts. This supported Hope as she was challenged to meet concrete learning needs. At the same time, we see Hope's orientation toward encouraging others and how she was able to give and receive support. Although Hope valued collaborative learning for instrumental reasons, which align with Hamilton's (1994) description of the goals for the "postindustrial model" (Trimbur, 1993), she and other learners with this way of knowing also appreciated the emotional and psychological supports this provided. This reasoning seems to mirror Hamilton's (1994) goals for what Trimbur (1993) calls the "social constructionist" model of collaborative learning. Next, we will turn to learners who demonstrate a fully operating Socializing way of knowing and show how they made sense of the cohort and collaborative learning as supportive of their academic efforts.

The Socializing Way of Knowing

Here, we present excerpts from our interviews with Pierre, an adult learner who constructed his experience with a full Socializing way of knowing (i.e., 3). While 11 learners had this system leading and/or operating in combination with other fully operating structures (i.e., Instrumental or Self-Authoring), Pierre demonstrated a singly operating Socializing way of knowing at program start.¹⁰ With this way of knowing, a person's internal experience becomes the focus of his orientation. One strength of this meaning system is a capacity to internalize others' perspectives; in fact, a person with this way of knowing derives his sense of self from these perspectives. Pierre's Case

We all got our strengths. We all have our weaknesses. Maybe what I... am good at, maybe they lack of it. What they are good at, maybe I lack at it. We have all got our weaknesses to work on.... Well, really, I don't pay attention too much with people. Maybe when they ask question I might say, "Oh, okay." (PI #4, p. 8)

Pierre's orientation to relationships provides an important example of how a person can demonstrate a dominant and singly operating Socializing way of knowing yet have an orientation to relationships that we do not usually attribute to Socializing meaning makers. His case contrasts sharply with the majority of learners who demonstrate a Socializing way of knowing and experience fellow cohort

¹⁰ Toungh and Pierre demonstrated a fully operating Socializing way of knowing at the program's start and finish. Rita initially had a meaning system of 3/2 and grew to have a singly operating Socializing structure. Henry, who did not complete the program, also initially had a fully operating Socializing structure. During our final interview with him in July 1999, we assessed his way of knowing to be 3(4).

members as sources of academic and emotional support. Pierre's case, therefore, provides a compelling example.

Kegan (1982) discusses the way in which a person who understands his experience through this underlying meaning system conceives the relationship between self and other. He writes,

You 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)

As with all ways of knowing, each meaning system has strengths and limits. Kegan (1982) illuminates these for Socializing knowers, stating that the strength of this meaning system,

lies in its [the self's] capacity to be conversational, freeing itself of the prior balances [i.e., the Instrumental way of knowing] frenzy making constant charge to find out what the voice will say on the other end. But its limit lies in its inability to consult itself about the shared reality. It cannot because it *is* that shared reality. (p. 96)

Pierre was embedded in or identified with his relationship with his teacher only, rather than also being identified with his relationships with his cohort colleagues (which is, in some ways, more typical of a Socializing way of knowing). In other words, Pierre derived his sense of worth from his teachers' evaluations of him. As we will show, Pierre preferred to work alone rather than with fellow cohort members and did not seem to value or enjoy interacting with other cohort learners. Unlike other learners who demonstrate a Socializing way of knowing, Pierre told us he did not seek approval from or look to fellow cohort members to help him make decisions or formulate his opinions so they might be more aligned with other valued members of the cohort. Instead, he seemed to define himself only by his teachers' opinions of him.

As we will show, Pierre located the source of his self-confidence in his teacher's help, and he saw it as the teacher's responsibility to "make" him feel self-confident (rather than seeing himself or his cohort colleagues as sources of self-confidence), which reflects a Socializing way of knowing. Later in this chapter (and in other chapters in this monograph), we will present excerpts from interviews with other Socializing knowers who were embedded in or defined by the opinions of valued others (e.g., fellow cohort members, their parents and/or loved ones, and their teachers). Here, we will highlight aspects of Pierre's meaning making to show how he experienced learning in small and large cohort groups and the change in his perspective toward the end of the program.

Pierre, who was in his late 40s when we first met him, worked full-time during the day at Polaroid and at night as a taxi driver. He emigrated from his home country in the Caribbean to the United States early in the 1980s. Unlike most of our learners, Pierre attended high school for four years in his home country. Like many of the women in the Polaroid sample, Pierre was not able to continue in school because he needed to work to support his family. When we first met Pierre, he told us he had five children from different marriages, ranging in age from mid-teens to mid-20s. At home, Pierre spoke English, French (his first language), and Creole. Although Pierre had relatives in the Boston area, he did not tell them about his decision to enroll in a diploma program. Unlike many of the other learners in our sample, Pierre did not mention a fear of being laid off; on the contrary, he seemed confident in his abilities as a learner and worker. When we first met Pierre in March 1998, he told us he faced a barrier in terms of his learning in the program because he was not able to express his thinking clearly in English. Like Hope, he hoped to grow more "comfortable" speaking English. Pierre said that he likes to keep his learning "private." He also stated,

A lot of time it gets me frustrated because the way I can explain, the way in explain I don't seem like clear enough to me, and I can feel the lack in myself. I'm not, I don't feel comfortable. (PI #1, p. 1)

Pierre recognized this internal feeling as "frustrat[ion];" he was aware how his accent influenced how other people (at work and in other domains of his life) responded to him. Here, Pierre demonstrates a Socializing way of knowing in that he was concerned about how he was viewed by others. It was a source of pride for him to be able to convey his fullest self to others. Pierre made an important distinction between what he was able to *say* (given his expressive language skills) and what he *knew*. This does not seem to be about experiencing himself as a *generator* of knowledge (which would be a Self-Authoring construction), but about expressing the knowledge he already had learned—which was contingent upon being able to have the vocabulary and language skills needed to communicate.

In our second meeting with Pierre, in September 1998, he provided more details about what it would mean for him to feel "comfortable" in his learning. Comfort came from "knowing more words," being able to "see more, understand more," and not taking much "time to answer" a question directed at him. After attending the program for a trimester, he felt more "comfortable" because he was "able to understand more now." He explained:

And a lot of thing(s), I used to hear on the street, [I] never know the meaning of it, I just say the word, doesn't know what it mean. And I can say a lot of them, I feel comfortable with them now.

He contrasted this feeling of confidence with the "nightmare" of not knowing the words. Pierre connected his comfort with learning with his confidence, which had grown alongside his language skills as a result of his participation in the program:

Oh, I feel confident. To me ... I would be more confident than I am now because I'm willing to learn because it was a nightmare a lot of time. And just the words you don't know. And words and the meaning of it.... The word and you don't know what it's meaning. And it's an embarrassing moment for me. But now I feel pretty confident.... It's really important to me.... I'm still in the learning process. My mind is open to learn because there is a lot of things.... But for a full month I see a lot. And more and more I'm going to see more when the time goes by. I'm going to see more because it's really important to me. And they really give me... myself. They put me on the self confident, I can learn. (PI #2, pp. 3–4)

Pierre was interested in understanding the meaning of words, rather than learning for the sake of getting the "right answer." He told us he felt embarrassed when he did not know the meaning of words; he was concerned about how other people viewed him and seemed to define himself in terms of how other people view him (evidence of his Socializing way of knowing).

Toward the end of the program, with much less fear about misunderstanding others or being misunderstood by them, he reported, "I feel comfortable enough to stand in front of anybody and discuss anything, and I would find my answer." Like many of the learners in the sample who are nonnative speakers of English, Pierre wanted very much to be able to "stand" in front of other people and express himself in English well. In Pierre's case, his strong orientation to how others view him, combined with his concern to avoid "embarrassing" himself, points to a Socializing way of knowing. Importantly, Pierre located the source of his self-confidence in his teacher's help, and he saw it as the teacher's responsibility to "make" him feel self-confident, which reflects a Socializing way of knowing. In response to a question about the teacher's help, he said, "Maybe they can . . . see, I have a sense to understand. And they [the teachers] make me feel self-confident, so I can." However, the manner in which Pierre preferred to learn was mostly by himself—or with the teacher's help, which sharply contrasts with the majority of learners in this cohort who experienced fellow cohort members as sources of academic and emotional support.

Unlike most other adult learners in the program, Pierre did not like working in small learning groups because, in his words, "thinking alone I'm doing my best." He reported that when he disagrees with what was said by others in a group, he "goes along" with their opinions because he does not want to "disappoint" them. He explained, "If that's what [people in the group] want, that's what you want. I know to me, that's what I want." Pierre seemed to look to a set of socially defined rules of appropriate behavior as to how to treat others both within group learning situations and work contexts, which seemed to be based on a strong sense of wanting to treat others the way he would like to be treated.

Pierre also told us that he would "move on" if a classmate sat next to him, meaning he would physically move away from the other person. When Pierre was required to work with others on an inclass assignment, he would try to work in pairs rather than in larger groups. Pierre's math and science teacher, John, described him as "extraordinary" in his "resistance" to group work. When John commented on the changes he noticed in Pierre during the program, he said,

Pierre is exceptional in one very important way . . . he was the most resistant to working in groups. He has a very strong tendency to set himself aloof and want to work independently. He expressed to me at various times that he also liked to get his focus and go with it. Sometimes the negative side of that was he would take the assignment and interpret it. I think what he would really like to do is to take a question and sit back and think and then produce something that he has come up with in his mind. And us [the teachers in the program] imposing stages you should go through to do a process fit in with that overall resistance, the same resistance as his working with others.

Nonetheless, John remembered that Pierre's resistance to group work would dissipate after he engaged productively with a small group of learners. In spite of Pierre's resistance to "group activities," John spoke of "a lot of the positive times when [Pierre] was working in group was where his explanations were actually very helpful to other people. Because he had a rephrasing capacity that was good."

But there were a number of times, like in a group task, where he started with that resistance but then, upon engaging, he would start to see the point. He's very

thoughtful and reflective type of person. But he usually thought he would have a better way of doing something, and that was part of the resistance to group. Let's say there also developed a kind of a comfortable situation where in talking he would start to talk too much. And I noticed the rest of the group like rolling their eyes or [saying] "Oh-oh, it's another tangent," whatever Pierre's going to come up with. There were other times it seemed like he was pretty good presence as far as keeping people on focus.

Pierre took pride in being sensitive not to impose his questions on fellow classmates, which may be another example of Pierre's interest in abiding by what he considered socially appropriate norms of behavior. Rather than soliciting help from a classmate when he was "struggling" with an assignment (like many other Socializing knowers might do), Pierre preferred to "call [his] teacher, 'Okay, here's where I am, what should I do?'" It may be that Pierre viewed his teacher as the only source of authoritative knowledge and therefore the only person he needed to consult to have his question answered. Alternatively, it could be interpreted as Pierre thinking he would rather not impose his question on a classmate or interrupt her, given his desire to follow what he considered appropriate rules of social behavior.

But in the last interview just before graduation, Pierre felt far more certain about his English skills and also began to align himself with peers in the cohort in small but significant ways. When asked if there were people other than the teachers who were helpful to his learning, Pierre responded with a definitive "no." However, for the first time, Pierre reflected on similarities between how he and other cohort members were struggling to learn English. He seemed to align himself with people in the cohort in that he developed, or had an appreciation for, other people's struggle to learn English but not with their experience in the classroom.¹¹

We all was [in the same boat], all foreigners. [Two] of them wasn't, they were American. We're [the rest of the cohort] all foreigners. We are all here for the same goal—learn English better because so many of them really struggle at their workplace. They cannot explain themselves and if . . . there is a promotion, promotion around, they can't do it just by not having high school diploma.

Pierre likened himself to others in the cohort, in that they were also "foreigners" and working toward a common goal in the diploma program. From his point of view, all members of the cohort had their "strengths" and "weaknesses."

There is few, but we all got our strengths. We all have our weaknesses. Maybe what I, what I am good at, maybe they lack of it. What they are good at, maybe I lack at it. We have all got our weaknesses to work on... Well, really, I don't pay attention too much with people. Maybe when they ask question I might say, "Oh, okay." (PI #4, p. 8)

The way Pierre understood that everyone was different and the same as he was demonstrates a Socializing way of knowing. For Pierre, it seems that difference is made okay because everyone is

¹¹ We have omitted the interviewer's words/questions from most quotations to place emphasis on the participants' words.

still connected and basically the same, which preserves the relationships. Even at the end of the program (June 1999), Pierre continued to prefer learning on his own. When asked if his relationships with members of the cohort had changed, Pierre said no, adding that he did not "pay attention too much" to the other adults in his cohort. In contrast to Hope, who appreciated the opportunity to work with cohort members for academic and emotional reasons, Pierre mostly thought his classmates distracted him from his real goal of listening to what the teacher said.

In the last interview, Pierre spoke powerfully about the ways in which he was embedded in other people's opinions of him. For example, when asked if there have been times when he felt his own home country's cultural values dictated certain ways of behaving—and those ways of behaving were in opposition to the culture in which he was living—Pierre told us he would change his behaviors to adhere to cultural norms.

So, naturally, I change too, I do to work, when I came to the United States, I do what the United States wants, when I'm in [his home country], I do what [people who live there] wants, **so I go by what people want**. I try to learn, different country, I always watch what people do before I start doing my own thing.... Because that's their country, that's their culture, I cannot change it. I cannot change because that's the way God made it, I cannot change it.... I'm different on my own. ... I'm different on my own, they might say "Oh, this guy must come from here," because of the way I acted.

Pierre voiced his concern about acting in accordance with the cultural values of the country in which he was living. Kegan (1994), in addressing the expectations and demands of the modern workplace, emphasizes how individuals with a Socializing way of knowing need to be "in alignment with" the values of the culture. Being out of sync with the expectations of the culture (whether it is the culture of the workplace or the culture at large) is, for these individuals, threatening to their selves. For Socializing knowers like Pierre, Kegan (1994) maintains, "the ultimate goal is being in alignment with—being in good faith with—a value-creating surround . . . winning the approval and acceptance of others" is of ultimate importance for these knowers (p. 171).

Pierre viewed the teacher as the person responsible for supporting his learning. While other learners also saw the teacher as a key support to their learning, none of them saw *only* the teacher as a support. All of them, except for Pierre, viewed their classmates as supports. It is important to highlight that although Pierre was a Socializing knower who needed to validation and acceptance from important others in his life, in our interviews with him, he did say he had close relationships with any of the other cohort members. We can only surmise that Pierre looked to a different set of important others for his sense of belonging.

Transitioning from the Socializing to the Self-Authoring Way of Knowing

In this section we present Paulo's case as an example of a learner who was making meaning of his experiences in the transition between the Socializing and the Self-Authoring ways of knowing. Four of the 16 cohort members constructed their experience in this way. We will show how in this time of transition both structures, Socializing and Self-Authoring, are operating. One of the strengths of this meaning system is that a person with a Self-Authoring way of knowing has the capacity to take a perspective on interpersonal relationships and shared loyalty.

Paulo's Case

If you work together, everything is be easy.... You have to work together.... You learn more working together. (PI #3, p. 14).

Paulo, born in West Africa, was in his early 40s when we met him. Almost immediately, he told us how proud he was that he was now "an American citizen." Although he spoke four languages (Creole, Spanish, Portuguese, and English), one of his hopes for learning in the diploma program was to improve his English speaking skills. He was married with four children ranging from toddlers to young adults.

When he first joined Polaroid in the mid-1980s, just after immigrating to the United States, he needed to learn English to communicate with coworkers and supervisors. He had been very successful at Polaroid, so much so that, while participating in the CEI program, Paulo was promoted at least twice, an achievement he attributed to improved skills in math, writing, and communication. Paulo was "very proud and happy" about his accomplishments at work and in the program; he frequently stated that he was feeling "very, very strong" because of all he was learning. Paulo attached great value to the recognition he had received from his plant manager and the Polaroid engineers for his performance on the job—making these important others happy made him happy.

As a team leader at work, Paulo was one of only two adult learners in the diploma program who held an official leadership position at Polaroid. Paulo talked about subtle but important qualities he possessed that, in his view, made him an effective team leader. For example, when he "corrects" people who work for him, he always focused on helping them be better in their work. This carried over into the way Paulo perceived good interactions between a teacher and student, and among cohort members.

You have to be patient to speak things. You have to be able to work with me. So I am the team leader where I work. If I say those people, "Oh you do something wrong, we don't have to do next time." [accusing tone] So I would be mad. But if you talked nice, "So this one is going a little bit bad, so next time, you try to do it this way, or try to do it this way, see how the things going, try to do this way if it's more easy for you, then the work is going better. So this is repeat, and do better next time." **The same thing happens to a student when a teacher show you something good**, or when you do this one wrong next time, you put the verbs here first, then this word don't match with this one, and so on. **So next time you don't try to say, "You do wrong all the time. You don't do good!**" [Laughs]...Be patient, be patient. (PI #1, 23–24)

For Paulo, being "patient" and "talking nice" were key components of effective interpersonal communication, at work and in the classroom. Also in this first interview, Paulo emphasized the importance of having teachers who understood "who" he was and "where" he came from for them to be good teachers to him. For Paulo, it was critical that the teacher and other cohort learners understood that he was "not stupid" and that he may need additional help learning because he spoke English as a second language. If the teacher understood his "background," he told us, learning would be "more easy" for him. This meant that if teachers and other adult learners knew he was born in West Africa and not a native English speaker, it would it be easier for him to ask for and receive help from

them. Paulo's experience of this kind of mutual respect among teacher and learners made the cohort a safe holding environment for him.

Paulo stood out to us as the most self-motivated of all of the Polaroid learners. Throughout our interviews, Paulo conveyed a strong interest in learning how to access information and better communicate his ideas. He enrolled in the program largely because he wanted to gain access to information from multiple sources which, in his view, would help him make informed decisions (e.g., where to send his daughter to college, how to buy a house and apply for a mortgage). For Paulo, knowing how to maneuver in systems (i.e., society at large, the educational system, and the economy) helped him overcome anxiety and bolstered his confidence in his decision-making ability. In his words, "If you [don't] know, or if you don't read instruction, or you don't go to the meeting, or you don't go to some class to show you to buy the house, you be afraid." The element that marks Paulo's eagerness to improve his decision-making ability as arising from a Self-Authoring way of knowing is that the most important thing to Paulo was to have the information for *himself* so he could decide for himself. If he were more firmly in the Socializing way of knowing, Paulo would likely be happy to have access to other important decision-makers whose opinions he might then adopt as his own. In the transition to Self-Authoring, however, it was vital to have his own access to information. Throughout the program, Paulo talked about what it meant to him to learn and to have knowledge. Paulo did not want to just learn the rules of the right things to do so he could then do them (which would be a Instrumental construction), he wanted to have the knowledge to make his own decisions about how to manage his money and life.

Paulo possessed a lovely gentleness and generosity of heart, which was reflected in his relationships with other cohort members. For example, Paulo's math and science teacher, John, recognized Paulo's ability and inclination to teach others when he told us how Paulo was one of his "best helpers" in math and science classes. In John's view, Paulo was "very helpful with people," because, although Paulo was "pretty low key about it . . . he was a computer user/Internet browser and would find things for people they could use [for their research reports]." Paulo helped several adult learners by giving them information from the Internet that they used in the scientific research reports for science class. However, Paulo preferred working with others in pairs, not in small learning groups. Small group work was "difficult" for him because disagreements that occur (a Socializing construction) distracted him, taking away from the time he could spend on his own learning (a Self-Authoring construction).

Compared to others, Paulo talked surprisingly little about his interpersonal relationships with cohort members. Nonetheless, he told us how he made sense of group work. In Paulo's view, both the teachers and the students were responsible for supporting students' learning (quite different from an Instrumental construction of group work, which gives full responsibility to the teacher, as we discussed earlier). For Paulo, it was important when working in groups to share knowledge with others if you were the person who knows something "a little better." In his view, all of the adult learners were "go[ing] in the same direction." If one did not "catch something," the teacher *and the other group members* were responsible to help that person "catch it." Paulo's reference to "catching" knowledge seems to be cultural, rather than an illustration that knowledge is a single thing (which would be illustrative of an Instrumental construction). "Catching knowledge" is an idiom in Cape Verdean and Puerto Rican cultures which seems to mean learning and a phrase that refers to knowledge acquisition (see Munoz, 2000).

At this point in the program, Paulo believed that working alone or in groups of two were the most effective ways for him to learn. He preferred to avoid larger groups, because they invite conflict. He explained,

Me and one person together, I think it's more helpful to me than group. Because sometime one person in a group disagree with you, so then start a lot of talk; until you finish, you don't put together to understand. Yeah, a lot of disagree, and lot of talking. But when myself and somebody else, we can put together easily. If I say something wrong [the other person helps and says] "maybe it's supposed to be like that." So that's put easy.... When group, sometimes a group, five or six, you have a lot of disagree, some say it this way, some say it another way, some say, "Oh, this is wrong, this one is right." So you have a lot of disagree. [Sometimes group members say,] "You don't understand nothing." You can catch nothing. You feel like you don't learn nothing.

While we have shown the way Paulo made sense of his experience with a Self-Authoring way of knowing, it is important to remember that he was, simultaneously, making sense of his experience with a Socializing way of knowing. Paulo demonstrated a Self-Authoring way of knowing when he took responsibility for his own learning and reflected on what it takes for him to facilitate his learning. For example, although he understood that disagreements within groups were moving toward a larger goal (i.e., learning), he preferred the pair work that felt more conducive to his own learning.

Although it was important to him that group members respect him and each other (rather than making comments like, "You don't know nothing"), he was concerned about cohort members' opinions of him. Paulo did not appreciate other people thinking he was inadequate or his opinions were wrong (demonstrating a Socializing way of knowing). While adults at all developmental stages may dislike conflict situations, those making meaning with a Socializing way of knowing often find conflict with others threatening, as it can be experienced as a breach in relationships that make the self cohere. Kegan (1982) eloquently illuminates how Socializing knowers experience conflict. He writes,

[For Socializing knowers] conflicts are not really conflicts between what I want and what someone else wants. When looked into, they regularly turn out to be conflicts between what I want to do as a part of this shared reality and what I want to do as part of that shared reality. To ask someone [with this way of knowing] to resolve such a conflict by bringing both shared realities before herself is to name precisely the limits of this way of making meaning. "Bringing before oneself" *means* not being subject to it [or identified with it], being able to take it as object [or to have a perspective on it], just what [a person with this meaning system] cannot do. (p. 96)

However, when a learner is growing towards a Self-Authoring way of knowing, he has a capacity to recognize that conflict can be a way to learn more, and agreement is not an end in itself but a means toward some greater end—an opportunity for growth. While Paulo understood that all cohort members were working toward a common goal, he preferred less conflict in learning situations because it interfered with his learning.

But Paulo's thinking about his relationship to the cohort and his experience in small-group learning changed remarkably over time. Contrary to his earlier opinion that people learned the most

alone or in pairs, by our third meeting (February 1999), Paulo had come to believe that a person learns more in a group. At this point, Paulo reported feeling more "comfortable" with other cohort members, meaning that others understood him, which was critical to his learning. Moreover, Paulo no longer felt bad or inadequate if he made a mistake pronouncing a word, for example, when working with other learners in small groups. In the following example of how he received help pronouncing words correctly in small groups and helped others in math, Paulo conveyed his value of group work. When asked what helped make group learning good for him, he said,

You know, you [can say] anything, like you say wrong. I don't feel bad if we, I read, I say something in English bad. You correct me, say, "Oh, you supposed to say this way not that way." So exactly, when I learn math **I try help my costudents** how to do the math, all that was what's come sometime, like I [meet them], 10 minute or 15 before the classes. Or you do your homework, let me see if you do exactly the way or why you don't try to do this work this way. So there is a very helpful [The group is] a good way to learn, because if you see anything, you see wrong pronunciation, so anybody can help you, or the pronunciation is supposed to [be] this way, or math if you know, you can help work together, work in team. The same on homework. If you work together, everything is be easy. If you work by yourself, that's not [inaudible]. You have to work together. You learn more working together. (PI #3, p. 14)

Paulo's thinking about the value of group work and his relationship to the cohort changed during the program. We suggest that this was not just a change of *opinion* for Paulo. Instead, his new ideas about the importance of group work might stem from his growing capacities for Self-Authorship, which supply him with an ability to have a new relationship to collaborative learning. In other words, Paulo might not simply have grown more comfortable in groups because he was used to working in them and working with his colleagues, he might have grown more comfortable in groups because he was less embedded in their opinions about him. At the Socializing way of knowing, as discussed earlier, it can be very painful to have others disagree with you. As Paulo becomes more Self-Authoring, however, he was able to have perspective on his cohort relationships and not be *made up by* those relationships any more. In this case, they can help one another work and disagree with one another without harming the fabric of the relationship itself. Kegan (1982) describes the movement from a Socializing to a Self-Authoring way of knowing, emphasizing how a person moves from *being* his relationships to *having* them.

In separating itself from the context of interpersonalism, meaning-evolution authors a self which maintains coherence across a shared psychological space and so achieves an identity. This authority—sense of self, self-dependence, selfauthorship—is its hallmark. In moving from "I am my relationships" to "I have my relationships," there is now somebody who is doing this having, the new I, who, in coordinating or reflecting upon mutuality, brings into being a kind of psychic institution... (p. 100)

At the same time Paulo reported his growing comfort with group learning, he spoke about how proud he was of the improvements he noticed in his ability to express himself in English and how this made a difference in multiple domains of his life. Since skills are the foundation for all actions, no matter how complex a person's thinking or how excellent a person's decision making, a person cannot benefit fully from learning opportunities unless he can speak and express himself in the dominant language.

The program cohort, a holding environment in which Paulo and other learners were *known*, *understood*, *and recognized* by each other and their teachers (learner–teacher relationships will be discussed in the next chapter), helped Paulo feel safe expressing himself, making mistakes, and giving and receiving help. In this way, the consistent and enduring nature of the cohort was a holding environment that both supported and challenged Paulo.

The Self-Authoring Way of Knowing

Only one member of the cohort, Jeff, made sense of his experience in a way that solely reflected a Self-Authoring way of knowing, though four other adults, Magda, Daniel, Christopher, and Paulo, made meaning in the transition between Socializing and Self-Authoring ways of knowing.

Jeff's Case

What you do with the knowledge after it's given to you is of your choosing.

One of the two U.S.-born adult learners in the Polaroid cohort, Jeff was in his late 40s when he began the program. Originally from the South, he moved to the Northeast when he was in the seventh grade. Through high school, Jeff continued to have "a hard transition" in adjusting to the demands of school. In 11th grade, he told his mother that he could not "cut it" and decided to enroll in trade school. After attending trade school for two years, he returned to high school but left before completing eleventh grade. He then enlisted in the Army, as his father had done before him. When we met Jeff, he lived alone and had two children from a previous marriage.

Jeff worked the C shift, 11:00 PM to 7:00 AM, at Polaroid, where he made batteries. He told us the machines he operated fascinate him. Whereas most of the other adult learners solved work problems by asking a supervisor or looking at a computer screen for instructions, Jeff preferred "figuring things out" on his own. Jeff described himself as someone who feels in charge of himself, his profession, his work, and his interests.

Jeff first enrolled in the diploma program the year before we began our research project, but he stopped out of it very quickly (after three weeks). He also began a GED course soon before our first interview but chose not to complete it. Jeff was one of only three learners in this class who did not have the responsibility of caring for young children or ill family members.

Initially, Jeff expected that working with other adults who had different academic needs (e.g., learning to express themselves better in English) would prove challenging. Yet over time Jeff cultivated an appreciation for working with his peers. Jeff's thinking about how and why it was helpful to learn with other people differs significantly from others whose stories we have presented. His reasons for valuing group work focus on the process of collaboration itself rather than the opportunity to give and receive practical or emotional support around learning. Furthermore, Jeff recognized he was able to learn through group work and to gain awareness of other adults' learning processes. He explained,

Like I said, everybody's learning is different. Everybody's learning is different. And come to find out, what they [other learners who had learned math in their home countries] were doing, they were applying these math skills that they had already learned in their country. They were trying to apply [them] to the American [system] and, come to find out, [that] what John was saying, they were doing it, but they were doing it the way they were shown [in their home countries] [and] coming up with the same answer. Which when me and Bill [the other person in the class who was born in America and had learned the "American way" to do math] did it, we had this big long thing. We had the answer, but the problem was worked out. But yet the way they did it, they had half of the problem, but their shortcuts were better.

Jeff told us that helping others is also a way to help himself learn about their processes. If the act of being able to help others gave Jeff his sense of self-worth, his construction of this would be illustrative of a Socializing way of knowing. Instead, while Jeff enjoyed the process of helping his colleagues, he was also able to hold a perspective on his own and other cohort members' learning experiences.

Jeff possessed the capacity to take a larger perspective on the group's learning and to share his internal reflections about how and why he valued group work.

[In groups,] it was like, okay, you might get stuck here, on, say, four and five. [I'd say] "Well, okay, I did." I sit here and look at my paper, "Well, you did this, how about trying this?" and kinda explain. And then once they [people in his group] finished, we took our papers and showed it to them, which they came up with the same answers we did. I think it was just the process of helping them, or her, get over that, and made it easier . . . I guess for them and me. . . . Well, like I said, we all have the same problem to work with. And why can I understand it, and you can't understand it.

It was the "process" of joining together in true collaboration that made the group learning so meaningful for Jeff. Jeff took pleasure in being able to help cohort members experience academic success and also found fulfillment in his own achievements. His reasoning about why group learning with cohort members was beneficial comes from his own standards (demonstration of a Self-Authoring way of knowing) and was not influenced by an external authority, which would reflect a Socializing way of knowing. Jeff demonstrated he could critique his own competence and limitations as a learner, which reflects a Self-Authoring way of knowing. Not only was he able to share what he knew with others, he also recognized he was able to learn from the process of working with others in groups.

In developing his own perspective about the value of groups in the larger enterprise of learning, Jeff demonstrates remarkable capacities of perspective-taking and self-authorization. These ideas were echoed in our last interview with Jeff, in June 1999, when he elaborated on his sense of how learning worked for him. Through his work with other cohort members, Jeff felt he had been able to discover his own capabilities. In Jeff's words, "I realized that I know more than I thought I did." Particularly striking is how he uses this newfound awareness to push himself toward deeper understanding. The act of doing, writing, and working in cohort learning groups with others facilitated his learning. The group was helpful to Jeff because "it helps when other people see your mistake. And other people can show you." Jeff continued by telling us how this worked for him:

We were given homework, and, you know, you go home, and you do it. And some of the things, you were able to do 'em all, but then, like, one or two problems, you

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always run into that one that you can't.... We'd come back the next Tuesday or the next Thursday, and we'd review what we'd done, and all that. And John [the teacher] would ask, "Well, did anybody run into any problems that they couldn't solve?" and all that. And we all did... from either Tuesday or Thursday, had problems that, one that we got stumped on. And by putting it up on the board and .. going from step-to-step, and all this, things that I missed on it, somebody else says, "Oh. You forgot this, this, and this." Which, when you look, you realize what it was you've done. But yourself, you can't pick it up.... You can't see no further or no other way. But with that little help, and all that—you might have forgot a number—you might have put a decimal, you know, in the wrong place or something like that.

Jeff illuminated *how* learning in cohort groups was helpful to him and others. It was the learning process that made a difference to his learning. And in this passage, he demonstrates his Self-Authoring capacity to take a perspective on his own and other cohort members' learning experiences. Jeff appreciated the complexity of other people's learning experiences while having a perspective on his own experience and how it was similar to and different from his colleagues.

Jeff often played the role of shepherd or protector of the members of the cohort. One way he did this was by looking out for their learning needs—especially the learning needs of cohort members who spoke English as a second language and by taking a stand with John, the math teacher, on behalf of others. We will highlight how this example illuminates Jeff's Self-Authoring way of knowing.

In February 1999, Jeff shared an example from the prior trimester when, for the class and himself, he needed to tell John that John was "losing" the class by teaching too fast. In Jeff's view, many cohort members were not able to absorb the concept of using a variable, the "x," to solve an equation that John was teaching. Jeff, at this time, admitted that he, too, was a bit "lost." Jeff told John to slow down so his classmates could understand the material. He reminded John that many of the other adult learners in the class have additional responsibilities and commitments (caring for young children and ailing family members) because they are adults who had lives outside the program. Jeff recalled,

Well, . . . [members of the class are] coming from a foreign country, and you go to school, and you learn this way. And then you come to America, and you all of a sudden have to change because you live here. You have to do it the American way. And I kind of think it makes it harder. . . . Well, like when John explained something, you know. [Here Jeff is referring to the way John taught the "x" to the class.] You can see different things—you can tell by people's expressions if they understand, if they don't understand. . . . I said, once we started the first day of algebra, it was like they [the other members of the cohort who did not learn the "American way" to do math] were all [lost]. Well, we all were kind of lost. I says [to John], "I kindly got a feeling that going into the algebra class," I said, "you basically kind of lost a big majority of the class." He [John] says, "Yes, I think I [did]." He [John] says, "I felt that, too." And then when we came back the next week, he [John] backed up. And went into more details on the beginning of algebra, which, more explanation, which that was all better.

Jeff demonstrates some of what is the hallmark of a Self-Authoring way of knowing: the ability to take the perspective of others (as he showed by talking about the experience of learning in a foreign country) without losing a sense of his own perspective. While Jeff valued and understood their experiences, his own experience was quite different. Having very different experiences of the same event was a given for Jeff, pointing to a Self-Authoring construction.

In our last interview, Jeff spoke once again about this experience of taking a stand with John on behalf the cohort. Interestingly, Jeff spontaneously brought up this example in response to a question we asked him about "Who or what in the program this year has helped you to learn the most?" Here we highlight Jeff's Self-Authoring capacity to take a perspective on his own and others' experience of being in the program. He was able to reflect on his own actions and on how the group and John benefited from Jeff's actions. In Jeff's view, the math class got better because he talked with John about how his classmates were not able to grasp the concepts John was teaching and suggested that John slow down. Jeff was proud he had followed his own decision (guided by his own internally generated standards) to take a stand with John on behalf of—as he remembered it—the learning needs of the cohort.

After everybody left, I had said to John, I says, "You know, I understand. I hear what you're saying," but I says, "For the rest of the class" . . . like I said, can't say foreigners, but . . . English [as] second language students. I says, "You're losing that part of the class." I says, "You only have [people who speak English as a first language] . . . the other 90 percent of the class, they're all from other countries, and it's harder for them to understand what you're saying. You have to explain yourself. You have to show them more details." And he says, "I kinda sensed or felt that." But, he says, "I wasn't sure." Once he started putting stuff down and going around to each one of 'em and showing and explaining, they understood more and better, which helped turn that class around and made all of them feel more comfortable.

In his reflections on impediments to his peers' learning, Jeff was able to hold the multiple views of himself, ESOL learners in the cohort, and his teacher. When recommending a change in his teacher's instruction, Jeff used his own judgment and appealed to his own internally generated value system. His decision to talk with John on behalf of the cohort demonstrated his capacity to have a perspective on the larger context, to take a stand for his own beliefs or on behalf of others, and to take responsibility for his own decisions. This example also illustrates Jeff's capacity to understand the group's experience. Jeff showed his caring nature and concern for the cohort's common goal, and he had the capacity to turn inward his value system to decide what he needed to do in this situation (Self-Authoring capacity).

When we asked John in March 1999 about the changes he noticed in the adult learners in his classes and to what he attributed the changes, Jeff immediately came to his mind—he was the first adult learner John talked about in that interview.

Jeff has changed dramatically. He's become more, much more confident overall and certainly more confident in speaking and not so worried about making mistakes. . . . He had a frightened look for a while, in the program, that [he] definitely has

become . . . much more of an advocate for the students which is really good. And he just stands out as someone who started out so scared and has asserted himself very nicely. Like doing projects in the science course very much ahead of pace from the rest of the class because, part of it was because of the way he used the instructions, and his diligence really paid off. So once he knew that he was always on pace or better, I think it helped him realize that he wasn't not only the worst possible student, that he was doing very well relative to others because of his persistence, so. . . . Yeah, when I first noticed his frightened look was very early in the math course, where he would be doing something he'd never been comfortable with. He came up to me after class once [and said], "You know I didn't finish the fifth grade." Something to that effect. At the time, he was somewhat comfortable talking about it, but he did have a fear that he wasn't going to be able to do it [complete the program].

John felt that Jeff was an "advocate" for the other cohort learners. Jeff's capacity to see the bigger picture—a Self-Authoring capacity—and his internally generated value system appear to have likely made him want this "advocate" role. We also learned that, from John's perspective, it was Jeff's "diligence" and "persistence" to succeed that helped him gain confidence that he could complete the program and earn his high school diploma.

Jeff, like Hope, often became "the voice of the class," in his teacher's words, taking a wide variety of needs into account as he advocated to improve everyone's learning experiences. Jeff frequently spoke with John and voiced feelings that other learners were somewhat afraid to communicate about their learning experiences and about his teaching methods. John referred to Jeff as being one of the "leaders" in the cohort. In John's words,

I'm just thinking, he and Hope. He became, they both played this role of [being a helper to other students.] [Jeff worked with other cohort members by saying,] "Here I'll show you," "It's not so hard," or that type of thing. [Jeff would say to a person he was trying to help,] "You do it like this" and you know, [Jeff would say it] somewhat in opposition to me [laugh] like, "He [John] makes it complicated, here is the easy way" or something, but not [in a mean way]. [*To you as the teacher?*] That's right.

John's comments shine light on how Jeff shared his own knowledge with other cohort members and how he worked with them. He helps us see how Jeff is both strong and gentle. Jeff was not the only learner in the Polaroid class who made recommendations to John about how he could improve his teaching. John said that Daniel (to be introduced in the next section) also talked with him about how his teaching methods were working for *him*. To our knowledge, Jeff and Hope were the only learners who raised this issue of the entire class' pedagogical needs.

In this section, we have demonstrated that the cohort, which at this site was sustained over 14 months, served as a holding environment spacious enough to support and challenge learners with *qualitatively different* ways of knowing. Specifically, we have highlighted how learners *differently* experienced the cohort as a support to their academic learning, and we have shown how these adults

with a wide range of ways of knowing *differently* made sense of their collaborative learning experiences in cohort groups,¹² depending on their meaning system.

Significantly, we have shown how learners across ways of knowing valued the cohort for *instrumental* reasons (i.e., it helped them achieve concrete goals, which closely align with Hamilton's (1994) conceptualization of Trimbur's (1993) "postindustrial model"); however, Instrumental knowers valued the cohort for these concrete reasons *only*. Socializing knowers, while valuing the instrumental supports provided by working with fellow cohort members, also appreciated collaborating with cohort members for the emotional and psychological support it provided as they pursued their academic learning (i.e., reasons that align with Hamilton's stated goals for Trimbur's (1993) "social constructionist" model). Lastly, Self-Authoring knowers not only named the instrumental and emotional supports as important, they also focused on the ways in which working with others helped broaden their perspectives as they pursued their academic goals (i.e., reasons that align with Hamilton's (1993) "popular democratic" model). By presenting case examples of learners who have qualitatively different underlying meaning systems, we have pointed to how each learner's meaning system shaped the experience of the *teaching and learning function* of the cohort. We contend that the cohort served as a holding environment for these adult learners as they struggled to make sense of and engage in academic learning.

Feeling recognized by each other and their teachers for the selves they were and the selves they were becoming helped these learners feel held in the psychological sense and supported by each other. We discussed how John, in particular, did this by creating learning opportunities through which cohort members engaged in a variety of collaborative learning experiences that were both supportive and challenging to learning. John supported and challenged cohort members collectively and individually as he provided different forms of support and challenge in learning situations. As Bosworth & Hamilton (1994) point out, a collaborative learning context is one in which "at least some aspects of classroom knowledge and authority can be developed or created by both students and teacher" (p. 18). John and other CEI teachers worked with learners to share authority and enhance learning.

Later in this chapter we will discuss how learners made sense of the "Life Stories" exercise that Judith, the Life Employment Workshop teacher, assigned during the final trimester of the program. In this exercise and others in the CEI curriculum like it (e.g., science research project and oral report, the Freedom Trail field trip), learners worked independently and in small groups, with guidance from their teachers and peers, before presenting their work to the entire class. Based on our classroom observations and interviews, these types of experiences seem to have been opportunities in which classroom knowledge and authority were shared and created by learners and teachers.

Together, the cohort members and the CEI teachers created a holding environment within the structure of the classroom. While the vast majority of learners valued the supports provided by group learning, the cohort also served as a holding environment that gently challenged them. Later, when we discuss the perspective broadening function of the cohort, we will highlight additional ways the cohort

¹² As we have discussed, Pierre, a Socializing knower, preferred working on his own or with the teacher. He is the only learner in this sample who did not experience his classmates as an additional source of support. However, toward the end of the program, Pierre aligned himself, for the first time, with fellow cohort members in that he had a newly developed appreciation for other people's struggles to learn English.

served as a holding environment that gently challenged learners. We now turn to how cohort members supported one another in nonacademic ways.

SECTION III: "LIKE A FAMILY": THE COHORT AS A HOLDING ENVIRONMENT FOR EMOTIONAL SUPPORT

But I think all of us, we made it because we help each other. But now the group is breaking up, and we are going different ways. It's like a family going apart . . . like when your child leaves home . . . that's the way I feel. I don't know about the other people. . . . Although we don't know each other's address completely and phone number, when we were together . . . it was like a family. (Hope, June 1999)

We have discussed the ways that collaboration within cohort groups enhanced *learning* opportunities for adults in the Polaroid diploma program. While the literature on group learning points to ways in which these experiences serve as a *social and emotional* support (see, for example Bosworth & Hamilton, 1994; Pedersen & Digby 1995), our study offers a new perspective on some of the ways consistent and enduring cohorts and learning groups support learners' well-being. We employ our developmental perspective to show that this emotional support is experienced differently by learners who make meaning in different ways. In this section, we focus on the ways cohort members supported each other in nonacademic ways. While for many participants the cohort became, as Hope and others said, "like a family," what "family" actually meant to these learners was different, depending on their ways of knowing.

Although the majority of these learners credited their colleagues with contributing to their success, we will focus on five adults at different developmental places who spoke at length about how the cohort provided emotional support as they participated in the program (see Table 4).

Name	Gender/Age at Program's Start	Region Of Origin	Way Of Knowing at Program Start & Finish
Bill	Male/Late 40s	United States	Instrumental [2 to 2(3)] Δ
Helena	Female/Late 40s	West Africa	Socializing/Instrumental Transition [3/2 - 3/2]
Christopher	Male/Late 30s	Caribbean	Socializing /Self-Authoring Transition, emphasis here is on Socializing way of knowing [3/4 – 3/4]
Daniel	Male/Late 40s	West Africa	Socializing/ Self-Authoring Transition, emphasis here is on Self-Authoring way of knowing $[3/4 \text{ to } 4/3] \Delta$
Jeff	Male/Late 40s	United States	Self-Authoring [4 – 4]

Table 4: Cases to Illustrate the Cohort as a Holding Environment for Emotional Support
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Instrumental Way of Knowing: Bill

Previously, we discussed Bill's orientation toward the cohort as a place where his ideas could be compared to those of other people, where others would form an audience in front of whom to talk, and where others provided the active learning environment he enjoyed so much more than a teachercentered class. Notably, Bill—and Renada, the other participant making meaning with this way of knowing—did not talk very much about feeling *emotionally* supported by people in his cohort. This may be because a person with an Instrumental way of knowing does not orient to an *internal* or emotional life. Support is felt and understood in more concrete ways, such as help with homework, friendly encouragement, and/or help pronouncing words correctly.

Instrumental/Socializing Transitional Way of Knowing: Helena

So she tell me, "Oh Helena, I think I gonna leave." I say, "Don't, don't, don't!" I say, "Keep going!" I say, "Try, try, try, you gonna make!" So when they almost done I say, "See, you have to try. If you don't try, you don't gonna make it." All the time I say, "Don't quit. I know it's hard, but try." (PI #1, p. 2)

In this transition, when both an Instrumental and a Socializing way of knowing are operating, learners began to comment on the ways the cohort offered emotional support that facilitated their success in the program. Learners making meaning in this transition often have both an orientation toward the concrete understanding of the Instrumental way of knowing and an increasing understanding and internalization of the perspectives of other people or social forces. Helena's case offers an excellent example of the way in which those in this transition make good use of the interpersonal support the cohort offered.

Helena, who was in her late 40s when we first met her, emigrated from West Africa in the late 1960s. She was a mother to two children in their early 20s. Helena's first language was Portuguese. From a family of 12 siblings, Helena had several relatives in the Boston area. In West Africa, she was able to attend school until the eighth grade; she sadly told us that in her home country, most women were not able to go to school beyond elementary school. It had been her wish for a long time to continue her education—and she felt strongly about having her children do the same.

The cohort was important enough to Helena that she spontaneously talked about it during the last interview, mentioning the group as a contributor to her "good time" in the class:

I tell you, we had a good time, and we very good group people, too . . . because we learn, like if I don't understand something, if that person know, they told me, or if I know, I told them. So we work together.

Her orientation in this quotation was not to reflect upon the various forms of *emotional* support she and her classmates gave one another; rather, she stated that they are "very good group people" as a fact, explaining that being a good group of people is a positive kind of exchange in which whoever holds the information shares it with the others. This orientation might be primarily Instrumental (as the relationships in the group are used for specific and instrumental purposes), but there is more to Helena's understanding of the group process than the specific information she might gain.

Helena was also interested in offering forms of emotional support to her colleagues without discussing the personal benefits of such an offering, a value she brought to her CEI Adult Diploma Program experience. She demonstrated this in the first interview, in which she reflected on the advice she gave a cousin who had gone through the program a previous year:

So she tell me, "Oh Helena, I think I gonna leave." I say, "Don't, don't, don't!" I say, "Keep going!" I say, "Try, try, try, you gonna make!" So when they almost done I say, "See, you have to try. If you don't try, you don't gonna make it." All the time I say, "Don't quit. I know it's hard, but try." (PI #1, p. 2)

We see Helena's orientation toward encouraging others through the sheer force of her positive attitude (instead of for particular reasons). Helena discussed the advice she gave to her cousin in a concrete way ("I know it's hard, but try").

At the same time, however, Helena demonstrates a Socializing way of knowing. She noticed connections between herself and others, cared about them, and offered them as important factors in her life in a way that Bill and Renada (who were more firmly making meaning with an Instrumental way of knowing) did not. At the end of her time in the CEI Adult Diploma Program class, Helena spoke of the support of her colleagues as vital to her success:

Because we here like family. Especially me, I am very close to my family, very close to my family, so here everybody friend. I think because we got along good. We got along very, very good. So, we never have any problem, like upset somebody, or talk about somebody.

Helena's orientation to the group as a family suggests her Socializing way of knowing. That she described what she meant by "family" ("here everybody friend," everyone "got along good," people didn't talk about one another) demonstrates a more advanced ability to be reflective about things (i.e., what it means to be family). Yet the features defining "family" still seem fairly concrete—people get along well and do not upset one another. The cohort met these needs for Helena and increased her comfort level and ability to accomplish her goals. As a holding environment, the cohort became a place where people were kind to one another and encouraged each other through the many difficulties of the program and the challenges of balancing the multiple responsibilities of their adult lives.

Socializing Way of Knowing: Christopher

We've been very respectful, too. So we learn to do that because we're not kids. We are adults, so we not make fun of people by saying stuff like if they don't know what to say, we polite. So we do appreciate each other. I will miss everybody after the class. And then I will hope, I really hope . . . we can still keep in contact. I mean contact, you know, calling each other, you know, things like that, to see how . . . we doing, you know. (PI #4, pp. 13–14)

For people who are Socializing knowers, there is less orientation toward the external facts of a situation and more toward an internal sense of things, an internal experience of the thoughts and ideas of others. Learners with this way of knowing will usually understand and make use of the cohort's interpersonal supports in different ways.

Originally from the Caribbean, Christopher was in his late 30s and had been in the United States for more than 10 years when we first met him. Christopher's teenage son lived in his home country, and his infant daughter lived in the United States. Christopher was highly motivated to get his diploma and saw education as "more important than money . . . It's like a key, I can open the door with a

diploma. . . . After I get it, I can decide what to do."

The cohort was helpful to Christopher's learning but in a very different way than for Helena. While Helena spoke mostly about how her cohort colleagues encouraged her to stay in the program, Christopher, when talking about how helpful the cohort was to him, spoke mostly about the way the members interacted with one another:

So, we not make fun of people by saying stuff like if they don't know what to say, we polite. So we do appreciate each other. I will miss everybody after the class. And then I will hope, I really hope . . . we can still keep in contact. I mean contact, you know, calling each other, you know, things like that, to see how . . . we doing, you know. (PI #4, pp. 13–14)

For Christopher, the cohort was not a group of people who might offer one another particular, concrete supports (such as advice about staying in the program). The cohort instead offered a way of being in relationship with one another, of giving an abstract level of support, and of accepting each other. Together, they created a safe place where they didn't "make fun of people."

To explain that this was not just a serious group, though, Christopher pointed out in February 1999, "But we are having fun. People are teasing a little bit, but with respect, you know what I mean. So, there wasn't any confusion about that." The group's atmosphere, rather than a single element, felt supportive to Christopher. They were a learning group, had fun together, and were polite to one another. If Christopher were farther along in the transition to the Self-Authoring way of knowing, he might have been able to step back from this perspective and offer a glimpse at the larger enterprise in which they were all engaged.

Socializing and Self-Authoring Transitional Way of Knowing: Daniel

Because of being so long, not real long, long, if you look, 18 months, it meets every, twice a week, two hours together, we study, we share the problems, we help each other, then we become good friends.... Like I said, it's like family, you have all the confidence in each other. If you don't know something, we help each other, we don't make fun of, we don't show, I know better than you, you know better than me. That's why I can tell, everybody meet together, become like a family.

Daniel, born in the late 1940s, emigrated from his home country in West Africa to the United States more than 20 years ago. He and his wife were foster parents to two preschool-age children who lived in their home and also had two young-adult children (one in his late teens and the other in her early 20s) who did not live with them. At home, Daniel spoke Portuguese, Creole, and English.

Daniel worked as a lead technician at Polaroid. One of the 10 learners from a the same home country in West Africa, Daniel became a leader in the cohort, supporting his colleagues and giving constructive feedback to his teachers about how they might best meet the learning needs of the group. His relationship to the group changed enormously during the program, from being "strange" and uncertain to providing strong interpersonal supports.

As Christopher did, Daniel focused a great amount of his attention on the atmosphere of the group. Also like Christopher (and others making meaning at the Socializing way of knowing), Daniel found the lack of conflict in the group vital to his comfort level. Daniel had an additional layer to his sense of the group's support though, like Helena, he thought the group was "like a family" and, like Christopher, he thought they were "nice with each other" and focused on the fact that they "don't make fun of each other."

When describing his introduction to the cohort in his final interview, Daniel reflected on the way the relationships among the Polaroid students grew and changed over time:

[At first] it was kind of strange, because we didn't know most, or all of them. You don't know exactly how we gonna deal with each other. It's not because we don't want to be nice with each other, but you kind of different, because you don't know how each other gonna react. In terms of like know, a lot of people might have good backgrounds and you don't know which stage you . . . fit, sometimes you kinda feel uncomfortable, because in the beginning, if you make a mistake, and things like that. But after a while, it's nice because we all, since then, we all understand that we all here for one thing, to learn. It's the reason we here, because we didn't know, or we didn't have that high school diploma. And so, it work out nice. Because we turn out, that's why I say, we turn out like a kid. We don't make fun of each other, because I can make mistake today, tomorrow you may make one too. That was the impression that I had.

Daniel shared that after a while he began to feel comfortable with the other students, "it's like a family." At the end of the program, he attributed this new comfort to the time they spent together and the help they offered, and he went on to explain what it meant to be like a family:

Because of being so long, not real long, long, if you look, 18 months, it meets every, twice a week, two hours together, we study, we share the problems, we help each other, then we become good friends.... Like I said, it's like family, you have all the confidence in each other. If you don't know something, we help each other, we don't make fun of, we don't show, I know better than you, you know better than me. That's why I can tell, everybody meet together, become like a family. (PI #4, 6-7)

The differences between Daniel's use of the interpersonal supports of the cohort and those of Christopher and Helena are subtle but important. Daniel, who may be better able to reflect on and discuss his thoughts about the reasons for the interpersonal things he noticed, explained what it meant to be "like family."

We found out that Daniel's conception of family was far less concrete than Helena's; it was an image of people who "have all the confidence in each other," who "help one another." He even gave specifics about *how* that process happened—meeting together often over time, studying together, learning together, and helping one another. In this transition when both the Socializing and Self-Authoring ways of knowing are operating, Daniel shared Helena's feelings about the cohort but at a different level, a level that allowed for *reflection* upon his feelings and an *examination* of the roots and importance of those feelings.

Daniel also shared Christopher's sense of the importance of the respect and lack of conflict in the group as a central feature, demonstrating a Socializing way of knowing. While people at any developmental stage might dislike conflict, those making meaning with a Socializing way of knowing often find conflict with people or ideas with which they identify particularly difficult. For learners making meaning primarily with a Socializing way of knowing, their orientation may be to avoid conflict for its own sake, to feel conflict as a breach in vital relationships that quite literally tears them apart. Moving toward the Self-Authoring way of knowing, however, enables a person to have perspective on feelings about conflict and see the goal of group harmony not as an end in itself but as a means toward some greater end.

Unlike Christopher, Daniel offered a goal larger than simply that the lack of conflict defined the group as a good one. For Daniel, both the lack of conflict *and* the group's common goals made them cohere. He said,

It's nice because we all, since [the beginning of the class] we all understand that we all here for one thing, to learn. It's the reason we here, because we didn't know, or we didn't have that high school diploma.

This cohort provided a strong holding environment for Daniel, as it did for Christopher and Helena, by meeting his needs at his level and creating an environment where he and other learners with different ways of knowing felt well held—in a psychological sense.

Self-Authoring Way of Knowing: Jeff

Being in the class environment . . . it makes you feel better. You get the reward. You able to see other . . . people's faces when you've done something, and you've got it right. Same with them, when they've done something. They got it right, you know. You can see other people, and you know that—hey, yeah, we're doing it. We're getting it down.

Jeff, the only person at the Polaroid site who had a fully Self-Authoring way of knowing, was, like Daniel, a leader in the cohort. Earlier, we discussed Jeff's role as a leader and protector of cohort members. In his protector role, Jeff looked out for the learning needs of the others. In this section, we will show how Jeff experienced the supportive and challenging "push" by working with other cohort members. As stated previously, Jeff was able to reflect on how learning with members of the cohort was helpful to him. Here, we will elaborate on how the "process" of learning with others was a source of encouragement for Jeff.

Unlike many of his colleagues, Jeff oriented to the more abstract, psychological supports he and other cohort members were given. Like Helena, Jeff noticed connections between himself and others, cared about those connections, and offered them as important factors in his learning life. However, unlike Helena, Jeff reflected on what these relationships meant to him in a more abstract way. His Self-Authoring capacity enabled him to have a bigger perspective on the complexity of the larger learning enterprise in which all cohort members were engaged. Like Daniel, who demonstrates a Socializing and Self-Authoring ways of knowing, Jeff reflected upon his feelings and examined the roots and importance of those feelings. However, unlike Daniel, lack of conflict was not a prerequisite for Jeff's comfort in interacting with others. He did not experience conflict as a threat to his sense of cohesion with the group.

Jeff did not bring up conflict as a prerequisite to his enjoyment of the group, but it was clear he took joy in his classmates' successes as well as his own. In our last meeting with Jeff (June 1999), he explained,

Being in the class environment . . . it makes you feel better. You get the reward. You able to see other . . . people's faces when you've done something, and you've got it right. Same with them, when they've done something. They got it right, you know. You can see other people, and you know that—hey, yeah, we're doing it. We're getting it down. . . . It gives you that little push, when you got other people working with you and around you, and stuff like that.

When Jeff discussed how "being in the class environment makes you feel better," he referred to his being able to experience "the reward" of not only "seeing other people's faces when" *he* did something "right" but also being able to share in the joy of knowing when others—his classmates in this case—did something well. Both gave Jeff a sense of enjoyment and satisfaction. Rather than constructing doing something right in terms of "the right answer" Jeff referred to being "right" in terms of demonstrating an understanding of a concept and understanding the *process* in contrast to following a rule.

Although Jeff stated that it made him "feel better" to be in a classroom environment and admitted that this was *a* motivator, it was not *the* main source of Jeff's motivation (as it might be if he constructed his experiences from a Socializing way of knowing). Jeff demonstrates a Self-Authoring meaning system in that he was motivated by his own set of values and beliefs. Another example of this was discussed previously when Jeff took a stand with John, the math teacher, on behalf of the class and himself. In that example, Jeff's internal values moved him to talk with John. He reminded John to take into account that the other adult learners in the class have additional responsibilities which may prohibit them from being able to do all John wanted them to do in terms of homework. In this example, Jeff seemed guided by his internally generated values to take a stand on behalf of the

cohort. Jeff was able to take a larger perspective on his experience in the classroom and step back from it so he could reflect on it. Jeff had his own sense of (or theory about) what made learning happen for himself and for others. Part of it involved leaving what he referred to as his "adult" worries or concerns outside the classroom to concentrate on his school work. Leaving his adult responsibilities outside the classroom allowed him to "clear" his mind and focus on the task at hand.

Jeff experienced working with cohort members as an encouraging support and reflected on how this was helpful—he valued the *process* because he felt it was effective, challenging, and supportive—not only for his own learning but also for other people's learning. Jeff had sophisticated and complex ideas about how and why the process of working in a group was helpful and supportive: "It give[s] you that little push when you got other people working with you and around you." Although the group gave Jeff the "push," he seemed to experience it internally. This passage demonstrates Jeff's construction of how the cohort encouraged him and also shows his capacity to have a perspective on the process of group work. He *knew* what he thought about group work, he could reflect on his own perspective about it and why he thought it was effective and supportive to his own and other people's learning. For Jeff, it was the *process* of working with others that was supportive and encouraging. He valued it because of its benefits for himself and other members of the cohort.

Jeff's reasoning was his own and not influenced by an external authority as it would be if he were a Socializing knower. His focus was on the common goals the cohort shared. As a Self-Authoring knower, Jeff constructed conflict as a natural part of learning from and working with others—not as a threat to his self. Working with other cohort members created a supportive holding environment for Jeff in which he received and gave support.

In this section, we have examined how adults who made meaning at a variety of developmental positions experienced the cohort as a supportive and encouraging holding environment. This cohort provided a strong holding environment for Jeff and Daniel—as it did for Christopher and Helena—by meeting their different needs for support and challenge. The cohort created an environment in which people who make meaning across a range of ways of knowing could be well held and encouraged.

SECTION IV: "I HAVE A BETTER APPRECIATION FOR PEOPLE": THE COHORT AS A HOLDING ENVIRONMENT FOR PERSPECTIVE BROADENING

When they [other cohort members from other countries] read their life stories, it was kind of, you could see the struggle some of them had, how they come here and met their husbands and met their wives. . . . I never thought about people [like that] before. I never thought about foreigners. To me, stop the flow at the border, you know, but what would have happened if a hundred years ago, they stopped my family from coming in, stuff like that. (Bill, Instrumental knower)

In this section, we will show how the cohort served as an enduring and sustaining holding environment for growth, challenging and supporting adults who made sense of their experiences in developmentally different ways. While the cohort supported academic learning and provided emotional encouragement, we focus here on how interpersonal interactions with cohort members helped learners develop their capacity for perspective taking. Sharing ideas through dialogue and writing challenged and supported learners to broaden their perspectives, regardless of their underlying meaning-making system.

Through group work, learners were invited to identify their assumptions and at times their very ways of thinking, which provided a space for them to reflect on themselves as learners. Engaging with others in groups over time *challenged* adults in the cohort to experiment with and enact new ways of thinking and behaving, thereby broadening their perspectives. By working in groups, learners were invited to name aspects of their own thinking and assumptions, which provides a space for individuals to become more aware of the thinking guiding their behaviors. Collaboration with other adults in the cohort often became a catalyst for growth. Learning in the cohort group encouraged adults to become more aware of and share their own perspectives and to widen their perspectives by listening to and considering other people's outlooks. We develop this argument by presenting case examples (see Table 5) illustrating how the same activity, namely group learning in the cohort over an extended period of time, became a space for transformation or a powerful holding environment—spacious enough to hold and challenge a wide range of learners, regardless of their underlying meaning system, as they broadened their perspectives.

Name	Gender/Age at Program's Start	Region Of Origin	Way Of Knowing at Program Start & Finish
Bill	Male/Late 40s	United States	Instrumental [2 to 2(3)] Δ
Hope	Female/Late 50s	Caribbean	Instrumental/Socializing
			Transition [2/3 to 3/2] Δ
Rita	Female/Early 40s	West Africa	Socializing [3/2 to 3] Δ
Daniel	Male/Late 40s	West Africa	Socializing/Self-Authoring
			Transition [3/4 to 4/3] Δ
Jeff	Male/Late 40s	United States	Self-Authoring [4 – 4]

Table 5: Cases for Illustrating the Cohort as a Holding Environment for Challenging and Supporting Perspective Broadening

Instrumental Way of Knowing

Bill's Case

I just know I see them in a different light, people from other countries, than I did before. To me, they were just invaders. Not invaders, I shouldn't have said that. You know, I don't know what I mean. Just to see them and actually talk to them and hear their life stories, and most of them struggling coming up. . . . I'm just trying, I ain't got the right words . . . I have a better appreciation for people who come from poor countries and Third World countries.

Earlier in this chapter, we introduced Bill, one of two native-born Americans in the cohort. When Bill first began the CEI class, he said remarkably little about his fellow students, except to speculate that the "foreigners" in the cohort might struggle with learning, given their limited English proficiency. Nonetheless, Bill grew to enjoy the opportunity to talk in small and large learning groups and felt confident that talking helped him learn.

Bill's perspective on other cohort members shifted radically over the course of the program. He connected this change to his experience of hearing other people's "Life Stories" presented as part of an assignment for the Life Employment Workshop during the final trimester. The Life Employment Workshop also focused on helping learners develop and build skills that would be helpful in terms of job advancement both within and outside Polaroid. Learning activities in this class included developing a cover letter and creating a resume. This class was especially important to these learners, they said, because of the recent layoffs at Polaroid and the current job uncertainty many of them were experiencing about their futures there.

For the "Life Stories" exercise, learners invested considerable time conceptualizing and writing personal narratives, which they then shared with the entire cohort through oral presentations during the final weeks of the trimester. Cohort members worked independently at home and in class in small writing groups—sharing ideas about their writing and receiving feedback from each other and from their teacher, Judith. Many of Bill's colleagues recounted their experiences of immigration, telling what it was like to leave their families behind with the hope of finding a richer life in the United States. Several presenters and many of us in the room were moved to tears as we listened to heartfelt accounts of new beginnings and the pursuit of "golden opportunities" that would bring rewards to themselves and their families.

Bill felt deeply affected by the other learners' "Life Stories." In fact, he identified this experience as the most meaningful for his learning because it "tugged at [his] heartstrings" and compelled him to see his classmates differently.

When they [other cohort members from other countries] read their life stories, it was kind of, you could see the struggle some of them had, how they come here and met their husbands and met their wives . . . I never thought about people [like that] before? I never thought about foreigners. To me, stop the flow at the border, you know, but what would have happened if a hundred years ago, they stopped my family from coming in, stuff like that.

Bill was beginning to recognize limitations of his former perspective. He admitted, "I never thought about people [like that] before. I never thought about foreigners." When Bill considered immigration issues in the past, he was limited in his perspective, unable to see beyond his own experience. Although his grandfather was born in Italy and did not speak much English, Bill, before listening to his classmates' stories, did not see connections between his classmates and himself, he told us. What he learned from other people *transformed* his thinking about himself, his own family of origin, and people from other countries.

The opportunity to learn alongside other cohort members challenged and enabled Bill to begin to think very differently about his classmates and about immigrants in general. He explained,

I just know I see them in a different light, people from other countries, than I did before. To me, they were just invaders. Not invaders, I shouldn't have said that. You know, I don't know what I mean. Just to see them and . . . actually talk to them and hear their life stories, and most of them struggling coming up. . . . I'm just trying, I ain't got the right words . . . I have a better appreciation for people who come from poor countries and third world countries.

By coming to know others in the group whose backgrounds were starkly different from his own, Bill grew much better able to understand and empathize with their experiences. Toward the end of the program, Bill realized that many members of the cohort come from "poor countries, these ain't big-money countries, and these people grew up on farms and barefoot." With this newfound understanding about the hardship in his classmates' past lives, Bill was able to recognize and applaud their accomplishments: "They're successful now, just maintaining jobs in America for all these years." This passage marks a profound shift in perspective for Bill. He began to empathize with those who are different from him and saw ways they were alike. Instead of seeing those who were different as completely other, completely separate from him (as he did during the first interviews), Bill both respected them for their accomplishments and put himself in their shoes, demonstrating a newly evolving sense of empathy for and identification with others. Notably, Bill felt grateful to other members of his cohort for helping him learn about their lives and challenging his thinking. Reflecting on his changed perspective, he said, "I just feel a lot of, I don't know, gratitude to meet them all and to learn about different things, different things about their countries." While Bill noted a shift in his thinking about his classmates in particular and immigrants in general, he was not yet able to express how this broadened perspective *felt*. Bill struggled to find words to convey his experience, sometimes revising his own statements, restarting sentences, or uttering "I don't know"; these speech patterns were virtually absent when Bill discussed other topics. We interpret the stumbling in Bill's speech as evidence that trying to reflect on his emotions brought Bill to an edge in his thinking: He began to bring others' experiences into the ways he knew and thought about his own life. We suspect that with continued support and challenge, like that which he experienced in this cohort, Bill would likely grow into this capacity as well.

This is only one experience that helped Bill take a bigger perspective on his own and other people's life experiences. The cohort served as a transitional space, holding Bill as he began to explore his own thinking and challenging and supporting him as he developed and broadened his capacity for perspective taking.

Instrumental/Socializing Transitional Way of Knowing

Hope's Case

We wrote about our parents [in the "Life Stories" exercise], what they, what ... values that they taught us. ... There were things that the group said that ... although they were from different, other countries, you could see that they were the same values. They may speak a different language, but you could see that it was the same values. ... Although ... the parents never knew each other, we have some of the same values.

Like Bill, Hope described the "Life Stories" sharing exercise as a powerful learning experience that broadened her perspective in lasting ways. Hope made sense of this learning differently, however, in part because she had a Socializing way of knowing alongside the Instrumental way of knowing that characterizes Bill's thinking.

After hearing fellow cohort members' life stories, Hope was able to see commonality where before she only saw difference. Hope previously assumed that immigrants from countries other than her homeland in the Caribbean had life experiences and world orientations very different than her own. She was surprised, then, to learn how much she shared with other members of the cohort. She explained,

We had different cultures, but by listening to each other, it's not different. It's no different than—they [others in the cohort] may speak another language . . . but when you listen, they may say it in a different word . . . but to me, it was the same.

By listening to other people's stories, Hope's thinking was challenged. Her assumption that members of the group were separated from one another by cultural differences was immediately called into question, which became an invitation for Hope to expand her perspective.

Hope demonstrated a capacity for abstract thinking, a strength of the Socializing way of knowing, when she reflected on shared "values" among members of the cohort. Hope was able to see underlying messages in the group's life stories:

We wrote about our parents, what they, what ... values that they taught us.... There were things that the group said that ... although they were from different, other countries, you could see that they were the same values. They may speak a different language, but you could see that it was the same values.... Although the parents never knew each other, we have some of the same values.

Despite obvious differences in their life histories, Hope now understood that she and many other cohort members were united by core values their parents had instilled. Hope was able to see other adults in the program as similar to herself. While members of the group spoke different languages and came from very different cultures, they shared fundamental beliefs about how to live. Instead of seeing those from other countries as completely unlike her in terms of values, Hope could now see she shared values with cohort members who may be different from her in other ways. She had a newly developed respect for what she had in common with her classmates and articulated her new understanding. Even though other cohort members may have been from other countries, spoken

different languages, and had parents who "never knew each other," she voiced a new awareness that her parents and other people's parents shared common values that they then transferred to their children. Hope's ability to recognize commonalties across the group enabled her to manage their differences, rather than feel threatened by them.

Remarkably, Hope was able to generalize her enhanced capacity for perspective taking beyond the classroom and into other domains of her life. She explained how learning made possible in the cohort was helping her at work:

[Working with the cohort] made me understand people who I work with. Cause they're people I work with that's dyslexic. And make me think back. I wasn't dyslexic, but it make me think back. If I didn't go to this class, I wouldn't have the opportunity of helping them in some of the things they are, and a little bit more patience.

With the supportive holding environment of the cohort, Hope was increasingly able to take on other people's perspectives, and this ability to see a bigger world also helped her in her work life. For Hope, it seems that difference was okay because everyone was still connected and basically the same (a Socializing construction). She discussed all of this in a concrete context (an Instrumental construction).

The cohort served as a holding environment, a supportive space in which Hope's thinking was challenged and supported as she began to see and make sense of a bigger world. Hope had already expressed an empathy for her fellow cohort members that stemmed from knowing more about their lives. For example, she said, "Some of them speak three languages plus English. So, I give my hand to them. Because to learn in English plus what they have before, that's a lot." This capacity for empathy now extended to many others, such as adults with dyslexia at work, whose struggles came into view for Hope.

Socializing Way of Knowing

Rita's Case

I might work part-time in another year after, 2000, because I want to, you know, when you go to school, you starting go to school . . . it's something that, it's like when you try to reach something that you put one footstool, then you couldn't reach that, you might say, let me go up on the ladder, I want to go one step at a time until I reach the top. When I start[ed] this program, I was low, low, low. And I took a course . . . when I passed the test for GED, I say, well, now is the time, when I saw this program and I said, 18 months is a long time. But I always think about the 18 months will be gone soon, and another 18 months is around the corner for me. You have to focus on your dream.

In this section we introduce Rita, who in her early 20s emigrated, alone, from her home country in West Africa to the United States. At the age of 12, Rita needed to leave school to help her parents run their household and earn money. Rita's mother insisted that young girls belong at home, not in school, although her father encouraged her never to give up on her goal of going to school. Now in her early

40s and with a husband and two elementary school-age children, Rita felt it was time to fulfill her lifelong "dream" of an education.

The CEI Adult Diploma Program and its cohort served as a dynamic holding environment for Rita, supporting and challenging her as she developed the capacity to envision new possibilities for herself and her future, thus broadening her perspective. Although Rita was laid off from her position in Polaroid's Camera Division during the second trimester of the program, she remained astoundingly hopeful about her career prospects and opportunities for continued learning. In this section, we will highlight how Rita's capacity for perspective expanded as she began to envision new possibilities for herself and her future.

Rita derived tremendous motivation from her "dream" of earning an American high school diploma. For most of her life, Rita felt stifled by her mother's charge that she go to work instead of school. Rita now saw the diploma as her chance to "move on with life."

That was my dream all this year that I worked for Polaroid. . . . I always talked to my supervisor about someday I have to go to school until I get graduated. Someday I have to become an American graduate, you know? So they had this program. Last year I couldn't take it because my daughter, she has knee injuries and she was on an off from the hospital. It was hard for me. But this year, [it was] so nice, [there were] fliers that we stamped here to go out, and I took one, and I pulled it out, and I told my supervisor, what do you think of this one? She said, "[I'll] sign it." . . . Now it is time to start. Move on with the life. (PI #1, p. 1)

In the metaphor of Rita's life, it is as if she has been resting on the side of the road, waiting for her journey to begin again. When she passed the CEI assessment test, Rita said to herself, "This is my first step." With the start of this program, she was finally able to get back to her "dream."

In the first interview, Rita talked about wishing "life could turn around," so that she could capitalize on newfound opportunities in the United States by prioritizing her schooling. Given her regrets and resentment about restricted choices in her adolescence, we are impressed by Rita's forward orientation; she was focused on future possibilities, the different careers she could pursue and the classes she could take to enhance her knowledge. Like many other cohort members, she believed "it is never too late to learn."

Her role as worker also seemed to influence her desire and need to learn more because, like many in the cohort, she felt that education would give her enhanced opportunities for job advancement. Although it was unfortunate she lost her job at Polaroid, she reframed this event as a welcomed opportunity to focus on her education. Such a hopeful, powerful word—"dream"—speaks to Rita as a person, how she constructed her experience, what she was about in the world, and the ways in which the diploma program helped her *see and believe in new possibilities for herself*. In important ways, Rita was at a phase in her life in which she was following her dreams—she wanted to do this for herself and her children. Rita wanted her children to be proud of her and to pursue their own education, and she felt that she would set a good example by earning her high school diploma.

Before beginning the program (February 1998), Rita did not articulate any career goals at all, except the certain knowledge that she wanted to go to college.

[My] second step I will see you in U Mass . . . If I graduate [from the program], 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. . . . I don't know yet [what she will study in college]. But I wait until I get my diploma. That is the first step I want to move on. I will. Someday. (PI #1, pp. 1–2)

In the second through fourth interviews (September 1998–June 1999), Rita mentioned three different career options: nurse, computer programmer, and medical assistant. The fact that Rita contemplated three different job options over the course of the final three interviews seems important in light of her earlier comments about job opportunities in this country: "As long as someone encourages you, you can become a lawyer, a doctor, a manager." In the diploma program, she experienced the cohort's and teacher's encouragement as important developmental supports that enabled her to explore options. Contemplating career options suggests Rita had developed a perspective on the versatility of her abilities and talents—and had a developing capacity to envision expanded opportunities for her future. In Rita's view, her interactions with cohort members in the Polaroid program and members of our research team made these options seem more viable.

We notice, however, that she did not talk about a progression of goals (e.g., "I used to want to be X but now I've learned more about it, and I want to be Y"). Instead, Rita talked about each career goal as a distinct entity in itself, a "dream" that sounded lifelong but changed from interview to interview. It seems that each of these goals motivated her to stay engaged with learning in important ways. The teaching practice of encouraging learners to consider a variety of goals might, in our view, help learners articulate goals which then might help them stay in ABE programs. This will be discussed in Chapter Seven.

In February 1999, Rita told us about how grateful she felt for the chance to learn.

Thanks to Polaroid, they come up with this program and thank all of you [our research team] that help us [the cohort] **that make us—ourselves change**. This is a big chance for us because we are adult. We have to work every day to survive and then to go to school, to have high school diploma is not easy. If I wasn't at Polaroid, believe it or not, I would never have my high school diploma. **But things will change**. (PI #3, p. 5)

Rita knew that more schooling was required to realize her career goals; "I have to go to school for what I am to be." Also in this interview (during the program's third trimester), Rita described how she bought a computer and had been practicing typing. This experience of learning to use computers in the CEI Adult Diploma Program seemed to open up the possibility for Rita that she could be a computer programmer, thus broadening her perspective on future possibilities. When asked during this interview about what she would like to be, Rita replied,

I want to be computer programmer, and I want to go to school to learn that, and now I start learning little by little but it's different because it's [the class] only an hour and a half. It's not enough. But if I go full-time, then I know it's different. Because I love work on the computer, and this year I bought myself a computer, and I practice at home. Now I start learning how to typing, which is something that I used to love, but I didn't have no computer, and I don't want to go somebody's house and say, can I use your computer, your typewriter? No, and I say, "Well, sometime God is good: He close one door, and He open up five doors." (PI #3, p. 8)

In the last interview, when Rita spoke about her "dream" she was able to take a bigger perspective on how earning her high school diploma was a step toward the bigger dreams she had for herself. In response to an interviewer's question about why it would feel good to be able to answer questions posed to her, she offered:

To be myself... It's like when you see the mirror in front of you, you see yourself. It's exactly what I'm right now. I see myself walking with my cap and gown with my diploma in my hand, and that makes me feel so proud, and that makes me feel I hope, and I wish, someday I have a job in the future to go to different schools to teach kids how to survive. How to go to school, how to prepare themselves for the future. Because you know, sometimes you see kids 14, 15, 16 years old, they think they know everything, but they don't know nothing. You have to have experience in life to have to succeed your goals, you have to see your dreams in your future. Well some people think I know how to write my name, that's okay. If anybody ask me for a signature, I'll do it. But it's not a thing beyond that. [*I have a picture in my head of you walking across the stage getting your diploma.*] That's the beginning.

One of the hallmarks of Rita's development is her articulation of her career goals over time and the ways in which the program—as a dynamic holding environment for growth—helped her envision new possibilities and expand her perspective about future career options.

Not only did the program help Rita to broaden her perspective, working with cohort members provided a safe holding environment that supported and held Rita as she took risks toward being able to express herself in new ways. Rita told us she finally felt able to express herself and imagine new possibilities for her life, "see [her] dreams in [her] future." For Rita, becoming educated, learning the language, being able to "answer someone back" meant *to be able to be herself*. It is as if she was able to reclaim herself through her learning, to set her self free. Rita not only broadened her perspective during the program, but also began to see the real possibility for realizing her dreams and for being herself—all as a result of learning with members of the cohort, being in the program, and earning her diploma. This is a powerful statement and experience—to be able to engage with other people and the world after so many years of being imprisoned by the inability to communicate, to be able to see the possibility in life that before was out of reach, to be able to have a perspective on how earning an adult diploma was a step toward making bigger dreams a reality.

Socializing/Self-Authoring Transitional Way of Knowing

Daniel's Case

We know we're all grownups in there. So we don't be afraid to ask a simple question, what it is or how this works or something like that. Where otherwise if you're not in the school, if I didn't take this course, I would say, "Oh, it's a small

word but I'm not going to ask people what kind of word is this." But in the school, we're all in there for one thing, to learn better. (PI #3, p. 14)

Earlier in this chapter, we introduced Daniel, a lead technician at Polaroid who emigrated from his home country in West Africa and who had worked at Polaroid for 20 years. When Daniel first began the CEI program, he felt "anxious" about his ability to balance the demands of being in the program and working full-time. Initially, Daniel said he felt "uncomfortable" about making mistakes. During the program, Daniel's perspective on making mistakes shifted dramatically as he grew more "comfortable" with other cohort members and also as he gained a different perspective on the *value* of making mistakes.

In our final two interviews with Daniel, we noticed his earlier perspective on being "scared" and "afraid" about making mistakes had changed. At this time, he talked about feeling "scared" on behalf of the whole class (demonstrating both a concern for, and possibly embeddedness in, their experience as well as an ability to take a perspective on the cohort's experience). At the same time, he focused on his own feelings about his learning and the changes he noticed in himself about his feelings as a learner. Daniel responded to a question about a "meaningful learning experience" he had in the program by talking about what it was like for the class as they approached the end of the program:

Meaningful? I think right now is the time when everybody is excited because you're getting to the end. . . . You can see the end is coming. And I think most of us, we really enjoy it. And I also started encouraging some more coworkers [to enroll]. . . . That's one of the feelings, I feel more exciting because I can see something, in the beginning sometimes you be scared, you don't know when you get into it if you're going to be able to learn something. We don't know, I don't know how it was like before I get into it. But right now we can speak more clearly, we can be able to speak with each other. Like in the beginning we [were] kind of scared. (PI #3, p. 4)

Daniel described how he personally did not know what the program would be like initially, and that was scary, a feeling that Daniel believed he shared with others in his cohort. He also spoke of his feelings about wanting to complete academic tasks "properly."

Importantly, in this third interview, he highlighted a change in his perspective and his feelings of trepidation. "When you start writing something . . . I like to do it properly, but I'm scared. But I feel comfortable with this right now or more less." At this point, Daniel accepted and understood why he felt uncomfortable and was able to have a perspective on feeling afraid and comfortable around his writing skills:

Yes. That's why I was thinking also what happened with the people like me, I come over here, there are more people that come over with more education also which is more advanced. . . . I see a lot of people that they're writing comfortable, they're not scared to write now. They . . . write, you understand what they're saying but you're misspelling a lot. That's why I'm afraid. I like to do things, I like to do it properly. . . . That's why I think I should be comfortable with myself to write it down even if it's wrong and then I correct it later or something like that. (PI #3, p. 16)

Polaroid Site

Daniel compared himself to "people that come over with more education" meaning perhaps other immigrants who arrived in the U.S. with more schooling, or perhaps native English speakers in his company. At this point, he noticed that "they're writing comfortable, they're not scared to write," and he seemed to want to be like them. Daniel demonstrates a Socializing way of knowing and a concern for how others perceive him, in that he was afraid of looking less than competent in front of others. At the same time, he had his own values and standards for completing tasks "properly." Wanting to do things "properly" seems to refer to wanting to meet his internally generated expectations for writing. He shared his newly developed perspective that it was okay to make mistakes and to correct these as he engaged in learning.

In the last interview, Daniel recalled how he felt scared as the beginning of the program and how his perspective changed:

From the beginning, that was kind of little tough, the English part, you have to write in the beginning. That was my most difficult, because I always have trouble writing. **It's not because I don't know how to write, I can write a few things, but I'm afraid to make mistakes**. I found out in the end, ... I was thinking, that was before, because probably in the beginning when I came to this country I was trying to speak English, so I can get a better job and communicate. I bought a, an English course which you hear, you read, and you understand English, and you forget about writing. And I was thinking that's the reason why I didn't write, **I was kind of scared to write, to make mistake**. So I, when I was in English class, that was very helpful. [*Do you feel that way now?*] Oh no. No, not after I write all those things. ... **Because I gained a lot experience. We wrote a lot. Then I learn how to correct myself**. (PI #4, p. 3)

Daniel's fear could stem from a fear of looking incompetent in front of others (a Socializing construction), and/or he may personally value high-quality work (a Self-Authoring construction). Importantly, Daniel did not implicate other people in his reasons for feeling scared or not. In fact, his reason for not feeling scared anymore is derived from his own experience and abilities (a Self-Authoring capacity) rather than from the reassurance of his teachers or colleagues (a Socializing perspective).

Daniel had gained some distance from his anxiety-ridden experiences and could now understand how others (other immigrant adults coming to the U.S. for the first time) may have had similar emotions. When Daniel said, "There is never a stupid question. And that encouraged me a lot. If you are really not scared, you can [learn]," it shows his newly developed perspective, which gave him freedom from this kind of fear and enabled him to learn. Daniel's clarity about what he wanted— "to make it comfortable to myself and start learning"—suggests his ability to evaluate himself. He expanded on his new perspective when he talked about how he will be as a learner in future courses:

Which, if I am going to be taking another course or something like that, I will be feel more comfortable asking questions, things like that. It has helped me a lot. There is something, there is a step that you [have to take] . . . you don't be afraid to ask people questions. Like the teacher is comfortable and it's a good thing we work together. We know we're all grown ups in there. So we don't be

afraid to ask a simple question, what it is or how this works or something like that. Where otherwise if you're not in the school, if I didn't take this course, I would say, "Oh, it's a small word but I'm not going to ask people what kind of word is this." But in the school, we're all in there for one thing, to learn better. (PI #3, p. 14)

The cohort served as a safe place that challenged and supported Daniel as he broadened his perspective on his own and on other people's learning processes. During the program, Daniel developed a perspective on his feelings. Some of these feelings he made his own ("I haven't had the courage") and some he ascribed to others ("They're scared to speak up"). Some feelings he shared with others (in the beginning, "we were afraid"). Daniel simultaneously owned his feelings and experienced himself as having the same feelings as others.

During the program, Daniel developed a new perspective on making mistakes; over time, he came to believe it was okay to make mistakes because he viewed mistakes as "opportunities" for learning. Daniel clearly stated this was not the way he thought about mistakes before he entered the program. The Self-Authoring part of his construction seems to be that Daniel at the end of the program realized he could be imperfect in other people's eyes—and he was able to risk being seen this way by others.

Self-Authoring Way of Knowing

Jeff's Case

One of two learners native to the United States, Jeff had enormous differences from many of the other members of the cohort—English was his first and only language, he grew up in the South, and he was schooled in the United States before dropping out in the eleventh grade. Although Jeff enrolled in the program to earn a high school diploma, he soon came to appreciate the value of his "multicultural" class. The only learner making sense of his experience in a fully Self-Authoring way of knowing, Jeff reflected sensitively on the ways in which working with other cohort members who were quite different from him in terms of their ethnicities, cultures, and family backgrounds helped him gain a broader perspective on himself and others.

For example, earlier in this chapter, we discussed how Jeff discovered he was able to learn from sharing what he knew with others and from the process of working with others in cohort learning groups. Jeff realized, through his work in small and large learning groups, that "everybody's learning is different," and he demonstrated the developmental capacity to have a perspective on the entire cohort's common purpose. His perspective was that the group was effective not only for his own learning but also for other people's learning. Jeff's thinking and sophisticated ideas about why working in a group was helpful and the ways in which his perspective broadened over time illustrate his Self-Authoring way of knowing.

In our third interview (February 1999), Jeff explained how his perspective on what it meant to be a member of a multicultural cohort had changed since the beginning of the program. At the start of the program, he worried that most of the other learners, who were immigrants, would slow his progress and the class because they needed help with the basics of grammar and pronunciation. However, Jeff's collaboration over time with the adults in this diverse group enabled him to broaden his perspective in significant ways. For example, Jeff reflected on the experience of doing a research project assigned in science class. Jeff soon came to understand the other adults' struggles with English as a learning need rather than a liability to his own learning. He also began to recognize the implications of his classmates' prior learning experiences in a different educational system:

Well, I think for me it was like he [the science teacher] gave us the things to do [in the science research project]. We all selected a title, a topic [to investigate on the Internet for the science project]. And then he'd [the teacher, John] give us directions on how to do it... Most of the people in the class didn't understand [the teacher's directions]. That was because they are from another country. And the two [educational systems are] different, maybe the schoolings are different. Maybe because, you know, like I said, they are from another country. They don't grasp or understand the English language, so therefore, they can't, as fast.

To complete this science research project and report, each learner needed to understand the teacher's directions and to work both independently (e.g., conducting research on the Internet, writing sections of the report) and collaboratively in a small group (e.g., developing outlines and theses, providing constructive feedback on drafts). Jeff explained how he thought other members of the cohort from other countries were looking to him and Bill, the only two "Americans" to see if they would find the project's directions easier to understand because they were native English speakers. Jeff said,

Now, we all worked in singles. But I think what it was, like, myself and Bill in the class, were the only two Americans. Everybody else was multicultural. So it's almost like I got the feeling that they were kind of looking at us—How much did they know? You know, the whole nine yards. [As if] I know no more than the rest of them do. But I kind of got the feeling that they expected us to know just a little bit more than they did. But when it comes down to it, we didn't know no more than the other person did.

After working with cohort members in these learning groups on this science report and in other classroom learning activities, Jeff realized the other group members thought he and Bill, knew more than the other multicultural members of the cohort because they were Americans. Jeff had the important capacity to see that others had different experiences and expectations of him than he did of himself. He also discussed how the other members of the cohort had important knowledge, ideas, and experiences to share with each other and with him. He reminded us, at the time of this third interview, of the example he shared earlier about learning the math concept of using the "x" to solve an algebraic equation.

Basically, yes, I did. Yes. Like I said, everybody's learning is different. Everybody has different types of learning. And come to find out what they were doing, they [the "multicultural" cohort members] were applying these math skills that they had already learned in their country. They were trying to apply [them] to the American [way of doing math] and come to find out what John [the teacher] was saying, they were doing it, but they were doing it the way they were shown [in their home countries, and] coming up with the same answer [as Jeff and Bill].... When me and Bill did it, we had this big long thing. We had the answer, but the problem was worked out. But yet, the way they did it, they had half of the problem, but their shortcuts were better. But they [the "multicultural" members of the cohort] had the same answer. So, John was saying, no, you have to do it the American way.

Jeff adopted a broader perspective on his own learning when he came to believe he could learn from the process of working with other cohort members who were different. He also developed a broader perspective on the process by which other members of the class needed to learn, especially because English was their second language. He decided to approach John and tell him that he was teaching sophisticated mathematical concepts in a way that was not working *for the class*. Jeff's awareness caused him to advocate on behalf of his classmates. Jeff told his teacher, "It's harder for them [the multicultural members of the class] to understand what you're saying. You have to explain yourself. You have to show them more details." Jeff articulated suggestions to John so John might be better able to facilitate the other students' learning. Jeff demonstrates the capacity to have a perspective on the struggles his classmates encounter. Interestingly, Jeff, a Self-Authoring knower, was the only learner in the program who raised this issue of the class's pedagogical needs as special because it was a "multicultural" class. This demonstrates how Jeff's perspective deepened over time and also his capacity to take a larger perspective on the situation.

During the third and fourth interviews, when Jeff reflected on his experience of being in a "multicultural class," he demonstrated his Self-Authoring capacity to take a metaperspective on and advocate for his views of teaching and step back from his own experience in the class. Having had the opportunity to work with other adult learners from a variety of countries helped Jeff broaden his perspective about what it means to him to be in a "multicultural" class and how people's learning needs differ. Additionally, he developed an appreciation for his fellow classmates' learning needs and how they influenced the learning process.

In the last interview (June 1999), Jeff explained more about how his perspective was broadened after being part of a "multicultural" class for the past 14 months. He shared his new and deeper understanding of what it meant to be a person who came to the United States as an adult learner in the CEI Adult Diploma Program. After being in the cohort, he had new appreciation for how his classmates must have struggled. The cohort served as a holding environment for Jeff, supporting and challenging his capacity for perspective taking.

Also in this last interview, Jeff reflected on another way his perspective broadened through participation in this diploma program. After working for Polaroid for many years and thoroughly enjoying and being fascinated by his work on machines, he was, for the first time, considering enrolling in a supervisor training course at Polaroid. Although he acknowledged a few reservations about the match between his personality and particular aspects of a supervisor's work, he was interested in exploring this career option. When asked whether the diploma program had helped him think differently about this possibility, Jeff explained,

Yes. It has. Yeah. 'Cause they, Polaroid does, they do, from time to time, offer a course or program for, should I say low entry or low-level like, supervisors. Supervisors in training? Stuff like that, which, now, with this, you know, completing this [diploma program] course and doing all that, and retuning,

sharpening my skills. I don't think I'd have a problem if they—[the] course came. I'd probably sign up for it. [*Jeff, you'd be a dynamite supervisor!*]... I just have ... more things to learn about supervision, supervisors, and the upper echelons of the company. (PI #4, pp. 22–23)

Jeff was interested in taking the supervisor training course at Polaroid and realized that if he chose to pursue this leadership position, he would need to develop certain skills. At the same time, Jeff realized other aspects of the work would be harder for him, given his personality.

Jeff had a broader perspective about future career possibilities at this point, and he attributed his ability to consider such options to his participation in the diploma program. In the process of making his decision, Jeff demonstrates the capacity to articulate some of his own assumptions about supervisors' work and to reflect on whether or not he had what he considered the qualities needed for this kind of work. He realized that learning to interact with the "upper echelon" would be required of a supervisor. He recognized his need for learning in this area but was in the process of considering his feelings about this. Jeff was challenging some of his own assumptions about his work and reflecting on his own values. This is yet

another example of a way in which the program served as a dynamic holding environment supporting and challenging Jeff's way of knowing, thus broadening his vision of himself as worker.

In this section we illuminated how the cohort—and the interpersonal interactions cohort members had with each other—helped learners develop capacities for perspective taking. Sharing ideas through dialogue, writing, gently questioning, and listening to each others' experiences both challenged and supported learners to widen their perspectives, regardless of their underlying meaning-making systems.

Working closely with cohort members in general and especially in small collaborative groups created a context for reflection. Engaging with others in shared learning experiences over time enabled and *challenged* cohort learners to experiment with and enact new ways of thinking and behaving, thereby broadening their perspectives. Naming aspects of their own thinking, as we have shown, provided a space for learners to become more aware of the thinking that guided their behaviors. In these ways, the cohort served as a holding environment for learners that gently challenged and supported learners as they enhanced their capacities for perspective taking. Working with other cohort members over time often became a catalyst for growth.

We also have shown how three learners—Bill, Hope, and Jeff—made sense of the Life Stories exercise assigned during their final program trimester. Although all three found this a powerful learning experience, they made sense of the *same* experience and how it helped them broaden their perspective differently, through their individual underlying meaning system. This is a compelling example of how learning activities such as the Life Stories exercise can sufficiently accommodate learners making sense of their experience through different meaning systems. Bill, Hope, and Jeff show us that the Life Stories curriculum (which involved individual and collaborative conceptualizing, writing, reflecting, oral presenting, and listening) was transformational across gender, racial background, and way of knowing.

SECTION V: SUMMARY AND IMPLICATIONS

In this chapter, we have illustrated how learners experienced the cohort (a program design feature) and collaborative learning (a teacher practice). In doing so, we illuminated how sustained connection to fellow cohort members and learners' work in collaborative learning groups provided a robust holding environment that supported learners' academic development, emotional well-being, and cognitive development. Furthermore, we have illustrated the ways that learners with different ways of knowing experienced collaborative group learning and argued that these seem to mirror the goals Hamilton (1994) articulates for Trimbur's (1993) three models of collaborative learning. In this section, we discuss the implications of our work for program design and teacher practice.

The interplay between CEI's program structure and the teacher practice of using collaborative learning created opportunities for learners to share experiences, form interpersonal relationships, and support one another's learning. We argued that the variety and forms of support and challenge offered to and given by these learners worked to transform this group of adult workers into a *cohort of learners*. And we have shown that learners experienced their relationship to the cohort differently, depending on their way of knowing. Engaging in common learning experiences over an extended period in which learners worked *together* toward the same goal contributed importantly to the formation of a caring learning community in which adult learners supported one another as they participated in this program. For many learners, this cohort was "like a family."

This finding emphasizes the cohort as a holding environment for adult learning that both supports and challenges learners, leading to important implications for both adult learning program design and teacher practice. It suggests how ABE practitioners might structure classroom environments to better support learners who make sense of their experiences in qualitatively different ways. In the CEI program, learners did not have the open-entry/open-exit option available to them. In the late 1980s, Boston, Massachusetts-area ABE programs experienced increases in attendance and program completion after dropping this option (Garner, 2001, personal communication). While working and learning together in cohorts has great benefit for adult learners, it may not be feasible to build the same kind of consistent and enduring cohort structure into all programs, given the complexities of adult learners' lives, program restrictions, and funding requirements under which many ABE programs operate. Therefore, we suggest ABE programs incorporate as many cohort features as possible (i.e., variations on the cohort theme) into existing program designs to enhance learning, better support the development of classroom community, and increase learner retention rates.

Our finding about the power of adult learning in the cohort parallels findings reported by Hal Beder and Patsy Medina (2001). In their qualitative study of 20 ABE classrooms with highly diverse populations learning in a range of contexts, Beder and Medina comment on the disappointing effects that turbulence, "unstable classroom environments in which learners constantly come and go" has on adult learning, classroom culture, and the possibility of developing "shared meanings" (p. 96). In their study (2001) of basic literacy, family literacy, and workplace literacy programs in which classes were conducted in public schools, community colleges, libraries, community centers, churches, and workplaces in eight different states, they discovered that "mixed levels and continuous enrollment are very serious problems, over which teachers have very little control, problems with which most teachers simply cannot cope effectively" (Beder & Medina, 2001, p. 89). These serious problems, they argue, contribute importantly to teacher burnout and lack of learner success in ABE programs.

Much like us, Beder and Medina maintain that mixed levels in ABE classrooms and enrollment turbulence have important "implications for the open entry/open exit norms of adult

literacy education as well as the time limits placed on student participation as a result of welfare reform and other adult literacy education policies" (2001, p. 15). Additionally, they suggest that the continuous enrollment policy, although often necessary to ensure funding, has important consequences. For example, they contend that continuous enrollment also influences learners with a propensity for "tuning out" in classrooms because presented material is too easy or too difficult. These learners become bored or cannot follow instructions (Beder & Medina, 2001). Furthermore, Beder and Medina (2001) suggest that "tuning out" may be characteristic of a learner who is near dropping out. They write:

As continuous enrollment and, to some extent, mixed level classes are products of high dropout rates, and it is unreasonable to expect that the dropout problem will be solved either soon or easily, we will probably have continuous enrollment and mixed levels into the future. Better ways to manage continuous enrollment and mixed levels are possible, however. First, a systematic search should be made for the best practices in managing continuous enrollment and mixed skill levels. After these practices have been evaluated for efficacy and feasibility, they should be disseminated to teachers and program administrators through professional development and other means. Dealing more effectively with continuous enrollment and mixed levels is achievable, and doing so would have a very significant positive impact on adult learning experiences. (p. 105)

In this chapter, we also illustrated how cohort learners, with different learning needs and different ways of knowing, engaged with collaborative learning—which may be a classroom practice that would help address aspects of the "mixed level" problem Beder and Medina point to above. We have shown how learners across ways of knowing differentially experienced *academic*, *emotional*, and *cognitive* benefits from working in collaborative learning groups with fellow cohort members. Because ABE classes will be composed of adults who make meaning at different developmental positions, and who have different learning needs (mixed levels within any one classroom), ABE programs that support these different students as they grow will be especially effective.

We illustrated the ways learners experienced collaborative group learning and suggested that these seem to mirror the goals Hamilton (1994) articulates for Trimbur's (1993) three models of collaborative learning. At the start of this chapter, we invited consideration of several questions. How might learners who make sense of their experience with different underlying meaning systems experience each of these models? What types of developmental supports and challenges might be necessary for learners to engage in any one of these models? How might learners benefit if teachers were to incorporate aspects of all three of these different models into their classrooms? How might ABE teachers who include collaborative learning in their classroom practices benefit from understanding the different developmental origins of adults in these groups?

As mentioned, the first model, the "postindustrialist model" of collaborative learning, in Hamilton's (1994) view, "appears in classrooms in the form of group efforts to solve common problems formulated by an instructor whose curricular agenda determines group structure, time on task, goals, and anticipated answers"

(p. 94). The goals of the "social constructionist model" include "engaging students more actively in their learning while concurrently developing social skills of negotiation and consensus building" (Hamilton, 1994, p. 95). The challenge of the "popular democratic model" of collaborative

development is "not to obliterate essential differences in the search for commonalties but rather to envision these essential differences . . . as catalysts for the making of meaning within specific concepts of the particular course" (Hamilton, 1994, pp. 95–96).

As we have illustrated, learners in the Polaroid cohort who were Instrumental knowers primarily valued opportunities to work collaboratively for *instrumental* reasons. These learners appreciated working with cohort members because it helped them achieve specific concrete, behavioral goals. Their reasoning aligns with the goals Hamilton (1994) articulates for Trimbur's (1993) "postindustrial model." They reported that cohort collaboration helped them:

- "find the right answers" in math, or the correct sentence structure when writing
- learn how to use the right words to better express themselves in English, and improve their vocabulary
- learn how to communicate better with other people at work, at home, and in their daily interactions with people in the world (e.g., co-workers, supervisors, school officials, and/or their children's teachers)
- see classmates and even themselves as holders of knowledge (constructed as an accumulation of facts)
- understand the meaning of words and concepts
- learn how to learn on their own (as evidenced by demonstrating a behavior)

We also showed that although learners who were Socializing knowers valued the instrumental supports named by Instrumental knowers, they also spoke about appreciating encouragement from fellow cohort members. Socializing knowers especially valued the cohort and collaborative work for the important emotional and psychological support it offered as they balanced the multiple demands of work, family, and school. Their experience mirrors the goals Hamilton (1994) names for Trimbur's (1993) "social constructionist model" of collaborative learning. It helped them:

- feel "comfortable" asking questions when they did not know the answer or did not know what do to in particular situations
- learn to "socialize with other people"
- feel less "afraid when speaking English" in front of others (both within and outside of the classroom)

Although Self-Authoring knowers mentioned instrumental, psychological, and emotional reasons why working with cohort members was helpful, they focused particularly on their appreciation of the different perspectives cohort members brought to a particular learning activity and how this helped broaden their perspectives. Their experience aligns closely with the "popular democratic model" (Trimbur, 1993, as cited in Hamilton, 1994) of collaborative learning. Self-Authoring knowers reported that working with other cohort members helped them:

- enhance their learning and teaching *processes* because they were exposed to varying perspectives (points of view) on particular issues
- better understand and appreciate themselves and other learners' academic and life experiences
- recognize and, at times, appreciate forms of difference and commonality across and beyond the cohort

The cohort and the collaborative learning groups in the CEI Adult Diploma Program classes served as contexts in which adults were often encouraged by each other, and by teachers, to challenge their own assumptions. A person's assumptions, we believe, deeply influence the ways in which a person thinks and acts (Kegan & Lahey, 2001). We have examined some of the ways the cohort and collaborative learning groups served as transitional spaces and holding environments for growth. Notably, two learners did not speak initially about group learning experiences. Specifically, during the first and second rounds of interviews, Renada and Teresina did not say much about working with other cohort members in small and large groups. However, as their expressive language skills seemed to improve (based on what we learned from them in interviews and classroom observations), they talked about participating more fully in small cohort groups and more often valuing group work with cohort members. Thus, even for members who did not seem initially as connected to the cohort as others, the learning community still seemed to have a powerful presence.

Significantly, the above three classifications of learners' experience closely match those described in the literature. Although Hamilton (1994) presents these models as a kind of a hierarchy of use, it is important for teachers to consider 1) not all learners can take advantage of the entire hierarchy, 2) some learners will find their highest level of use in one of the models, and 3) there is a need to create classroom environments in which all models are working synergistically. As we have said, Hamilton (1994) suggests a teacher would benefit from selecting and implementing one particular model *for any one class* that suits his or her teaching philosophy or personal style. However, since learners make sense of the *same process*—collaborative learning—in qualitatively different ways, selecting and implementing only one model would support learners with one way of knowing better than it would others. Learners with different ways of knowing used several model types—to varying degrees and depending on their way of knowing—and needed different forms of support and challenge to benefit from these experiences. Therefore, we suggest that teachers adopt a *plurality* of approaches, flexibly incorporating components of all three models in any *one classroom* to meet and attend to a wide range of learners' ways of knowing and diverse learning needs.

We believe that ABE teachers will benefit from recognizing the multiple ways learners make sense of the cohort and collaborative learning groups. We hope this work offers insights to educators and program designers and sheds light on the importance of understanding how adult learners *differently* experience and benefit from cohorts and collaborative groups. This kind of developmental attentiveness may allow us to meet adult learners where they are and better scaffold learners with a diversity of learning needs, ways of knowing, and hopes for the future.

In the next chapter, we turn to how the cohort and other features of this CEI program (e.g., teachers, structure, and curriculum) helped adult learners transfer classroom learning to their lives. We focus on the changes learners reported in themselves and attributed to their program experience.

In so doing, we also highlight observed developmental changes in their meaning making and how these developmental changes reshaped their relationship to work and their world.

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