A study followed for a year or more the internal experiences of learning and change of 41 adult basic education/English as a second language learners enrolled in these 3 programs: community college, family literacy site, and workplace site. It focused on learners' meanings as the starting point for exploration and used a developmental lens to understand learners' program experiences in its approach to data collection and analysis. Protocols and measures administered before or near the start day of each program, during the middle months, and near the end of the program were focus groups; Experiences of Learning Interviews; Subject-Object Interview; Loevinger's Ego Development Sentence Completion Test; Role-Related Vignettes; Satisfaction with Life Scale; Perceived Efficacy Beliefs Scale; Locus of Control Scale; Self as Learner, Parent, or Worker Map; Reflecting on Changes in Self as Learner, Parent, or Worker Map; classroom observations; and Teacher Interview on Student Changes. Key theoretical and methodological lessons that focused on exploring developmentally oriented questions were adapting measures in accordance with learnings related to logistical, language and cultural issues; learnings related to contextual issues; and learnings related to using a range of measures to understand learners' meaning making and program experiences. Protocols and measures are appended. (Contains 45 references.) (YLBJB)
Adult Development Researchers' Reflections on Using Multiple Research Methods with ABE/ESOL Populations

BY:

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INTRODUCTION

Beyond the acquisition of important language skills and increased content learning, what are the bigger internal meanings for adults participating in ABE/ESOL programs? How do the systematic ways in which adults are making meaning when they enter their program shape how they will best learn in programs and what they will most need from them? How can developmental theory and research methods increase understanding of how ABE/ESOL learners’ experience their programs?

As adult developmental psychologists interested in adult education¹, we carefully followed for a year or more the internal experiences of learning and change of 41 ABE/ESOL learners who were enrolled in three different U.S. programs (i.e., a community college, a family literacy site, and a workplace site). Each program was oriented to enhancing participants’ greater English language fluency, content knowledge, and effectiveness as students, parents, or workers. Our purpose was to better understand how: these adults experienced program learning; this learning transferred to their roles as parents, workers, or learners; they experienced program supports and challenges to their learning; this learning helped them change. Our research methods enabled us to listen carefully to participants’ experiences and attend to their meaning making so that we were able to trace their processes of learning and, in some cases, their transformation. In this paper discussion I will discuss our research methods, interpretative techniques, and the encountered challenges and strategies for attending to them from our longitudinal, mixed methods study that addressed these questions and was funded by the National Center for the Study of Adult Learning and Literacy (NCSALL).

This is the first in-depth study that examines adults’ meaning-making of their own learning experiences in three ABE/ESOL programs. Prior studies employing Robert Kegan’s (1982, 1994) theory have been mostly composed of white, highly educated, middle class American adults who speak English as their first language. Our research (Drago-Severson,

¹ I acknowledge and thank all members of the Adult Development Research Team of NCSALL, and especially our principal investigator, Professor Robert Kegan, whose collective wisdom infused this research project and team monograph (Kegan et al., 2001a; Kegan, Broderick, Drago-Severson, Helsing, Popp, & Portnow, 2001b).
Helsing, Kegan, Broderick, Portnow, & Popp, 2001a; Kegan, Broderick, Drago-Severson, Helsing, Popp, & Portnow, 2001b) extends the use of this framework by applying it to adults who are not economically privileged, mostly not native-born American, and mostly non-native English speakers.

This paper addresses questions of theoretical and practical importance: How do we conduct research that relies heavily on language (in order to understand both the content of a learner's thoughts and to assess the structure of thinking—two central aspects of our study) with samples of ESOL learners? How relevant might a developmental theory be (given prior studies with strikingly different populations) to understand ESOL learners’ meaning making? What methodological challenges might be encountered in exploring these kinds of developmentally oriented questions with ESOL learners and how might we adapt measures and develop strategies in order to better understand ESOL learners’ perspectives on their program experiences and their meaning making? Here, I will discuss our research methods to illuminate how we addressed these questions and worked out encountered challenges.

To provide context for this methodological discussion, first I will briefly review the theoretical frameworks that guided our study and informed our approach to data collection and analysis. Next, I will present a brief description of each quantitative or qualitative measure. Each description is followed by a discussion of what we learned from administering each measure and how and why we adapted several standard measures, traditionally employed with populations who are native English speakers, to better understand the experiences of the ABE/ESOL sample we studied. Four themes are highlighted in discussing how we adapted and learned from administering various measures: (1) logistical issues, (2) language issues, (3) cultural issues, and (4) contextual issues. This paper illuminates what we learned about the benefits of employing multiple research methods— informed by various theoretical and methodological paradigms—given the visible and less visible challenges of research with this highly diverse population. In closing I emphasize how using a range of measures helped in
triangulation of data and with assessing validity, and the importance and usefulness of this research.

Beyond increasing understandings of how ABE/ESOL learners can be better supported in ABE/ESOL programs, the longer term objectives of this research are to improve teaching and learning practices, enhance program design by using research to inform practice, and deepen understandings about the value of using multiple research methods and various types of developmental measures to inform and broaden our understanding of adult learners’ experiences. This work will help us to attend mindfully to the qualitatively different ways in which learners make sense of their ABE experiences and it holds the potential to strengthen future research, classroom practice, and program design. I offer our study’s research methods and lessons learned as resources for other researchers, practitioners, developmentalists, and policymakers.

CONTEXT AND THEORETICAL FRAMEWORK

In the growing ABE/ESOL field, researchers cite the need for in-depth qualitative studies that are not framed from the perspective of either the ABE/ESOL mission, in general, or the purposes of the specific ABE/ESOL program in which the learner is enrolled (Skilton-Sylvester & Carlo, 1998; Rockhill, 1982; Valentine, 1990; Horsman, 1990). Wiley (1993) urges researchers to focus on learners’ perspectives on their own experiences, hopes, and needs, instead of examining the learner’s perspective in relationship to a program’s expectations or to the U.S. host society’s definitions of the learner’s needs. Furthermore, Taylor (1996) highlights the value of using developmental theory to inform our understanding of ABE learners’ experiences (Kegan et al., 2001a; Kegan et al., 2001b).

Our study responds to these calls in two ways. First we focus on learners’ meanings as the starting point for exploration. Secondly, in our approach to data collection and analysis, we employ a developmental lens to understand learners’ program experiences. In so doing we join Lytle and her colleagues (Lytle, 1991; Lytle & Schultz, 1990; Lytle, Marmor & Penner, 1986) in
their explicit call to help develop a literature of "adults’ own evolving conceptual frameworks or theories about language, literacy, teaching, and learning" (Lytle, 1991, p. 120). To this end we designed qualitative protocols and adapted standard quantitative measures that enabled us to thoughtfully and carefully attend to and examine both the meaning constitutive and potentially transformable nature of adult learners’ beliefs (Kegan et al., 2001b). In this work, we also utilized Robert Kegan’s (1982, 1994) constructive developmental theory to understand how the adults in this study made sense of what they learned in their programs and the supports and challenges they named as facilitating their growth. This theoretical framework is informed by 30 years of research in the adult development field, which suggests that developmental principles can be applied to adults (Basseches, 1984, Belenky et al., 1986; Cranton, 1994, 1996; Daloz, 1986, 1999; Kegan 1982, 1994; Kohlberg, 1984; Mezirow, 1991; Piaget, 1965; Weathersby, 1976). Our research methods enabled us to focus on how meaning systems shape and frame experience, constituting a lens through which the adult learner looks out at the world within and beyond the classroom, and how that lens can potentially change over time (Kegan et al., 2001a).

Development, from our perspective, involves more than learning new skills or acquiring knowledge, which we refer to as informational learning. Development also rests upon transformational learning — learning that involves a qualitative shift in how people know and understand themselves, their worlds, and the relationship between the two. Transformational learning enables people to take broader perspectives on themselves (seeing and understanding different aspects of the self) and others (Cranton, 1994; Kegan, 1982, 1994; Mezirow, 1991, 2000). Transformational change is intimately linked to the way people construe their adult responsibilities and roles. This kind of learning helps them enhance their internal capacities to better manage the complexities of their lives as learners, parents, and workers (Drago-Severson et al., 2001a; Drago-Severson, Helsing, Kegan, Broderick, Popp, & Portnow, 2001b; Helsing, Portnow, Popp, & Broderick, 2001; Kegan et al., 2001a; Kegan et al., 2001b).

2 Portions of this section appear in similar form in our monograph (Kegan et al., 2001b), and/or its executive summary (Kegan et al., 2001a), and/or articles written for practitioners (Drago-Severson et al., 2001a).
Kegan’s theory enabled us to consider the ways in which people construct the reality in which they live and the ways in which these constructions can change or develop over time. We refer to an adult’s underlying meaning system — through which all experience is filtered and understood — as a way of knowing or a developmental level\(^3\) or a developmental level (Kegan et al., 2001b). A person’s way of knowing organizes how she understands her experience of herself, others, and life events and situations. Each way of knowing has its own logic, which is different from and builds upon the previous logic by incorporating the former into its new meaning system. Moving from one developmental level to another is a progression of increasing complexity in an individual’s cognitive, emotional, interpersonal, and intrapersonal capacities. Understanding how a person is making sense of her world creates an opportunity to join her and offer support in a way that she will experience as being supportive (Drago-Severson et al., 2001a). Three qualitatively different ways of knowing are most prevalent in adulthood: the Instrumental, the Socializing, and the Self-Authoring ways of knowing.

A person’s way of knowing shapes how he understands his responsibilities as a learner, parent, family member, and worker, and how he thinks about what makes a good teacher, a good student, a good parent, and a good employee. We employed this lens to inform our research design, protocols, and analysis. It influenced the framing and nature of our questions, which were aimed at understanding how individual participants made sense of their motives and goals for learning, their expectations for themselves as learners and for their teachers, the supports and challenges to their learning, and their sense of themselves in their social roles. This theoretical framework also allowed us to trace how participants’ sense making changed — grew more complex — over time. In the next section I will discuss our research methods and give special

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\(^3\) In this writing the terms way of knowing and developmental level are used interchangeably. Belenky et al.’s important work, especially Women’s Ways of Knowing (1986), has achieved such prominence in the adult education field, that it is important to stress that we use the term “way of knowing” in its literal and ordinary sense here; we are not referring to their taxonomy. In our study, we employ the term way of knowing to refer to the underlying structure of a person’s meaning making: the subject-object relationship—a person’s developmental level. “Subject” refers to what a person with a particular way of knowing is embedded in, identified with, cannot reflect upon, and cannot take a perspective on. “Object” refers to what a person with a particular way of knowing can examine, and have perspective on. The distinctly different meaning-systems defined in our study are qualitatively different ways of organizing the subject-object relationship, and thus, experience. They are literally different “ways of knowing” and understanding reality (Kegan et al., 2001a; Kegan et al., 2001b).
attention to our research protocols and learnings from their administration in service to how they helped us explore our research questions.

METHODS

The following research questions guided our exploration of the developmental dimensions of transformational learning:

- How does developmental level shape adults’ experiences and definitions of the core roles they take on as learners, parents, and workers?

  What are the regularities in the ways in which adults at similar levels of development construct the role demands and supports in each of these domains?

- How do adult learners’ ways of knowing shape their experience and definition of programs dedicated to increasing their role competence?

  What are adult learners’ motives for learning, definitions of success, conceptions of the learners’ role, and understandings of their teachers’ relationship to their learning?

- What educational practices and processes contribute to changes in the learner’s relationship to learning (vis-à-vis motive, efficacy, and meaning system) and specifically to any re-conceptualizations of core roles?

Site Selection:

The sites we chose were ongoing programs that we considered to model best practice (see e.g., Harbison & Kegan, 1999). Best practice programs use effective methods for achieving excellent, targeted results, and they set benchmarks for other programs to follow (Hammer & Champy, 1993). We selected three programs in Massachusetts that were longer term (nine to 14 months), enabling us to explore long-term growth in students’ understanding and allowing us to examine the developmental dimensions of transformational learning (Drago-Severson et al., 2001a; Drago-Severson & Berger, 2001; Kegan et al., 2001a).

The selected programs incorporated a variety of supports and challenges to facilitate adult learning (e.g., tutoring, advising, and technological support for learners). The goal of the programs was either to (a) prepare learners for enrollment in a General Education Diploma

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4 Portions of this section appear in similar form in Chapter Two, Research Methods, of our monograph (Kegan et al., 2001b) and in an article written for a practitioner audience (Drago-Severson et al., 2001b).
(GED) program or to help students learn English (ESOL); or (b) to prepare learners for academic coursework in college; or (c) to earn a high school diploma. These three programs also had developed curricula aimed at improving adults’ specific role competency in one of three social roles: student, parent, or worker. We designed protocols to help us examine and trace how participants, over time, reported program learning as helping them perform specific social roles differently. Therefore, each individual measure that was administered at a particular site (e.g., the participant interview #1, which was administered before or near program entry to participants, contained similar questions at all three sites and also include questions related to a particular social role). We also developed protocol questions to explore how program design, teacher practice, and curricula might support and challenge learners with different ways of knowing and possibly lead to transformation.

Selection of Participants:

During 1998-99, we followed 41 adult learners originating from different regions in the world who were enrolled in the three selected programs. This sample was diverse with respect to race, ethnicity, age, past educational experiences, socioeconomic status, and social roles. The vast majority of participants across these three sites were non-native English speakers.

At Bunker Hill Community College (BHCC), Charlestown, MA, we studied how a group of newly immigrated young adults (late teens or early 20s) experienced a pilot program aimed at helping them become better prepared for academic coursework in college. These adult students were enrolled in the same two BHCC classes during their first term (i.e., an ESOL class, and also an introductory psychology class designed for ESOL learners). During the second semester the group separated, and each student independently selected his or her own courses from the range of academic courses at BHCC. Similar to adults at our other two sites, all students enrolled in this program were primarily from lower socioeconomic backgrounds and spoke English as a Second Language. Unlike learners at our other two sites, these students had already earned a high school diploma and were matriculating for an Associate degree or a Certificate of Study.
Our interest was in learning how participation in this program influenced the ways in which participants conceived their roles as students.

At the second site, we followed two groups of parents enrolled in a Family Literacy Program. One group was in a pre-GED class and the second parent group was enrolled in an ESOL class. These parents (most in their 30s) emigrated from different countries and had been living in the United States for an average of nine years. Parents in this program also had at least one child who attended the Family Literacy Program. Our interest was in learning how participation in this family literacy program affected the ways in which these adults conceived and enacted their roles as parents.

At the Polaroid Corporation manufacturing plant in Norwood, MA, our third site, we studied a group of workers who participated in a 14-month CEI Adult Diploma Program that was designed and delivered by the Continuing Education Institute (CEI) of Watertown, MA. Most of these learners were in their 30s and 40s, had lived in the U.S. for more than 20 years, were married, and had children. Our interest was in learning how participation in this program affected the ways in which these individuals conceived and enacted their role as workers.

All adults enrolled in these programs were invited to participate in our study. At each site, all participants initially agreed to participate in our research. We began with fifty-eight participants (17 from BHCC, 22 from the Family Literacy site, and 19 from Polaroid); however, during the research seventeen participants (across sites) either withdrew or temporarily stopped-out of their programs for a variety of reasons (Drago-Severson et al., 2001a; Kegan et al., 2001a). We conducted non-completer interviews with a few of these participants after the programs’ year ended.

Data Collection:

Forty-one adults participated in the complete study, making time available on three (and, at the one site, four) separate extended occasions to share their thinking via a variety of data collection methods and tools. These included tape-recorded, open-ended qualitative interviews; structured
exercises; classroom observations; focus groups; and survey type measures. Table 1 presents our
data collection schedule.

**Table 1: Schedule of Data Collection at Research Sites**

<table>
<thead>
<tr>
<th>SITE</th>
<th>ROUND ONE</th>
<th>ROUND TWO</th>
<th>ROUND THREE</th>
<th>ROUND FOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community College</td>
<td>October 1998 (several hours on</td>
<td>December 1998 (several hours on</td>
<td>May 1999 (several hours on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>two separate days)</td>
<td>two separate days)</td>
<td>two separate days)</td>
<td></td>
</tr>
<tr>
<td>Family Literacy</td>
<td>November 1998 (several hours on</td>
<td>March 1999 (several hours on</td>
<td>July 1999 (several hours on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>two separate days)</td>
<td>two separate days)</td>
<td>two separate days)</td>
<td></td>
</tr>
<tr>
<td>Workplace</td>
<td>March/April 1998 (several hours</td>
<td>September 1998 (several hours on</td>
<td>March 1999 (several hours on</td>
<td>June 1999 (several hours on</td>
</tr>
<tr>
<td></td>
<td>on two separate days)</td>
<td>two separate days)</td>
<td>two separate days)</td>
<td>two separate days)</td>
</tr>
</tbody>
</table>

(Drago-Severson, 2001)

As Table 1 indicates, three (and at one site four) intensive rounds of data collection occurred over the course of a year or more. Additionally, at all sites, we conducted classroom observations during the academic year, program teacher interviews at the start and toward the end of the academic year, and program director interviews at the start and, in some cases, the end of the year. In total, we conducted and analyzed approximately 670 hours of semi-structured qualitative interviews and developmental assessments (tape-recorded and transcribed), 160 hours of quantitative survey type measures, 25 hours of observations, and various documents.

Although we considered interviewing each adult learner in his or her first language, the first-language diversity of our sample made the cost of this strategy prohibitive and impractical. All interviews were administered individually, in English (discussed later in more detail). Each site visit lasted several hours on at least two different days during each round of data collection allowing us to gather data on a wealth of questions about participants’ experience of a variety of aspects of the learning and teaching enterprise. For example, questions included: What are your purposes in pursuing this learning? What, in your view, makes a person a good teacher? What effect is your learning having on your work, in your relationships with your child, or in your role as a prospective college student? These and other questions helped us examine what the

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5 This site prefers to remain anonymous.
processes of transformational learning looked like, how learners with different developmental
levels experienced such processes, and the practices that learners named as supportive to these
changes. Revisiting the same participant at different points allowed us to ask him about any
changes he noticed in himself and to trace these changes by examining data from different points
in time.

Qualitative and Quantitative Measures: Rounds of Administration
Following is an overview of the qualitative interviews, structured exercises, and survey type
quantitative measures that we administered to participants at all three research sites. In addition
to describing the measures and their intended purposes, I focus on how, if at all, we adapted them
(and why we did so) during the course of this research. Specifically, I highlight how our team’s
process of reflecting on what was working well and what needed to be improved upon—before,
during, and after each round of data collection—helped us, in many cases, to improve the
measures and our administration of them to this diverse ABE/ESOL sample. Revisiting and
revising our protocols in this way assisted us in better-understanding participants’ meaning
making. Table 2 displays the types of measures we administered to learners and when we
administered them to participants at all sites. Note that at one site, the workplace site, we
administered two middle rounds of measures, since this the CEI Adult Diploma Program was 14
months in duration.

Four central themes emerge from our learnings related to our administration of various
protocols. These are woven through and highlighted in discussing each measure, and revisited in
the final section of this paper.

Logistical Issues: For example, (A) Time constraints for data collection made it necessary
to alter and shorten certain protocols so that they could be administered to learners at each
site. B) Pairing the same interviewer and interviewee, whenever possible, helped to build
research relationships. (C) Gaining access to participants who did not complete of the
three programs was sometimes difficult.
Table 2: Types of Measures & Rounds of Administration

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>FIRST ROUND (Near or Before Program Start)</th>
<th>MIDDLE ROUND (Middle of the Program)</th>
<th>MIDDLE ROUND (Second round of Middle of the Program administration to participants at the workplace site only)</th>
<th>FINAL ROUND (Near or at Program Completion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Groups</td>
<td>X</td>
<td>X(n=2)</td>
<td>X (n=2)</td>
<td>X</td>
</tr>
<tr>
<td>Experiences of Learning Interview (i.e., Participant Interview, PI)</td>
<td>X (PI #1)</td>
<td>X (PI #2)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The Subject Object Interview (SOI)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Loevinger’s Ego Development Scale (SCT)</td>
<td>X³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role-Related Vignette</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Quantitative Survey Measures</td>
<td>X (n=3)</td>
<td></td>
<td></td>
<td>X (n=3)</td>
</tr>
<tr>
<td>Self as Learner, Parent, or Worker Map</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Language Issues:** Especially at the programs’ start, we learned that participants’ levels of expressive English varied (e.g., vocabulary, grammar, difficulty and/or ability to express the full complexity of one’s ideas). This influenced the type of measures we decided to administer and the ways in which we adapted measures to better suit the participants (especially developmental measures).

**Cultural Issues:** These became apparent to us when we administered some of the paper and pencil measures, including the Loevinger Sentence completion test (as will be discussed). We also learned that the Subject Object Interview (Lahey, Souvaine, Kegan, Goodman & Felix, 1988) was helpful in inviting participants to discuss cultural issues because they select the issues (i.e., content) that they wanted to discuss in this qualitative measure.

**Contextual Issues:** Focus groups provided a rich context for participants to express their feelings and concerns differently than they did in individual interviews. For example, at the workplace site recent downsizing and lay-offs were discussed in-depth; several workers voiced that they were concerned about being “let go.” Also, at BHCC, the community college site, the focus groups provided a context in which individuals and groups of students expressed their thinking and feelings about the importance of community.

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6 I acknowledge and thank Deborah Helsing for her help in thinking through and developing these categories.

7 We administered this measure initially at the workplace and the Family Literacy site only. This is discussed more fully later in this section.
The descriptions of the measures shine light on how each helped us to learn about participants' perspective on program learning and/or a social role, and to also trace changes over time. After a measure's description below, I note in italicized font any bumps or challenges we experienced in administration, how, if at all, we adapted both standardized and our own measures in an effort to improve the measure and/or its administration, and the rationale behind our decisions. After describing the measures, I will discuss larger learnings, lessons, and challenges that we faced in administering these measures to ABE/ESOL participants and again link these to the four themes that emerged from our learnings. In so doing, I will highlight the strategies we developed to meet many of the challenges and how using multiple measures helped us to triangulate data, to assess validity, and to carefully trace how learners' made sense of their experience.

Before or near the start day of each of the three programs, we administered the following protocols.

(1) **Pre-Program Learner Focus Groups.** We facilitated focus groups in which adults were asked questions about their hopes and expectations for learning in their programs (please see Appendix A).

(2) **Experiences of Learning Interview (Participant Interview #1, PI#1).** We designed this qualitative interview to help us better understand a learner's previous learning experiences and unexplained theories about teaching and learning processes. Each protocol was adjusted for each particular site, and through it we gathered information on learners' motives for participation, their learning goals, and their current understanding of the targeted role (i.e., student, parent, or worker). Additional topic areas included: educational history, conceptions of support for learning, and demographics (please see Appendix B).

*Asking participants to comment on their motives and goals for learning and about their perceptions of how program learning was helping them, both in the program and in their social roles, at different points in the program allowed us to understand and trace both content related and, in some cases, developmental changes over time. Additionally, during each round of data collection, we asked participants to share their thinking about, for example, What makes for a good teacher? What do you see as a student's job? These and other developmental questions in this interview protocol provided us, in many cases, with a way to trace changes in learners' thinking over time (i.e., developmental and other types of changes). This data also helped to illustrate how a person's way of knowing is demonstrated, for example, in their conceptions of their role as learners.*

(3) **The Subject-Object Interview (SOI, see Lahey, Souvaine, Kegan, Goodman & Felix, 1988).** We administered the Subject-Object Interview to participants at all three sites during
our first and our final rounds of data collection. The Subject-Object interview is a semi-structured interview created to explore the ways in which an individual makes sense of his or her experience. The interview is usually conducted in 90 minutes and is conversational in nature. Dr. Robert Kegan and his colleagues at the Harvard Graduate School of Education created the original SOI (Lahey et al., 1988) (please see Appendix C).

The SOI interview procedure is structured around a uniform set of probes, around which real-life situations of the interviewee are generated. The probes are constituted by a set of ten cards. On each card the interviewee writes a word or phrase associated with the named subject header (e.g., "success," or "torn"). The interviewer then explores the meaning that cited experience had for the interviewee and how meaning is organized.

Through the SOI assessment procedure, we are able to distinguish five gradations between each way of knowing. Interrater reliability in studies using the original measure has ranged from .75 to .90. Several studies report expectedly high correlations with like measures (cognitive and social-cognitive measures). Our analysis of this measure included a developmental comparison of each participant’s meaning making during our initial and our final data collections. We were particularly interested in assessing changes in how participants made sense of their experiences from our first data collection period to our final one.

We administered the SOI in one hour rather than 90 minutes due to time constraints (logistics). Although we had at least two different days on which we were able to collect data from participants at each site—during each round of data collection—because we had multiple measures to administer on each data collection day, we needed to adjust the amount of time for this measures administration. Therefore, we adapted the original version of the Subject-Object Interview (Lahey et al., 1988) by reducing the number of probes offered to participants from ten to five. After participants wrote a few words, phrases or sentences on each card we invited them to talk about some of the things they had written down. Interviewers told participants that what they decided to talk about with was up to them and, if at any point during the interview, a participant wanted to stop talking about a particular card topic, they were free to do so.

We selected the following five prompts because we thought they would be most relevant to participants’ learning experiences in these program: (1) angry, (2) torn, (3) success, (4) worried or nervous, and (5) important to me. Participants’ SOI’s from the initial assessment were scored by at least three different team members, who were trained as reliable scorers, and scores were discussed to assess reliability of scoring and a means of assessing validity. Since this was the first time this measure was employed with this particular population, it was especially useful for team members to discuss how and why they were scoring the measures as they were. Later in this paper we will discuss in more detail what we learned from administering this protocol with ABE/ESOL adult learners.

(4) Loevinger’s Ego Development Sentence Completion Test (SCT). Loevinger & Wessler (1970) designed this measure to explore the way a person makes sense of himself and the world. Usually, this measure is administered to a participant and the participant himself writes down his first response, which allows for its administration of the measure to large groups of people. Occasionally, the researcher writes down the participant’s verbal answers. Loevinger & Wessler (1970) identify six stages of ego development or complex thinking and their measure is scored in accordance with these stages. We administered the short form of this measure, which is composed of 18 sentence stems. When administered, a participant is asked to complete a sentence stem in any way he wishes by responding spontaneously to the stem. Each individual sentence stem is scored according to a rubric, and a total score is
calculated in order to assess participant’s ego development level. In other words, the way in which a person completes these sentences is thought to reveal a person’s way interpreting events (please see Appendix D).

As Appendix D indicates, this measure depends on a participant being able to respond spontaneously to a sentence stem, which we observed to be challenging for many of the ESOL learners in our sample. Additionally, administration of this measure in the English language to ABE/ESL learners relies upon English-language proficiency/literacy. Therefore, scores that rate each response depend upon a person’s understanding of each word in the sentence stem, on his capacity to formulate a response fairly quickly, and on his expressive language skills and vocabulary in English that is needed to complete the sentence stems. In our case, given the differing levels of participants’ writing and expressive language skills at program entry, we decided to administer this measure one-on-one and to read each sentence stem aloud to each participant and record his first response to completing the sentence stem.

After debriefing the administration of this measure at our first and second sites, we discussed our observations and the challenges associated with administering this measure to participants. (A) Several of the sentence stems included words that participants did not understand, and during administration, participants asked interviewers to help them understand the meaning of words. Several interviewers explained the meaning of concepts to participants in an effort to enable them to complete sentence stems. (B) Some sentence stems included phrases that seemed to contain cultural assumptions and did not match with the participants’ experiences, which caused them to ask questions about the meaning of the sentence stem itself. For example, the female version of the Loevinger asks that a participant respond to the following questions:

15. A wife should ____________________________
16. I feel sorry ____________________________
17. A man feels good when ____________________________

In a few instances, a male interviewer was paired with a female participant (and vice versa) and we wondered how, if at all, this might have influenced what a participant might say in response to these and other sentence stems and how, if at all, cultural norms might effect participants’ responses to these sentence stems. (C) Several participants gave a first response (which is the response that interviewers wrote down for each person) and then articulated a second (and sometimes third response) which was often more complexly formulated.

Given these observations related to language, cultural, and logistical issues, the challenges we experienced in administration, and in consideration of how these issues might influence the validity of this measure, we decided to consult with an expert Loevinger scorer before administering this measure at third site. This expert scorer who had broad experience and knowledge of administering this protocol with varied populations, scored the first set of the measures that we administered at the first site. After analyzing and scoring participants’ responses to this measure from site one, we believed that we could not accurately assess participants’ responses and, in our case, we had questions about the validity of its administration. Accordingly, we decided not to administer it to participants at our third site, and we did not administer it to participants at any site during our final round of data collection.

(5) Role-Related Vignettes. We created one developmental vignette, i.e., a hypothetical-problem solving measure that was used to assess an individual’s way of knowing, and role competence in specific domains, for each site. The Learner Vignette is a developmental
student-situated dilemma created to explore a student's decision-making, problem-solving skills, and sense of competency as related to their construction of authority. It presented a student/school dilemma and invited participants to respond to a set of questions designed to help us understand the reasoning underlying the decisions they would make. The Parent Vignette is a developmental role-situated dilemma created to examine a parent's decision-making, problem-solving skills and sense of competency as related to their construction of authority. It presented a parent dilemma and invited participants to respond to a set of questions designed to help us understand the reasoning underlying the decisions they would make. The Worker Vignette is a developmental work-situated dilemma created to explore a worker's decision-making, problem-solving skills and sense of competency as related to his or her construction of authority. It presented a workplace dilemma and invited participants to respond to a set of questions designed to help us understand the reasoning underlying the decisions they would make (please see Appendix E).

We analyzed these vignettes for role competency themes and also scored participants' responses in accordance with Kegan's constructive-developmental theory. We administered this measure because we thought it would provide a role-related context to better understand participants' meaning making. We learned that, in some cases, it was difficult for us to assess a person's developmental level in scoring these vignettes because we discovered that there were particular context-specific company or institutional rules that participants reported. In other words, it was sometimes challenging to tease apart the relationship between a person's own problem solving abilities and her desire to abide by company policies so as not to risk losing one's job, for example.

(6) Quantitative Survey Measures. We administered several well-established and highly regarded quantitative measures to assess participants' levels of satisfaction, feelings of self-efficacy and success, and locus of control (please see Appendix F).

A) Satisfaction with Life Scale (SWLS): The SWLS is a 5-statement questionnaire that ascertains a person's subjective judgment of his/her global life satisfaction. Diener, Emmons, Larsen & Griffin (1985) created this measure. It is believed that while a person may feel greater or less satisfaction with particular areas of her life, she also has a more general, or global, sense of life satisfaction. The rating scale for this measure is 1-5, ranging from "Strongly Disagree" to "Strongly Agree." A person is asked to write down the number which best describes her degree of agreement with each statement. This global evaluation constitutes an individual's satisfaction and dissatisfaction with life.

B) Perceived Efficacy Beliefs Scale (PEBS): The PEBS is a 10-statement questionnaire that assesses a person's perceived self-efficacy. The rating scale for this measure is 1-7, ranging from 1, "Strongly Agree" to 7, "Strongly Disagree" (i.e., the opposite meaning is assigned to numbers in this scale as compared to what numbers are meant to indicate on the SWLS scale). A person is asked to write down the number which best describes her degree of agreement in a space next to each statement. This measure helped us better understand and assess possible changes in an individual's belief in her ability to do the tasks and skills necessary to successfully perform (i.e., in her primary social role). The Personal Efficacy Beliefs Scale, created by Riggs, Warka, Babasa, Betancourt, and Hooker (1994), assesses an individual's thinking about her capacity to successfully perform the role-related tasks within a particular sphere (e.g., worker role, parenting role). Because we administered this measure before program entry and completion, it provided both an initial and final assessment and a way to record any changes in individual's role-related self-efficacy.
**C) Locus of Control Scale (LOC):** LOC is a 7-statement questionnaire that assesses a person's beliefs in her/his ability to control life circumstances, events, and problems. The purpose of this measure is to identify a person's perceptions about her ability to control life circumstances, events and problems. The Locus of Control, created by Pearlin and Schooler (1978), assesses the extent to which a person believes her life experiences are under her own control (internally determined) as opposed to a belief that they are the result of things outside of oneself (externally determined, e.g., controlled by fate). The rating scale for this measure is 1-7, ranging from 1, "Strongly Disagree" to 7, "Strongly Agree." Since we administered this measure before program entry and also at or after completion, it provided an initial and final assessment and a way to record any changes in self-sense over time.

Since we administered these three measures before program entry and also after program completion, they provided an initial and final assessment and a way to record any changes in an individual's global life satisfaction from program entry to program completion.

Since we were interested in global as well as role-related overall satisfaction, we consulted with experts in the field about altering the Satisfaction with Life Scale (SWLS) so that we could assess both global and role-related satisfaction with life. In accordance with experts' suggestions, we added five role-related global satisfaction questions to the original questionnaire, thus making it a ten-item questionnaire. For example, at the workplace site, these questions related to overall satisfaction with work, and at the parent site, these questions focused on overall satisfaction with parenting. Following is an example of a question (#1) that we added to the SWLS that was administered to parents and also a question (#2) from the un-adapted SWLS.

Q#1: In most ways my life as a parent is just how I wish it would be. ______
Q#2: In most ways my life is just how I wish it would be. ______

**Altering Scales:** Before administering the Perceived Efficacy Scale and the Locus of Control measure, we checked with experts in the field and decided to modify the seven-point scales to five-point scales.

**Language—Adding Smiley Faces:** After reflecting on the administration of these three measures at the first site, we decided that it was necessary to help make the 1-5 scoring scale on all three measures more understandable and user-friendly to participants—especially since assigning a rating of 1 on the PEBS scale meant the opposite of assigning a rating of 1 on the SWLS scale. During the administration of these measures at the first site, participants asked questions about how to assign a number, which would indicate their agreement with a statement. Several participants had difficulty understanding the meaning of the scales themselves. Additionally, through our initial analysis of these measures, we noticed that some participants' responses to particular questions contained in these measures conflicted directly with what they had reported in other qualitative measures.

Since the scale was confusing to some of the participants, we added to the original scale in an effort to make clear what the numbers on the scale signified. The addition of small faces (about the size of a quarter) above each number of the likert scale (e.g., ranging from frowns indicating totally disagree, 1, to smiley faces indicating full agreement, 5—depending on the scale), seemed to help participants make sense of the number system. These faces also seemed to be very helpful to participants at the other two sites in the first round of administration of measures and at all three sites during the final round of data collection.

**Highlight the different meanings of the Scales:** Additionally, we realized that since all measures (SWLS, PEBS, and LOC) were administered immediately after one another at each
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Site, adding the quarter-size faces above the scale numbers, as discussed above, and pointing out differences in these two scales for participants was very useful. For example, we highlighted for participants during administration of the LOC that assigning the number “1” meant “Strongly Disagree” and “5,” “Strongly Agree.” These adjustments and explicit reminders were reported as being helpful to participants and also useful to enhancing validity.

**Administrating these Measures to Small Groups of Participants:** These and other survey type (pencil and paper) measures (e.g., the Loevinger sentence Completion Test) were the only ones for which we did not tape-record and transcribe participants’ responses. Additionally, after administering these measures at the first site and learning from the questions asked by participants, we decided to administer all paper- and pencil type measures to small groups of participants rather than administering them to the larger cohort groups. We also offered to sit with each participant and administer the measures one-on-one, if needed. Only a small number of participants made use of this option. Small group administration enabled us to respond to questions that, for the most part, had to do with explaining the meaning of a word or reminding participants about the meaning attributed to the numbers on the scales. In the final round of administration, across all three sites, we observed that participants asked fewer questions about the meaning of words. This may have been related to an increase in their proficiency in English (i.e. vocabulary) and/or their familiarity with these types of measures and scales.

(7) **Self as Learner, Parent, or Worker Map.** We created and administered three custom-designed mapping interviews to explore participants’ perceptions of their roles as learners, parents, and workers. The mapping exercise provides a picture of the participant’s current conceptions of the core elements of a particular role (i.e., learner, parent, or worker), his or perceptions of the relationships among the core elements, and his thinking processes. We employed this as a tool for establishing and then tracking participants’ changing perceptions of themselves in their roles, the ways in which they value or devalue their role, their view of role relationships, the central emotions and beliefs they associated with a particular role, and the activities of their role. (Please see Appendix G.)

Initially, each participant was invited to create a diagram of how they saw themselves in a particular role, and to respond to probing questions. During each subsequent round of data collection, participants were invited to review their prior map of their thinking and to comment on how, if at all, their perceptions had changed as they progressed through the program. This map helped us to explore each participant’s role perception in his or her own words and also through the lens of constructive developmental theory.

After administering this map at each site, we met as a full team. All data collectors were invited to attend these meetings, and we requested that they write analytic memos (Maxwell, 1996) to highlight important learnings from participants they interviewed and from administering measures. In these meetings, we debriefed our learnings from administration of the maps and other measures to assess what worked well and what we needed to improve. We learned that while many participants found it easy to select terms they ascribed to themselves (e.g., patient, strict, easy-going) from the pre-prepared descriptors we created, it was oftentimes understandably difficult for them to generate their own words to describe themselves. We found this especially true during our first round of data collection as participants were beginning their programs and that, in some cases, participants became better able to generate descriptors as they participated in their programs. However, this was one limitation of employing this type of protocol that requires students to articulate fine distinctions between words (e.g., some participants had difficulty articulating the meaning they assigned to both the prepared descriptors and to their own self-generated descriptors. We also discovered that it was useful to create what we called “capture sheets” on which
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Interviewers recorded notes related to the meaning participants ascribed to pre-prepared descriptors and to those descriptors generated by participants.

Near the start of each program, we also administered a qualitative Teacher Experience Interview to program teachers to learn about their goals for students and their classes, their philosophy of teaching, and their methods for assessing learners' progress.

After our first round of data collection, we believed it would be helpful to ask an important question of participants individually and as a group after administering measures: "If you could be interviewed in your first language, would your response be the same as those you give us in English?" Most participants responded by telling us that the meaning of their responses would be the same, and that they might have "more words"—or more sophisticated words—with which to express themselves. This question was one of the ways in which we tried to understand the influence of interviewing participants in English, which for the most part was not their first language.

During the middle months of each program, we administered the following protocols to participants at each of the three sites.

(1) **Focus Groups.** We administered two types of focus groups to participants in each program during the middle round(s) of data collection. One type of focus group invited participants to reflect on their learning experiences in their program classes, and the other type invited them to discuss any changes they noticed in themselves as learners and as they enacted a particular social role. In the second type of focus group, our intention was to understand how learners at each site believed their participation in a particular program was or was not affecting their perceived performance in a particular role (i.e., worker, parent, or learner). We developed this protocol to explore individuals' perceptions of their roles and role-related responsibilities.

Just as with any group meeting and/or focus group, we found that some participants talked more than others and that some participants preferred to participate by listening. We adopted a policy of stating explicitly at the beginning of each focus group that participants are not required to speak. Our general policy was noted on our protocol, which was given to the focus group facilitator: "Present a middle ground invitation, not a requirement to speak. Say something like: "I want to give each of you who want to, a chance to talk. So I want to give each of you who have not yet spoken a chance to say what you're thinking if you want to."

Participants reported that they enjoyed and valued the context of the focus groups. At the BHCC site, for example, several students reported that they experienced our focus groups as

\[8\] As mentioned previously, we conducted two rounds of data collection in the middle months at Polaroid.
opportunities to get together and reconnect with colleagues after their first two courses ended.

Focus group data gave us an additional way of understanding how groups of participants, and individuals within these groups, perceived program learning as transferring to their social roles and perceived competencies within a particular role (i.e., triangulation). Also, participants seemed to feel at ease in these groups discussing the challenges associated with their social roles (i.e., context).

Transcripts from these and all focus groups not only presented what was said, but who said what. This allowed us to trace group themes as well as to use data from particular participants in coordination with other data we collected (e.g., Participant Interviews, Maps, and SOI's). This also helped with triangulation of data (Miles & Huberman, 1994), and proved very useful in understanding the fuller context and culture of participants' lives. For example, some participants at the workplace site talked more about their work (e.g., relationships with co-workers and supervisors, and fears associated with the possibility of being laid-off from work) during focus groups than in individual interviews. The context of the focus group also seemed to make it okay for some participants who did not discuss their fears or concerns in individual interviews to do so with fellow learners in focus groups.

(2) During the Program—Experiences of Learning Interview (PI #2, and at one site PI #2 and also #3). This open-ended, semi-structured interview was designed to help us better understand each participant's program learning experiences and how, if at all, he or she thought that their learning was making a difference to their thinking about and enactment of their role as worker, parent or learner.

Whenever possible, we did our best to match interviewer—interviewee pairs during every data collection round. We thought that this would help build rapport, and as we will discuss later, this effort proved beneficial on several fronts. In fact, the participants reported that they valued relationships formed with team members and asked about interviewers if a particular interviewer was not able to participate in a scheduled data collection. When it was not possible to match the same interviewer with participant from one round of data collection to the next, we made an effort to introduce the new interviewer to the participant.

All interviewers were asked to read the participants' prior transcripts from a particular measure to become familiar with the participant to be interviewed. In many cases this allowed interviewers to ask about experiences shared during prior rounds of data collection and to integrate their understanding of aspects of the participant's experiences into the current interview, which set the stage for follow up questions related to stories told in past interviews. This strategy was highly effective and yielded not only richer data, but also helped, in most cases, to build rapport. Additionally, since several of the same questions were asked during each round of data collection, as mentioned earlier, this measure offered another way to track content-related and developmental change over time.

We learned that it was also important and necessary to phrase questions in multiple ways on the interview protocol itself, so that we had the greatest chance for participants to understand our questions. Explicitly stating or re-framing questions proved beneficial with this sample of learners. For example, in asking a participant to tell us about a classroom experience that was helpful to her learning, we developed multiple ways of framing our question to access participant's meaning making. To understand learners' conceptions of their teachers we asked: "What makes for a good teacher?" or "What do you see as a teacher's job?" Some participants responded immediately to only one of these prompts—they appeared unable to answer the question when we framed it the other way. In
order to learn why a particular learning experience felt helpful or supportive to a participant, we created alternative ways to frame our probes: “What was most helpful to you about that experience?” “What was most satisfying about that experience?” “What did you feel best about in terms of that experience?” “What did you feel good about in that experience?” “What were you happiest about in that experience?” Presenting interviewers with alternative ways of posing questions often helped participants to respond in fuller ways.

Additionally, since we were interested in learning about participants’ thinking (and its underlying structure), we held training sessions for interviewers to help them understand the purposes and intentions behind each of the measures we designed. We wrote explicit directions on the cover page of interview protocols to remind interviewers to ask two different types of developmentally oriented probing questions about participants’ stories. The first type of probe that we requested interviewers to pose were “process probes” that helped to understand a learner's thinking. To get at this, we urged interviewers to invite participants to talk about a story or situation related to a particular experience. For example, on our protocol we wrote the following about how to employ this kind of probing question. “If a learner says that he was surprised by his ability to do the homework, ask him or her to tell you a story (or about a situation—since we learned that some learners interpreted “a story” as something made up) about a particular time in class when this happened. You can ask the learner for an example of a time when he or she felt surprised. Remember, you will want to ask questions that will help you learn what it was that surprised him or her.” The second type of probe we asked interviewers to employ was one that would help to learn “why” a learner was feeling a particular way about her experience. We suggested that interviewers ask: “What was most important to you about - - - -? Why? What was it about a particular experience that was most helpful?” Both of these types of probes helped gain a deeper understanding of how participants were making sense of their experiences.

(3) Reflecting on Changes in Self as Learner, Parent or Worker Map (Map #2). We designed and administered this protocol to continue exploring participants’ perceptions of their role as workers, parents or learners, in their own words and also through the lens of our theory. It created an opportunity for an individual to reflect on and add to the picture/map-diagram (i.e., Map #1) that was created by the participant during the first round of data collection. Specifically, we asked learners to add to or change their prior map in any way that seemed appropriate based on changes they saw in themselves and in the ways in which their learning in the program was affecting their sense of themselves in a particular role. This protocol enabled us to track learners’ changing perceptions of themselves as in a particular role, changes in the ways in which they valued or devalued their work, changes in their views of role relationships, changes in the central emotions and beliefs they associated with work, and changes in the way they conceptualized their role activities and responsibilities.

The mapping exercise was designed as a tool for establishing and tracking how the students’ perceptions in their social roles shifted over the course of their program participation. During this round of administration, as mentioned previously, we created “capture sheets” that we used write down what learners said about connections between student skills and social role skills. We also wrote down the descriptors participants added to their maps, and the meaning participants assigned to these descriptors.

At this point in data collection, we were not sure if we would be able to have all of the tapes fully transcribed from these mapping exercises. Transcription, for the most part, was more costly and time consuming than initially anticipated. It was more difficult to transcribe some of the tapes due to a variety of factors including tape quality, background noise, damaged tape-recorders, and speech patterns (e.g., speaking softly, alternative pronunciation of
words, and some phrasing that was unfamiliar to the transcriptionist). We retained the audiotape recordings from this and Map #3 for reference and key sections of them were transcribed, which was somewhat helpful to our analysis.

(4) Classroom observations. We conducted observations of learners in each of their program classes at least once during each semester.

Classroom observations provided useful contextual data, which we drew upon for use in our qualitative interviews, and they also helped build rapport with participants. We wish that it had been feasible to conduct additional observations; however, this was not possible due to insufficient resources (e.g., human, time, and financial). We also learned during the study that several research participants expressed desire for members of our research team to observe them in the other contexts of their lives. For example, several Polaroid Corporation workers voiced their wish that we could also observe them in their work setting—as opposed to only within the classroom—as they did their jobs with machinery equipment. Due to time constraints, logistics of access, and associated expenses, we were unable to conduct these kinds of observations. However, we recommend that future research incorporate these kinds of observations into study design.

Near the end of or shortly after program completion, we administered the following protocols to participants as all three sites:

(1) The Subject-Object Interview (SOI). We administered a final SOI to each participant to assess his or her developmental level (i.e., way of knowing) at program completion, and to compare it to our initial assessment of each individual’s developmental level. Scores and emergent themes from these final interviews were compared to initial SOI scores and themes.

At this time, we noticed that many participants’ expressive English language skills appeared to be stronger after participation in their programs. There were two ways in which we found it helpful to use the SOI data in conjunction with data from other measures. First, SOI data helped with triangulation, and secondly, it allowed us to learn about other issues important to participants that were not discussed or made explicit in other protocols.

(2) Final Learning Experience Participant Interview (PI#3 or at one site, PI#4). We designed and administered this open-ended, semi-structured interview to better understand: (a) how participants at each site were thinking about their program experiences, (b) the ways in which they believed they had changed since beginning their program, and (c) how each participant felt about herself as a learner and in her social role at program completion. This helped us gain a deeper understanding of how participants made sense of changes they noticed in themselves and also to understand what they experienced as sources of challenge and support in their role as a students, and in their social roles (i.e., parent, worker, or learner). Additionally, we asked learners to reflect on their program experience overall, i.e., how their learning influenced their perceived role competencies, their learning goals, and their overall satisfaction with the program.

In assessing our learnings from prior PI’s and from other protocols, we decided to integrate more questions about how their learning in the program was, from their perspective, transferring to their social role. Although we focused on one particular social role at each site, learners at the sites often discussed the ways in which program learning was not only helping them in one social role, but also helpful to them in other social roles. For example, at the workplace site where our interest was in how program learning was transferring
primarily to the social role of worker, many participants not only discussed this transfer, but also discussed how their learning was helping them in their role as a parent.

(3) Teacher Interview on Student Changes. This qualitative interview was administered to program teachers at or near the end of each program. We designed this protocol to help us understand the changes program teachers noticed in each of their students during the program. When administering this protocol to program teachers at each site, we asked each teacher to talk about the changes he or she noticed in each of the learners in the program and to what or who the teacher attributed the changes.

This measure was helpful to building our understanding of teachers’ perceptions of students and, in some cases, it also provided us with additional information about relationships students had with each other that we may not have observed during our observations and interviews. Since program teachers spent much more time with learners throughout the program and had a different perspective than we did as researchers, these interviews provided additional rich and interesting data.

(4) Quantitative Survey Measures. At program completion, we administered the same quantitative measures that we administered at the start of our research. Our goal was to assess participants’ levels of satisfaction, feelings of self-efficacy, and also locus of control at program completion. We noted changes in these measures from the initial assessment.

These measures and the modifications we made to them were discussed earlier in this paper.

(5) Vignettes. At program completion, we administered the same vignette from our initial round of data collection to each learner individually at each site. Learner responses were examined for role competency themes and also scored in accordance with Kegan’s constructive-developmental theory.

(6) Reflecting on Changes Map (Map #3, and at the workplace site, Map #4). We administered a final mapping interview (i.e., The Reflecting on Self as Student, Parent, or Worker Map). Distinct mapping exercises were designed for and administered to participants at each of the three sites. These created an opportunity for our research team to talk with participants about the changes they noticed in their perceptions about themselves in a particular social role. We probed participants’ end-of-program thinking about their perceptions of role competence. We also attended to changes they discussed related to their self-regard. Doing so enabled us to continue exploring participants’ perceptions of their role as workers, parents or learners, in their own words and through the lens of our theory. Since we had administered at least two prior mapping protocols to participants at each site during prior rounds of data collection, this final mapping protocol gave participants a chance to discuss their current perceptions about their social roles.

At each site learners were asked to review two past diagrams (i.e. maps) that they created and to add to or change the map in any way that seemed appropriate to them based on changes they noticed in themselves and in the ways in which they saw their program learning as affecting their sense of themselves in a particular role. We carefully examined learners’ changing perceptions of themselves in a particular role, changes in the ways in which they valued or devalued their role, changes in the ways in which they viewed their role relationships, changes in the central emotions and beliefs they associated with a particular role, and changes in how they understood their role activities and responsibilities.

To successfully administer the final map at each site, we asked that interviewers review the protocol and participant transcripts and/or notes from prior maps. We created two tables that helped us organize our notes and write down what participants said about how they saw
themselves as enacting their social roles differently, or in the same way, as they had in the previous mapping exercises. Since we transcribed key sections of the tapes, we asked interviewers to take notes only, and not attempt to capture explanations verbatim.

We also created a qualitative interview that we administered after program completion to several participants who did not complete their program (i.e., the Non-Completer Interview). Our goal was to gain a better understanding of how these participants were thinking about their experiences during the year, how and why they made the decision to leave the program, and their current conceptions about learning. We aimed to learn more about what was different or changed for them since the beginning of the program year. This interview was designed to help us learn more about the heart of the participant’s experience—and the differences in how each learner thought or felt about himself or herself at the end of the program year as compared to the beginning of the year. We probed participants’ responses to better understand how they made sense of any changes they noticed in themselves, and to learn how they thought about the supports and challenges in their lives. While able to interview several people who did not complete their programs, it was difficult, and not possible in some cases, to locate and engage participation in non-completer interviews.

Data Analysis

Our data analysis consisted of two distinct phases: the early and the substantive phases. Research gains depth and focus when data collection and analyses are continuously integrated (Coffey & Atkinson, 1996; Strauss & Corbin, 1998). Our study benefited from this kind of purposeful integration, and also triangulation of data.

The Early Phase

We began data analysis by coding both participant interviews and also the learner-generated role-maps from the first round of data collection at one site in order to develop a coding schema and refine our analytic framework, which we later employed to analyze data from all three sites. We then compiled a list of emerging themes derived from both theoretical codes (i.e., etic
codes), and also from participant's own language (i.e., emic codes) (Geertz, 1974; Miles & Huberman, 1994). This early phase of analysis focused on identifying consistencies and discrepancies within and across participants' data (Maxwell, 1996). Next, we reorganized and reduced our code list to reflect twelve key emerging categories and their sub-concepts while drawing out distinctions among participants (e.g., participants' thinking about the learner/teacher relationship and how it changed over time). Next, we built matrices to understand participants' responses to key interview questions across the sample site data and created narrative summaries (Coffey & Atkinson, 1996; Maxwell & Miller, 1991) that extracted the critical themes and main points from the interviews. After each round of data collection at each site, the research team—and doctoral students who assisted with data collection—wrote analytic memos (Strauss & Corbin, 1998; Maxwell, 1996). Shortly after data collection at each site, our full team met to discuss learning, assess protocols, and develop preliminary strategies for progress. The analytic memos and our tape-recorded conversations informed and were vital to both the early and substantive phases of analysis. The collective wisdom of the team served as a tremendous resource, which strengthened both study design and our data analyses.

To explore the influence of learners' developmental levels on their experiences of change in the program, we examined the subject-object interviews and the vignettes and related these to our analysis of the quantitative measures. The subject-object interviews and vignettes were scored according to the Guide to Scoring the Subject-Object Interview (Lahey et al., 1988). As mentioned earlier, we initially scored one full set of SOI's and vignettes using multiple scorers to establish inter-rater reliability. (We employed similar methods in our substantive analytic phase.) The preliminary quantitative and qualitative analyses, analytic memos, and full team analytic conversations helped us to identify patterns of transformation and develop an analytic framework for our intensive analytic phase.

* Some sections of this section appear in a similar form in the Research Methods chapter of Kegan et al., 2001b.
The Substantive Phase

During the second or substantive phase of analysis, research team members divided into three analytic sub-teams with each sub-team analyzing data from one of the three sites. Our analytic framework was informed by and grounded in our developmental perspective; therefore, the three analytic sub-teams first examined data from those participants with common pre-program SOI scores (Kegan et al., 2001b). After focusing on data from participants with a particular way of knowing, sub-teams moved on to the next common way of knowing to explore contrasts and similarities across subject-object worlds (Kegan et al., 2001b). To do this, we examined four learning and teaching role-related analytic questions and four social role-related related analytic questions (Seidman, 1998). Additionally, we explored how participants’ conceptions of their roles changed over time. Our analysis created thick portraits of the variety and commonality across each way of knowing.

To answer our analytic questions, sub-team members wrote thick analytic memos (which included data and interpretations) in response to the two role-related sets of questions, and we then discussed these memos in site sub-team weekly meetings. In these meetings, we learned about each other’s interpretations, considered alternative plausible interpretations, and incorporated additional questions, discoveries, and ideas noticed by the sub-team. Incorporating learnings from our sub-team conversations then enhanced these analytic role memos. During this intensive analytic phase, we met regularly as a full research team to discuss what we were learning from participants at each site and, also to identify key findings within and across sites.

To carefully examine connections between learners’ developmental levels and their experiences of change in the program, we primarily looked at the subject-object interviews and the social role-related vignettes. The scoring from the quantitative measures of stress, life satisfaction, and locus of control (i.e., pre and post-assessments) established baselines and documented changes in these constructs from program start to finish. The degree and direction of change were assessed in our quantitative analysis through descriptive statistics. We correlated the assessments of variability in these with changes in SOI score (see e.g., Kegan et al., 2001).
The developmental and qualitative data helped us to dimensionalize (Strauss & Corbin, 1998) our definition of transformation and the holding environment, so that they corresponded to data from the study itself. We looked for relationships between participants’ experiences of changes as they related to their way of knowing, and built matrices that linked patterns found in ways of knowing across groups to other aspects of learners’ experiences, (e.g., other ongoing supportive contexts, and their motivation and goals). We examined patterns that emerged across the map diagrams in our effort to understand frequent and compelling descriptions of self and role within each context.

Having identified the learners whose experiences appeared transformational and those whose experiences changed in other important ways, we closely examined the supports and challenges that learners named in describing both kinds of changes. We then selected participants whose stories served as case examples. In writing, our intention was to illustrate key points in narratives and to link them to salient themes across cases within and across all three sites. We integrated data from a variety of sources, which allowed us to create a complex and rich narrative for each case example. Many of these highlight a person’s program experience, her descriptions of her own skills, how she generalized to the concept of competency in a particular social role, her reported changes during the program, and her recent experiences of real success.

In making our interpretations from data, there are multiple ways we worked to attend to validity threats throughout the design, data collection, and analytic phases of this study. We collected data through multiple measures and, when possible, triangulated what we were learning from multiple data sources. After the first round of data collection, we asked participants whether what they would be able to tell us about the complexity of their experience would be different if we had interviewed them in their first language. This is but one example of how we strove to enhance validity by frequently asking participants about how well they feel they are expressing the full complexity of their ideas. We combined multiple analytic tools to address interpretative validity. During every phase of our analysis we engaged in cross-checking codes...
(Miles & Huberman, 1994), and discussed and incorporated multiple interpretations among sub-
team members and with our full research team. Throughout analytic phases, we searched for and
examined discrepant data to test both the power and scope of our emerging theory (Maxwell,
1996; Merriam, 1998). By attending to data at the level of the individual storyline, group
patterns, and case write-ups, we generated theory that accounts for the multiple levels of data and
role specific perspectives on its interpretation (Glaser & Strauss, 1967; Strauss & Corbin, 1998).

SUMMARY AND IMPLICATIONS:

LESSONS LEARNED FROM ENCOUNTERED CHALLENGES

This study demonstrates the value of employing a developmental perspective in research and in
practice. It has multiple implications for teaching and learning in ABE/ESOL settings. The
three major research findings highlight: (a) the possibility and variety of significant change for
adults in ABE/ESOL settings, even during programs as brief as a year in duration; (b) the
importance of the cohort for adult learning; and (c) the variety of importantly different ways
of knowing that adults bring to the ABE/ESOL classroom (Drago-Severson et al., 2001b; Drago-
Severson, Helsing, Kegan, Popp, Broderick, Portnow, 2001c; Helsing et al., 2001; Kegan et al.,
2001b).

Among other things, this study is an effort to understand whether and how this adult
developmental theory, which was developed by researching samples with very different
characteristics, would apply to immigrants from lower socioeconomic backgrounds and less
privileged education. Notwithstanding the fact that learners in each of the three sites were
primarily of similar age and oriented to a particular social role, our research teaches us that
diversity in learners’ ways of knowing existed within each site. These ABE/ESOL adult learners
demonstrated a range of developmental levels that was similar to the range reported in previous
studies with native English speaking adults with similarly widespread SES (see e.g., Kegan,
1994). Put simply, ABE/ESOL learners were not found to have noteworthy differences in their
developmental profiles. Additionally, the differences in complexity of learners’ ways of
knowing were not highly associated with level of formal education. That is, some ABE/ESOL learners with limited formal education did demonstrate developmentally complex ways of knowing. Therefore, this finding will help ABE/ESOL educators and policymakers to use insights from this research when considering how best to design programs that better support adult learning. Moreover, research that employs developmental theory to inform its design and analysis will expand our understanding of learners' experiences (Drago-Severson et al., 2001a; Drago-Severson et al., 2001b; Kegan et al., 2001a; Kegan et al., 2001b). I encourage future researchers to administer developmental measures in conjunction with ethnographic measures to explore issues of culture, background, and acculturation further (and the intersections between development and acculturation). Such explorations will help us to better understand the multifaceted, rich, and complex experiences and perspectives of ABE participants themselves.

This study and its research methods demonstrate that a developmental perspective has multiple important implications for ABE/ESOL settings. Throughout this paper, I have focused how and why we adapted protocols to better match the needs of ESOL learners in our sample, how using a range of measures helped in assessing development, and what we learned from employing each measure over time. In this summary section, I highlight a few of the key theoretical and methodological lessons learned from this work that focused on exploring developmentally oriented questions with this particular sample—given the visible and less visible challenges of conducting research with this highly diverse population.

Adapting Measures in Accordance with Learnings related to Logistical & Cultural Issues—Time, Interviewer-Interviewee Pairings, Selecting Content, & Attending to Culture

For example, given time constraints, it was necessary to adapt the Subject-Object interview, SOI (Lahey et al., 1988), so that it could be administered within one hour and to reduce the number of questions from ten to five. I discussed how this was accomplished, and how this developmental measure helped us assess development on its own and in combination with other measures. In
the SOI learners select the content to be discussed. This allowed them to discuss their own experiences as opposed to other types of protocols which have predetermined content and invite learners to respond to set questions that may require certain types of cultural literacy—with which learners from diverse cultural backgrounds may or may not be familiar. In this paper I discussed the challenges of conducting research with a diverse population as well as what we learned from our administration and analytic methods.

I mentioned our efforts to, whenever possible, match the same participants with the same interviewers during each round of data collection. Additionally, we asked that all interviewers review participants’ data before interviewing them. This had two purposes. First, it was important that interviewers were familiar with the participants and their stories—an initiative we believe aided in development of rapport and trust. And secondly, since this was a developmental study, it was critical for all interviewers to understand participants’ stories from prior interviews so that they could integrate questions and their own understanding into the current interview and ask developmentally-oriented probing questions. We also sent a hand-written thank you note to each participant after every round of data collection. In it, we expressed our gratitude for their participation in our research and for all that they had shared with us.

*Adapting Measures in Accordance with Learnings related to Language & Cultural Issues: Vocabulary, Grammar, & Expressing Full Complexity of Ideas*

I have also highlighted the limitations of protocols that require students to articulate fine distinctions between words (e.g., in role maps where participants need to invent descriptors of themselves) or the challenges associated with completing the Loevinger Sentence Completion Test, which requires participants to spontaneously complete sentence stems. Significantly, we discovered that developmental measures (e.g., the SOI, quantitative measures, and vignettes) could be used reliably with adults from diverse cultural backgrounds.

As mentioned, it was necessary to adapt standard quantitative measures and Likert scales (e.g., locus of control) to better match this sample’s characteristics (e.g., we altered the scale from a seven-point to a five point scale). I have illuminated how we made these measures user
friendly (e.g., adding smiley faces above the numbers on the Likert scales) and understandable to ABE/ESOL learners (e.g., reminding learners about the scales meaning before administering measures). Re-phrasing questions in multiple ways, for example in the Participant Interviews we asked, “What makes for a good teacher?” or “What do you see as a teacher’s job?” helped learners to understand and respond more fully to questions. This also provided us with additional data sources for understanding a person’s way of knowing.

I also highlighted other challenges associated with language issues and how we developed alternative strategies to with them. As mentioned, we learned that some of the paper and pencil measures contained vocabulary words that were unfamiliar to participants. For instance, one of the questions in the Perceived Efficacy Belief Scale (PEBS) asked learners to state their degree of agreement or disagreement with this sentence: “I feel threatened when I have to present my work in class.” Several learners did not understand the meaning of the word “threatened.” We altered our administration of the paper and pencil measures—from large group to small group administration—so that we could attend to these sorts of language issues.

We learned about additional cultural issues after administering several paper and pencil measures during the first round of data collection which caused us to think carefully about how to administer the measures in the final round. For example, a few participants told us that the statement, “I am an excellent student” was “hard” for them to agree or disagree with because of their home country’s cultural norms, which state that a person should “not speak in this way about himself.” Also in the Loevinger Sentence Completion Test, some sentence stems included phrases that seemed to contain cultural assumptions and did not match with the participants’ experiences, which caused participants to ask questions about the meaning of the stem. For example, in the female version of the Loevinger a participant is required to respond to the following questions: #15: “A wife should...” and #17: “A man feels good when....” Since a few of our the female participants were paired with male interviewers, we wondered how, if at all, this might influence participants’ responses to stems & how, if at all, cultural norms might effect in participants’ home countries might influence their responses to stems? I also discussed how
several participants gave a first response (i.e., the response that interviewers wrote down) and then articulated a second (and sometimes third response) which was often more complexly formulated. In this paper, I have discussed the ways in which other measures, for example, the SOI in this case, helped us to understand participants’ experiences more fully, and how we used this measure in combination with other data courses. Researchers might explore the administration of measures that are even less language-based than those we employed; doing so could provide interesting and important contribution to the field.

**Learnings related to Contextual Issues**

A central and unexpected learning relates to the participants’ perspectives on their participation in the research project. Specifically, four themes emerged related to participants’ perspectives on being in our study. First, many participants told us how our interview questions encouraged them to reflect on their experiences. Secondly, participants across all three sites reported that knowing we would be “coming back” supported their persistence in the programs. Several program teachers also emphasized the important ways in which our research team, from their teacher perspectives, helped support and improve learner retention and, in some cases, support successful completion of the program. Thirdly, many participants, especially those at the BHCC site, let us know that they valued the focus groups we facilitated, and that focus groups served to gather students together and facilitate reconnection. Lastly, in our final rounds of interviews with participants we again asked them about the supports that they believed helped them in their learning and toward completion of their programs. Many participants named either our research team as a group (e.g., “you guys”), or an individual interviewer—who was carefully listening and attending to their words, tracking changes in their thinking, asking questions, and valuing their experience throughout the program’s duration—as supportive or helpful to their learning and program completion.
Learnings related to Using a Range of Measures to Understand Learners' Meaning

Making & Program Experiences

Another important learning concerns the value of using a range of measures (e.g., in-depth qualitative interviews, subject-object interviews, focus groups, role maps, quantitative measures, vignettes, observations, and learner-centered interviews), which helped in triangulating data from multiple sources, tracking both content-related and developmental changes over time, and in assessing validity. For example, our learner-centered interview (i.e., the participant interview or "PI") that was administered to participants during each round of data collection was not initially intended as a developmental assessment tool (although we did include several developmental questions within the interview). And, the SOI was not designed to examine participants' experiences in the program. However, as we analyzed the data from these rich interviews we learned that, taken together, they enabled us to understand a fuller picture of participants' learning experiences and, in some cases, see a broader picture of their lives by understanding how they saw themselves in their various roles. Using multiple developmental assessment tools that we designed (e.g., role-based vignettes that were administered before program entry and also at program completion) helped in assessing developmental change over time. Talking individually with adult learners at different points during their programs enabled us to learn about their internal experiences of change over time. The longitudinal nature of our study and the design of our protocols enabled us to revisit the same participant at different points, allowing us to carefully document changes in participants' thinking and to ask of the data and the participant: Are there changes in learner views?

In sum, our methodological findings have important implications for future research. For example, in terms of administering protocols to ABE/ESOL learners, our study demonstrates that language-based research measures can be administered if the effectiveness of the measure itself is carefully monitored and assessed, if they are properly adapted, if the students' expressive English skills are adequate, and if there are multiple measures used to triangulate findings and assess validity. Also, validity can be enhanced if participants are frequently asked about how...
well they feel they are expressing the full complexity of their ideas in English during interviews. This creates an additional check on the quality of the data.

I hope that our research methods and findings illuminate how a developmental perspective can be an analytic tool for better understanding how adults experience ABE/ESOL program learning and how this learning helps them grow better able to enact their roles as learners, parents, and workers differently. By better understanding adults’ experiences of learning, teachers can better support and guide them. By bringing an meaning-making and explicitly developmental framework to inform research in ABE/ESOL field, this work will be useful to a wide range of professionals: ABE learning-policy and program planners, ABE teachers, professors of adult learning and their students. It is our hope that learnings from our study support teachers and other practitioners in their noble work to create strong educational practices and expectations that more closely match and attend to the developing capacities and experience of their adult students.
References


Appendix A: Focus Group Protocol, p. 38

Appendix B: Experiences of Learning Interview (Participant Interview #1, PI#1) pp. 39-43

Appendix C: The Subject-Object Interview (SOI); Lahey, Souvaine, Kegan, Goodman & Felix, 1988), p. 44

Appendix D: Loevinger’s Ego Development Sentence Completion Test (SCT), pp. 45-46

Appendix E: Role-Related Vignettes, pp.47-49

Appendix F: Quantitative Survey Measures, pp.50-55

Appendix G: Self as Learner, Parent, or Worker Map, pp. 56-61
Focus Groups (Round 1)

**Introduction:** Let learners know what the purpose of the Focus Group is.

For the next 45 minutes that we have together, we invite you to have a conversation with us. Our hope is to get to know you a little. We're also hoping to learn how you are thinking about the program before it starts.

We're interested in getting a sense of how you're thinking about the program now. It's nice to have this chance to talk with you before the program starts.

So that we can remember what you tell us, we'd like to tape record our conversation today. No one from Polaroid or your teachers in the Diploma Program will hear the tape. Our conversation will be kept private. So it is okay with all of you if we tape? **Move on!**

**Note to Interviewer:** If there is silence, constricted participation: put people in pairs, let them discuss the question w/ each other first, then after a few minutes ask if anyone is willing to tell group what they were talking about in pairs.

1. What are 1 or 2 of the most important reasons why you wanted to be a student in the Even Start program?

2. What have you liked best about the Even Start program so far?

**Note:** You might want to let the group know that you'll be asking this question again at a later point during the program to see if they think about it differently later on and before they graduate.

3. What have you found as the most difficult part of the program that you think would be good for us to know?

4. Do you have any other thoughts or feelings you may have about the program, even before it starts, that you think would be good for us to know about?

5. In what ways have you changed or become different during the program so far?

6. Do you have any questions of us?

**General Policy:** present a middle ground invitation, not requirement to speak
Say something like, "I want to give each of you who want to, to have a chance to talk. So I want to give/invite each of you who have not yet spoken, a chance to say what you're thinking if you want to."
Participant Interview #1: Workplace Site
Transformational Learning Project

Name of Interviewee: ____________________________
Name of Interviewer: ____________________________
Date: ____________________________
Duration of Interview: ____________________________

Section 1: Context

1. Appreciation & Introduction
Thanks so much for participating in our study. I appreciate your taking the time to talk with me today. Before beginning the interview, I want to introduce myself, tell you more about the purpose of our project, let you know what the kinds of questions I’ll be asking you today, and address issues of confidentiality.

A Brief Introduction from Researcher. Tell what you do for work, how long you’ve been in the field, and say something about your interest in this study. Remind person being interviewed that s/he is “the expert”—your interest is in learning from him/her.

2. Overview of Our Purpose and Goals
Our hope for this research is to learn more about your experience as a learner in the Diploma program. During our conversation, I’m going to ask you questions so that I can better understand how you think/feel about your experience as a learner. I’d like to ask you questions about how you see yourself as a worker at Polaroid and a learner in this program. I’d also like to ask you some questions to help me learn more about your background and family. There are no right or wrong answers. Instead, talking with you will help me to better understand your experience. This interview will take about one hour, and may take less time.

3. Confidentiality
As researchers we will write about what you tell us. When writing about your experience, we will disguise your name. Everything you say will be kept private. We will never identify to anyone the names of any of the people who are helping us to learn about the learning relationships. We may quote things that you say in anything that we write but we’d never use your name. You do not have to answer any question that you do not want to answer.

4. Taping
In order to be able to make sure that I can listen well to you and so that I can review what you have said, I will be tape recording our conversation. I want you to know that no one other than the my research team will have access to the tape. In the same way we guard the privacy of the interview transcript, we guard the tape. We never identify who said what to us to anyone and this includes everyone at Polaroid and your teachers. The tapes will be transcribed, and no one will see transcript except for our research team. If you want to see the transcript, we will give you a copy of it.

5. Questions
Do you have any questions before we begin?

If you have any questions at any time during our conversation, or if you don’t understand something I’ve said, please let me know.
Section II: Getting Started

1. What name do you prefer to be called?

__________________________________ (capture pronunciation)

2. How did you learn about the Diploma Program?

3. Why did you enroll in the Diploma Program? What were some of the reasons why you decided to enroll? (You can say: Some people have one single reason and some people have a few reasons. If you think of any other reasons during our time together today, please let me know.)

Section III: Demographics

a) Family Status: Tell the person that you would like to ask him/her a few questions about his/her family.

1. Marital Status (Please ask these questions in a conversational manner):

   Have you ever been married; do you have any children? How many?

   ____ Married (if yes)  Spouse's occupation ________________
   ____ Single
   ____ Divorced
   ____ Widowed

2. Number of children ______

3. Children’s ages ______ ______ ______ ______ ______ ______ ______
   (If person tells you names of children, you might want to jot them down.)

4. Do you have any other family living in the area?
   
   Probe: Who lives in your home?

5. What languages do you speak at home?

b) Re: Learner

1. Where were you born? ____________________________ (Please write down country of birth)

2. How long have you lived in the USA? ? (Please enter number of years) ______

3. Have you lived your whole life in the USA? ________________

4a. How old are you? or Can you tell me how old you are? When is your birthday?

   Date of Birth ______/_____/______ or Date of Birthday ______/_____/______
4b. Gender

Male
Female

c) Educational History

1. Where did you go to school?

2. How many years of school have you had? (Please enter number of years) 

3. How long has it been since you've been in a classroom as a student?

Probe: When were you last in a learning experience? What do you see as a powerful learning experience?

Can I ask you a little about your parents?

4. How many years of school did your mother have? (Please enter number of years) 

5. How many years of school did your father have? (Please enter number of years) 

6. How many years of school did your children have? (Please enter number of years) 

IV. Learner's Views on Learning and Teaching

a) Views of the Program

1. How do you feel about participating in this program?

2. What do you think will be the best part of the program?

3. What do you think is going to be the most difficult part of the program?

4. Of the five classes in the Diploma Program, which ones are you most interested in? Why?

Five Classes: 1) Reading/Writing, 2) Math, 3) History, 4) Science, and 5) Life Employment Workshop

5. What do your family and friends think about your being in the diploma program?

b) Learner's General Theories about Learning and Teaching

Step One: Story Generating Level (getting at learner's notions of learning)

Let's talk a little about your experiences as a learner. I'm hoping that you can tell me a little about your experiences of learning in and out of school (as a child and as a teacher). I don't just mean your experiences learning in school (e.g., formal learning in a class); you can talk about learning experiences at work too (e.g., in an apprentice situation, formal class, or on-the-job training).
Transformational Learning Team of NCSALL
Polaroid (workplace) Site, Dip #1, Participant Interview (PI) #1

1. Can you tell me about a powerful learning experience or one of your best learning experiences? OR Can you tell me about a really good learning experience, some experience where you learned a lot?
   **Probe:** What was it about the learning experience that made it really powerful?

**Note to Interviewer:** If participant tells a story about a childhood learning experience, please ask her/him to tell a story about a recent learning experience -- as an adult)

**Note to Interviewer:** If the person is blocked and cannot think of a “powerful” or “best” learning experience, ask person to tell you about a “worst” learning experience (Q#2).

2. Can you tell me about one of your worst learning experiences? OR a really bad learning experience?

**Note to Interviewer:** If person cannot answer above questions, then ask question #3.

3. Who have you learned the most from in your life?
   **Probe:** What made her/him a good teacher?

**Step Two: Support for Learning and Teaching**
*Probe the story to get at theories about learning. Try to stick within the context of the learner’s story. You may have to ask these questions in different ways. Use form that works best.*

1. What’s the best way for you to learn? What makes it easier or harder for you to learn something?
   What are the ways in which you learn best?

2. What helps you most when learning? OR What helps you most when you’re learning something new?

**Step Three: Theories about Learning. Drop back,**

1. What do you think makes a person a really good learner (or student)?
   **Probe:** Ask questions about how successful students become successful.
   What do you see as a student’s responsibilities?

2. How do you know when you have really learned something?
   **Probe:** Try to get the person to tell a story. This becomes a platform for thinking about learner’s theories of learning and teaching.

3. What do you think makes a person a really good teacher?
   **Probe:** Why? OR Why was s/he a good teacher?
4. How do you think teachers would describe their job?

**OR** Can you think of a time when you taught something to someone.  
**a)** What did you teach the other person?  
**b)** What did you think about when you were trying to teach him/her?  
**c)** How did you know that the other person had learned something new?

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**Section V: Engaging with Us**

1. Do you have any questions for us? Anything you need to know?

2. Is there anything else that you’d like to add?

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**Contact Information**

<table>
<thead>
<tr>
<th>Work Phone ( )</th>
<th>Home Phone ( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
<td>City</td>
</tr>
<tr>
<td>State</td>
<td>Zip Code</td>
</tr>
</tbody>
</table>
SUBJECT-OBJECT INTERVIEW
PROCEDURES

Interviewer:

Begin by saying "this is an interview to find out how you think about things. It will take about one hour.

There are no right or wrong answers in this interview. Every person has a different way of thinking about things and I want to learn about/understand how you think about things. I will be asking you a lot of questions to help me learn how you think about things. Some of the questions to help me understand how you think about things. Some of the questions might sound kind of silly, but I just want to make sure that I understand what you mean.

We'll spend the first 5 minutes or so going through these cards (show cards to interviewee). These cards are for you to use. I will ask you to write down a few words or sentences on each one and then we will talk about some of the things that you wrote down. What we talk about is up to you. You don't have to talk about anything that you don't want to talk about. So if you start to feel uncomfortable with something we're talking about, please tell me and we will go on to something else.

Ok, let's start with the first card;

(HAND INTERVIEWEE IMPORTANT TO ME CARD)
IMPORTANT TO ME: If I asked you what is most important to you in your life right now, what are 2 or 3 things that you would say.
Again, write down a few words to remind yourself what those important things are.

(HAND INTERVIEWEE TORN CARD-- you may need to say that this means undecided, or one part of you feels one way about something and another part of you feels another way about it)
TORN: Can you think of a time or some times in the last few weeks or months when you felt torn about something. When if felt like something or someone was pulling you in one direction and something or someone else was pulling you in another, and you really felt pulled in two different directions at the same time. This can be about anything in your life.
Write down a few words to remind yourself of that time.

(HAND INTERVIEWEE WORRIED OR NERVOUS CARD)
WORRIED OR NERVOUS: Think of a time or some times recently when you felt nervous about something or if you were worried or afraid about something.
Write down a few words to remind yourself of what that was.

OK. Now we'll spend the rest of the hour talking about some of the things that you wrote down on the cards. We don't have to talk about all of the cards. Some people only get to one of them and some people go through all 5. Either way is just as good.

You can choose which card you would like to start with--any one you want is fine. Remember you don't have to talk about anything you don't want to. So, why don't you choose one and we'll begin.

(AFTER INTERVIEWEE PICKS THE CARD TO START WITH SAY:) Ok, great, can you tell me a little bit about what happened and then I'll ask you some questions.
Loevinger Sentence Completion-FEMALES

Purpose:
The Loevinger Sentence Completion Test (SCT) was designed by Loevinger & Wessler (1970) to explore the way a person makes sense of her/himself and the world.

Introduction to the Loevinger:
The underlying idea of the SCT is that a person has a customary orientation to the world and to oneself or a kind of “frame of reference,” which are called stages. The short form of the SCT is made up 18 sentence fragments (or stems) that an individual is asked to complete in any way s/he wishes. The way a person completes these sentences is believed to reveal the frame of reference through which s/he understands events and interprets the world. This “frame of reference” represents a person’s development and reflects the complexity of her/his thinking.

The SCT has been well researched and is highly respected for reliability and validity. The completed sentences are compared to those in a scoring manual and are scored accordingly. The SCT distinguishes six stages of increasingly complex thinking.

INTERVIEWER’S COPY

Instructions for Administration of the Sentence Completions:

I’d like you finish the following sentences that I read to you. You can tell me the words you want me to write down for each sentence or you can write the words down yourself right on this page. Which ever way you want to do it is okay. These sentences are about how you think about different things. There are no right or wrong answers. For example, here is half of a sentence I’d like you to finish. Would you tell me or write down what you want to say to finish this sentence. You can finish it any way you like.

  e.g., Yesterday I ___

(If the learners ask, “who is she?” say, “it can mean anyone, just think of anyone you wish.”)
Transformational Learning Team of NCSALL
Loevinger Sentence Completion: Administered before program entry only

NAME ___________________ DATE_______

1. When a child will not join in group activities

2. Raising a family

3. When I am criticized

4. A man's job

5. Being with other people

6. The thing I like about myself is

7. My mother and I

8. What gets me into trouble is

9. Education

10. When people are helpless

11. Women are lucky because

12. A good father

13. A girl has a right to

14. When they talked about sex, I

15. A wife should

16. I feel sorry

17. A man feels good when

18. Rules are
Learning Vignette
(Male version)
Transformational Learning Project

Name of Interviewee: __________________________

Name of Interviewer: __________________________

Date: __________________________

Duration: __________________________

Set Context

What name do you prefer to be called? __________________________

1) Thanks and appreciation

2) Introduce vignette: “I want to tell you a story and hear how you think about it. This is a story about students. At the end of the program, I’ll be talking with you again about the same story. It will be a chance to hear how your thinking might have changed.”

3) We will talk for about 20 minutes.

4) You do not have to answer any question that you do not want to answer.

5) So that I can listen well and review what you tell me, I will tape record our conversation.

6. Questions
   a) Do you have any questions before we begin?

   b) If you have any questions during our conversation, or if you don’t understand something, please let me know.
VIGNETTE:

Joseph is in a community studies class in a community college. One day the teacher divided the class into groups of 7 people each to work on an assignment. The teacher told the students that in order for the assignment to be successfully completed, each person in the group has to participate and contribute. The teacher then gave the groups specific instructions about what they were to work on in the groups.

Joseph’s group gets together and starts to talk about the assignment. One person in his group says "I have a really great idea for getting this done. It's not quite how the teacher says to do it, but I've seen it done in other places and it's really cool and a lot of fun, and I think we'll actually learn more. What do you guys think?" Some students in the group nod their heads and say they'd like to hear more about it. A few other students protest and say that it's not doing the assignment the way the teacher instructed them to do it, and they don't want to do anything different from what was assigned. The group argues about which way to do the assignment and finally someone says "let's take a vote." Up to this point, Joseph hasn't said anything. He realizes that his two good friends in the group disagree on what the group should do. One of them wants to go with the new ideas and the other friend wants to follow the teacher’s instructions. From listening to the others argue, Joseph also realizes that his own vote will break the tie in the group and decide the way it will go. Joseph is not sure what to do.
PROBES FOR MALE VERSION:

If you were Joseph, what would you do?

Which way would you vote? Why?

How would you make that decision? How do you know this is the right decision?
What would it be like for you to vote against one of your good friends?

What would be the hardest thing for you in this situation?

How would you deal with that?

Interviewers: With this vignette, we are trying to get at how the interviewee makes sense of conflict, group loyalty, loyalty to the teacher, authority (source of authority, and what constitutes legitimate learning), and decision-making issues.
Let these things be a guide for your probes when they seem relevant.

Listen for these things as you probe: where the interviewee seems to locate the authority, the interviewee’s sense of adherence to the rules or not, conflict over following the teacher’s instructions or not and what that conflict is about for the participant, how the person deals with issues that challenge or threaten group loyalty and cohesiveness.

You don’t have to ask about all of these--let them be a guide for your probing.
Locus of Control Scale

Purpose:
To identify and record a person's beliefs and perceptions about his/her ability to control life circumstances, events and problems.

Background:
The Locus of Control (LOCS) created by Pearlin and Schooler (1978) assesses the extent to which a person believes her/his life chances are under his own control vs. believes that they are the result of things outside of oneself, such as controlled by fate.

The LOCS will provide a means for establishing the extent to which a person's perception (locus) of control is more internally or externally placed as well as a way to record any changes in this self-sense.

The LOCS is comprised of seven statements which an individual is asked to read (or listen to) and respond to by rating how much s/he agrees with each of the statements. Using the number rating scale (1-5) the individual is asked to place the number which best describes he/his degree of agreement in the blank space next to the statement.

The LOCS is a widely used and widely respected assessment tool. A score is attained by summing the number ratings for the seven statements. The scores represent a range of perceived control and mastery (from control seen as outside oneself vs. seen as internal or within oneself). An internal locus of control has been associated with helping coping.

Instructions:
On this paper there are different statements that describe feelings and thoughts people often have about themselves. After I read each one to you (After you read each one) would you decide how much you agree or disagree with this statement? At the top of the page is a line of numbers from 1-5. Each different number stands for describes a different amount of agreement or disagreement. Choose the number that you feel matches how much or how little you agree with the statement just read. Write that number in the space that is to the right of the statement. There are no right or wrong answers, we just what to learn what you think.
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<th>NO !</th>
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<th>3</th>
<th>YES</th>
<th>YES !</th>
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<tr>
<td>1</td>
<td>Strongly disagree</td>
<td>2</td>
<td>disagree</td>
<td>3</td>
<td>Neither agree or disagree</td>
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1. There is really no way I can solve some of the problems I have ........................................... 2

2. Sometimes I feel that I am being pushed around in life .......................................................... 1

3. I have little control over the things that happen to me .......................................................... 1

4. I can do just about anything I really decide I want to do .......................................................... 5

5. I often feel helpless in dealing with the problems of my life .................................................... 2

6. What happens to me in the future depends mostly on me .......................................................... 4

7. I can't do much of anything to change many of the important things in my life. ....................... 1
Personal Efficacy Beliefs Scale (PEBS)

INTERVIEWER'S COPY

Purpose:
To explore and record a person's belief in her/his ability to do the tasks and skills necessary to successfully perform her/his job/schoolwork.

Background:
The Personal Efficacy Beliefs Scale created by Riggs, Warka, Babasa, Betancourt, and Hooker (1994) focuses on a person's subjective judgment of her/his capacity to successfully perform the required tasks (one's sense of personal efficacy) within the domain of school. It is based on the idea that an individual's assessment of and expectations about her/his ability to perform a task are based on experiences of personal success & failure with similar types of tasks & situations. A strong sense of self-efficacy has been associated with increased job satisfaction and commitment.

The PEBS will allow us to establish a person's level of self-efficacy in the area of learning and to track changes in this self-sense as the learner goes through the BHCC program.

The PEBS is comprised of 10 statements which an individual is asked to read (or listen to) and respond to by rating how much s/he agrees or disagrees with each of the statements. Using the number rating scale (1-7) the individual is asked to write down the number which best describes her/his degree of agreement in the space to the right statement. Scores are attained by summing the statement number ratings producing a range from high sense of self-efficacy to minimal sense of efficacy.

Instructions:
On this paper are ten sentences or statements which you may agree or disagree with. They are sentences that describe the feelings people have about themselves and their schoolwork. After we read each one, would you decided how much you agree or disagree with this statement?

At the top of the page is a line of numbers from 1-5. Each different number stands for or describes a different amount of agreement or disagreement Choose the number that matches how much or how little you agree with the statement we just read. Write that number in the space that is to the right of the statement. There are no right or wrong answers. People agree and disagree with these statements, we just want to learn what you think.

Before you decide how much you agree with each statement think about all of the things or tasks you are expected to do to complete your schoolwork and do it really well. Then think about your own personal learning skills and your ability to do your schoolwork. Now, decide how much you agree with each statement.

(Feel free to remind the learners to think about this for each statement)
When I think of myself as a parent or the care-taker I believe that:

1. I have confidence in my ability to be a good parent or care-taker.
   - [Strongly agree]

2. There are some things about being a parent or care-taker that I cannot do well.
   - [Neither agree or disagree]

3. When there are problems with my child, it is because of my lack of skill as a parent or care-taker.
   - [Disagree]

4. I doubt my ability to be a parent or care-taker.
   - [Strongly disagree]

5. I have all the skills needed to be a good parent or care-taker.
   - [Strongly agree]

6. Most people who are parents or care-takers can do this better than I can.
   - [Neither agree or disagree]

7. I am an excellent parent (care-taker).
   - [Neither agree or disagree]

8. My success as a parent is limited because of my skills.
   - [Neither agree or disagree]

9. I am very proud of my parenting skills and abilities.
   - [Neither agree or disagree]

10. I feel worried or nervous when other people watch me parent.
    - [Neither agree or disagree]
Satisfaction With Life Scales (SWLS)

Interviewer Copy

Purpose:
To examine and record a person’s evaluation of her/his overall satisfaction with life.

Background:
Created by Diener, Emmons, Larsen & Griffin (1985) the SWLS focuses on a person’s subjective judgment of his/her global life satisfaction. The assessment tool is based on the idea that individuals create or construct a standard which they perceive as appropriate for themselves and against which they compare the circumstances of their life. It is believed that while a person may feel more or less satisfied with particular areas of his/her life, s/he also has an overall and more general sense of life satisfaction. This global evaluation represents a person’s satisfactions and dissatisfactions across different domains of life.

The SWLS will allow us to keep a record of overall change in the way a learner globally evaluates her/his life.

The SWLS is comprised of 5 statements which an individual is asked to read (or listen to) and respond to by rating how much s/he agrees with each of the statements. Using the number rating scale (1-5) the individual is asked to place the number which best describes her/his degree of agreement in the space next to the statement.

The SWLS is reported to have good reliability and validity and may be administered to men and women of different backgrounds and ages. A score is attained by summing the number ratings for the 5 items producing a range from minimal satisfaction to high satisfaction.

Instructions:
On this paper are five sentences or statements which you may agree or disagree with. After I read each one to you (After you read each one?) would you decide how much you agree or disagree with this statement? At the top of the page is a scale of numbers from 1 - 5. Each different number describes a different amount of agreement or disagreement. Choose the number that tells how much or how little you agree with the statement we (you) just read and write that number in the space that is to the right of that statement. There are no right or wrong answers and people agree and disagree with these statements.
1. In most ways my life as a parent or parent is just how I wish it would be.  
2. In most ways my life is just how I wish it would be.  
3. The conditions of my life as a parent or care-taker are excellent.  
4. The conditions of my life are excellent.  
5. I am satisfied with my life as a parent (or care-taker).  
6. I am satisfied with my life.  
7. So far I have gotten the important things I want from becoming a parent (or care-taker).  
8. So far I have gotten the important things I want in life.  
9. If I could start over, as a parent (or a care-taker) I would not change anything.  
10. If I could live my life over, I would not change anything.
Describing Self as Care-taker or Parent Map/Diagram #1

Name of Interviewee: __________________________

Name of Interviewer: __________________________

Date: __________________________

Orienting Student Overview/Appreciation

1. Appreciation & Purpose
   a) Thanks for helping, appreciate your time
   b) Interested in learning how you think about yourself as a parent or caretaker and how your thinking might change while you're in the Family Literacy program
   c) Today we'll ask you to describe yourself as a parent or caretaker
   d) We'll put the words you say down on paper to make a diagram of what you say
   e) The diagram will be a record of how you see yourself as a parent or caretaker and we will look at it again, the next time we visit to see if your thinking has changed while you're in the Family Literacy Program
   f) We'll work together today for about 40 minutes

2. Confidentiality & Taping
   a) The tapes will be written out. No one sees them but our research team
   b) If you want a copy of the words of your tape, we will give you one.
   c) Don't have to answer questions that you don't want to
   d) Ask me questions, if you have them as we talk

NOTE TO INTERVIEWER:
Each section of this interview tells you: 1) what supplies you need; 2) the task you do 3) the questions you ask; 4) how to orient the learner
Section I: Making the Self-Descriptor Map

Supplies you need: pencil and stickers, circle map

Sample Pre-Prepared Descriptors:

- patient
- strict
- easy going
- understanding
- worried
- discipline my child/children
- angry
- enjoy being a parent
- consistent
- use my judgment
- affectionate
- play with my children
- require good manners
- give my children chores
- be a good listener
- give choices
- encourage my child/children to do things themselves
- feel I’m a good parent
- teach right from wrong

1. Students Brainstorm Own Descriptors

Task: Interviewer writes learner descriptor words on stickers

In making diagram of you as a parent or caretaker

a) The first step is need we to make list of words, phrases or sentences that describe you as a parent (or caretaker for those not a parent)

b) Think about self as a parent/caretaker, what you do, feel, think about your work, how you are as caretaker or parent, your skills etc.

c) Tell me all words, sentences that come to mind that describe you as a parent or caretaker, just throw these out, I’ll write them on these stickers (BRAINSTORM THESE)

d) It’s ok to include positive, negative words. There are good, bad, easy, difficult parts to being a parent or caretaker of any aged child/children.

e) write down student’s descriptors on blank stickers
   We’ll take a few minutes for this
2. Students Rank Own Descriptors

Task: put learner created descriptor-stickers on map

Orient to diagram: this is the diagram we’ll put words on; there are 2 circles A & B. 
A= circle for words that you think best describe you  
B= circle for words that sort of describe you

a) In circle A place words we wrote on the stickers that you think best describe you as a parent/caretaker, or describe you most of time as a parent/caretaker, describe you really well, tell how you really are or closest to way you think of yourself  
(use whatever directions help the student)

b) In circle B place words we wrote on the stickers that sort of describe you as a parent/caretaker, or describes you some of time as a parent/caretaker somewhat important to way you think about yourself as a parent/caretaker

(Interviewer: use whatever words work here)

Section II: Adding Prepared Stickers

Supplies you need: prepared stickers, circle diagram

1. Students Select Prepared Sticker Descriptors

Task: put prepared stickers on circle diagram

a) Here’s a list of words that sometimes describes parents, some may fit for you and some may not; you don’t have to use all of them; there’s no right or wrong answers

b) Read these together going down list, if necessary

c) Place words that describe you very well as a parent/caretaker in circle A (show where)

d) Place words that describe you somewhat as a parent/caretaker in circle B (show where)

e) Place words that don’t describe you at all outside the circle (show where) or you may not want to use these at all
Section III: Understanding Meaning of Descriptors for Student

Supplies you need: Colored pens

Orient to task: Want to look at picture together & understand why you put words in different circles & what words mean for you--Questions are to help me think about the words your said and the diagram we made of you as a parent, the way you do -- I want to understand what you mean

(Note to Interviewer: use whatever Q. will help learner to talk and feel comfortable. Feel free to skip questions that don’t seem to work)

1. Student Explains the Meaning of Descriptors

Task: talking

a) Can you tell me what you mean by this word?

   Probe: Tell me how this a word/sentence really describes you? OR
   Why is this a good description of you? (as a parent)

b) Has this always been a good description of you? OR
   Always been the way you’d describe yourself as a parent or caretaker?
   Probe: Something you’ve become, learned, tried more recently?

c) Have other people also noticed this about you? (underline in orange)

d) What on this picture about yourself is most important? (Put circle around it)

e) What on this picture about yourself would you most like to change, if anything? (Put a triangle around it).

Section IV: Understanding Relations Among Descriptors

1. Helping Student Explain Links Among Descriptors

Task: learner draws lines around connections among all descriptors

Focus: to get at complexity of self-view, sense of coherence, relationships of descriptors to each other

a) Take a minute & see if any words, phrases go together
b) Would you draw a line connecting those words, phrases that go together?
     c.) Tell me about how these words/phrases go together?
**Probe:** In what ways are the words related/connected? Are there times when they don’t go together?

d) Would you underline those words/phrases you think other people would use to describe you? (optional)

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**Section V: Final Comments & Good-bye**

1. **Final Comments & Questions**

   a) Is there anything else that you would like to add? **Probe:** Anything you now want to change?

   b) Is there anything on this picture you think will change as you go through the Family Literacy Program?

   c) Do you have any questions for us? Anything you need to know?

2. **Good-bye and Thank you**

   a) Thank them for time, willingness to be in study, sharing themselves

   b) Remind them how their work with us has helped, will help others

   c) Good luck in class; looking forward to seeing/speaking with them again

   d) We’ll be visiting to see the classroom a few times during the Program. We will visit again to talk with them during the winter to see how their thinking might have changed.
(A) Describes me best

(B) Sort of describes me
Title: Adult Development Researchers' Reflections on Using Multiple Research Methods with ABE/ESOL Populations

Author(s): Eleanor E. Drago-Severson, Ed.D.

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