Learners' Engagement in Adult Literacy Education

Hal Beder, Jessica Tomkins, Patsy Medina,
Regina Riccioni, and Weiling Deng
Rutgers University

NCSALL Reports #28
March 2006

NCSALL

National Center for the Study of Adult Learning and Literacy

Harvard Graduate School of Education
101 Nichols House, Appian Way
Cambridge, MA 02138

CONTENTS

TABLE

DEDICATION

This report is dedicated to the teachers, learners, and staff of the New Brunswick Public Schools Adult Learning Center from whom we have learned so much over the past five years. You are the best!

EXECUTIVE SUMMARY

Engagement is mental effort focused on learning. It is important to understand how and why adult learners engage in literacy instruction because engagement is a precondition to learning progress. Researchers who study engagement conceive of it in different ways. Some focus on engagement as a cognitive, or mental, process closely related to such factors as motivation and self-efficacy. They seek to understand how the engagement process works and how it is related to learning. Others are more interested in how learning context shapes engagement—how the educational environment affects how and whether learners engage. Although both traditions are important, in this study we have focused on the second tradition—how learning context shapes engagement. We have done so for a very practical reason; to a great extent adult educators control the educational context. Thus, if they understand how the educational context shapes engagement, they can influence engagement in positive ways.

This study was conducted at the National Labsite for Adult Literacy Education, a partnership between the National Center for the Study of Adult Learning and Literacy (NCSALL) and the New Brunswick Public Schools Adult Learning Center. The Center serves about 3,800 learners a year with basic literacy and English for speakers of other languages (ESOL) classes, preparation for the tests of the General Educational Development (GED) credential, and an adult high school that issues a school district diploma. Over a period of five years (2000–2005), we studied six classes: three basic literacy, two adult high school, and one GED preparation. Our methodology was qualitative, with multiple data-collection methods, including the use of video, traditional ethnographic observation, and learner interviews. The teachers of the classes we studied participated in some of the data-analysis sessions, and when they did, the session was recorded and transcribed. The transcripts were then treated as an additional data source. Multiple data sources enabled us to triangulate in data analysis. We found that there were three contextual factors that shaped engagement in the classes we studied: the instructional system, teachers' roles, and classroom norms.

The Instructional System

Five of the six classes we studied employed an instructional strategy we have termed individualized group instruction (IGI). In IGI, at intake learners are tested to determine their literacy skills levels. Based on this diagnosis, they are placed in classes where they are assigned instructional materials at their appropriate skill levels. Learners then work individually on the materials. When they complete an exercise, teachers correct the work. If it is essentially correct, more difficult work is assigned. If it is incorrect, materials at the same level are assigned and teachers often render one-on-one instruction to help the learner. If learners become "blocked" during the process, teachers assist.

Because learners worked individually on assigned materials, they decided when they would engage. If they missed a class, they would simply begin where they left off in the previous session, without penalty and without missing instructional content. Learners also engaged at their own pace. Faster learners progressed more rapidly, while slower learners did not fall behind the group as they might have in a group-based class. Because the materials, rather than the teacher, primarily conveyed instructional content, the materials determined what the learner engaged in. Moreover, to a great extent the material's directions determined how the learner would engage. Learners assessed the outcomes of their engagement by how successfully they were progressing through the materials. Thus in IGI, the instructional system shaped many aspects of learners' engagement. In the classes we observed, learners were highly engaged in IGI. Eyes moved along the page, pages turned, pencils wrote. Although learners occasionally took short breaks, they quickly returned to work when the break was over. As was evident from interviews with learners, at least part of the high degree of engagement was due to a high level of motivation.

That the instructional system shapes learners' engagement means that classroom management is an important concern. Management issues in an IGI setting include accurately diagnosing learners' skill levels, assigning appropriate learning materials, keeping learners engaged in their work while they are waiting for help, and rendering help effectively in a one-on-one teaching environment.

Teachers' Roles

At the Center, all teachers had to be certified in a K–12 subject. Thus nearly all had K–12 experience. Most, however, lacked experience in either adult education or IGI when they were first hired, which meant that teachers had to self-define their roles in relation to IGI and teaching adults, and for that reason, role behavior varied somewhat among the teachers. One teacher of a basic-level class defined her role primarily as helping her learners to get the correct answers on the teaching materials. Thus most of her efforts were directed at correcting the materials and showing learners what the correct answers were if their answers were incorrect. She rarely checked to see if learners actually comprehended the material. Although the learners in this class were consistently engaged, their level of comprehension was an issue. When the teacher left to take another job, the new teachers concluded that the learners were not comprehending adequately and needed more help than was possible in an IGI format. Thus they switched to small-group instruction. Learners still worked with materials but they did not move to new exercises until, after dialoging with the learners, the teachers concluded that everyone in the group understood. Thus, in this class, teachers directed engagement—when learners would engage, how they engaged, the pace of engagement, and what they would engage in.

The teacher of the GED class, in contrast, adopted a somewhat different role. In the GED class the objective was patently clear—passing the GED tests. The IGI materials were targeted toward the test. Teachers gave practice tests frequently and learners were not permitted to take the GED tests until they had passed a GED simulation test. The class was extremely task-oriented. Learners picked up their materials, sat down at tables, and were riveted on their work for the entire class. Learner-to-learner interaction was very uncommon. In this class, the teacher functioned primarily as a coach. The game was passing the GED tests. The learners were the players and the teacher felt he was there to help them win.

In the IGI classes in which the materials conveyed the instructional content, teachers functioned primarily as facilitators. Part of their role as facilitators was to encourage and support engagement. Teachers monitored learners' engagement, taking disengagement to mean that a learner was blocked and needed help. Teachers supported engagement by constantly praising learners for work done well and by "talking up" learning tasks. Thus in IGI, whether and how teachers maintain and support learners' engagement is an important matter.

Classroom Norms

Classroom norms are the formal and informal rules that govern behavior in the classroom. In none of the classes were learners penalized for missing class, coming late, or taking breaks. Yet in all the classes, the predominant norm was "sticking to business." Sticking to business was primarily an informal norm that was accepted by learners and teachers alike. The only formal rule directed at sticking to business was that cell phones were prohibited. Sticking to business meant that all behavior was directed at the business of the class. When learners interacted with each other, and they often did (except in the GED class, as mentioned above), their interactions almost always focused on helping each other with their work. When learners entered, they picked up their folders and began to work immediately. Teachers adopted a very businesslike posture. We never observed a teacher negatively sanctioning a violation of the sticking-to-business norm. They did not have to because learners accepted the norm and complied with it willingly.

The norm of sticking to business meant that engaging and maintaining engagement for the entire class session was the commonly accepted behavior of the class. It was so ingrained that it hardly ever needed to be enforced.

Implications

We have found that the context of the adult literacy education classroom shapes learners' engagement in instruction. The instructional system determines when, how, and in what learners engage. Teachers' role behavior affects the extent to which engagement is

supported and classroom norms directed to sticking to business create a climate in which being engaged is the predominant value.

Whether learners learn can only be assessed indirectly through tests. Yet engagement, a precondition to learning, can generally be assessed through simple observation. It follows that learners' level of engagement can function as a day-to-day marker of instructional success. If the results of the assessment prove negative, malfunctions of the instructional system, teachers' role behaviors, and/or classroom norms may be places to search for solutions.

CHAPTER ONE: INTRODUCTION

This study is about engagement in adult literacy education. Engagement is effort focused on instructional tasks. In less formal terms, it means working hard at the business of the class. When learners are engaged they are focused on text, their eyes are moving, and pages are turning. They are writing the answers to written exercises. They are attending to teachers or they are helping each other do their work. When they are not engaged, they are talking about matters that have nothing to do with the class, taking breaks, or simply daydreaming.

It is important to understand engagement because engagement is part of the learning process. Clearly, learners cannot progress unless they are engaged; therefore building and maintaining engagement is an important part of what adult literacy educators do.

This research was conducted at the National Labsite for Adult Literacy Education, a partnership between NCSALL at Rutgers University and the New Brunswick Public Schools Adult Learning Center. The Center was founded in 1980 and over the years it has grown considerably. In 2004 it served 3,699 learners. It employed 57 certified teachers and 28 support staff. Fifty-three percent of the learners were enrolled in ESOL classes, 30% were enrolled in basic skills classes and 17% were enrolled in classes at the secondary level. The Center had three full-time counselors, four full-time teachers, and three full-time administrators. During the period of our study, many of the part-time staff worked between 35 and 40 hours per week. The Center was open from 8:30 a.m. to 8:30 p.m. Monday through Thursday and 8:30 a.m. to 4:30 p.m. on Fridays.

The Center is located in a modern three-story building that also serves as the school district headquarters. As adult literacy education facilities go, it is among the best. The Center features a computer laboratory with 17 up-to-date desktop computers and 35 laptop computers, all with Internet access. The 16 classrooms are clean and decorated with teaching aids, inspirational posters, and quotations. The Center is located in an urban, working-class neighborhood, and it has the reputation of being one of the very best in the state. After working with its teachers and staff for 5 years, we believe that the reputation is well deserved.

Context of the Study

There are three factors relating to the Center and the context of this study that are important to understand: individualized group instruction (termed hereafter IGI), the professional model, and the adult high school.

Individualized Group Instruction (IGI)

Although ESOL and some adult high school classes at the Center employ whole-group instruction, five of the six adult literacy classes we studied used a form of instruction we have termed IGI. In IGI, learners are tested at intake to assess their skill levels in reading and math. They are then assigned to a classroom, where, after a brief orientation, they are given instructional materials appropriate to their diagnosed skill level. The materials are kept in large envelopes with learners' names written on them. They are deposited in file crates, picked up by learners when they come to class, and put back when learners leave. Learners work independently on their materials. When they have completed an exercise, the teacher corrects the work and provides help if needed. If the work is essentially correct, the teacher assigns more difficult materials. Thus in IGI, materials are the focus of teaching and learning, and students progress by completing progressively more advanced materials.

The primary reason for using IGI is continuous enrollment. As with the great majority of adult literacy classes in the United States, compared to elementary and secondary education the attrition rate at the Center is high. At the same time, there are many potential learners waiting to enroll. As a result, new learners are added to classes as space becomes available. Because of the constant influx of learners, whole-group instruction is problematic as new learners would have missed instruction delivered prior to their enrollment and teachers would be faced with a class that varied greatly in respect to skill level and experience with adult literacy education. IGI compensates for this problem. Because learners work on their own individualized, program of instruction, they can begin any time and progress at their own pace.

When we first learned that the classes we would be studying employed IGI, we worried that we would only be able to observe learners working on materials and that this would make for a rather meaningless study. We were also concerned that all the classes would be very much the same and this would make analysis difficult. As the reader will discover, these concerns were ill-founded. The classes were very different because a lot more goes on within IGI than learners working on materials.

The Professional Model

Part of the reason the classes were all different lies in the professional model for teaching in place at the Center. At the Center, teachers are viewed as being professionals who are capable of, and responsible for, making their own decisions about how to teach. There is no mandated teaching methodology. In fact, in one class we studied, the teachers elected to abandon IGI for low-level learners and adopt small-group instruction in its place.

The implication of the professional model was that teachers were free to, and indeed had to, define their own roles in respect to teaching adults and functioning in an IGI context. Since most teachers had little or no experience with IGI prior to teaching adult literacy, and since they had to define their own roles, teaching behavior varied considerably among the classes we studied.

The Adult High School

The final contextual feature of note is the adult high school. Through the adult high school, learners earn a New Brunswick Public Schools diploma. To do so they must meet all state K–12 curriculum standards and pass the state High School Proficiency Assessment. The adult high school is funded through regular K–12 state aid, although the per capita allocation to adult students is smaller than for K–12. The director of the Center holds the rank of principal in the school district and the adult high school pays for three counselors and four full-time, tenure-eligible teachers. Thus the adult high school pays for resources that programs in other states would not have at their disposal. We studied two adult high school classes, one in reading and the other in writing. In both classes the instructional system had been converted to an IGI format.

Organization of the Report

This report is organized into six chapters. This chapter introduced the study. The second reviews the literature on engagement and the third explains the methods and procedures of the study. The fourth chapter is comprised of case studies that analytically describe engagement in the classes we studied. In the fifth chapter we present a holistic analysis of engagement and the final chapter discusses the implications of the study.

CHAPTER TWO: LITERATURE REVIEW

Introduction

As there is virtually no research on engagement in adult literacy, most of the research we drew on for this study is from the literature on engagement in K–12. Although we also included studies of adolescents and college students—groups who under some circumstances might be considered adult learners—discussions of their engagement are not completely adaptable to the adult literacy experience. This is because the context of adult literacy is quite different from that of traditional schools. First of all, because participation among learners in the present study is mostly voluntary, motivation to engage can be almost assumed. Second, adult literacy programs lack the extracurricular activities and other formal social components in which K–12 students engage. Most important, adult literacy learners are mature adults who occupy adult roles. At the same time that they are students they are also parents, workers, and members of the broader society. On one hand, the desire to enhance their performance in these roles can provide motivation to succeed in adult literacy. On the other, role conflict can be a deterrent to continued participation.

How the construct of engagement is defined in educational research varies. Definitions of engagement range from engagement as "participation" in school as a social system (Finn, 1989; Newmann, 1981; Newmann, Wehlage, & Lamborn, 1992; Organisation for Economic Co-operation and Development, 2003) to the notion that engagement is a cognitive function employed during certain academic tasks (Corno & Mandinach, 1983; Helme & Clark, 2001; Pintrich, 1990). Fredricks, Blumenfeld, and Paris (2004), setting out to organize the engagement literature and highlight its gaps for future research, propose that discussions of engagement fall into three categories. *Cognitive engagement* is defined as the student's investment in and commitment to academic work. *Emotional engagement* refers to a student's reactions to others, and connections with the school community, and *behavioral engagement* to participation in both the school and academic work. They suggest that a "fusion" of these categories is needed in order to get a deeper and more satisfying handle on student engagement.

Another aspect of this uncertainty in definition is that engagement can be conceived as both an input and an outcome. As an input, engagement can be defined as an individual's motivation and ability to undertake academic tasks (Corno & Mandinach, 1983). In contrast, engagement can be seen as an outcome, the product of the right combination of individual motivation and a motivating school environment (Finn, 1989; Newmann, 1981). These conceptualizations are not necessarily dichotomous: Engagement can be both an input and an outcome (Ainley, 1993).

The concept of engagement varies in part because it is used by researchers in different fields. Psychologists, sociologists, and educational theorists are all concerned with the idea of engagement in forms that manifest differently according to the researcher's focus and discipline. The categories outlined by Fredricks and colleagues (2004) are therefore useful for examining the broad array of engagement literature. This inquiry begins with the research on cognitive engagement, with its focus on individual motivation, goals, and the presence of self-regulation. Second, we examine the literature on emotional and behavioral engagement, which tends to highlight the social and classroom contexts as they relate to engagement.

Cognitive Engagement

The concept of engagement in the cognitive tradition is elusive. There are a variety of perspectives on engagement that have yet to be synthesized into a cohesive, commonly accepted definition. Terms such as active learning, self-regulation, high-level engagement, and metacognition are at times used as if they were synonymous with engagement and at other times to distinguish between forms of engagement. The elusiveness of the concept is alluded to in much of the literature, most recently by the Fredricks and colleagues' (2004) review of the literature on school engagement. The authors note that, "The engagement literature is…marked by duplication of concepts and lack of differentiation in definitions across various types of engagement" (p. 65). Zimmerman (1994) also points out the lack of a cohesive concept:

> An extensive number of self-regulatory processes have been proposed, and many of them, such as cognitive self-monitoring, are both subtle and covert. To complicate the picture even further, many process constructs appear to overlap conceptually, such as meta-cognition, volition, and planning. (p. 6)

This elusiveness may be somewhat inherent in the discussion. As Zimmerman explains, we all know what is meant by "an engaged student," and teachers can readily point out examples of engaged behavior. It is more difficult to attempt an explanation of engagement. As Corno and Mandinach (1983) explain, for example, "self-regulated learning is one form of cognitive engagement, that elusive variable inferred from measures of motivated behavior" (p. 89).

For Corno and Mandinach (1983) it is the presence of "self-regulation" which distinguishes highly engaged students. Corno and Mandinach integrate theories of motivation and learning in order to describe cognitive engagement in the classroom. They ask the question: What do motivated students do while engaged? Further, they examine how instruction influences learning and motivation, and suggest ways teachers can help develop self-regulated learning behaviors.

Corno and Mandinach (1983) suggest a four-part model of cognitive engagement. The highest form they describe is self-regulated learning, which encompasses the other forms of engagement. In this conception, self-regulated learning operates at the meta-cognitive level and is defined as "…an effort to deepen and manipulate the associative network in a particular area…and to monitor and improve that deepening process" (p. 95).

Corno and Mandinach (1983) hypothesize three additional forms of cognitive engagement. Each form may be appropriate for a certain learning task, or in a particular learning environment. *Resource management* is the process by which a learner fulfills a goal by gathering information from available sources, such as reference materials or other people. This form of engagement can be an asset during group work or collaborative learning. However, a reliance on resource management may lead to an inability to do one's own work when other resource options are not available.

Recipience describes a learning situation in which the instructor "short-circuits" the learning process by supplying the information for the student, whether in the form of a diagram, summary, or other material. Corno and Mandinach (1983) describe teachers in their study who intend to use a participant modeling strategy, but in effect provide the content to the students without imparting a sense of why the information is organized as it is. Recipience is the product of a rote-learning situation in which students receive the information from the instructor. It is a legitimate form of engagement, but is problematic when it replaces the use of other strategies, or the development of the ability to choose one's own strategy.

Task-focus is the form of engagement during which a student uses analytical skills to perform a specific task. Students can be engaged in this way while solving a problem or taking a test. This is essentially problem-solving, without reaching beyond one's analytical skills to perform a task.

Though students may depend solely on one or two of these forms, self-regulated learning encompasses all of them. Self-regulation involves two ways to deal with information: information acquisition and information transformation. Acquisition involves both *alertness* and *monitoring*, and primarily involves gathering information. Information transformation involves *selectivity*, *connecting,* and *planning:* skills involved in making connections to previous knowledge and building understanding. Though Corno and Mandinach (1983) point out that both kinds of processes involve metacognition and cognition, transformation is a skill belonging to the more self-regulated learner.

While each of these forms may be useful at times, they each have limitations as learning strategies. A student who depends, for instance, on resource management will be at a loss when working independently. The self-regulated learner, in contrast,

distinguishes herself by her ability to move easily and productively between the above forms, calling on each when appropriate. Self-regulation therefore implies much more than high motivation. For example, although two students may be equally motivated to perform a certain task, the way they accomplish it may or may not be self-regulated. A student who relies exclusively on external resources, may be motivated to accomplish the task, but lack the ability to use self-regulatory strategies. The ability to shift between forms of cognitive engagement and to monitor one's own use of various strategies has important implications for the future work of the student. Because the use of self-regulated learning seems to distinguish between high-level and low-level student ability, Corno and Mandinach (1983) emphasize the importance of using classroom instruction to model and develop self-regulatory strategies among low-ability students.

Corno and Mandinach's work is seminal in that their cognitive engagement construct usefully elaborates the relationships between motivation and learning strategy use. Their explanation of self-regulation as the salient feature in cognitive engagement, though it has been worked, reworked, and expanded significantly since their 1983 article, is the starting point for many studies on student goals, strategy use, and instructional methods as facets of student engagement. Meece, Blumenfeld, and Hoyle (1988), for instance, draw in part on Corno and Mandinach's definition of self-regulated learning when they examine types of student goals and the impact of these goals on high levels of engagement. They define high, or active, cognitive engagement "by students' reported use of metacognitive and self-regulation strategies rather than by help-seeking or effort-avoidant strategies" (Meece et al., 1988, p. 515).

Meece and colleagues organize student goal orientations into three types. Essentially they examine the difference between intrinsic and extrinsic motivations on student engagement. They divide goals into task-mastery, ego/social, and work-avoidant. Task-mastery goals are those in which "students [seek] to independently master and to understand their work" (Meece et al., 1988, p. 515). These goals involve a sense of accomplishment from work itself. Ego, or social, goals are those in which students seek "to demonstrate high ability or please the teacher" (p. 515). In contrast, these goals are not for the intrinsic reward of accomplishing the task. The authors also included work-avoidant goals, to capture the student orientation that revolves around doing as little as possible. Meece and colleagues examined these relationships in a study of fifth- and sixth-grade students working in science classrooms. Their findings confirmed that task-mastery goals, "in which students [seek] to independently master or understand their work" (p. 515) are linked to more active cognitive engagement. Ego/social goals "in which students [seek] to demonstrate high ability or please the teacher" (p. 515) are related to less active cognitive engagement.

Further, Meece and colleagues' study indicated that it is a student's specific goals, more than intrinsic motivation, that seem to produce classroom engagement. Cognitive engagement also is not related to students' ability so much as to their self-concept. An

important finding with implications for classroom teaching is that the type of instruction influences the level of students' engagement. Small-group instruction in particular makes individual differences among students more relevant to their levels of engagement.

Pintrich (1990) similarly analyzes the effects of motivation on cognitive engagement. He introduces his article, "Motivational and Self-regulated Learning Components of Classroom Academic Performance" with a thorough explanation of his definition of self-regulation. Pintrich synthesizes the literature on self-regulation and identifies three essential components of self-regulation. First is the student's "metacognitive strategies for planning, monitoring, and modifying cognition" (p. 33). This, in effect, is a student's monitoring of her academic work. The second component is the student's monitoring of her environment, "management and control of effort on classroom tasks" (p. 33). Third is the student's use of learning strategies, "the actual cognitive strategies that students use to learn, remember, and understand the material" (p. 33). Examples of learning strategies are rehearsal, elaboration, and organizational tactics.

Pintrich's concern is the relationship between student motivation and these three aspects of self-regulation, in order to determine how a student's personal characteristics result in classroom engagement and academic performance. His definition of motivation also has three components, which he links to the three attributes of self-regulation: expectancy, value, and affect. Motivation consists of student's beliefs about their ability to perform classroom tasks (expectancy; e.g., Can I do this task?), their goals and beliefs about the importance of the tasks (value; e.g., Why am I doing this task?), and their emotional reactions to the tasks (affect; e.g., How do I feel about this task?).

Pintrich (1990) examines the relationships between motivation and self-regulation in two steps. He looks at how motivational orientations affect the use of self-regulatory strategies, and also looks at how motivational orientations and self-regulatory strategies, taken together, affect achievement on academic tasks.

In testing these relationships in a group of seventh-grade science and English students, Pintrich found a series of connections between student motivations and students' active engagement and performance in the classroom. In terms of the first set of relationships, between motivation and self-regulation, Pintrich reported that self-efficacy was positively related both to cognitive engagement and performance. Students, then, who expected to do well did in fact perform better than other students. Student belief in the value of an academic task also had a strong impact on the use of self-regulatory learning strategies. Finally, self-regulatory behavior had a positive impact on student performance.

Pintrich (1990) concludes that the implications of these relationships are that "will and skill" are both relevant to student success (p. 38). "Will and skill" is a nice summary of the work on cognitive engagement, as it addresses the meeting point between motivation and learning-strategy use. Corno and Mandinach (1983) refer to this intersection similarly when they point out the necessity of students having both the "will" to work and a "way" to do their work. As Corno and Mandinach summarize, "will is engendered as a result of gaining knowledge of a strategy use or way to proceed that works, which in turn, promotes feelings of internal control and self-efficacy for the task" (1983, p. 106). This reciprocity, between motivation and strategy use, is a central concern of cognitive engagement. As with Pintrich (1990) and Corno and Mandinach (1983), Ainley (1993) is concerned with this reciprocal relationship, which begins for her with the student's personal learning orientation. As she explains, "Characteristics that the individual student brings to the learning context shape and combine with that student's construction of the task to influence the learning strategies they adopt and the outcomes they achieve" (Ainley, 1993, p. 404).

Ainley uses Pintrich and Garcia's (1991) three examples of self-regulatory learning-strategy use to identify styles of engagement. These are elaboration, organization, and rehearsal, which are divided into reproductive and transformational strategies. Elaboration and organization are "deep processing strategies" in that they link new learning with past learning, and as such are labeled as "active transformation." Rehearsal, on the other hand, is a "surface strategy," and as such is reproductive and passive; for example, memorizing material.

Ainley (1993) links these types of learning strategies with types of goals, essentially contrasting intrinsic and extrinsic motivations. In this study, a deep approach to learning is associated with mastery goals, and an achieving approach is related to extrinsic motivation. The surface approach, in contrast, relies on extrinsic goals less fruitfully by fulfilling the minimum requirements to complete the task. Ainley conceptualizes engagement as an expression of motivation, and therefore as both an outcome in itself and an orientation toward schoolwork. Engagement is defined as a combination of student goals and beliefs about learning.

Using self-reports in her study of 11th-grade female students, Ainley (1993) identifies the learning strategies employed by the students as they took exams in both their strongest and weakest subjects. This work adds to the discussion of the relationship between student orientations to learning and engagement by identifying six styles of engagement. These styles appear to affect both the type of learning strategies students use and their academic achievement.

The six styles that emerged were named detached, committed, hopeful, engaged, disengaged, and keen to do well. *Detached* students are characterized by a low level of involvement, below-average ability, and a focus on mastery goals. *Committed* students

are the highly able students who are concerned both with understanding and performance. *Hopeful* describes the students who have lower-than-average ability and yet an average level of achievement goals, though these are focused on fulfilling tasks minimally as opposed to mastering tasks. *Engaged* students are described as just that: "engaged with his or her learning in order to achieve and understand" (Ainley, 1993, p. 401), though they show a low level of academic ability and a low use of deep-processing strategies. *Disengaged* students, in contrast, are minimally involved in their work and rely on surface strategies. Finally, the *keen to do well* style is also characterized by a reliance on surface strategies, though these students also use deep-processing strategies at an average level.

Ainley's characterizations of styles of engagement broaden our understanding of motivation and engagement by taking into consideration the variety of motivational orientations. In this study, the more engaged styles were in fact connected to a higher use of transformational or deep-processing strategies. Ainley's study, as with that of Meece and colleagues (1988), reveals that student orientation to learning can transcend academic ability. In this case, more-engaged students were better able to balance their use of strategies between transformational and reproductive, indicating the importance of considering multiple learning strategies alongside multiple goals.

McGregor and Elliot (2002); Miller, Greene, Montalvo, Ravidran, and Nichols (1996); and Wentzel (1989) look somewhat outside the traditional bounds of cognitive engagement. In these studies, engagement is expanded and modified to include affective concerns, social goals, and other motivations that are nonacademic in nature.

McGregor and Elliot (2002) look at how student goals affect academic performance. As with the other researchers concerned with cognitive engagement, McGregor and Elliot focus on engagement during a specific academic task: in this case three studies of undergraduate students taking their final exams. Their idea of engagement is interesting, however, in that they conceive of task engagement as a process that includes three stages: preparation for the task, experience of the task, and reaction to the task.

McGregor and Elliot use a trichotomous model of achievement goals (as cited in McGregor & Elliot, 2002). These are performance-approach goals ("attainment of competence relative to others"), performance-avoidance goals ("avoidance of incompetence relative to others"), and mastery goals ("development of competence through task mastery") (p. 381).

The researchers were specifically interested in the earliest stage of engagement, "which includes the individual's appraisal of and orienting to the task and its requirements, preparation for task engagement, and his or her psychological state

immediately prior to the evaluative encounter" (McGregor & Elliot, 2002, p. 381). Their findings reveal that wanting to understand the material (a mastery goal) had the highest impact on exam performance. In contrast, the desire not to do poorly (a performance-avoidance goal) had a negative impact on exam performance. Interestingly, the desire to do well on the test (a performance-approach goal) also had a positive impact on exam performance. Though performance-approach might generally be considered a less useful orientation than the desire to achieve mastery of the material, this finding suggests to the researchers that performance-approach goals might be worth cultivating in the classroom along with mastery goals.

This work is relevant to our understanding of cognitive engagement in its focus on engagement as a process, with preparation a crucial element of that process. It also suggests that merely wanting to do well on a test is a more useful motivator than one might think. This is interesting to think about in terms of adult learners, who often appear to be completing tasks that don't seem to have any relevance to them except in terms of degree attainment. The issue of relevance, or authenticity, is common ground in both K–12 and adult learners. In both contexts, motivated and nonmotivated students are often faced with tasks that may appear to lack meaning.

Garcia and colleagues (1995) looked at the characteristics of "worriers and procrastinators." Their study of college students expands the definition of self-regulation to include affective concerns, as the authors make the point that students self-regulate affective outcomes as well as academic ones. As they explain, they are building on the research on self-regulation, which has "typically emphasized students' use of cognitive, meta-cognitive, and resource management strategies to regulate the encoding and processing of information, and how the use of these strategies is related to motivational factors…" (p. 3).

Garcia and colleagues (1995) examine two motivational strategies—defensive pessimism and self-handicapping—to see how each behavior relates to a student's motivational outlook, use of learning strategies, and academic performance. Defensive pessimism—the belief that one will likely not perform well—creates anxiety for the student, resulting in the unintended benefit of allowing her to mentally rehearse the experience in advance. Defensive pessimism is presented as a form of regulating one's learning that can in fact lead to increased cognitive engagement. Self-handicapping, on the other hand, is the withdrawal of effort in order to preserve one's sense of self-worth, a concern that may compete with more strictly academic goals. Despite the negative associations with each behavior, Garcia and colleagues (1995) make the point that students engaging in these behaviors are nonetheless exhibiting qualities of self-regulation. They are monitoring and controlling the emotions that may be associated with academic tasks.

As well as contributing to our understanding of the affective aspect of self-regulation, this work is valuable in that it highlights the classroom context, pointing to the relevance of how this context creates the conditions for defensive pessimism and self-handicapping. As the authors state, "The implications for self-regulated learning are clear: Low levels of cognitive engagement may be due to attempts to maintain one's sense of self-worth, not simply because of lack of knowledge of appropriate learning strategies" (Garcia et al., 1995, p. 3).

Although she doesn't specifically refer to engagement, Wentzel (1989) similarly expands our understanding of student motivation by analyzing the role of social goals. Wentzel focuses on the relationship between student efforts, standards for performance, and achievement. Wentzel conducted two studies of adolescent students to learn how examining multiple goals might contribute to understanding student performance. Specifically, Wentzel included social goals—social interaction and social responsibility—along with academic goals. Social responsibility goals, such as "conforming to classroom rules and being cooperative" (Wentzel, 1989, p. 132) distinguished high- from low-achieving students in her study. Miller and colleagues (1996) sought to understand how the positive social goals Wentzel linked to achievement are specifically tied to cognitive engagement. How is student engagement in academic work related to personal goals separate from the desire for competence? Miller and colleagues describe cognitive engagement as including "persistent effort, self-regulation, and deep strategy use" (1996, p. 390). They looked at multiple goals of high school math students, to see how they related to students' perceived ability and to measures of student engagement. Specifically, they examined learning goals, performance goals, goals related to pleasing others (teachers and family) and future-consequence goals (long-term potential results of task performance, such as career goals).

Along with the clear link between learning goals and engagement, Miller and colleagues (1996) found two other goals that contributed: pleasing the teacher and future consequences. They found that the goal of pleasing the teacher predicted self-regulatory behaviors in the classroom, such as setting goals and monitoring progress, and noted that this goal may be considered a strategy in itself. They also found that a belief in the future consequences of academic work is tied to self-regulation and to achievement. One of the implications of this study is, then, that cognitive engagement may be fostered by teaching goal-setting to enhance student motivation.

Helme and Clark (2001) also focus on classroom situations as they relate to engagement. They define engagement as "the deliberate task-specific thinking that a student undertakes while participating in a classroom activity" (p. 136). They observed eighth-grade math students in four types of learning situations to discover what engagement looks like in a classroom setting, focusing on the interplay between the individual, the learning environment, and the learning task, and noting how these relationships affect engagement.

They divided their videotaped observations into instances of students working side by side; in collaborative, small-group activities; during interactions with the teacher during whole-class instruction; and within the student-teacher interactions that occurred during small-group work. Observations were followed with teacher interviews. Helme and Clark sought empirical indicators of engagement, hoping to discover observable cues to engaged learning.

Their study revealed different patterns of engagement in each type of learning situation. Helme and Clark (2001) note that situations that allowed for the most student-to-student interaction seemed to provide the most opportunity for high-level cognitive engagement, citing that "the social rules governing these different activities appeared to play a pivotal role in the form and expression of cognitive engagement" (p. 151). Methodologically, this work fits well with the present inquiry, as we noted observable episodes of cognitive engagement and took into account social interactions and the general classroom context.

Emotional and Behavioral Engagement

Although they can be separated, emotional engagement (what a student *feels*) and behavioral engagement (what a student *does*) are usefully discussed together. Emotional and behavioral engagement are also both discussed along with cognitive engagement. The following studies, though they may focus on two or three of these aspects of engagement, are tied together by their emphasis on the social or classroom context in its relationship with individual engagement.

Zimmerman (1994) conceives of engagement as a combination of cognition, emotion, and behavior, and focuses his understanding of engagement on the classroom context. In this sense, his work provides a bridge for us between the work on cognitive engagement, with its focus on self-regulation, and the work on emotional and behavior engagement, which tends to focus more broadly on engagement as a type of participation. In his introduction to *Self-Regulation of Learning and Performance* (Zimmerman, 1994), Zimmerman synthesizes the research on self-regulation in order to create a conceptual model that cuts across fields of research. For Zimmerman, "The construct of self-regulation refers to the degree that individuals are meta-cognitively, motivationally, and behaviorally active participants in their own learning process" (p. 3). Looking to understand why some students and not others are able to direct their own learning, Zimmerman considers the psychological dimensions, task conditions, self-regulatory attributes, and self-regulatory processes of academic self-regulation.

One of these perspectives on self-regulation entails the characterization of the self-regulated learner. Zimmerman identifies the attributes of such a student. The first is self-motivation, or the willingness to pursue academic endeavors. Self-regulated students

also exhibit a "reliance on a planned or an automatized method of learning" (Zimmerman, 1994, p. 11)—the use of self-regulatory learning strategies. Third, self-regulated students are self-aware, in that they are able to know how well they did on a specific task, are likely to keep records, and are better able to concentrate in the face of distractions. The final two attributes are the general ability to monitor oneself, and the ability to seek help, selectively and appropriately.

Zimmerman concludes that choice and control are necessary for self-regulated learning to occur, stating that, "Inferences about students' self-regulatory capability cannot be made if they do not have options available or cannot control an essential dimension of their learning, such as one's method of studying" (1994, p. 6). Choice here refers to the opportunity to pick one's learning strategies, manage one's own use of time, select performance outcomes, and have some control over the physical and social learning environment. For example, if a student is taught a learning strategy and subsequently uses that strategy, it is not clear whether the student is self-regulating. Only when students make their own decisions about their strategy use can the presence of self-regulation be clear.

As well as working toward a cohesive concept of self-regulation, Zimmerman (1994) seeks to understand the environmental conditions that contribute to fostering this set of behaviors. His discussion has particular relevance to the adult and to the IGI context. In the IGI classroom, students of all abilities are required to choose their tasks, seek help from teachers and other students on their own initiative, set their own pace, and often must discover how to accomplish academic tasks on their own.

The literature on engagement as opposed to alienation, engagement versus disaffection, and engagement as a sense of belonging are conceptually interrelated. In these views, engagement is conceived broadly as a set of behaviors that appear to be more of an outcome than a prerequisite for learning. The authors of the work we will discuss below each begin with the belief that as people we have basic psychological needs, and that it is the interplay between these needs and the social environment that provides the opportunity for engagement.

Newmann's work (Newmann, 1981; Newmann et al., 1992) explores engagement as a quality which exists on a continuum with alienation. In this sense, engagement is an involvement with schooling that has emotional and behavioral components, as well as cognitive ones. Newmann sees alienation as a feature of modern society that must be addressed as both "an objective structural feature of human situations" as well as "a personal psychological phenomenon" (1981, p. 547). To reduce alienation in schools, then, two kinds of changes need to occur: a change in the organization of schools toward a structure more conducive to students' active involvement, and a change in the perceptions of the individuals involved. Newmann begins, then, with an individual's basic psychological needs, and focuses his work on organizational changes that can

reduce alienation in the specific context of school. "Reducing Student Alienation in High Schools: Implications of Theory" (Newmann, 1981) addresses six arenas for reform. *Voluntary choice* and *clear and consistent goals* refer to the need for parents and students to buy in to the school's mission, and for the goals of the school to be understood and shared. Engagement increases with *participation,* in the sense of student involvement in school policy and management. The need for *extended and cooperative goals* addresses the problem of the specialization of roles and suggests that adults and students could work collaboratively. The need for *integrated work* views students in schools in a similar light as workers and suggests that increased authenticity and creative control of work can produce higher engagement. Finally, Newmann points to *small school size* as a way to increase student engagement.

Newmann and colleagues (1992) further discuss the idea of engagement as opposed to alienation in the opening chapter of *Student Engagement and Achievement in Secondary Schools*. They define engagement in academic work as "a student's psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote" (p. 12). Again, this is engagement as a form of investment in schooling, and represents a set of feelings and behaviors, as well as cognition during academic tasks. The authors identify the factors that affect engagement as a combination of student needs and school offerings. Students have a need to experience competence, feel a sense of membership in the school, and do work which is meaningful. Students' needs, then, are mediated by a school environment that provides opportunities for membership, so that students "…perceive the general enterprise of schooling as legitimate" (Newmann et al., 1992, p. 19). Second, personal needs are fulfilled through authentic work— work that feels meaningful, rewarding, and fun.

This description of the factors that affect engagement is discussed in the context of secondary-school students. The issue of alienation is naturally relevant in the high school context, but at the same time adapts well to a consideration of adult learners. Newmann and colleagues (1992) acknowledge that adolescents are in many ways in adult roles and their academic work is therefore often in competition with their other responsibilities and interests:

> The social roles and developmental dynamics of adolescents pose roadblocks to engagement in academic work, as other concerns and activities occupy students' attention and energy. Interpersonal issues with parents and peers usually take on added significance, as do sexual relations…adolescents' expanded opportunities for social participation with peers and in the adult work force can interfere with engagement in academic work. (p. 15)

Adolescents, viewed in this light as members of the larger society, are in a similar position to adults in respect to academic engagement.

Newmann and colleagues also point out that this view of engagement "calls special attention to the social contexts that help activate underlying motivation, and also to conditions that may generate new motivation" (1992, p. 13). Anderson and Lee (1997) also place primary importance on the social learning environment. They examine types of motivations among sixth-grade students in science classrooms, relating their behaviors to their experiences of the class as a social system, which plays out dynamics around culture, particularly race and class. They are specifically concerned with students who come to lessons already feeling disengaged, or alienated, from the subject or the classroom.

Anderson and Lee (1997) characterized the motivations of the 12 students they observed into four categories: intrinsic motivation to learn science, an ordinary motivation to learn science, task avoidance, and active task resistance. Lessons planned to engage students meaningfully in scientific understanding were successful with those students who began with some commitment to the subject or to their own academic success, those with either intrinsic or ordinary motivations to learn. The students exhibiting task resistance or avoidance predictably acquired little or no benefit from the science lessons.

The authors conclude by pointing out that, "No matter how tightly student's classroom behavior is controlled and guided by teachers and curriculum materials, students always retain personal control over their attention and effort" (Anderson & Lee, 1997, p. 724). Understanding the starting place of each student is always relevant, despite the quality of the lesson offered. Further, the patterns they observed around engagement were clearly related to the ethnicity and social class of the students they observed. Therefore, their recommendations around fostering engagement relate to changing the cultural climate in the classroom, and they suggest that alienated students be included by making the social environment around learning more inclusive, by beginning with the personal agenda of the student, creating a sense of membership for alienated students, and creating social bonds so that science learning becomes personally relevant for those initially lacking the motivations to engage.

Newmann (1981), Newmann and colleagues (1992), and Anderson and Lee (1997), by dealing with engagement as opposed to alienation, and by examining school culture, bring the discussion of engagement to a level that is applicable to the adult education environment. As Newmann explains, "The problem of disengaged students can be viewed as an instance of the more general challenge of reducing alienation in modern culture" (1992, p. 16). Engagement as opposed to alienation, which is a societal issue, posits students as members of society. While the authors refer to school society, it is seen as a subset of the larger culture, with accompanying issues around work, race, and class. Adults are more clearly members of the larger society and this type of membership bears on their academic engagement within the school environment.

The engagement/alienation continuum is related to the idea that engagement has as its opposite *disaffection*. Connell's work (1990) on the self-system processes similarly outlines a person's basic psychological needs as competence, autonomy, and relatedness. Skinner and Belmont (1993) examine these needs in terms of student relationships with their teachers. Kindermann (1993) looks at these needs in respect to peer groups within schools.

The needs for competence, autonomy, and relatedness on the part of the individual exist in a dialectical relationship to that individual's environment (Connell, 1992). In respect to the school environment, competence is defined as "cognitions regarding academic outcomes," autonomy as "cognitions and affects regarding one's role in initiating and maintaining behavior," and relatedness as "quality of relationships with social partners" (p. 80). Psychological needs are met by the social provisions for them, which Connell names structure, autonomy support, and involvement. In terms of the individual's need for competence, engagement is possible when there is adequate structure, for instance when teachers explicitly state consistent expectations and consequences. Autonomy support entails providing opportunities for students to make choices and feel that their decisions and ideas are respected. Involvement concerns meeting the need for relatedness so students feel connected to the social environment of the school. Engagement then is defined as "patterns of action reflecting acceptance of and commitment to the goals of learning and successful school performance" (Connell, 1992, p. 87), a definition which encompasses elements of cognition, emotion, and behavior. Disaffection, on the other hand, is the absence of these patterns.

Skinner and Belmont (1993) use Connell's scale of engagement-disaffection to examine student engagement in relationship with teacher behavior. As the authors explain, their study:

> …is nested within a larger motivational model that was also constructed at the interface of the psychological and educational literatures.…This model has as its cornerstone the notion that the source of motivation is internal to the child, so that when the social surround provides for children's basic psychological needs, motivation will flourish. (Skinner & Belmont, 1993, p. 572)

In their discussion, cognitive engagement is considered separate and they focus on emotional and behavioral engagement. Qualities that indicate behavioral engagement are "students' effort, attention, persistence during the initiation and execution of learning activities" (Skinner & Belmont, 1993, p. 575). Emotional engagement is understood in terms of students' reactions to classroom activities, such as "interest…happiness…anxiety and anger" (p. 575).

Skinner and Belmont examined both student and teacher perceptions of the teacher's interactions with individual children, along with children's classroom

engagement in the fall and the spring of a school year. The provisions of the social environment, in this case, were examined in respect to teacher behavior. Structure is defined as clear expectations, consistent responses, and a willingness to offer necessary help. Autonomy support is giving the students the freedom to control their own behavior. Involvement is giving time, affection, and showing one's interest in the students.

Skinner and Belmont (1993) point out, in their findings, that the nature of the relationship between student engagement and teacher behavior is reciprocal. Teacher behavior proved to impact student engagement, as did children's perception of their teacher, particularly in respect to the student's sense of relatedness. At the same time, the teacher's perception of student engagement influenced the teacher's behavior toward the student. Student engagement seems, in this light, to be a self-perpetuating quality, at least as far as relationships with teachers go: Those students who are more engaged receive more of the attention and affection that leads to high engagement. On the other hand, students who are less engaged are likely to interact with the teacher in ways that lead to further disengagement.

Kindermann's study (1993) points to another aspect of the school social environment important to student engagement: student peer groups. Using engagement versus disaffection as a conceptual framework for understanding motivation, Kindermann looked at students' peer group affiliations in respect to engagement. Kindermann noted that students organize themselves into groups that are somewhat homogenous motivationally, that is, students hang out with other students who possess similar motivational orientations. Though membership changes in groups throughout the school year, and though individuals personally change in terms of their motivational level, peer groups preserve themselves in terms of motivation.

These two studies (Kindermann, 1993; Skinner & Belmont, 1993) were interesting to us as we focused our investigation of engagement on episodes that contained either teacher-learner interactions or learner-learner ones. As with these researchers, we also define engagement both in respect to individual needs and in terms of the ways in which relationships within the classroom enhance motivation. Autonomy support, in particular, plays an important role in the IGI context.

Newmann's (1981) work on school membership and Connell's (1990) on relatedness are complemented by the literature on school belonging, which is concerned with the emotional and behavioral aspects of engagement. Osterman (2000) introduces her review of the school belonging literature by explaining that:

> Conceptually, the review reflects a social cognitive perspective on motivation. This theoretical framework maintains that individuals have psychological needs, that satisfaction of these needs affects perception and behavior, and that characteristics of the social context influence how well these needs are met. (p. 323)

Osterman's review revolves around engagement as a commitment to school, and looks at the effects of engagement on academic performance. The Organisation for Economic Co-operation and Development's Programme for International Student Assessment (PISA) (OECD, 2003) rests its research into student learning on this concept of engagement, as a form of participation and a set of feelings about school. In the introduction to the report on their 2000 surveys, the authors carefully distinguish their concept of engagement from one of a predictor of achievement:

> Variables describing engagement have…usually been treated in analyses as predictors of other schooling outcomes, particularly academic performance. This report considers sense of belonging and participation as important schooling outcomes in their own right. (OECD, 2003, p. 8)

The school-belonging literature, in this sense of viewing engagement as an outcome, is an example of engagement most broadly defined, on the other end of the extreme from the cognitive-engagement literature.

Finn and Voelkl's work (Finn, 1989; Finn & Voelkl, 1993; Voelkl, 1995, 1997) similarly posits engagement as commitment to school, and both authors examine engagement as a state of mind *and* a set of behaviors. Finn (1989), viewing disengagement as a process that culminates in dropping out of school, proposes a model of identification and participation to understand engagement. Identification is defined as a student's experience of belonging, that is, "that they are discernibly part of the school environment and that school constitutes an important part of their experience.…second, these individuals value success in school-relevant goals" (p. 123). Participation is the student's corresponding set of behaviors, such as paying attention in class. This idea contributes to a definition of engagement by examining its opposite: disengagement. Disengagement is viewed not as an event but as a process, and school dropout is viewed as the furthest extreme of this process. At the same time, using the terms "identification" and "participation" to represent emotional and behavioral engagement allows for an examination of engagement itself.

Finn and Voelkl (1993) use the identification/participation model to focus on school characteristics related to engagement. The authors point out that much of the work on dropout has focused on individual characteristics; this study looks instead at institutional characteristics. Finn and Voelkl divide "policy-manipulable" school characteristics into two types. Structural elements include the size of the school and the school's racial and ethnic composition. Regulatory elements are the degree of structure within the school and the disciplinary system. Looking specifically at at-risk students, the authors note that smaller school size translates into engagement, specifically as defined by participation, in terms of attendance, classroom participation, and students' perceptions of support.

Voelkl (1995), using this model and building on Newmann's (1981) ideas about school membership, examines how students' perceptions of school warmth contribute to participation and achievement. School warmth is understood by a student's sense of teacher warmth, caring, and supportiveness. Voelkl posits participation as a mediator between perceptions of warmth, so that students who feel that the school is a supportive environment are more likely to participate, and in turn to have higher achievement in their academic work. Voelkl (1997) also examines the role of identification in engagement, suggesting that the "bond between the child and the institution" is instrumental in enhancing student engagement (p. 296).

The school-belonging literature, as well as the literature on engagement/alienation and engagement/disaffection, clearly grows out of examination of our compulsory education system. Adult literacy learners, on the other hand, are for the most part attending voluntarily and are not expected to participate in school activities beyond fulfilling academic requirements. This strain of engagement literature, however, relates because all students are members of society with some element of control over their choices. In the compulsory system, students, as Anderson and Lee point out (1997) ultimately maintain control over their engagement. In one sense, this relates to the engaged learners we see who choose to attend adult literacy programs.

Conclusion

Taken together, this literature offers an increasingly expanding definition of the concept of student engagement. If we view the concept of engagement as having a broad range, we can posit Corno and Mandinach (1983) on one extreme and Finn (1989) on the other. The range, then, encompasses everything from a very specific definition of "self-regulation" (with its focus on individual motivation and strategy use), to engagement as a sense of belonging (a form of participation which consists of both feelings and behaviors). As a complement, we can view the engagement literature as a history. In this sense, engagement is an increasingly holistic idea, built on foundational definitions and expanded to take into account more and more facets of school and social life. We can adapt this literature to our understanding of the adult literacy context as far as it reveals a picture of multifaceted learners in specific educational contexts, which can promote or diminish their motivations to learn and their engagement with schooling.

As the literature suggests, engagement is essentially a mental process that is both an input to learning and a potential outcome of instruction. It is affected by contextual features, such as teachers' behavior and classroom environment. It follows, then, that a comprehensive understanding of engagement in adult literacy education must deal with both the mental and the contextual components. Because, as we have noted, adult literacy education differs from K–12 education in so many important aspects, and because there is no literature on engagement in adult literacy, this study takes a "big picture" approach

and focuses primarily on how the classroom context shapes learners' engagement. In the belief that the most effective way to study context is through observation supplemented with interviews, this study operationally defines engagement according to what is observable: students' focused attention on completing instructional tasks. Note, however, that this study, along with the literature, has informed other studies at the Labsite that employ quantitative methodologies to study the cognitive aspects of engagement and their relationship to learning outcomes. These studies are described in more detail at the end of the final chapter.

CHAPTER THREE: METHODS AND PROCEDURES

Although, as the literature review attests, a considerable amount of research has been conducted on engagement in K–12 education, as we explained in the previous chapter, the K–12 research is marginally relevant to this study because the context of adult literacy education is so different from K–12. In K–12 education, for example, law mandates participation while in adult literacy participation is mostly voluntary. K–12 students are motivated by the demands of their parents and teachers, while adult literacy students are motivated by the demands of adult life. K–12 students are under the care and control of their parents and teachers, while adult literacy students make their own decisions.

The understanding that the "adultness" of adult literacy education represented a new context for engagement research led us to a two-phase strategy for studying engagement. In the first phase, as represented by this study, we wanted to be broad and encompassing and to focus primarily on context. Thus the guiding question for this report is: What are the contextual factors that shape learners' engagement in adult literacy education? In contrast, in the second phase, which is now in progress and is quantitative in orientation, our goal is to be more detailed and refined and to focus on the mental, or cognitive, aspects of engagement.

For this study we ultimately decided on a qualitative methodology known as grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) that is particularly appropriate to situations in which there is little previous research to go on. Rather than testing or verifying theories or hypotheses generated from previous research, grounded theory develops analysis from the data in a "bottom-up" approach. The objective is to develop themes and categories that explain the data and lead to meaningful theoretical propositions.

Class Selection

Classes selected were located at the New Brunswick Public Schools Adult Learning Center, our partner in the National Labsite for Adult Literacy Education. We applied two criteria for selecting classes. First, because we wanted to observe engagement in as many different contexts as possible, we wanted classes that differed from each other as much as possible. Second, we wanted classes with a teacher who was enthusiastically willing to work with us. Selection of classes was discussed with the Center director, the assistant director, and the Labsite Management Team (composed of staff from the Center and NCSALL-RU). We selected six classes: three basic-level classes, a GED class, and two adult high school reading and writing classes. Descriptions of the classes are located in Chapter Four.

Data Collection

To promote the validity of the study, we used multiple data sources, including video, ethnographic observation, stimulated-recall interviews, teacher-as-researcher reports, and targeted open interviews. Multiple data sources enabled us to "triangulate" in data analysis. When an analytical theme began to emerge from video data, for example, and we could find evidence of that same theme in the other data sources, we were confident that the theme was credible.

Video

The video data was our primary data. It was particularly valuable because it represented a permanent observational record that could be viewed over and over in data analysis. Classes were videoed for between 1 and 2, hours for a total of 30 video sessions in the study. During videotaping sessions, two project staff were present—the videographer and a member of the research team. The researcher conducted ethnographic observation and told the videographer what to shoot.

In a typical video session, the researcher and the videographer would enter the room. The researcher would observe and the videographer would begin moving about the room, shooting episodes that lasted several minutes. Some of the episodes were randomly captured, others were directed by the researcher. Students sat in their normal locations and did what they normally did. When we started videotaping a class, students were given colored nameplates so we could identify them by name on the video, and to differentiate (by the color of the nameplate) who had consented to be in the study and who had not. (Students who had not consented could not be videotaped.) The nameplate convention was abandoned, however, when we learned students' names and could identify students who were not part of the study by sight. At the end of a video session, everyone's (both consenting and nonconsenting subjects) nameplate was placed in a bag and there was a drawing for a small prize, typically a McDonald's gift certificate.

After a video session, the video was converted to MPEG format and copied onto a CD that could be played on any of the project's computers. Playing the CD on computer enabled us to parse the video efficiently and to note time codes so that we could easily return to a given place in a video.

When we decided to use video, we were concerned that videoing might disrupt the class and might bias students' and teachers' behavior. Although there was some disruption, especially in the beginning, it was minimal, probably because of IGI. In IGI, learners work independently on materials while sitting at tables and they were used to teachers and aides circulating among them. The videographer quickly became just another circulator.

There were cases of video influencing behavior, but the incidence of this declined rapidly as students became desensitized to the camera. We are confident of this because episodes of camera-influenced behavior were easy to identify in the video record. In one case, for example, two students who were talking to each other switched from English to Spanish when the camera was pointed at them and in another a student who was sensitive about wearing glasses removed them when the camera pointed his way.

Although the video provided extremely useful data, it did have limitations. First, because we were videotaping in regular classrooms, we were limited (by the shape of the room and the maximum camera angle) as to how much of a class we could include in the video. For this reason, and because we could not videotape nonconsenting students, we could not include everyone in the class in the video at one time. Thus, many events took place in classes that were not part of the video record. Second, although the video itself was of sufficient quality for analysis, sound was often a problem. Background noise interference was usually an concern and many students had accents that were difficult to understand on the audio record.

Ethnographic Observation

When we realized that the video camera could only capture a portion of the class, we were concerned that we would miss some moments that happen in classes. To compensate, we added ethnographic observation to the research protocol. In ethnographic observation, the researcher observed behavior and took notes while the class was being videotaped. On-site notes were then employed as memory aids when the researcher prepared formal field notes that became part of the observational record of the class.

Stimulated-Recall Interviews

Although observation is a very direct method of collecting research data, it has a major limitation; it is very difficult to accurately infer what is motivating subjects or what they are thinking and feeling from observational data. Thus, the part of behavior that goes on "in the head" is missing. To compensate, we included stimulated-recall interviews in the data-collection regimen.

First, the researcher who observed a particular class reviewed the video of the class, noting the time codes for activity that was indicative of emerging themes or potential new themes. Then the student involved in the activity was scheduled for an interview, for which he or she was paid $25. At the interview, the researcher played back the selected video segments on a laptop, and while the student was watching, interviewed him or her with questions about intentionality, affect, and so on. In this way, the mental record could be added to the observational record. The stimulated-recall interviews were audiotaped and transcribed verbatim.

Targeted Open Interviews
After we had employed stimulated-recall interviews in three classes, we concluded that this procedure was no longer providing us with information of value. In grounded theory, this is known as theoretical saturation; theoretical saturation is a signal to cease data collection. At the same time, we began to raise questions about patterns of student behavior that we could not answer well from the video or stimulated-recall data we had collected. Thus we abandoned stimulated-recall interviews and decided to conduct additional, open interviews with selected students to probe more deeply into their backgrounds, in-class experiences, and motivations. We selected particular students for open interviews because they had been prime respondents in earlier interviews. These interviews lasted between a half hour and forty-five minutes in duration and all were audiotaped and transcribed.

Teachers in Data Analysis

Primarily because we believed that participating in the study would be a useful professional development experience, in the first class we studied, we asked the teacher to participate in two data-analysis sessions and one debriefing session and to help with the logistics of data collection. For this she was paid $1,500 to compensate for the time spent. We quickly realized, however, that when she was present during data analysis she was a very rich source of information. She was, for example, able to explain her own behavior and she knew a great deal about students that we did not know. As a result, in the remaining five classes we studied, we increased the number of data analysis sessions in which teachers participated from two to four. We audiotaped each one and then transcribed the sessions verbatim.

We promised the teachers confidentiality and they all signed consent forms. Yet while pseudonyms suffice for confidentiality in publications external to the Center, there was no way to guarantee confidentiality among the other teachers and staff at the Center because they all knew which teachers had worked with us. Thus when the cases were completed, we asked the teachers to read them and react in writing to two questions: (1) Is there anything in the case that might harm you personally? and (2) Is there anything in the case that is inaccurate? No one responded affirmatively to the first question but there were some minor comments to the second question, which also served as a member check. In a member check, the participants in a qualitative study read and assess the accuracy of the researchers' analysis. This enhances the validity of the study. The cases were subsequently modified in reaction to teachers' suggestions for change.

Theoretical Saturation

In grounded-theory analysis, researchers continue to collect data until they reach the point of theoretical saturation—the point at which additional data collection is not

producing anything new. Although each class we observed was different, because of IGI teaching and learning in all classes was quite routine. Because of the routine, we reached theoretical saturation at about the fourth video session. We continued to collect data, however, to enhance the validity of the study.

The Pilot

As we planned the engagement study, we were faced with a considerable amount of uncertainty. Would we be welcomed by the teachers? Would students balk at being videotaped? How should our staff behave to best avoid biasing the data? To answer these questions and others, we conducted a pilot of data collection in the summer of 2000. The pilot was very useful and caused us to amend our data-collection protocol in several ways. For example, at first we intended our research staff to function as participant observers by acting as classroom aides as they observed. In the pilot, however, we discovered that functioning as aides precluded systematic observation, because while working with students, observers could not focus on the class as a whole. Furthermore, we became concerned that we were building relationships with students that would be difficult to terminate when our data collection was complete. As a result, researchers were instructed to function as passive observers. We also learned a great deal about videotaping—how to be relatively unobtrusive and how to get the best quality video and audio.

Data Analysis

In grounded theory, traditionally data are coded according to categories as they emerge. In coding, incidents that represent a category are demarked so that the episodes that represent a category can be compared with each other for similarities and differences. This analysis of similarities and differences leads to the refinement of categories and the generation of new ones.

At the outset, we intended to code the video with a computer program known as V-Prism. With V-Prism we could identify a video segment, clip it, name it with an emerging category, and save it in a file with all other clips of the same category. These clips could then be viewed serially with other clips of the category and rearranged into new categories. After experimentation, however, we abandoned this procedure. The problem was that we could not tell what came before or after a coded episode. Thus the coding removed the video episode from the larger context of what was happening in the class. It decontextualized the data, making it very difficult to generate meaningful analysis.

Consequently, we developed another data-analysis procedure that, while consistent with grounded theory, was more appropriate to the kinds of data we were

working with. First, a member of the five-member research team was selected to lead a data-analysis session. (At first, only experienced researchers served as leaders, but as team members learned the protocol, everyone took their turns as leader.) The leader viewed the video of a class session and noted the time codes of video segments that represented emerging categories or potentially new categories. Then the entire team viewed the selected segments. This was followed by discussion directed at refining categories and identifying new ones. Viewing the video in this way allowed us to parse backward and forward from the segment to establish context. It also allowed us to view the segment as many times as necessary to establish consensus on its meaning.

Although discussion at data-analysis sessions was prompted by video data, the discussion was not limited to the video shown. Rather, the team was encouraged to make comparisons with other sessions of the same class and with the other classes we studied. The team also brought data from the student interviews to bear in the discussion, and when teachers were present for the data-analysis session, their perspectives were interjected into the discussion.

After the group-analysis session, the leader prepared a written memo that reported the results of the session. This memo was then circulated to each team member who, after reflection, commented in writing within the body of the text. Comments sometimes offered elaborations and sometimes added new insights. At times team members disagreed with the comments of other team members and this stimulated debates within the theoretical memo. When all members of the team had commented on the memo, it was "retired" and became part of the written record on the emerging analysis.

Table 1 summarizes the number of data-collection and data-analysis sessions.

Table 1: Summary of Data Collection and Analysis

CLASS	NUMBER OF ETHNOGRAPHIC OBSERVATIONS	NUMBER OF VIDEO SESSIONS	NUMBER OF STIMULATED-RECALL INTERVIEWS	NUMBER OF OPEN INTERVIEWS	TOTAL DATA-ANALYSIS SESSIONS	DATA-ANALYSIS SESSIONS WITH TEACHER
Silvia	11	6	6	0	6	2
Bill and Diana	8	7	7	3	5	4
Patti	7	7	5	5	6	4
Pat and Celia	7	5	0	8	5	4
Ray	7	5	0	5	5	4

Organization of Findings

There are two ways we could have presented our findings. First, we could have organized the findings by themes and presented data from all the classes we studied in elaboration and as evidence. Alternatively, we could have organized them by class and concluded with a synthesizing chapter that tied it all together. We chose the second option because our data was very rich and this option enabled us to best portray this richness.

CHAPTER FOUR: FINDINGS

Before we discuss our findings in detail, it is important to introduce two themes that crosscut all the classes we studied and will be revisited again as the analysis unfolds. The first is that the level of student engagement was consistently very high. The second is that instruction, and hence the focus of engagement, was materials-driven. These themes are universal; they were patently evident in each of the six classes we studied. They are presented here, rather than highlighted in the cases or analysis chapter, to avoid redundancy.

Very High Level of Engagement

If you viewed the hours of video we have collected, what you would see most of the time is a group of students working very hard at learning. When students were reading, their eyes were on the page and they turned the pages. When they were writing, pencils moved; when doing math, problems were read and answers were entered on work sheets. When students talked with teachers or with each other, the conversation was nearly always about their work. Engagement was clearly and consistently evident. This is not to say that students did not take breaks. They did, but the breaks were short and were usually taken at their seats. When the break was over, they got right back to work. Some students—like Peter in Silvia's basic-skills class and Henry in Ray's GED class—fidgeted a lot when they worked, but others—like Li Yan in Diana's adult high school class—remained riveted on their work for hours. Based on earlier work where we observed a considerable amount of disengagement in the classes we studied (Beder & Medina, 2001), we initially expected to see chronic disengagement now and then in our study, but we did not. We believe there are three reasons why this was the case. The first is motivation; the second is teachers' encouragement; the third is the voluntary nature of participation in adult literacy education.

Motivation

As the literature on engagement notes, motivation and engagement go hand-in-hand. A high level of motivation to succeed in adult literacy was evident in our interviews with students. As Jesse, a student in the adult high school class, told us:

> We're all here for a reason. My reason is to get credits, and graduate, and get my high school diploma. So I am pretty much focused. That's how I feel. In the class, it's all about going hard, going strong, finishing strong.

Mabinty, who graduated from the adult high school 18 months after she enrolled in the Center, spoke with similar conviction:

Interviewer: What kept you coming and what keeps you interested?

Mabinty: Because I know my goals. I know what I want in the future.

Interviewer: You know your goals all right.

Mabinty: Yes, I know what I want to do. Nobody is going to do it for me.

Mark, a GED student, spoke in similar terms:

I am just motivated because I want to do something better for me and my wife. And, from so many years of just being out there in the world, you know that when you goof off, it's not going to get it done. You've just got to jump in and do it, because if not, it's not going to get done…I've learned that for me it's more motivation than it is anything else. If I am motivated to learn, I'm going to learn. If I am not motivated to learn, then it's really difficult for me to learn anything.

The students at the Center were motivated to achieve specific goals, goals that for the GED and adult high school students included obtaining a high school diploma. Many, like Aleida, Louie, Alice, Jesse, and Mabinty, wanted to go to college after graduation. Most had specific occupational aspirations. Siaka said:

It's like, I don't know, commercial…You got to learn something like a trade job or something, something that should be with you until you die. Something like that. Be a doctor or whatever. That's why I want to do stuff.

Jean wanted to be a nurse:

Interviewer: What makes you stay in class? What makes you come every day?

Jean: I just want to make my life better, and I really like the class. If you don't come to class, you're not going nowhere. If you want to go to college, and the first thing you have to get is your diploma or GED or something, but if you don't come, you can't do it.

Interviewer: Is that what you want to do?

Jean: Yes, I have no choice now.

Interviewer: What will you do?

Jean: Oh, to go to college, I might take pharmacy. I could take care of patients. I really like nursing because I work part time in this nursing home. I really like to work with those people. I take care of patients.

Although most of the students in the basic-level classes eventually wanted a diploma, many also had shorter-term literacy goals. Rina, for example, wanted to write letters to her relatives in the Middle East and Georgina told us:

> I'll be very happy if I learn to spell, how to write, how to read. I'll be very happy…And I am very happy that I come here because, I tell you, I come here to learn because it's really breaking my heart that I am so old. I'm a grandma and I don't know how to write a note.

Joseph wanted to learn math:

> Why, because see I was in a job. I worked on ships and I was an able seaman, which means I steered the ship. I tied it up, things like that. And for me to advance to be a mate on a smaller boat or any type of advancement, it looked like I needed to learn navigation, which meant algebra from what I saw.

Teachers' Encouragement

The second reason engagement was so high was that teachers encouraged motivation and hence engagement. To one degree or another, all teachers monitored their classes for signs of disengagement because disengagement often meant that a learner was having problems and needed help. One way teachers encouraged engagement was by "talking up" learning tasks. They did so by explaining why the task was important or would be enjoyable. For example, one day we observed Pat, a basic-skills teacher, working with a student:

> The learner to the right of Pat [the teacher] said that it would be a good idea to number the paragraphs, to pull the event from the paragraph and transfer it to the answer. It was a fairly long reading, about 10 paragraphs. Pat agreed and asked her to re-explain it to the other learner, which she did. The other learner listened and followed along as the first learner explained the strategy. Pat told her that it was a great strategy and a good way to help understand what she was reading. She agreed with them that it was hard work to pull the events and sequencing out of the reading.

Another way teachers supported motivation was through the use of praise and other signs of approval, such as a warm smile or pat on the back. For Silvia, a basic-skills teacher, praise was like a mantra. When she returned work sheets that had correct answers, the transaction was almost always accompanied with praise. If a learner had an incorrect answer, Silvia would help him or her to find the correct answer and dispense praise when the transaction was concluded. For Diana, an adult high school reading teacher, teaching transactions usually began with a short episode of friendly chat followed by a helping episode and concluded with praise. For example:

> Diana then turned to Ana's paper. She corrected it against her key. Ana said it was hard. Diana told her it was OK because they would go over everything together again. As she was correcting her paper she told her she did a great job.

Bill taught writing in the adult high school. In his advanced writing course learners were required to write essays that were clear and well organized, as well as being grammatically correct. In discussing learners' work, Bill nearly always found something to praise, as he did when working with Jean. During a lesson:

> Bill went over Jean's essay and praised his work. He congratulated Jean on his use of language, the plot he developed, and his choice of phrases. He called it innovative and creative.

Ray, who taught GED classes, used praise more sparingly than the other teachers we worked with, although he was very supportive of learners in other ways. This was because he recognized that his learners were adults and that for adults overuse of praise could sound condescending. During a data-analysis session he told us this:

> Researcher: But what we don't see you doing is lavishing praise and patting the back, and all that kind of stuff. You're very focused and you're very business-like.

> Ray: One of the things that I have a hard time with, and I think a lot of adult educators have a hard time with, is letting someone feel mature and adult while they're learning things.…But you don't want to seem surprised if someone does a good job. You know what I mean? Even when you are surprised. You don't want them to know that you're surprised that they were able to pass the predictor [test], or that they were able to do a certain amount of math problems. I try to go in with the assumption that, of course you can do this, you know, why couldn't you do this?…and if there's something in the way of you doing this, let's figure it out, and then we get on to the "of course you can do that problem."

Voluntary Participation in an IGI Context

The third reason engagement was high is more speculative than the first two. This reason relates to the IGI context and the fact that participation in the classes we studied was, for the most part, voluntary.[1] With IGI, if learners missed a class they could start in their individualized materials where they left off the last time they attended. Thus, although missing a class represented a loss of instructional time, it did not cause learners to miss instructional content. It stands to reason then, that if for any reason learners felt that they

---

[1] Although the Center did conduct classes for welfare recipients who were mandated to attend, these classes were not part of this study. In the classes we did study, there was a small minority of learners whose attendance was mandated by the courts. There is no evidence, however, that the mandated nature of these learners' attendance affected the findings.

could not work effectively on a given day, they would simply not come to class. Conversely, learners who did attend came ready and willing to engage.

Materials-driven Instruction

As is the case with IGI in general, instruction in the six classes we studied was materials-driven. For the most part, instruction was individualized. Upon entering the classroom, learners would pick up the folders that contained the materials they had been assigned by the teacher. Then, after taking a seat, they would open the folder, select the materials they were to work on, and start to work. The directions in the materials determined what learners would engage in and how. The explanations and exercises within the materials carried the content of instruction. The great majority of learners' time was spent on working with materials.

If they got "stuck," or if they had finished an exercise, learners would engage a teacher or the teacher would engage them. The ensuing teacher-learner interaction, however, was almost always focused on the materials, showing the learner the right answer if the answer was incorrect, for example. Teachers sometimes used learners' performance on the materials to diagnose problems, but when they did, the prescription was, typically, giving them additional materials. Likewise, teachers also used learners' performance on the materials to assess learning progress.

Learners' interactions with other learners generally focused on helping each other with materials. Clarifying directions was common, as was asking for the meaning or pronunciation of words and checking answers.

ABE Case Studies

We observed three ABE classes: Silvia's, Pat and Celia's, and Patti's. Silvia's daytime class became Pat and Celia's class when Silvia left the Center. Patti's ABE class was its evening counterpart. Silvia and Patti each decided to open their classes to learners at both the ABE1 (grade level 0–3 on the TABE) and ABE2 (4–6) levels in order to accommodate learners' schedules. Pat and Celia restricted their class, as much as was possible, to ABE1 learners.

Though these three classes did not have the same sets of learners and teachers, they had certain characteristics in common which influenced learner engagement. Because these were ABE classes, they naturally had learners on a fairly low academic level. At the same time, there was quite a range of academic levels within the ABE classes. Whether the range was from 0–6 on the TABE or only half of that, was significant. Such a range represented a spectrum of abilities and needs among the learners

that was bound to affect how they engage. Second, there was a diversity of goals in the ABE classes. Learners were there for a variety of reasons ranging from wanting to write more legibly to using the class as a stepping-stone to get into the GED class or adult high school. In addition, some learners were motivated by the social aspects of the class, others by the purely academic aspects. While learner interviews generally revealed strong motivations, some learners had translated their motivation into very specific professional or academic goals, while others were more vague about their reasons for attending. Finally, participation in the program did not lead to a specific outcome, such as a diploma. The teachers defined their own goals for the program and interpreted their own roles and their learners' needs in their own ways.

Silvia's Basic-Skills Class

Silvia's class was a basic-level class that met from 9:00 a.m. to noon Monday through Thursday. Learners' grade levels ranged from near zero to about six. As you entered Silvia's classroom, to the left there was a blackboard and to the right were four circular tables where learners sat to do their work. At the back of the room there was a computer, a bulletin board, and a large map of the United States. On one side there were windows and on the other, bins where learners' work was kept in large envelopes. On the walls there were posters and learning aids, as well as a large Equipped for the Future wheel.

According to the original plan, there were to be two basic-level classes, a Monday and Wednesday class for the lowest-level learners and a Tuesday and Thursday class for the slightly more advanced learners. However, to make more hours per week available to learners, Silvia combined the two classes. The net result was a class twice the normal size, and on days when attendance was at peak, teaching resources were strained and the class could be quite noisy. Even when the class was noisy, however, the engagement level was high.

Teacher, Aides, and Learners

There were three people in Silvia's class who had teaching roles of one kind or another. First, there was Silvia, the teacher. At the Center, all teachers must be certified and Silvia was certified in special education. Silvia was very upbeat in her demeanor. Connie, the aide, was a senior at the local university. Connie supported instruction by correcting work, answering questions, and providing help to learners. Helen, the volunteer, who appeared to be in her seventies, came in several days a week to work with the most in-need learners.

The learners were very diverse. Most sat at, or near, the same table each day. At the front table sat Mark and Bob. At the next table sat Rina and Mona. They were among the least literate of the class, and when Helen was in class, they usually worked with her.

The rest of the learners sat at the other two tables. Several of the regular attendees were immigrants from West Africa and developed in-class friendships.

For the majority of the learners, English was not their first language. This meant that pronunciation could be a problem and that learners sometimes lacked vocabulary that would be commonplace to native English speakers. Ages varied from 18 to about 55 and the ratio of men to women was about equal.

The amount of time learners spent in Silvia's class varied. Rina had been a learner at the Center for at least two years. Other learners, few of whom agreed to participate in this study, stayed for such short periods of time we did not get to know them. Others progressed rapidly and were "promoted" to more advanced classes during the period when we were actively collecting data.

<u>Teaching and Learning</u>

Norms and Procedures

As we have noted elsewhere, to understand engagement in the context of this study, one has to consider what learners are engaging in, and that was IGI. In Silvia's class, learners entered the classroom sometime after 9:00 a.m. (Tardiness was not punished, or even acknowledged.) Learners picked up their packets of materials from the file crates, and took a seat at a table. Learners selected the materials they would work on that day, read the directions, and began to work. Although Silvia and sometimes Connie distributed materials, they rarely mandated what subject learners would work on. Alicia, for example, hated math and hardly ever worked on it.

Based on observed eye movement when reading, and hand movement when writing or doing math, the level of engagement was very high. When learners got tired, they took a break, either at their seats or out of the classroom, but when the break was over, they readily re-engaged. The materials typically consisted of an exercise and a quiz. When a learner had completed a unit, Silvia or Connie corrected it. If the score was above the threshold (70 or 80%), Silvia or Connie assigned new work at a higher level. Then the student went back to work until it was time to leave at noon. Shifts in engagement occasionally occurred—away from working on materials to interactions with teachers or other learners—yet the topics of interaction with teachers and other learners almost always revolved around the materials themselves.

In order to function in Silvia's class, students had to learn the norms that governed behavior in the class and the procedures associated with IGI. These norms and procedures were new to the learners as their previous experience had been in the group-based instruction of American K–12 or their countries of origin. Orientation to the class,

conducted by Silvia, was cursory, lasting five minutes at most. Thus most of the norms and procedures were learned through observation, asking questions of the teacher, and conversation with other learners.

Unlike in K–12, one norm was that disengagement was acceptable. Learners could take breaks whenever they wanted, were free to move around the room, and could use the computer without asking. Verbal interaction among learners was tolerated. Although at times the class became quite noisy, we are not aware of any complaints by either learners or teachers. Although Silvia frequently praised the learners, at no time did we witness even mild rebuke for learners' behavior. The atmosphere of the class was informal. Learners called teachers by their first names. Trent dressed in hip-hop fashions, Michelle sometimes wore her native Ghanaian clothes, and the dress of most other learners was mainstream casual.

The procedures associated with IGI were relatively straightforward and easy to learn. As mentioned earlier, learners kept their completed work and work in progress in a large yellow envelope with their name on it. The envelopes were stored in crates and learners picked up their envelope when they arrived and "filed" it when they left. The directions for completing exercises were located within the exercises themselves and if learners didn't understand, they asked Silvia, Connie, or another learner for help. When they had completed an exercise and needed it corrected, learners got up and went to Silvia or Connie if the latter were seated, or signaled by hand if Silvia or Connie were walking about the room. IGI became so routine that on one day when Silvia and Connie were both late, the class began and ran successfully without them.

In Silvia's class, as in all the classes we studied, there were three types of teaching and learning transactions: learner/materials, learner/teacher, and learner/learner. In learner/materials transactions, learners worked on reading, math, or rudimentary writing materials. In learner/teacher transactions, learners interacted with teachers; in learner/learner transactions, learners interacted with other learners. Consistent with IGI, learner/materials transactions were primary. Learner/teacher and learner/learner transactions nearly always focused on the materials. The materials themselves were from different publishers and had been collected over time by teachers who had previously taught Silvia's class.

Learner Engagement with Teachers

Because teachers at the Center must be K-12 certified, nearly all had experience in K–12, group-based instruction. Rarely, however, did a new teacher come to the Center with experience in IGI. That meant that very few of the Center's teachers has been trained in IGI or socialized into IGI-teacher role behavior. To a great extent, teachers had to define their own roles as IGI teachers and the net result was that teacher role behavior varied across the classes we studied.

Silvia played the role of what we have come to call *correct and direct*. When learners had completed an exercise they would attract Silvia or Connie's attention with hand signals, or go to Silvia or Connie if they were seated. Their work would be corrected and graded, typically with an answer key. Learners, rather than teachers, virtually always initiated correcting sessions. If the work was essentially correct, they would be given new work at a more advanced level. If it was not correct, they would be given work at their current level or asked to correct what they had done. If a learner's work indicated that the learner was having problems, or if a learner flagged Silvia or Connie with a problem, they would provide help.

During one class, as Connie checked Hector's work it became clear that he was having problems with decimals. This is how the lesson went:

> We are just checking. I said we were just checking. I'll check it. We have a trick for this. You move a decimal over. When you multiply by 10, you move it over once. By a hundred, you move it twice. For a thousand, you move it over three times. However many zeros there are, that's how many times you would move the decimal place. For a grand, you would move it three places. When you divide, you go this way. When you multiply, this way. OK? You go this way. One, two, three. You do them right there OK? Let's start over. So the decimal would move over this way, and however the amount of zeros. That's all it is. Here is the decimal point, here.

The great majority of learner/teacher interactions was directly linked to the materials. For example, Peter had just finished a phonics exercise and Silvia asked him to read his responses to the questions:

> Silvia and Peter together are reading Peter's answers from his worksheet. At first both read out loud together and then they go back and forth.
>
> Both Sylvia and Peter together: In May hey. It's May hey. It's a day away.
>
> Silvia: All right, read it again.
>
> Both together: It's a day away. We have the hay.
>
> Silvia: Hey. Ray had the hay.
>
> Both together: Ray had the hay.
>
> Silvia: Ray had the hay. Lay the hay away.

Silvia: Hey, hay, day, lay, say, nay, use any of these letters to make words. OK? Then there's a sentence and there's three words for each sentence. OK? You have say, day, May, now finish the sentence.

Although in this episode Silvia is certainly trying to help Peter, as is typical in this class the materials are doing the teaching. Silvia is primarily providing support and making sure that Peter knows what to do.

Silvia was very concerned about learners' self-confidence and tried to create a warm supportive atmosphere in the class. As noted before, one strategy for doing this was frequent praise. Praise rang like a mantra in Silvia's class and part of its purpose was to maintain learners' self-confidence and motivation to engage. Silvia knew that Rina had been feeling discouraged and was considering the ultimate act of disengagement—dropping out. As Silvia checked Rina's work, her intervention strategy was a public self-confidence-building session:

Silvia: Drives.

Rina: Drives. Man?

Silvia: Man.

Rina: Man. No. Yeah?

Silvia: Could be, it looks like she's talking to a man, so it could be.

Rina: Stop the dog. Close the door. Let the cat go. Let it go.

Silvia: (Yes.)

Rina: Bake some cake.

Silvia: (Yes.)

Rina: The mother bakes it. Light up the food. Get it out of the oven. Work with color, yes. Paint the color.

Silvia: Washing, not painting.

Rina: Get out. Little pig. Help the cows. Work in the tent. Play with the ducks. Play with geese and pigs. Stay home. Help baby. Ask for some cake. But that's not cake.

Silvia: That's not cake, so it's not right.

Rina: Run with father.

Silvia [So loudly that the whole class could hear]: OK. You just read fifteen sentences. Tadaa! You can read! You can read. You can read. You can read! All right, we're going to start a new session. OK? I can read. I can read. OK? [Writes "I can read" on Rina's paper.] OK? What's that say?

Rina: I can read.

Silvia: Say it nice.

Rina: I can read.

Silvia: I can read. Say it like you mean it. I can read. If you know the letters and you know how to speak, you can read. I can read. OK, number one. This is what we're going to do. Forget the books. Forget the stories. Forget the things. We're going to find what you know, and we're going to go from there. I can read. What does that say?

Occasionally Silvia would do a group lesson. In one class, for example, Silvia conducted a group phonics lesson called the Phonics Box:

At 10:25, Silvia calls the class to attention.

She goes to the side of the room and gets a big box.

She carries it and places it on a table near the chalkboard (whiteboard) at the back of the room. She tells the class that she has developed something that will allow them to play. She says, "Let the little child in you come out. This is a phonics reading basket. It will help you improve your reading skills."

She writes the vowels on the board and puts a line over them.

She says, "If I write on your paper a long line you have to say the letter…"

Silvia teaches in a way that she provides all the information to the learners.

The only information she received from learners was the names of the vowels and words that correlated with long or short vowels.

For example, "Who can tell me a word with a long a in it?"

There are several learners who knew what the vowels were and a few could differentiate between long and short sounds—or at least knew there was a difference.

> One woman knew that sometimes y is a vowel….
>
> She tells the learners that she is Italian, then corrects herself and says Sicilian.
>
> She then tells them that when Sicilians think they don't know some information, but realize they should have known it, they hit themselves on the head and say, "I shoulda known."
>
> As Silvia is teaching, most of the class is engaged and is paying attention to her.
>
> Some of the learners have smiles on their faces.
>
> There is one man sitting at the table next to teacher's desk who continues to read a story. After about five minutes, he too begins to pay attention.
>
> Two learners, a man and woman, are working on the computer.
>
> At no time do they pay attention to the lesson.

Although this lesson had educational content, given the range of literacy skills levels in the class it was relevant to some but not to others, and to those others the lesson was a source of disengagement as it distracted them from their IGI materials. For Silvia, however, group lessons had an important secondary purpose and that was to create a sense of community and make learning fun.

Learner Engagement with Materials

Learners engaged with materials in several ways. Several learners, including Rina, Bob, and George, appeared to be riveted on their work. Bob was so focused that if the classroom became too noisy, he would leave to find a quieter place to work. Rina sat straight in her chair and moved little. She rarely took breaks and hardly ever interacted with other learners except for a few casual words. Rina, who seemed to be in her fifties, was born in the Middle East and spoke at least three languages. Yet, because her father did not permit her to go to school, when she came to the Center she was virtually illiterate. She has been in the United States for 16 years, during which time she took ESOL classes and learned English. Although her English was accented and sometimes ungrammatical, she understood English well. She was employed at a hospital and lived with the brother who had sponsored her immigration.

Rina rarely interacted with other learners. When we interviewed her she told us that she was frustrated because she just was not making progress in reading and writing. When Helen, the volunteer, was in class, she worked with Rina and Mona, and Rina greatly appreciated this. The supportive nature of the relationship seemed to ameliorate

Rina's frustration. However, when Helen was not in class, Rina worked on individualized materials that were very difficult for her. Rina's frustration was often obvious from her facial expressions and body language, but even when she was frustrated, she continued to engage. However, Rina was sometimes so frustrated that at one point she considered dropping out. When we talked to her about dropping out, she said:

> Yeah, I wanted to leave, because it's hard for me, I need more help. Yes, we all need someone sit with us, and tell us for example, you don't know how you spell that word. We all need someone to sit with us, cause we don't know nothing, because we are from another context and never go to school. Like first grade kids.

Peter, Adnan, Michelle, and others were more animated while they worked. Peter and Adnan moved frequently in their chairs. Adnan took more breaks than most learners. Peter read out loud to himself or mouthed the words, fiddled with his materials, and followed the words with his pencil or finger as he read. He often joked with others at his table, especially Michelle. Yet despite these different styles of engagement, engagement with materials was very high in Silvia's class. The exception was Alicia. Alicia appeared to be about 18. Although her eyes were on her reading, at times no pages were turning. She was quick to interact with other learners, especially Juan, with whom she had a flirtatious relationship. Yet despite her tendency to disengage, she progressed enough to move from Silvia's class to the adult high school.

In Silvia's class then, for the most part instruction was embodied in the materials and in the exercise-correct-move-on sequence associated with them. Materials did most of the teaching. Learners quickly learned that IGI was the name of the game and that winning the game had to do with getting the correct answer on the worksheets.

During a stimulated-recall interview session, Peter had just viewed himself waiting as some of his work was corrected. This is what ensued:

Interviewer: When the aide was checking your work, you kept looking at her, why?

Peter: Because I wanted to know what's my score, what my grade is. That's why, because I was very tired at the time, cause the work, the past week is too long so…

Interviewer: Uh-huh.

Peter: I was thinking maybe I would have just like 70 or worse…

Interviewer: But you did better than that.

Peter: Yeah.

That IGI was the object of engagement and success meant getting the correct answer was so imbued as a norm in Silvia's class, that during a rare instance when Silvia conducted a group lesson—a very loud and animated lesson—many of the learners simply ignored her and continued to work on their materials. One learner even left the room to find a quieter place to work.

Engagement with Other Learners

In Silvia's class, learners did not get new materials until the work they were doing was corrected. This meant that they had to wait, and when attendance was high, the wait could last five or more minutes. Waiting functioned as a space for something other than working on materials to happen—a vacuum to be filled with other activity. Waiting often also signaled a transition from engagement in materials to other forms of engagement or disengagement. One option for learners was to take a break, to do essentially nothing until the work was corrected. Another was to work on other uncompleted materials in the folder. Although we observed both of these options in action, for one group of learners, helping each other generally filled the waiting space. The group included Peter, who was from Sierra Leone, Adnan, who was also from Sierra Leone and worked with Peter at the same department store, Michelle, who was from Ghana, and Alicia who was of Hispanic background. Peter referred to the group as the "old people," meaning that they had been attending the class regularly for a considerable amount of time. Because Peter and Adnan attended regularly, and because we interviewed them both extensively, we learned more about them than many other learners.

Peter was probably in his forties and was always neatly dressed in casual clothes. As mentioned previously, Peter was from Sierra Leone, a West African country that had been in a state of revolution for a decade. Although when he was a child he went to Arabic school for a while, he never went to English school. His home was burned; his parents died; and a friend of his father's brought him up. He had five brothers. Several of his brothers managed to immigrate to the United States and were able to sponsor Peter's immigration. Peter's first language was Creole, and his heavily accented and sometimes ungrammatical English was often difficult to understand.

When we first met Peter in the summer of 2001, he was a nonreader and did not know the alphabet. Initially he was shy and withdrawn but as time passed he became much more confident, outgoing, and sociable. When asked about this transformation in an interview, Peter told us that at first he felt confused:

> They confuse me. I feel confused. The language when they speak, I don't understand it. And then I meet different people and I don't get used to them yet. The only person who can encourage me is Silvia. She talk to me nicely…she show me. I feel happy and come back tomorrow.

Because his literacy level was lower than the others, Peter was more likely to ask for help than to give it. When he worked on reading materials, he tended to mouth the words and follow them with his pencil. He had reading glasses but did not like to wear them; and when he worked without his glasses, he held the materials at arms length. Although Peter worked deliberately and consistently, he fidgeted a lot too.

In our interviews with Peter, two things stood out. The first was his deep respect and gratitude toward Silvia, his teacher. Over and over, Peter attributed his persistent participation to Silvia's encouragement and moral support. The second was Peter's high motivation to succeed. Peter assessed success by Silvia's praise and the number of correct responses he received on the exercises that came with the materials. As he said, "I will come every day, every month. Push up. Go up, go up, go up." Peter worked at a department store from 3:00 p.m. to 11:30 p.m. He went home after work, went right to bed, and awakened at 5:00 a.m. Then he often did some homework and read part of the paper. He went to class at 9:00. His attendance was among the most regular of all the learners in the study.

Adnan was about 18 years old and, with his young brother, he had immigrated to the United States from a West African country about 6 months before we interviewed him. He lived with his parents who had arrived in the United States earlier. Speaking of the day he enrolled in the program, he said:

> I will never forget that day. That was the happiest day of my life, because in my country for the past five years the school is not active. We started going to school like three months and then we see the rebels enter and they destroyed many things and killed people.

Adnan's parents were very supportive of his participation. He remarked:

> Yeah, because when I come my mother tells me I am getting my GED. So I said, "What is that? I don't know much about that." And she said, "When you finish that, you are going to college." I said, "OK, I will finish. I will do well."

Like Peter, Adnan was an enthusiastic and diligent learner who rarely missed class despite the fact that he had a full-time job at a department store. Although he had been in the basic level class for only four and a half months by the time our data collection in Silvia's class was complete, he was ready to "graduate" to the adult high school, the option he ultimately chose over the GED program. Adnan was often sought as a helper, partially because he was perceived as being more proficient than they were and partially, we suspect, because he had a friendly, easygoing manner that invited social interaction.

As noted earlier, waiting created a "space" for something other than IGI to happen. Helping each other during waiting often entailed checking the answers,

especially if learners were working on the same materials. If, for example, one of the group had chosen a, c, b, c on a multiple choice test and the helpmate selected a, c, b, e, they would assume that the answers held in common were correct (a, c ,b) and the answer that differed was wrong. The learners then re-engaged with the materials to find the correct answer for the question that was in dispute.

Helping also occurred as learners worked on their materials, but this kind of help usually entailed short episodes such as helping with pronunciation or word definition. At one point, for example, Michelle was having trouble pronouncing "bird." She was saying "baird." She asked Alicia how to pronounce it and Alicia told her "bird." At another point Trent, a new learner, needed to use the dictionary and did not know where it was. Peter got up, retrieved the dictionary, and gave it to him. Aside from short episodes of joking, in-class communication among learners almost always focused on the business of the class and hardly ever focused on out-of-class activities. Thus learner-to-learner communication typically represented a shift in engagement from written resources to human resources, rather than disengagement from instruction.

There appeared to be patterns in helping relationships based on friendships and perceived ability to render useful help. Adnan was sought by Alicia, Peter, and others but Peter was sought by no one. Some of the learners hardly ever sought help from other learners or even interacted with other learners, and if they needed help, they sought it from Silvia, Connie, or Helen. This was true for Rina, Mona, Bob, and George. It was also true for the occasional learner who attended for a few sessions and then left.

<u>Conclusion</u>

When Silvia's class is examined holistically, it is clear that Silvia had considerable control over engagement. When she directed learners to do something, they complied. Yet in Silvia's class the materials also had control, in that they directed most of the learners' educational activity and were the object of learners' engagement most of the time. Unlike students in traditional education, however, learners had a substantial amount of choice. They decided whether or not to come to class and were not sanctioned if they did not. Furthermore, if they missed class, they could simply pick up where they left off in their materials. Learners could also choose what subjects they worked on and how slowly or quickly they did their work. Learners were also free to disengage at their leisure, but they rarely did.

Pat and Celia's Basic-Skills Class

Just after we had finished data collection in Silvia's class, Silvia left the Center to take a job in another state and two new teachers, Pat and Celia, were hired to take her place. Pat and Celia's basic-skills class, which was the lowest level class at the Center

(approximately new readers to grade 3), met Mondays and Wednesdays from 9:00 a.m. to noon in the same classroom that Silvia's class had used. The layout of the classroom was virtually unchanged. However, in addition to there now being two teachers and an aide, Celia and Pat decided to change the format of the class from IGI, as it was with Silvia, to small-group instruction. The decision to change to small-group instruction is central to this case and will be discussed in more detail throughout this analysis.

When the class was in progress, Pat and her group of six to eight learners worked at a round table nearest the door and Celia and her learners occupied the table next to it, near the windows. The other two tables accommodated various learners, including Joseph and Neha, who worked individually in IGI mode and were attended to by Rajabu, the aide. Three learners from Silvia's class—Peter, Rina, and Mona—were still attending and Peter and Rina were now participants in the small groups (although Peter sometimes worked independently in IGI mode). Because there was a considerable amount of oral communication between the two teachers and their groups, the classroom was generally quite noisy. Pat and Celia both acknowledged that noise was sometimes a problem and several learners mentioned that this was a distraction to their engagement.

Teachers, Aide, and Learners

Pat had been working at the Center as a GED teacher and was moved to basic skills after Silvia left. She had joined the Adult Learning Center only a few months prior to this assignment. Although she is a certified teacher, Pat had only worked briefly as a classroom teacher prior to working at the Center. Previously, she had worked in technical school admissions, eventually becoming a director of an adult technical institute.

This was Celia's first experience teaching adults. She had spent the first part of her career teaching special education to middle school learners in another state and has bachelor's and master's degrees in education. During a sabbatical from her original K–12 position, Celia began classes in pupil personnel, eventually obtaining a second master's and becoming a high school counselor. After a short retirement, Celia applied to the Center in hopes of finding part-time employment. She joined the Center in March of 2002. Rajabu, the aide, is a young, African American man who teaches in another of the Center's programs, as well in this class.

The learners varied in age, ethnicity, and academic level, and in their reasons for attending. Some had been at the Center for a few years, while others were new to the program. Some learners came to the Center with personal goals such as acquiring basic writing skills and improving their English skills.

Georgina, an immigrant from Italy, had been coming to the Center for 2 years, in the Monday/Wednesday class for the entire time. She received minimal formal education

in Italy, only attending up to first or second grade. She learned to write in Italian, and with her children grown, was working to improve her basic skills in English, specifically her writing skills. Manuel, an immigrant from Mexico, was working as a truck driver and had been attending classes for the past two years. He came to the class to improve his English skills because he wanted to advance in his job and recognized that his English speaking and writing skills needed to improve in order to achieve that goal.

Evelyn had very different goals. She lived with schizophrenia and was involved in an accident that left her unable to write legibly. She obtained her high school diploma traditionally and worked for years prior to the accident. Although she was able to read and compute basic math, her handwriting was not as clear as she would have liked. She was referred to the Center by a mental health outpatient clinic.

Another learner, Peter, had been enrolled in Silvia's class prior to entering Pat and Celia's class. He received no education in the United States before entering the Center and had only minimal formal education in Sierra Leone, his country of origin. He was eager to learn to read. Both Pat and Celia conceded that Peter had a difficult time assimilating into their classroom. Because he was highly socialized into IGI in Sylvia's classroom, the transition to small-group instruction was difficult. Although Peter worked independently when we first began observation in the class, he later moved to Pat's group.

Joseph, whose skill level was higher than most of the other learners, generally worked independently. He had originally been assigned to a higher-level class, but attended Pat and Celia's class because his schedule did not permit him to attend the other class. He had returned to school after a career in the merchant marine because he realized he needed to upgrade his math skills in order to earn his GED and advance in his occupation. He did not graduate from high school and acknowledged that he had been a poor learner when he was in school.

Teaching and Learning

Norms and Procedures

When Pat and Celia began teaching this class, the first step they took was to change the instructional format. Instead of an IGI format, the class now ran with a combination of small-group instruction and IGI. Most learners were placed in a group with either Pat or Celia as the facilitator. In changing from IGI to small-group instruction, Pat and Celia established two norms that supported the group format. The first norm was that the group never moved on to a new exercise until the teachers were sure that everyone in the group understood the lesson. The second norm was cordiality, a consciously cultivated atmosphere of warmth and emotional support.

We All Move On Together. During one class that we observed, Pat led a group lesson on sequencing and sentence formation. She stood at the head of her group's table, her back to the chalkboard, book in one hand, chalk in the other. The observation began at 10:00 a.m.; the group—three learners and a volunteer—had finished reading the story together before we arrived. The mood in the class was very light, Pat was laughing out loud as she stood before her group. She had written A, B, C, and D on the board to begin the lesson. She began, "We know he is driving in his car. What is the main point? Sam is driving…" (she trailed off and circled her arm to indicate that the group should finish the sentence). Someone called out "in the car." Pat answered, "In a heavy snowstorm, right?" Then she turned to the board to begin to write the sentence after the letter A. She wrote, "Sam." The group copied "Sam." Pat asked the group out loud as she looked at her book, "Now do we have words here that we can go back to?" She pointed out the part in the story that said that Sam was driving home. She paused, then said, "Sam is driving home in a…." She asked the group, "In a what? Not a car. They want to know what the weather conditions are. Snow, that is one of our words." Pat then noted, out loud, that the weather conditions in the story are bad and that the temperature is very cold. She asked the group about this, and they said that there is a snowstorm. Pat told them that the word "snowstorm" is not used, so she erased the word "the," and added "and ice." The final sentence was, "Sam is driving home in the snow and ice." She told the group that the sentence was the first point made in the story, as well as the main point of the story.

She continued the lesson, "What happens next? What happens to Sam?" The lesson continued in this way until all four sentences had been produced. The group collectively provided the answers to Pat's questions to complete the lesson. It was a slow and methodical process, lasting about 15 minutes, with Pat drawing the sequencing and sentences out of the learners. The learners remained engaged during this process and alternated between looking at Pat and at their papers, as well as calling out answers and writing on their worksheets. When we asked her about this lesson, she told us that sequencing is particularly difficult. Knowing this, Pat offers learners a chance to participate orally, as well as hear the answers that others are offering. This is important because, since the task is difficult for the learners, Pat decided to make the lesson a group effort. She monitored the learners as the lesson progressed and paced the lesson so the learners had a chance to respond to her questions and prompting. Pat told us:

> Whatever it is that we're doing, that they may be writing, but they are responding and I think that's probably why I like this method of teaching because I know they are interacting, even if it's not so much with me, they're interacting with the person next to them. And that's fine because it's all a learning process. Because in this particular lesson, there were many things that they were clearly able to do but this, I remember, this was one of those lessons where there are other skills that they still are not at-level for doing independently. So we have to work as a group, to retell the story in four or five lines. You know, this is a very, very difficult thing for people at this level to do, so we were trying to get these responses out and then I would clarify it because some of them would be hard pressed to get up there and spell or write these kinds of things.

As the above sequence shows, to assess whether the learners in the group understood the lesson well enough for Pat to move on to another lesson, Pat engaged the group in an elicitation, a series of questions posed by the teacher and answers rendered by the learners. As Beder and Medina (2001) point out, elicitations have two functions. First, by the incidence of correct and incorrect answers, the teacher can gauge whether or not learners have "learned" the lesson, and second, the elicitation allows students who do not know the answers to learn the correct response when the teacher or another learner provides it. By their nature, in elicitations, learners' engagement is controlled by the teacher because she poses the questions and can encourage engagement by calling on learners who she suspects might be disengaged. The norm of "we all move on as a group," however, means that the pace of instruction is set by the least skilled learners in the group, while in IGI the pace is set by each individual learner.

Pace was an issue in Pat and Celia's class, primarily because the learners often struggled with the lessons. A majority was immigrants for whom English vocabulary and pronunciation were challenging and some, like Georgina, were suspected of having learning disabilities. An account of one of Celia's lessons demonstrates this:

> The group was engaged in a grammar lesson focusing on adverbs. Learners were required to rewrite a given word with the *ly* added correctly to the end. The learners took turns saying the new word and then spelling it out loud. The three learners present all had difficulty with pronunciation and Celia spent a lot of time pronouncing words that they had difficulty with, as well as explaining what the words meant. At first, Georgina did not understand the directions. When she understood what to do, she laughed and threw her head down on the table. Mona leaned over and patted her arm. There is a real sense of easiness and understanding at the table. Everyone was laughing. Celia began with the word "madly." She says, "Madly, you are crazy about him. Madly, madly. It is not mad. I am mad at you. She is mad at me." Celia was interrupted by Pat asking her to please keep the noise down. The group giggled and Georgina said that Pat was mad, and the group giggled a little. Celia continued in almost a whisper to her group. "Mad, mad. She is mad. Madly in love. Crazily in love." Celia exaggerated her pronunciation when she said this adding a little humor to the lesson. Celia then directed Mona to complete the next exercise. She told her to say both words, the word given and then the word with *ly* added to the end. Mona had difficulty pronouncing the word, she paused for a moment and the table waited for her. Celia leaned all the way over the table to decrease the space between her and Mona. Mona said truth. Celia told her to say the next word, which initially confused Mona. She thought she had to say the next word on the sheet. Celia told "No, say the word with *ly*. When you added *ly* what did the word become?" Mona struggled, making three false starts to pronouncing the word. Again, the group waited for her. Georgina was mouthing the word along with Mona. Finally, Mona said the word. Celia pronounced it correctly. Mona tried again. Mona had a lot of trouble. Now Georgina was trying to pronounce the word as well. The two pronounced the word a few times. Celia turned to Mona and said, "You are saying truthflee. I am saying truthfully, full of truth." Celia exaggerated her mouth as she spoke so that Mona could see what the mouth looked like as the word was pronounced. Mona tried a few more times and said the word closer to correct. Celia nodded her head affirmatively and said, "Yes, yes." Celia remained

animated and attentive during the entire lesson and displayed true happiness for Mona as her pronunciation progressed. Mona then spelled the word out loud. Celia told her that she was correct. The group spent about three minutes on this one word. Next was Georgina's turn and the group proceeded similarly…. The learners were not embarrassed or upset by not properly pronouncing a word and Celia worked with each learner equally. Again, learner engagement was high during this lesson, with all of the learners working hard at pronunciation, reading, and filling in their worksheets.

Compared to IGI, the pace in this lesson was very slow. It was determined by the learner who takes the longest to understand the materials. At the same time, the pace was controlled by Celia.

This norm was further illustrated when, during one observation, Georgina excused herself to go the restroom for a few minutes. The lesson stopped as the learners were directed by Celia to wait for her return. The learners easily shifted from being engaged in the lesson to engaging socially. (Pat and Celia both noted that if a learner were to leave the lesson for an extended period of time, for example to meet with a counselor, the lesson would continue without the learner, but because their learners need help to work through the material, they would wait if the learner was due to return promptly.) Evelyn, Samantha, and Celia engaged in a social discussion about Evelyn's personal life. Evelyn began the discussion and Samantha listened, nodding and participating in the discussion with her. There was an atmosphere of warmth and openness between the women as Evelyn related her personal issues. Celia also added to the conversation, reinforcing her desire to maintain both a professional as well as personal relationship with the learners. When Georgina returned to the group, the lesson resumed immediately.

As we noted in the Silvia case, when learners stopped working on their materials because they were waiting for help or to have their work corrected, their interactions with each other almost always revolved around the business of the class. This was true for all the purely IGI classes we observed. Thus in the IGI classes, a shift from working on materials to verbal interaction did not really represent disengagement. It merely signaled a shift from an individual mode to an orally interactive mode. This is not the case in the example we described above, in which the learners are indeed disengaged as they talk about their personal lives; the episode of disengagement lasts until Georgina returns. However, the waiting time did serve the purpose of allowing learners to interact on a personal level. This was important to the teachers because they felt it was important for the learners to interact socially. Because the teachers led the group through their lessons, there were no opportunities for disengagement, and social interaction, unless the teacher created it.

The Norm of Cordiality. Pat and Celia believed that because most of their learners had learning problems, they needed extra emotional support and encouragement, not only

from the teachers but also from each other. Thus they consciously cultivated a warm, caring atmosphere that contributed to a sense of community. As Celia told us:

> This is also a program where I think they feel very welcome. No matter what the weather, I mean look at a day like today. They walk, they come. Today, I only had seven, but you know when I was teaching in high school, if we saw two flakes of snow, half the class was empty. They always found a reason not to come. Oh, we think it may snow. They feel very welcome. I think they really know, I mean I don't want to blow horns for us, but they know that we care. We really care about them, and I think they feel that I'm not there just as a teacher. I'm retired, you know. I'm not doing this out of need any longer. I'm doing this out of choice. And, I think that makes a big difference, and I think this is something that comes across. I certainly hope this is what I'm projecting because this is what I mean to project.

That Pat and Celia were successful in creating an atmosphere of cordiality was quite apparent in the video data. Learners were consistently smiling. The teachers were lavish with their encouragement, not only with verbal praise but also with non-verbal gestures such as smiles and the nodding of their heads. Both teachers employed a considerable amount of humor. The norm of cordiality supported a different kind of engagement—social engagement—another aspect of engagement important to learning in adult literacy.

The move to small-group instruction and the norms that reinforced it had a significant impact on learner engagement. It meant that to a much greater extent than in IGI, teachers controlled engagement. Teachers controlled *when* learners engaged, as learners were directed to engage when they called the group to order and the lesson began. They were induced to engage when the teacher called on them, and they sometimes disengaged when a learner left the group. Second, it meant that learners engaged in *what* the teacher told them to engage in—the topic of the lesson—and the teachers decided what that topic would be based on their professional judgment. It also meant, however, that through elicitations and other verbal interactions with learners, teachers had much greater ability to assess what, and to what extent, learners were learning.

Learner Engagement with Teachers

When Silvia was teaching the class in IGI format, the class was a mixed-level class with grade levels ranging from new readers to about grade six. This had caused problems, however, because the class was quite large and Silvia had difficulty giving the lower-level learners the help they needed. Thus when Pat and Celia took over, the class had been split into the Monday/Wednesday sessions for the lowest-level learners and a more advanced class that met Tuesdays and Thursdays. It was assumed by the teachers that learners in the Monday/Wednesday class would move to the Tuesday/Thursday class as their skill levels increased and then on to the GED class or adult high school.

Although at first Pat and Celia used the same IGI format as Silvia had, they soon concluded that IGI was not working for the lower-level learners. As Pat explained:

> [W]orking individually in a lower-level class, they [the learners] require so much of your time, so much individual help that it's just impossible to deal with every person. It's impossible. So the decision was made pretty early on, I would say within the first two weeks of just feeling around and both of us walking into a program that we had not taught previously. And, we just had to pick up the pieces of an existing program, and we decided right away, since there were two of us, we were going to start to do group instruction….We tried to make a very quick assessment of what their levels were within those two weeks, what their needs were, and to group them accordingly. And, [we] realize that there's going to be some difference between levels at tables, but we felt [it would be] an advantage to have people in groups with somebody who would be a little higher and somebody who would be very low, and somebody in the middle so they could drag each other along because we just couldn't do it otherwise.

Celia added:

> Basically, when we came into the program…we used the model that had already been in place because that's what the prior teacher had done. So we just continued with the same model, so within a very short time, she looked at me and I looked at her and said this is not working because basically the learners [at] this level cannot work independently. And, we were running from learner to learner and really not spending sufficient time with each one because we were running from learner to learner. So we sat down and we talked about it. I think we talked about it on the telephone one night, and we said we have to come up with something else so let's group them. So Pat basically said that she thought that this grouping would work, and I looked it over, and I concurred that this seemed like it would be something that would work. And, since then, I have to say, in my opinion, it is working much better. First of all, they get to interact with each other and for this level learner and this type of learner the socialization is really important as well as the learning process.

Essentially, to successfully meet the learner's needs within the IGI structure the teachers, as Celia put it, "needed roller skates."

For Silvia, the primary marker of learners' progress had been how well they scored on the IGI exercises, and for the most part she assumed that learners were understanding the work if their work was correct. Yet we know from observations of Silvia's class that this was not always true. Learners sometimes got the right answers through collusion and some of the lowest-level learners struggled ever to get the correct answers. For Pat and Celia, however, the marker for progress was whether learners understood, something they assessed through dialogue with the learners. Based on more substantial interaction with the lowest-level learners, they concluded that the learners did not understand through IGI, that they needed more help, and that as teachers they lacked the resources to render sufficient help in the one-on-one interactions characteristic of IGI.

There was a second and related reason for switching to small-group instruction. As Pat and Celia noted, most of the learners in the Monday/Wednesday class had what they called "issues," problems that interfered with their learning. Three learners, for example, were immigrants who had had no, or very little, schooling in their native countries. Another was schizophrenic and brain injured as well. As Celia said:

> I'm looking at the level these learners are at, and, after working with them for several months, I realized that no matter what I do, I don't know whether it's realistic to make that expectation. Because yes there is some learning going on, but I don't know if they can ever learn to the level to go to the adult high school or a GED program. And, one of the most difficult things, not only for me but for them because they expect eventually to make this movement, and Pat and I had to work on goals that were more realistic....Their oral reading skills have improved, their comprehension has improved, all of their skills basically are better. Are they good enough to move to a more advanced class? No. Do I see them eventually being good enough to move to a more advanced class? I don't think so.

Pat and Celia believed they needed to provide the learners with a highly supportive learning environment that was most conducive to the academic level and abilities of their learners, and for them this meant small groups. Celia said that their learners had been outsiders for much of their lives and the groups enabled them to feel like they belonged. Pat agreed, explaining what she felt made the groups successful:

> I think being with others who share the same problems or similar problems helps them tremendously because instead of this desperate state of just staying home and not being able to function, and you know you're not able to function here. You're not able to get a job, and, if you are working, you're working in Wal-Mart or one of these places, you know they don't give you any kind of responsibility because you can't read, or you can't do something. You can't understand something. This is a place where they feel they are accomplishing something, as limited as it may be from our perspective. But, perhaps to them, maybe it's tremendous, and it's that support of being with others who have similar problems because they do. They have opened up. A lot of people have shared some of their histories, and I think this is what helps. They have to be together. And, therefore, the entire idea to us of individualized instruction was nonsense because that's how they lived their whole lives, feeling this singleness, and it just didn't work.

Pat and Celia thus redefined the role of the teachers in the ABE class. They broadened their responsibility to include social learning and support, as well as academic learning and support. Like Silvia, Pat and Celia were facilitators, mediating the learners' relationships with the materials. But the way they incorporated themselves into the teaching/learning transactions made their contributions an integral part of the learning process.

Learner Engagement with Materials

Small Group. Despite the fact that this class used small-group instruction, instruction was still driven by materials, the difference from IGI being that the learners all worked on

the same materials together under the guidance of the teachers. Most of the materials were commercially produced. Some were the same materials that Silvia had used.

An example of materials usage in small-group format was a lesson on check writing in which Celia used a combination of the blackboard, her own checkbook, and workbook materials. Celia had three learners at her table when she introduced personal check writing. The learners were very excited about this lesson and let Celia know that they had never written a check before. Georgina even sat with her hands folded in front of her on the table eagerly awaiting the beginning of the lesson. Celia introduced the lesson with excitement in her voice. Celia provided each learner with a worksheet that offered a step-by-step guide to writing a check and blank photocopies of enlarged checks that they would use to practice how to fill out a check properly. She then retrieved her personal checkbook to share with the learners. She leaned over the table so that she could show all the learners her checkbook. The learners watched intently as Celia held it open for them to see so she could explain her checkbook to them:

> She spoke slowly and methodically as she showed them one of her blank checks. She told them, "This is my personal check. You see it has my name, it has my address, my complete address." Then she flipped her book over and told them, "This is the register. I made a deposit; and look, this is a record of what I spend and the deposits that I made. There are two separate columns. This column is for my checks that I write and this column is for my deposits." She explained that after writing a check you have to put money back into the account. The learners giggled with Celia. She pointed to the last number and told them it was the balance in her account.

Celia then directed the learners to look at their photocopied checks and showed them the number on the check. She told them all checks are numbered. The worksheet numbered the steps of a check-writing task. Celia read the steps to them and directed the learners for each step. One of the learners stated that she thought that the bottom line that references what the check was for was where she should write who the check was for. Celia told her she would write what the check was for there and she offered an example. After they finished reading the worksheet, the group moved to writing their own checks. This part of the lesson lasted about 15 minutes. The first task was to write the date, which was May 4, 2003. Pat told them that they could write 5/4/03 or May 4, 2003. She pointed to one of the learner's checks because the learner was unsure of where to write the date. The worksheet detailed whom the check should be written out to, Kay's Paint Shop, which Celia read aloud five times, pointing to where it was written on the worksheet. She shuffled one of the learner's papers and pointed to where it was written on her worksheet. She nodded approvingly as one of the learners began writing it correctly. She waited patiently as the learners filled out their checks.

Celia followed the directions on the worksheet in the proper order. When one of the learners asked what amount she should fill in on the check, Celia told her to wait. The

worksheet directed the learners to write what the check was for (four gallons of paint). The learners were then directed to write the amount of the check. Celia asked them why it is important to write the amount in words. One learner volunteered that she knew why. Celia encouraged learners to answer her questions out loud; the atmosphere of the lesson was conversational. Celia waited until all of the learners understood. She explained that the two amounts had to match. Again, her explanation was deliberate and to the point. She wrote out the amount on the board so the learners could copy. After each learner had filled the check out, Celia told them to sign the check. The learners had to then transfer the check information into a worksheet register. Celia next directed them to write another check. They then had to subtract the amount of this check from their register.

It is unclear whether this lesson prepared any of the learners to write a check competently enough to open and manage a checking account. However, the level of engagement was exceptionally high in the checkbook lesson, perhaps because the relevance of the task went beyond learning the basic skills involved.

IGI. Although small-group instruction predominated in Pat and Celia's class, IGI was still the structure for more advanced learners or as a supplement for learners in small-group instruction. Rajabu, the aide, facilitated IGI. Rajabu sat very close to the learners when he worked with them and spoke clearly and in a low voice. He gave the learner his full attention and responded to their questions without hesitation. For instance, when we observed Rajabu working with Neha, they were going over exercises that Neha had finished independently. Rather than use an answer key, Rajabu directed Neha to read everything out loud, the question and then her answer. Rajabu listened patiently and helped her only when she needed it. During this process he also helped direct her to resources, such as a dictionary, to help her understand the materials better. Neha and Joseph were the only learners not in a group during this observation and were, therefore, the only learners who needed Rajabu. This allowed Rajabu to spend a lot of time with Neha, nearly the entire observation. During our video session, Rajabu worked with Neha, who was working on division:

> Rajabu sat right next to her and she listened intently as he spoke in a low voice to her.
>
> Rajabu: Did you ever do division?
>
> Neha made a face.
>
> Rajabu: OK, let me see this pencil.
>
> Neha handed him her pencil and a piece of blank paper to write on. Rajabu proceeded to write down the problem.

Rajabu: 7 is divided by…427 is divided by 7 how many times? 7 goes into 4—that's impossible. Right?

Neha nodded her head.

Rajabu: 7 goes into 42 how many times. 7 times what equals 42. This is basically multiplication. Division is multiplication. 7 times 6 is 42. Right? So, so 7 goes into 42 six times. So, 7 times 6 is 42 then you subtract and you get zero.

Rajabu was writing as he was talking Neha through the problem.

Rajabu: 7 can't go into zero. OK. So, bring down the seven. 7 goes into 7 how many times.

Neha: One.

Rajabu: One time. One times 7 is seven.

He sat with her for a few more moments and then let her continue the page so he could attend to Peter.

This is a good example of the type of helping transaction a higher-level student in this class would engage in.

Conclusion

As with all the classes we observed at the Center, engagement was very high in Pat and Celia's class. At the same time, it was qualitatively different from the strictly IGI classes we observed. In Pat and Celia's class, they controlled what learners engaged in while in IGI, learners had much more control over what they worked on. Pat and Celia were committed to the class and spent time prior to the class preparing lessons and locating materials. In Pat and Celia's class learners engaged when the teachers directed them to and there were few breaks. In contrast, in IGI learners engaged on their own volition and took breaks when they felt they needed to.

When Pat and Celia engaged learners it was for the purpose of direct instruction. Engagement in this class also contained an oral component that was not institutionalized in the other classes. Learners were encouraged to participate orally. The teachers constantly monitored their groups for signs of disengagement on the assumption that disengagement was an indication that the learner was having problems with the lesson. The small-group design and the oral component allowed the teachers to engage the learners in discussion about the lesson to gauge understanding. Celia and Pat conveyed content and they rewarded—even celebrated—learner success. As a result of the

grouping of the learners, there was a higher sense of community as learners engaged in Pat and Celia's class, which was a goal that they had set forth.

Patti's Basic-Skills Class

Patti's ABE1 class met on Monday and Wednesday evenings from 5:30 to 8:30. Patti also taught the ABE2 class at the Center on Tuesday and Thursday evenings. At times she allowed learners from the ABE2 class to attend the ABE1 class that we observed. Hence, the classroom could be quite full. We observed as many as 15 learners in attendance. However, there were also class sessions when as few as four learners attended. This pattern of attendance is typical for ABE.

Teacher, Aides, and Learners

Patti was a part-time teacher at the Center. She was also a full-time third-grade teacher in a New Brunswick public school and has a master's degree in reading. Patti was quite gregarious and her verbal interactions often included colloquialisms. For example, when a learner was leaving the classroom, she asked, "Are you leaving?" Then she began to sing, "I'm leaving on a jet plane, don't know when I'll be coming back again." On another occasion, Patti read to the class a paragraph about a woman who was planning to buy a car:

> Patti is standing at the front of the class. She is holding a book and reading to the class. "Mom's getting ready to buy a new car. She's making a list of things to consider." She looks at the class and inserts her own comments, "You know she's making a list and checking it twice, gonna find out who's naughty or nice." Patti reads from the text again.

In addition to Patti, an aide is also assigned to the class. During our data-collection period, there were three different teacher's aides.

The learners in the class were a mix of native-born African Americans and foreign-born adults. The majority were immigrants from various countries, including Guyana, Jamaica, Mexico, Morocco, and Sierra Leone. The reading levels of learners ranged from nonreaders to a grade level 4 as measured by the TABE. Their math levels were slightly higher but still at the lowest levels. Learners had various reasons for attending the class. Many wanted their GED diplomas. Some wanted to enter college. Others needed to upgrade their skills to keep their jobs or gain employment. Still others just wanted to improve their skills. Some learners were not clear about their future goals.

Classroom Context

As in many of the IGI classes we observed, learners entered the classroom, retrieved their folders, selected a worksheet, and began to work. The teacher moved from table to table, stopping at times to assist learners with their worksheet assignments, correcting, providing praise, and directing learners to another worksheet. In many ways, Patti's class was the most complex of the classes we studied. Although IGI was the primary mode of instruction, Patti also did whole-group and small-group instruction. Learners moved freely in and out of the class and there was a considerable amount of learner-to-learner interaction. The aides functioned primarily as assistant instructors.

When we first began to observe this class, learners worked in IGI mode for the first 15 to 30 minutes. Then the teacher introduced a full-group lesson. For example, during our first observation the following took place:

> Patti is correcting the work of a female learner. She says, "You rock! This goes into your reading folder." The teacher hands her a worksheet, "Now get ready to read this. Get ready to read. We're going to have some readers in here in a couple of minutes. Rose [referring to another learner], that will help you, won't it?" She walks over and helps another female learner. At the end of that encounter, "OK, you're rockin'. Now let me get you a number four" [meaning an assignment from book number four, *Reading for Context*].

Each time Patti finished helping someone, she handed them a worksheet which would be the focus of a full-group activity. In one 15-minute observation, Patti introduced a full-group lesson in which the learners took turns reading. During some of the classes we observed, Patti taught to the entire class for a considerable amount of time. At other times, however, the whole-group lesson was short or not conducted at all, and the class worked primarily in the IGI mode.

Teaching and Learning

In Patti's class, as in the other classes we studied, there were three primary engagement patterns: learners engaging in materials, learners engaging with the teacher, and learners engaging with each other. It is important to describe each. Teachers and aides were not the only ones with whom learners worked in Patti's class. Learners also worked with each other. In general, learners did not begin working on a new assignment until the previous one had been checked by the teacher or aide. Because the instructional staff worked with one learner at a time, it was common for learners to have to wait for help. Sometimes, learners utilized their waiting time by helping other learners with their assignments. Learners sat in close proximity to each other as they performed their learning tasks. When they worked on similar worksheets, collaboration often ensued. The

classroom norms and the teacher's role also contributed to engagement and are examined along with the three types of learning transactions.

Norms

The term that best describes the norms in Patti's class is *laissez-faire.* Learners came late, left early, and left the room to take breaks when they wanted so there was more movement in and out of the class than in most of the other classes we studied. Learners were free to interact with each other at will. At any given time there might be three or four pairs of learners helping each other or simply socializing. The aides were free to define their own roles as helpers and each of the three aides we observed functioned differently. When Patti gave whole-group lessons, learners were not required to pay attention and learners sometimes disengaged from the group lesson to work on their IGI materials. When the class was crowded the noise level was high enough to distract some learners from engaging.

Patti established the norms for her class and learners followed suit. A major reason for the laissez-faire nature of Patti's class was that she believed that adult learners should make their own choices and be responsible for their own decisions. Thus it was not her responsibility to establish norms that restricted her adult learners' behavior, even though at times she was critical of their behavior.

Learner Engagement with the Teacher

Teacher's Role. Patti was employed full time as a third-grade teacher and was trained in elementary education. She learned how to function in the IGI mode primarily through experience. In respect to IGI, Patti felt that it was very important to establish a comfortable environment for learners. This was true for both her third-grade learners and adult learners. There were differences, however, between how she viewed her role as a third-grade teacher and that of a teacher of adults. With her third graders she stated that she was:

> …more in charge of the hierarchy on what we're doing, we're going to do this today, we're going to do that today. Today boys and girls, we're working on the letter A. Tomorrow we'll work on the letter E, then we're going to do vowels.

With adults, however, she thought she should function more as a guide:

> I'm there just to guide them. But, in a way, I'm also there to push them, just to guide them because Wycleff [a male learner in the class] would do math the whole time. So I'm here to push him to say, "You know what? You're doing great in math. Let's move onto language now and to reading" because he needs a solid balance.

Patti also believed that because the learners were adults, they should be able make their own decisions about how and when they engaged in class. Thus there were no sanctions for absenteeism and learners left the room to take breaks when they wanted to.[2] During one of our data-analysis sessions, we showed Patti videotaped data of a class where learners came in late, left early, and left and returned to the class several times. Patti told us why she allowed this:

> Interviewer: [I]t seems that sometimes learners in your class can leave at will. You're not sanctioning them.
>
> Patti: They do. They come in and go out.
>
> Interviewer: And you seem OK with that?
>
> Patti: Yeah, I'm very flexible. They come in when they want, and they leave when they want. Some leave earlier.
>
> Interviewer: OK, and why do you seem to have that philosophy within your class?
>
> Patti: I don't know, I don't think this is a formal setting, you know. It's different if it was a regular elementary school or junior high or high school. This is an adult learning center. I'm aware that learners that are coming, the adults that are coming to the adult learning center are one, adults. Two, they may be holding down one or more jobs. Three, they have other outstanding obligations, whether it's family, and it's not that formal, but you know, oh, you're late today, you missed the first ten minutes, now I have to explain everything all over to you. Well, here's a paper, enjoy your time. Princess [a learner] comes in, she comes in for ten minutes and walks out, and then she thinks that she's there all night. She's not getting the full three hours, but she is attending.

Patti also described the accommodations she made for learners who could not attend the class when scheduled. Learners who were scheduled to come in on Mondays and Wednesdays, for example, could attend on Tuesday or Thursday if they wished:

> Interviewer: How do learners become aware of this?
>
> Patti: [A] couple of my learners have come in, and they said they have to go to the hospital, that happened two weeks ago. Again, the program was originally set up that on Monday and Wednesdays, the lower learners come, and on Tuesdays and Thursdays, the higher level [learners] but some people are working on Monday and Wednesday, or

---

[2] A formal attendance policy is in place at the Center. The Center is flexible within these guidelines to accommodate the busy schedules of adult students, which include complications stemming from work, family, transportation, child care, and other personal problems. Learners are encouraged to attend and often called or sent letters when they do not attend, but students must fulfill the requirements of the program that they are in.

because of their work schedule, they can't come in. And I've opened it up this year, and I opened it up last year. We're here four days a week, you want to come in on Monday, Tuesday, Wednesday, Thursday; you are welcome. You want to come any of the four nights, that's great. If you only want to come in on the odd nights, or the even, or whatever, that's fine.

Patti described her perception of the attendance policies at the Center.

The Center has a written attendance policy and the interviewer begins by asking Patti what she knows about it.

Patti: There may, there may very well be, and I am just not aware of it, or I just totally forgot it. I don't know, you know, these are good questions you could ask like [one of the counselors or administrators]. I don't, I just feel that's there's flexibility there and again because we're working with adults.

Interviewer: Because that must impact on how you teach and what you do, right? That's what I was wondering about.

Patti: Well, I'd like to think everybody came in, we could all start together, and then separate, and you know, you're working on one thing; you're working on the other— doesn't happen. It's not the real world. Andy's going to come in at 10 of 6, Rosetta's going to be there 20 minutes before school, at 10 after 5, and doing her own thing, and she's going to stay until 8:30, and walk me out the door. Andy's going to leave at 7 o'clock, and say "I've got church, choir practice now, I'm leaving, I'll see you tomorrow …." And you know hey, if you've got choir practice, and you came in, and you spent an hour with me, fine, then you would be encouraged….You know you're, good for you, you came in. I'm not going to sit here and say, you really came in for an hour, not three hours.…I didn't like it in the beginning, I love it now because I can see how, it's nonthreatening, before it was like, what do you mean, you're not getting here on time, you know? I wanted everybody to be on the same page, at the same time. That's not the real world. I can't even get that even now out of the other school kids. But, there is, it's nonthreatening. I don't know, you have to be aware of a lot of our learners, and where they're coming, and a lot of people have been turned off I think by education, and by the rigidity, and by the laws and rules and that you have to do this then, and you have to do that.

The "fluidity" in Patti's classroom extended to the roles of aides. We observed three different assistants working with Patti during our data-collection period. Each of them seemed to play a different role in the class. For example, the first aide primarily worked with a group of three to four learners, and when she was there, Patti rarely interacted with that group. However, when an extremely outgoing young man named Harry became the aide, he worked with everyone. He also did work that Patti may have been less comfortable doing. For example, Patti described to us how a learner, Andy, was reluctant to do higher-level math work although he was ready for it. Yet Patti was reluctant to

force him to take on the more difficult work. Harry, however, got one of the algebra books, started teaching Andy, and within a few weeks Andy had moved on to the GED class. Patti described another example in which Harry worked with a learner with whom Patti had a somewhat contentious relationship:

> I said to Harry I'm really uncomfortable; Kemal and I have not hit it off at all this year at all. I'm really uncomfortable going up to him, and giving him the work that he really needs to do. His reading is very, very low, and I'd like to encourage him on the reading, but I give him something like that, and he'll say to me, oh no, no, it's too easy or something, so I said, this is what, and I gave, I actually gave Harry the pass that I would like for him to work on this, and Harry said give it to me. And Harry went over, handed Kemal the paperwork, and he said, here, see this isn't work that you could do; I think you could handle this, I think you can do it, and Kemal just ate it up, he just ate it up. And I went to sigh, and I said how did you get him to do that? He said well I just went hi, I think this good for you, and I think you can do it. And I said OK, maybe that's what I should have been doing all along. Good! If it works great, and I thought that was great, and I thought that would be the approach I would use the next time I went to Kemal to do some work.

As with the role of the teacher, the role of the aide was open to interpretation and was fulfilled according to the inclination and talents of the individual.

Helping. In many IGI classes, learners initiate contact with teachers when they need help. In this class, however, Patti was often the one who initiated contact. Seeking to determine if learners needed help or to gauge their progress, she sometimes initiated engagement with learners as they engaged with their materials. For example, during one class session, the videotape data depicted the following:

> Sonia is quietly reading a language arts worksheet. She is using her pencil, eraser pointed down, to follow along as she reads. Patti has been circulating about the room and stops to peer over Sonia's right shoulder. She does not speak to Sonia. Sonia continues to use her pencil as she reads. She is also fidgeting with her earring. Patti has been looking over Sonia's shoulder for 30 seconds when she suddenly reaches across the table and picks up a large manila envelope that is to Sonia's left. Patti has put her arm in front of what Sonia is reading. Sonia puts her hand on her head and continues to read. Sonia stops reading and asks the teacher what she is doing. Patti says, as she begins walking to Sonia's left, "I'm looking. I'm trying to find the paper you did before that." Patti is now to the left of Sonia rifling through some papers. Sonia has re-engaged with her worksheet. Patti asks her a questions and Sonia also begins to shuffle the papers. Patti walks. Sonia stares at Patti as she continues to rifle through the papers. After approximately 40 seconds, Patti walks away without saying anything else to Sonia. When Patti is away from the table, Sonia re-engages with the materials.

In the one-on-one teaching/learning transactions characteristic of IGI, teachers had to decide which learners they would interact with, when, and how. All the teachers we

worked with had conventions for making these decisions and these conventions became part of the class routine. Moreover, these conventions were a very important part of teachers' role behavior, because they determined which learners would receive attention, when, and how often. Patti felt that it was part of her responsibility to "get to everyone" on a regular basis regardless of whether they had asked for her help. Consequently, as the above episode portrays, she sometimes initiated engagement with learners who were working individually when the learners did not expect it. Despite the idealistic goal of getting to everyone, this sometimes seemed to startle learners and may have interfered with a fluid transition from one form of engagement—with materials—to another, engagement with the teacher. Quite frequently, Patti interacted with learners because they requested her help, and in such cases the transition seemed to be more fluid.

In IGI, the great majority of one-on-one teacher/learner interactions were focused on the materials. Generally, in these interactions, Patti sat next to the learner to correct work, to provide help, and to assign more materials. A major issue for IGI teachers in our study was how much time to spend with each learner. Especially if the class was crowded, when teachers spent a considerable amount of time with one learner, other learners could be neglected. Perhaps in an effort to "get to everyone," many of Patti's one-on-one sessions with learners were comparatively brief. Sometimes, for example, she would stand near a learner and quickly help her or him by providing an answer. These interactions could last as little as a few seconds. For example:

> Patti is walking towards Lusala, who is at the same table as Leoni. The teacher stops, looks over Leoni's shoulder and as she continues walking towards Lusala, she points to Leoni's paper with her pencil and says, "i-n-g ending," Leoni does not look up. Patti moves on to Lusala.

In this case, the learner continued to engage with her materials and said nothing to Patti. Sometimes verbal exchanges were one-sided with Patti doing most of the talking. At other times, however, while a learner focused on the materials, Patti posed questions and the learner responded. The following illustrates how Patti worked individually with Gerardo. He had finished reading a passage and was answering the questions that followed in the materials:

> Patti is sitting next to Gerardo who is at a table by himself. She watches him as he answers the questions at the end of the passage. She is pointing at his paper. He has gotten an answer wrong. The teacher is pointing and saying, "It's not strong, it doesn't move." She makes gestures with her hands. He erases. She continues to correct his answers and provide information why the answer is incorrect. "That's a powerful force that can smack you in the face." Gerardo responds, "That's strong." She points to his answer and responds, "Yeah, that's not strong." Gerardo erases his original answer.

Patti and Gerardo continued to interact as above. She showed him his mistakes, identified the correct answer by pointing to it, and then explained why the answers were wrong.

Gerardo engaged with both Patti and the materials, alternating his attention from one to the other as Patti spoke. During this episode he erased his incorrect answers and provided short responses to Patti's questions. When Gerardo supplied the correct answer, Patti took it to mean that he understood. This encounter lasted for a few minutes, which in this class seemed about average.

As noted previously, Patti's routine was to "make the rounds," checking in with as many learners as possible. She corrected, provided answers, and sometimes demonstrated, but as is common in IGI, the materials carried the instructional content. Rarely did Patti teach in the traditional sense.

One of the challenges of IGI is that, because learners work individually and silently, it is often difficult for teachers to know if learners are having difficulties with their work. Leoni, for example, was having problems with compound words. She had been working on the topic for most of the class and had received some help from Patti and the aide during the first half hour of class. It was now 45 minutes into the class, and the following encounter, just more than a minute's duration, took place:

> Leoni says, "I'm mixed up." Patti notices and sits next to her. Leoni says, "I don't know what to do." Patti immediately begins to read and point to Leoni's paper. "This is someone, someone, some and then one." Patti erases what Leoni has written. She continues speaking, "Does that make sense? Someone. These are compound words. Any, a-n-y [she spells], any and then one." Leoni neither makes eye contact with Patti nor says anything to her. Patti watches Leoni engage with her worksheet for a few seconds. She then says, "You see how you're separating the words? Yeah, you got it," which is a typical phrase that Patti uses when providing praise. Leoni says, "OK, I understand. Thank you." Patti gets up and looks over Leoni's shoulder for a few seconds and watches Leoni fill in her worksheet. "Every, everyone. You got it." Patti walks away.

Although Leoni said she understood, she did not understand completely. Later Patti told the data collector, "She's having trouble with compound words so we're going to zero right in on that." Patti then found more work on compound words and gave it to Leoni. A few minutes later Patti again sat down with Leoni. Patti focused on the worksheet—pointing to words and saying them out loud. The materials included 24 clues to 24 compound words. The objective was to write the letter of the correct compound word next to the clue. Patti completed two of these with Leoni—she read the clue a few times to her, and told her to write the correct letter of the compound word in the space provided. The emphasis was on the correct answer on the worksheet.

Leoni was fully engaged with the materials and she responded to Patti's queries, yet every time she worked on her own, she needed help again. While Patti offered Leoni opportunities to practice creating compound words by providing her with a series of worksheets, Leoni's problem may have been that she did not understand the concept of

compound words, that she had somehow missed it in the materials or that the materials did not convey the concept successfully. While Patti knew that Leoni was having difficulty and then helped her with the materials, Patti may also have assumed that as long as Leoni was engaged, she was making progress, the assumption being that "if they keep working hard, they will get it."

When Patti perceived that learners' skill levels were low, those learners received more of her time than other learners. When asked about the length of time she spent with the emergent readers, Patti stated that, because more advanced learners were more able to work independently, she was able to focus on those she considered nonreaders. In this class there were two learners, Milton and Norbert, who were nonreaders. During one class, Patti sat next to Norbert for a good part of the entire session. When she was working with Norbert, the aide, Harry, took over. Both instructors circulated around the table when they could. Data was collected for a half hour in this class session. For most of that time, someone was working with Norbert.

The first lesson that Patti did with Norbert was an exercise on the short "a" sound. Because the photocopied materials she was using with Norbert were a little blurry, Patti placed the book from which the materials had originally been copied in front of him:

> Patti initiates contact with Norbert by saying, "Are you ready for me?" She sits and begins instruction immediately by saying, "Bag." She waits while he writes. He does not make eye contact with her. He focuses on his paper. Patti points to his paper and says, "Bag." Norbert erases. Patti points and says, "Bag, tag." They are working on the short a vowel sound and final consonants. Within a few minutes, they are working on the final "d" and "t" sounds. Patti says and points to Norbert's paper, "Bad, sad…bat, sat." Norbert is focusing on the paper. He is not writing. He repeats some of the words but…is almost inaudible.

Norbert appeared to be a little confused by the task but he worked independently for about five minutes. Then Patti walked toward him, looked over his shoulder, and pointed, "You have this to do, this to do and this to do." Norbert was being assigned a considerable amount of work. At times he disengaged for short periods when working independently, but usually he worked diligently. The following depicts Patti introducing the short "e" sound to Norbert. This took place shortly after the short "a" sound had been introduced:

> [Holding a notebook] Patti is standing next to Norbert…. Norbert is working on worksheets copied from that workbook. She stands next to him for about a minute and discusses his work with him. He says nothing and focuses on his worksheet. Patti sits down and holds up the workbook. Norbert now focuses on the workbook, which Patti is holding. She points to the book and says, "You do it by the process of elimination. This is a man. Does this look like a man or a woman?" Norbert leans forward, moving his face closer to the book and replies. Patti looks at the workbook, then at Norbert as she

interacts with him. Norbert looks primarily at the book and rarely looks at the teacher. He seems to be concentrating very deeply. Patti continues to teach. "Buh, bag." Is this a bag? It is a? After a few seconds, Norbert replies, "Band." Patti seems both surprised and pleased. "Band, yeah. Like a hand. This is a band, people playing musical instruments—a band." Norbert does not change expressions. He writes on his worksheet. Patti waits until he finishes writing, takes his worksheet and says, "This was the 'a' sound." She asks Norbert to hand her a stack of stapled worksheets that are to his left. "We did the 'a,' now we are going to go to 'e'…it has the 'e' sound, 'net,' see if that makes sense?" She reads, "Ben blank Ted use his sled." Norbert is supposed to put the word "let" in the blank.

Patti continued to work with Norbert for the rest of time we videotaped the class. As the encounter with Patti continued, Norbert became more relaxed and focused on the book, and looked at Patti more often. His facial expression indicated deep concentration and he became more animated with the teacher. Patti often gave out the answers before Norbert had the chance to answer. She also gave clues to help Norbert pronounce and get the correct answer, perhaps because she wanted Norbert to feel he was being successful.

Learner Engagement During Teacher-Fronted Lessons. Teacher-fronted lessons are lessons where the teacher stands before the class, or a smaller group, and delivers a lesson. During our first observation of Patti's class, and several times after, she introduced a teacher-fronted, whole-group reading lesson, saying,

> "OK. How about we read the stories aloud, now that you've had time to do them yourselves. That's good. I know Jasmine has been waiting for this. Even if you got 100%, it doesn't matter because we're going to go over the vocabulary words. Stay with me. We did number one, so let's start with Story 2. You were going to read for us Peggy." She reads aloud.

During this activity, learners who participated read aloud, followed along as others read, and filled in the correct answers in their worksheets. There was, however, one table in the corner that consisted of Leticia, Princess, and another learner who continued to work on math while the reading lesson took place. Patti did not demand that learners pay attention to the group lesson, and Jasmine, the aide, continued to help this group with their IGI work. Another learner, who continued to work on his math while the lesson took place called someone on his cell phone, and in Spanish, spoke about the math problems he was doing.

When the group lesson began, most learners took part in the lesson and were fully engaged. Some learners never read aloud, however, and only followed along. Others read more than once. Some learners read fluently; other struggled with the text and received help from the teacher and learners. Initially, engagement during this activity was quite high, but after a while, engagement began to wane. By the time 15 minutes had passed, Patti had introduced a third exercise to the group. At that point, learners were less focused and some of them started to leave the room to take a break in the middle of the

lesson. Although at times when Patti conducted a whole-group lesson learners remained engaged in what she was doing, more typically learners began to disengage after awhile and to work on their IGI materials.

As with Silvia's class, learners knew that IGI was the "name of the game" and that if they were going to progress it was going to be through engaging in IGI, not the whole-group instruction. As is characteristic of IGI classes, the learners worked on different materials at different skill levels. Thus progression through the materials provided continuity to instruction and organized engagement in a meaningful way on an individual basis. In this context, the whole-group lessons generally represented a discontinuity, a diversion that was marginally useful to the learners. Thus they disengaged from the group and re-engaged in the individualized activities they considered to be more meaningful. In Patti's class, learners were free to choose and choose they did.

The situation was different when Patti linked group instruction to the individual work learners were doing, when group work supported IGI, rather than being discontinuous with it. For example, Andy, and then Romesh, were working on math problems:

> Andy has his math book open and is working on a problem. He is pointing to items in the book with his pencil. He gets Patti's attention by saying, "I'm trying to figure out, I know this is wrong." Patti walks over to him. Patti is standing next to Andy. She is holding a math book. His book is on the table.
>
> Patti says to Andy: "Which one is giving you trouble?"
>
> Andy responds by pointing to an item on the page and says, "This one." He continues, "I know I'm supposed to be going towards the plus sign, right?" Patti is looking at the book with concentration. She moves to the chalkboard and says, "Minus 69 and plus 24." Andy says, "I just can't get the answer."
>
> Patti is at the chalkboard writing and Andy is focusing on Patti at the chalkboard. He says, "I have 25 and I've gotta get to 64 this way." He swings his arm to the right. Patti proceeds to give a four-minute, teacher-fronted math lesson to Andy. There is a lot of give and take between them until he gets the correct answer. After the problem is worked out, Patti begins making the rounds of the class again….Patti is back with Andy. She is working out some math problems on the board. Andy is transfixed and Romesh is also now paying attention…Andy and Romesh are together working on math problems at the chalkboard.

In this example, Patti's lesson helped the learners to engage despite their frustration.

Learner Engagement with Materials

By and large, most of the learners were intensely engaged with the materials that were assigned to them. Learners were observed during numerous occasions completing their worksheets, having them corrected by an instructor, and then moving on to other worksheets. Moreover, the nonverbal behavior of learners as they interacted with materials indicated that they were engaged with them. Learners often developed personal routines as they engaged that made them more comfortable or supported their learning. They adopted practices such as moving their lips, following along with their fingers as they read, circling or underlining text as they read, and writing on scrap paper as they calculated their math problems. Rosetta, who worked as a teacher's aide in a public school and needed her high school diploma to keep her job, described how using scrap paper helped her with math calculations:

> Rosetta: I have a scrap paper that you know, to add or subtract from, make little marks, and count them, subtraction, you know. I have my own paper, scrap paper.
>
> Interviewer: OK and what have you learned in this class about multiplication?
>
> Rosetta: The way I do my multiplication is like sometimes I don't have it [in] my brain like, you know; know them all, I just write them down like one time, maybe 2 times 2 on a paper, like that.
>
> Interviewer: OK, so, on a scrap paper?
>
> Rosetta: Yes.
>
> Interviewer: And then—
>
> Rosetta: And then I put the number here [meaning the answer sheet].

The following is an episode of Rosetta quietly engaging with her materials. The data collector's field notes indicated that on this date, "everyone was working heads down." During this encounter the camera focused on Rosetta for almost a minute:

> Rosetta is sitting at a round table with two other learners. She is reading a worksheet. She holds the worksheet with one hand and it is halfway up to her face. It is not lying flat on the table. In the other hand, Rosetta holds a pencil. Rosetta moves her head from right to left, ever so slightly, as she reads. Her hand movement is also from right to left as she points to words with her pencil as she reads. She does not look up from her worksheet.

During the same data-collection episode, the video depicted learners engaging with their materials alone without the help of instructors or peers:

> Gerardo has just had his math work checked by the teacher. She suggests that he do some reading, rather than work on math. He has an open workbook laid flat on the table. He holds a page with one hand underneath it, so it is partially turned towards him. He reads silently. He exhibits no head or overt eye movement. Norbert and Sonia are sitting at a round table across from each other. Each is working on math. They focus only on their math sheets. Both are writing with pencils and using scrap paper. They do not look at each other. Ian has one hand on his head as he continues to work on math problems. Sonia turns a page. She writes on the answer sheet, erases, and then writes again. Rosetta and Leoni are sitting at the same table. Leoni is staring at a worksheet lying flat on the table. It is a reading passage with multiple-choice questions. She looks at her watch, and then begins reading the passage again.

The scene described above was very typical of how learners engaged with materials in the class. Learners were accustomed to the routine of coming into the classroom, getting their worksheets, and silently beginning their work. This solitary engagement with materials could last for as little as a few minutes before engagement shifted from the materials to a teacher or a peer. Just as often, however, learners worked for 15 minutes to a half hour without any verbal or physical exchanges with anyone else. Learners' engagement with materials was by far the most common teaching/learning interaction in Patti's class.

Engagement with Other Learners

In all of Patti's classes we observed, learners consistently helped each other. Helping episodes were almost always related to the materials they were working on. Learner-to-learner interaction was also voluntary. Although Patti supported learner/learner collaboration, it happened naturally; she did not organize it. When learners collaborated, they typically did so quietly at their tables. In the few cases where learners talked about something unrelated to class work, they quickly re-engaged in their work. The following episode is an example:

> Jeneba and Kaye appear to be talking about Kaye's work—Jeneba is pointing to Kaye's yellow piece of paper. The yellow piece of paper is passed on to Jeneba—now I can see what it is—Kaye has shared her phone number and address with Jeneba. After Jeneba finished reading the paper, they both were back on-task with their class work.

> Sadie leans over to Rosetta at table 1 and asks her for help. Sadie watches everything that is happening at Table 1.

> Jeneba and Rosetta are working together—they are reading aloud. Kaye has now stopped working, has closed her book, and is straining to see what Jeneba and Rosetta are doing. Earlier Kaye and Jeneba were partner-reading and Kaye was very much on-task.

> Kaye's phone rang and she jumped up and left the room. Jeneba and Rosetta are reading together again. Jeneba is sitting in [between] Kaye and Rosetta. She has been working off and on with either Kaye or Rosetta during the last half hour. Rosetta is pointing with her pencil and appears to be guiding Jeneba's reading. Kaye returns from her phone call and shares the result of her phone conversation—some giggling ensues—both Jeneba and Rosetta are most attentive.
>
> After the phone call information had been shared, Jeneba and Rosetta are holding a book up and both appear to be coaching each other through the reading. Kaye is working independently but keeps looking around the room—she doesn't appear to have accomplished her task as yet.
>
> Jeneba is working in *Using the Context B* book and leans over to Rosetta again and asks for clarification. There are a lot of interactions at this table throughout the evening.

In this case, the brief socializing and the interruption from the phone call did not forestall engagement: The learners instead remained engaged in their task by keeping each other company as they worked.

Engagement Shifts

More so than in most of the classes we studied, learner engagement in Patti's class shifted a good deal from learners engaging with materials to learners engaging with Patti and the aide, to learners engaging with each other. Patti initiated some of the shifts; learners initiated other shifts. This is how Leticia engaged, disengaged, re-engaged, and shifted her engagement during one hour of class:

> At 6:30, Patti led a whole-group session on an exercise entitled, "Throw one away" which consisted of finding the odd word from a selection of four. Leticia is very active during this activity. Patti calls on learners based on the show of hands. She asked Leticia, who had already been called on, to wait her turn. Leticia reminded Patti that she had opened the floor to everybody, and since nobody had volunteered, she felt she could have a second chance….The word set they focused on to deal with consisted of "soiled, dirty, filthy, and mud." The correct choice "to throw away" was mud, because mud was the sole noun. Leticia did not understand why mud should be excluded, because to her they all meant the same thing. The only word she felt was inappropriate was "soiled." Patti explained the meaning of soiled, using the example of a diaper or a child wetting himself. She discussed the meanings of the other words, but she did not mention the fact that "mud" was a noun while the others were all adjectives.
>
> 6:45: Leticia is sitting at a table with Milton and Princess. She is working on "Drawing Conclusions" and sometimes asks Jasmine for help. She speaks a lot with Princess, often encouraging her to get on with work.
>
> 7:00: Patti declares a break for those who want it. Leticia is out the door like a shot.

7:10: Patti is busy with Milton on table 4....He is trying to explain to Patti that he wants the counselors to hear about his test score so that he can move to a higher level class. He says this a few times and she does not understand as all she keeps saying is, "Milton you're really rocking; now you can do the next level." He repeats himself a few times and Leticia translates (from English to English) for him and then Patti says that the counselors will know as soon as he has finished all the levels when he will be ready to move on.

7:20: Leticia works individually on her materials for a while and then leaves her table briefly to go to Jasmine [the aide] to get help with reducing fractions. She listens to what Jasmine says and follows the work done by Jasmine on her paper. Then she returns to her seat and continues calculations on her own.

7:30: Princess leaves the room. Leticia asks her to come back, as does Jasmine. Jasmine does not look happy with Princess leaving like that.

Patti forms a group at table 1, with Milton, Iciline, Rosetta, Jeneba, and Kemal…Those not sitting at the table, like Leticia and Princess, repeat the words after Patti says them.

7:40: Princess is called out by a friend and she leaves. We can hear her laughter and their conversation in the corridor. Leticia is the only one who looks up and seems upset that Princess has left. Jasmine works with Leticia on her math…Jasmine notices that Princess has disappeared. She tells Leticia, "This one right here, she's gonna hear my mouth. Tell her to ask me for a recommendation!" Leticia says she told Princess to sit and work. There is some social chitchat between Leticia and Jasmine about restaurants. Leticia tells Jasmine that there is a good restaurant and launches into a discussion about the quality of food, the price, and the directions to the place. Jasmine now leaves the room, presumably in search of Princess. Leticia returns to her work. Leticia counts loudly as she works. She does look distracted and chews slowly on her pretzel as she looks around.

In one hour, Leticia engaged in these ways: as part of a whole group, in a helping episode with the classroom aide, by helping another learner communicate with the teacher, in working alone, and by being part of a small group. During this hour she also took a break out of the classroom and spent a few minutes socializing with her friends. She was clearly engaged for most of this time, though the sheer quantity of engagement shifts make this episode of engagement distinct from what we saw in other classes.

Conclusion

The classroom context and the teacher's role definition combined to create a very complicated, busy classroom. The learners were in the room due to a variety of motivations and had varying academic needs. Patti defined her role as being very hands off (as she didn't seek to interfere with learners) and at the same time extremely interactive (she initiated helping transactions, grouped learners, and delivered whole-group instruction). As we saw with Leticia, shifts in engagement could be constant, with each type of engagement lasting only a few minutes before another shift occurred.

However, there was clearly a high level of engagement in this classroom. The norm of laissez-faire, which seemed to be a direct product of the teacher's role definition, left space for quite a lot to happen. Learners worked with each other and helped each other; aides taught and helped keep learners focused if they chose to; learners worked alone. The "anything goes" nature of this classroom, as disruptive as it may look to the observer, did not seem to interfere with the central fact that learners came to get their work done and did in fact remain engaged.

The AHS and GED Case Studies

Along with the three ABE classes, we observed two adult high school classes and one GED class. Bill teaches the high school's daytime English courses and Diana the daytime reading courses. Bill and Diana share a classroom and have most of their learners in common; our observations of these classes are combined in one case study. Ray teaches the evening GED course.

The Center has two options for learners ready to work towards their diplomas: the GED program and the adult high school. The counselors and the learners together discuss these options and decide which program is most suitable for the individual learner's needs. Thus, while these programs are very different, there are parallels between them and the pictures of engagement that emerge from each share core similarities. First of all, learners in both programs tend to have strong, specific goals. Second, the programs themselves have strong and clear goals: the diplomas. Finally, and this is related to the clarity and strength of individual and program goals, both classrooms are highly functional and driven by norms that revolve around efficiency.

<u>Bill and Diana's Classes</u>

The Adult High School

The adult high school is an alternative high school program in which learners earn a regular school district diploma. Learners join this program at the discretion of counselors, who look at an individual's goals, test scores, and earned high school credit to assess whether they will be more successful in this program or the GED program. The average age of learners in the program is 30, but the range of ages extends from teenagers to seniors. Classes include English, reading, history, sciences, health, art, math, and electives. Classes are offered both in the day and the evening during the school year. Enrollment is open and continuous. The group classes have formal attendance requirements while the expectation in the IGI classes is that students will come in on a regular basis during class times. Learners who enroll in the adult high school create an educational plan with their counselor, which they update at least twice yearly. For this study, we observed two sets of adult high school classes, one set in reading and one that

included both literature and writing. Both used an IGI format and met concurrently in the same room.

The Classroom

The adult high school used one large classroom for their reading and English classes. These classes both met Mondays–Thursdays, from 9:30–12:00. Bill taught English 1, 2, and 3, and Diana taught the five reading courses. Learners arrived to do work for either one or both teachers, and were free to enter and leave the classroom at any time during the class session.

The classroom itself contained six tables for learners. There were three computers along the wall opposite the door. Materials were housed in crates against one wall, and organized so that learners had access to them. Learner folders contained current work and progress charts were similarly stored. The teachers shared a desk in an alcove (created with filing cabinets and bookshelves) but most of the time the teachers were moving around the room and working with learners at their seats. The walls were decorated with posters: "Read" posters featuring celebrities, an EFF wheel, a poster explaining figurative language, and maps. Photos of learners covered a column by the teachers' desk, and pictures of recent graduates were displayed. The room was typically crowded, with all available space used. When the class was full it could be noisy and full of movement. For some learners, this classroom was an unofficial "home room," a place to sit while waiting for other classes or for a ride home. It was also common for learners to attend or not depending on their overall high school schedule, whether, for example, other classes were meeting or cancelled. There was no official break time, so learners also left the room for a break when they chose to. There was, therefore, a considerable amount of movement in and out of the room. It could also get noisy, as many different learning transactions occurred simultaneously.

Teachers, Aide, and Learners

During this Monday–Thursday class, Bill taught level 1–3 English, courses that consisted almost entirely of writing assignments. The first two were short-story based, and the last was entirely learner writing. He has had 20 years experience teaching at the Center, where he began his career as an educator after earning his MA in adult education. His teaching style has developed over time, rooted throughout in the context of working with adult learners. He was a laid-back, friendly teacher, who seemed genuinely interested in his learners.

Diana had taught the reading courses for 15 years. She was often the first teacher to work with a learner entering the adult high school. Before coming to the Center, she had experience working in an IGI setting with small children, remedial junior-high

learners, and with adults. She was a serious teacher, soft-spoken, efficient, and organized, who often worked late to accommodate learners.

The classroom aide was a young woman named Nina. Nina moved between Bill and Diana's room and the math class, and was generally in the room only once or twice a week. She was more comfortable teaching math than the other subjects, and in fact this is what we generally saw her helping learners with. Otherwise, she corrected learners' work, and administered placement tests.

Learners in this classroom varied greatly in age, ethnicity, country of origin, and academic level. This class included learners just beginning in the adult high school, as well as some who were close to graduation. Learners came to the program for different reasons and at different places in their lives, and so the group included some who have completed their secondary education in their native countries, as well as United States learners whose educations were interrupted. Marie, one particularly diligent learner, was a Haitian immigrant who had been in the United States for 12 years. She finished her secondary education in Haiti, and taught in a convent school there before immigrating. Now she is a nurse's aide and is pursuing her education in order to become a nurse. She described the reading, essays, and math work she was assigned as a reminder of her education in Haiti. She was attending the adult high school to brush up on her skills, and attain a United States diploma. Mabinty was another immigrant who finished her secondary education in a West African country but needed to attain her United States diploma in order to go to college.

Jesse and Lydia were returning to high school after dropping out as teenagers. Lydia left school because she was pregnant, and Jesse due to what he just described as "trouble." All four of these learners, as with many others in this classroom, were very determined, and had very clear ideas of how their diplomas would help them achieve their goals.

Motivations differ, of course, and while these learners were extremely goal-driven in their pursuit of their diploma and future career, others had incorporated this program into their daily schedules, and attended on a long-term basis. Alice, for instance, was an American learner who seemed to embrace the school routine, though she didn't speak of a particular ambition. Jeremiah, another American, had been attending the program intermittently for 10 years, arriving to work on his writing and reading but less interested in other components of the adult high school program.

Teaching and Learning

Norms

Unlike other classes in our study in which learners established many of the norms, this class was governed by norms created and maintained primarily by the teachers. The

learning transactions in the class resulted from IGI and the system the teachers had established for helping the learners. Bill and Diana both made an effort to create a welcoming atmosphere for learners and to provide them with whatever help they needed to proceed through the materials. From there, the responsibility for engagement lay with each learner.

Efficiency was the overriding principle that governed the norms in the class. The focus on efficiency derived from the goal-driven nature of the program. Learners were there to do the work necessary to acquire their high school diplomas. The efficiency of the classroom was evidenced by the norms of keeping busy and working independently.

Keeping Busy. Learners were always expected to have something to work on. If a learner was having difficulty, and it was not her turn with the teacher, she was expected to move to another task while waiting. Learners also, at times, helped each other in order to facilitate moving on with their work. While consulting each other for help was normal, it was unusual for learners to socialize while in the classroom. Many learners explained to us that socializing was a waste of class time and should be saved for after class.

Bill and Diana each had a formal system for getting around the room to help their learners and keep them busy. They also scanned the room to identify learners who needed help. They seemed to base their assessment of this on two factors: whether learners appeared engaged in their work, and whether there were learners who, based on past experience with them, they suspected might need help. When they scanned, they asked themselves, "Does everyone have something to do?" and "Does everyone know how to do what they are doing?" Diana, for example, took time from helping learners on her help list to check in with others:

> Diana finishes with Li Yan and walks around checking in with other learners. She makes sure Alice remembers what to do on her worksheet, and gives her a pat on the shoulder. She asks Runi if he needs her help today but he says he is working for Bill. Bill then calls out to Diana that Runi is progressing—he is finishing English 3. Diana next checks in with Kiesha, who has not signed in on her sheet although she is doing reading work, but Kiesha doesn't want help. She checks in with Ahmad, who is also fine.

Because the adult high school class was a large class where learners worked on separate assignments, the norm of keeping busy was essential for the class to function. Although the teachers set the climate of efficiency, it was followed by the learners without hesitation because they wanted to progress as quickly as possible. The teachers did not formally state the "keeping busy" norm; rather, students learned it through observation.

Working Independently. Working independently was a natural corollary to the norm of keeping busy. Learners understood the IGI system and participated by following its

routines and procedures. Learners accepted being left to their own devices between helping episodes.

Occasionally, however, a learner would violate the norm of "working independently," either because she had not fully internalized it or because of a lapse of memory. One learner, Marita, had particular trouble learning the classroom procedures associated with working independently. She called out across the room to Diana, who was working with another learner, "Diana, I don't know what to do!" Her declaration that she did not know how to work independently resulted in an intrusion on another learner's time with the teacher, and the loudness of her interruption was unusual and jarring. When Bill and Diana were asked if Marita did something she was not supposed to do, they answered:

Diana: Well…

Bill: I mean, it's not that you're not supposed to do it, but nobody does it.

Bill's comment illustrates the unspoken nature of the rule about not interrupting: This is not something teachers explained to learners but instead a behavior that learners engage in naturally, possibly because they had observed other learners' behavior.

Although violation of class norms was unusual, in one class we observed a learner who violated the norm of working independently by becoming too independent. Adnan, who normally attended regularly, stopped showing up for class. Instead, he dropped by intermittently just to see the teachers and to take work home. While there was no specific attendance policy, learners were expected to make contact with the teachers often so that the teachers would know how they were progressing with their work. Finally, when Adnan arrived one day to get take-home work from Diana, she told him that what he was doing was unacceptable. In regard to this episode, Diana commented that the class "is not a correspondence course."

Although the subjects they taught and their personalities were very different, Bill and Diana's teaching styles were quite similar because they were both influenced by the adult high school requirements and the IGI context. Both Bill and Diana guided the learners through the materials. Both taught, corrected, clarified, oriented, and praised their learners. Unlike a traditional class in which the teacher directs the learning process, in this class learning was directed primarily by the IGI materials. Learners were expected to progress through the materials, using the skills and strategies they possessed, with the teachers functioning as guides. When a learner experienced problems—because she needed further work, needed clarification, or did not understand the directions of the materials—the teachers stepped in to diagnose the problem and to offer help. As long as learners progressed through the materials, they needed little attention from the teachers.

Keeping busy and working independently were functional in this classroom because they were supported by teacher help—learners could rely on getting appropriate and timely help when they needed it, and could otherwise work independently.

Learner Engagement with Teachers

Teacher Role. Diana described her role as that of a facilitator. Her interactions with learners showed her to be facilitating their engagement with the materials, in her case the requirements for the reading courses. Diana explained:

> I feel like I'm a facilitator to help them learn. I'm there to guide them through the program and to help them understand anything that they really need help with. But I try to really set it up so that they have a lot of freedom and they can work as slowly or quickly as they want.

Her teaching interactions with learners followed a general format. Diana first checked in with the learner to see how he or she was doing in general, asking about something going on in the learner's life or just saying hello. For example, when sitting down to work with Daisy, Diana saw that she had a cold, and commiserated with her before looking at her work. In this way, Diana engaged the learner by degrees: first in the helping episode itself, and second in reviewing the work.

Diana's greetings were usually brief and always friendly. She then looked over the learner's work and either corrected it from an answer key or answered a question the learner had. If necessary, she provided a mini-lesson on the skills involved. Regardless of the type of help needed, Diana seemed to give the learner she worked with her full attention and as much time as she or he needed. Her explanations and instruction varied greatly from one learner to the next, depending on the learner's familiarity with the classroom system and the content of the material. Before leaving a learner, she made sure the learner knew which work to move on to next. In this way, she was facilitating further engagement in a way appropriate to IGI: making sure the learner knew what to do for now so that he or she could work. Making sure directions were clear was a way to forestall the learner getting stuck.

Diana's transactions with learners were typically concise. This was due to the norms that had developed around IGI, a situation in which the teacher needs to get around the room to as many learners as possible each day. When she explained a new kind of writing assignment to Li Yan (a "Dear Abby" exercise designed to fulfill the persuasive writing component) she showed her what to do, how to do it, and what to do next, in just a couple of minutes of explanation:

> Diana: OK, do you read the paper at all? Do you read the paper?

> Li Yan: I don't read the English paper.
>
> Diana: No, OK, this will be a really fun thing for you to start to do, to read the paper, OK?...Look at this part here, advice, B5. This is also a very good way for you to learn about the American culture. This section here is called Annie's mailbox. So here's the person…and they tell about the problem they have, and they sign their name, not their real name, they make up some other name, and then this person writes a letter back to them and gives advice. OK? So it's very interesting. Each time Annie writes back with advice. All right? So I'm going to leave this here for you to look at this, so you have an idea about it. And this is very interesting—all kinds of young people like you, people my age, older people…all different kinds of problems in life, and it's fun to read. So after you've read this a little bit, you can decide which one of these you're interested in, because you are going to write back advice, just like this lady does.
>
> Diana shows her a couple more examples.
>
> Diana: So after you read this, to get the idea, you can look through this folder, and you choose which one you would like to write advice back to, like you're the expert.
>
> All right, so this is fun. You think you're going to like this? Yeah, it's fun, it's good. So you'll do this first, and then you'll look through here…just don't look on the back, cause on the back is the advice she gave…just about the same length as it would be for a paragraph, just a medium-sized piece of writing.
>
> OK, so you understand?
>
> Li Yan: I understand.
>
> Diana: OK, great. I'll leave it right here.

Diana's language was designed to promote engagement. Her suggestion that the exercise was fun, and that it would relate to Li Yan's own life, was a way to get her interested in the material. Li Yan, though fairly new, shy, and a tentative English-speaker, seemed to know what to do. In other situations, Diana would spend a good deal of time helping to orient a learner to a new task. In preparation for helping Oscar do a worksheet on using the table of contents and index of a book, for instance, she gave him a lengthy mini-lesson on how to navigate through a textbook:

> Diana: Now, this assignment here is based on a copy of a real book, and I want to show it to you in this book…OK? In front of all these content area books, that's right, a table of contents we call it, where they list the chapter, the title of the chapter, and the pages where each of these individual topics are discussed in the book. All right, chapter one, all the way up here, to—look how many chapters, this is a very long book, 38 chapters.

Oscar: 38 chapters. That's the page number?

Diana: That's the page for that part of that chapter.…Now, I know you've worked in the hospital before, in a nursing home?

Oscar: I worked in food…

Diana: You worked in the food department?

Oscar: Oh, yeah. I used to cook the food, yeah, for _____Medical Center.

Diana: Excellent, so you would probably be very interested in this book then, chapter 38, "Career in food and nutrition." All right? So you would go right to this page, page 571. Now, perhaps you're interested in this one, "Getting a job." OK? So in that case, what page?

Oscar: Page 582.

Diana: 582. OK, let's look at it, 582…and it should be right here—look, the same thing, exactly what it says, "Finding a job isn't easy, it takes self-confidence, enthusiasm, hard work, know-how and sometimes luck." So then you could go through here…

Diana interrupts herself to point out an example of a business letter, which Oscar had recently been working on.

OK, so this is the table of contents. Now, perhaps you are very interested in…how about, you want to specialize in nutrition. And you're not sure what chapter is talking about that. You can look in the back in the index, under "n" and—think of how nutrition is spelled— here it is, and then look up that section, and then it will tell you…careers in nutrition would be which pages?

Oscar: 571-579.

Diana: There you go, and that can tell you…so in the back, these are all the topics…

Oscar: The index…

Diana: …that are covered in the book, in alphabetical order, where the front is not alphabetical order, these are organized by topics…

Oscar: …these are topics, I look here if I'm looking for the topic, I look in the index for alphabetical order in the back…

> Diana: So now that you've seen that in a real book, now we can look at this. What kind of book do you think this is? From what you just read?
>
> Oscar: I think it's about…about the moon and stuff?
>
> Diana: Right, right, exactly…so based on that, now what we can do is answer the questions…
>
> Diana and Oscar do the practice question together, and Oscar chooses the correct chapter. They do a question together.
>
> Diana: All right, that's how you do it…
>
> Oscar starts working on the next one and Diana helps him use a process of elimination to find the answer.
>
> Diana: Would you like to try the rest of these alone? OK, and if you get stuck on one, put a little question mark next to it, and I'll come back to it.

Diana concluded the lesson by making sure Oscar understood how to check and record his answers, and then moved on to her next learner.

Diana's teaching encounters with Li Yan and Oscar were an expression of the way in which she defined her role. In each case, she was introducing the learner to a new exercise. As a facilitator, it was her role to give just the amount of help necessary for the learner to be able to engage independently with the materials and to ease the progress of the learner. The curriculum was set, and it was Diana's job to allow the learners to move through it.

Bill's interactions with learners appeared very different, although he was similarly guiding them through their completion of the materials. Bill's teacher role was also that of a facilitator. In terms of his facilitation style, Bill functioned as a guide, in that he modeled the process, gave advice, and showed learners the way to do the work. Because he taught the writing courses, the help Bill gave learners was of a different nature. Since Diana focused more on getting her learners successfully through a predetermined set of materials, her role was to keep learners on track. If they strayed, she would help them with their problem and get them back on track. As a teacher, she organized learners in their progress through materials. In contrast, English 1 and 2 are short-story based, and learners wrote in response to pieces they had read. English 3 is entirely made up of learner writing. Often, then, we saw Bill discussing stories with his learners. His role was to guide in that he led by example, modeling for learners ways to talk about writing, and ways to turn one's own stories into formal pieces of writing. He tended to encourage personal writing, and was often drawing out a learner's stories as part of his teaching. He

also shared his own personal experiences with learners. Bill explained in an interview that it is his understanding of adult education that leads him to discuss personal experiences with learners, and not limit his teaching to the content of their work. He told us that in his view, a traditional high school should focus more on content, and an adult high school more on the learner as a person:

> So I try to build into everything I do, almost half, or a little less than half, for people to just share their experiences or their own ideas. And I think that's what makes it work as well as it does. And also humor. Because I think in many cases we don't have folks who find this generally speaking an easy process. It takes a while, you have to make a lot of sacrifices and a lot of times people in their environment don't really think it is too important. So you might as well have a little different approach along the way to keep them coming. I mean, I wouldn't want it otherwise. You mean get out of bed on a sleety February morning to come discuss short stories? Jesus…you have people walking through this crappy weather with carrying bags, book bags? Good lord, I mean, you got to respect that.

Bill was consciously engaging with the learner as well as the work. By doing this he helped keep the learners engaged on the most basic level: coming back to class. Unlike Diana, who focused intensely on one learner at a time, often speaking very quietly, Bill was loud, and tended to draw others into the conversation, those at the same table and sometimes the classroom at large. As far as Bill's response to learner writing, he tended to deal first with content and then with the technical aspects. This meant that when Bill sat with a learner to go over his writing, we usually heard them discuss the plot, the truth that inspired the writing, or the piece's better qualities. When Bill sat with a full table of learners to read a couple of Adnan's papers, he created conversation around the papers' interesting points. The first paper was about Adnan's native country. Bill read the paper and then said to Adnan:

> Oh, this was so good. I haven't received a paper yet, until this one, that gives a good overall picture of the country, its location, sense of geography, about the population…This is fascinating, all the information about the different tribes…fascinating. Because I know some of this, but nobody has ever presented it in a complete way like this, so very good job on this. And I didn't know this [how the country got its name]…so that's a nice feature. People who have chosen to write about your country haven't chosen to put this in. Why did you decide to put this in?

Bill then turned to the two Haitian immigrants and asked them to explain why their native country is so named, which started a conversation at the table about the histories of the learners' countries. He then picked up Adnan's second paper, about coming to America, and teased him:

> Bill: And you have…ah, oh, good: "Coming to America." You were on the boat for how many months?

Adnan (laughing): Noooooooo…

Bill read the paper, stopping to clarify a point. He then got to a part where Adnan evidently discussed returning to his country, and asked, "So this is a plan of yours, to go back?" Adnan answered yes, he planned to return permanently. Bill was interested in this idea and began asking the other learners at the table, and then at the next table, if they planned on returning to their native countries. Each learner said yes. The learners then began discussing the difficulties of succeeding in their own countries, and making comparisons between their experiences. The conversation ranged from this, to the origins of voodoo, to class differences, the oppression of the poor worldwide, to revolution, and then died out as learners returned to their tasks. Bill returned to reading Adnan's paper, finally commenting "good job" and discussing with Adnan which assignments he had fulfilled and which he had yet to do. These two papers satisfied the requirements for narration and description, and Adnan would next have to write a narrative with dialogue. Bill explained this to him before he moved on, advising him to begin with only two people talking, and promised to help him once he got started.

After dealing with content, Bill often took the learner's work with him to comment on specific mistakes or points for improvement while the learner went on with other work. If the piece was to be revised, they would talk about editing and rewriting at a later time. Bill's teaching encounters were interlaced with jokes and storytelling. The social element to his interactions with learners was hard to separate from his teaching, as he was often guiding learners to create writing based on their personal experiences. This was so for two reasons. The first has to do with course content: because Bill teaches writing his instruction is personal. To engage learners academically, he must talk to them about their thoughts and their lives. Secondly, his instructional style is inseparable from his own definition of his role. Bill sees his job to make learning interesting, personal, and fun, and to keep learners coming back.

Praise. Praise was another component of the teaching-learning transactions in this class. Both Bill and Diana sincerely praised their learners for doing well, and learners accepted their praise as an indication of progress. This was perhaps because praise was not routinely given, but was a product of the teacher's genuine appreciation of learner work.

Diana and Bill both interspersed their teaching with praise, as we saw when Diana worked with Oscar and Bill responded to Adnan's papers. Occasionally, either would be very impressed with a learner's work and would express this clearly. In this encounter with Jesse, Diana was obviously genuinely impressed with his writing, and told Jesse:

> I love your sentences. They're very creative.…Most people just sort of throw something together to get the words down, but I can tell you really put a lot of thought in there. OK, now that's your third one, right? One, two, three…so we can mark that off. OK, great. Now what do we have here?

Diana reads over some more work.

OK, good…excellent, very nice. I like the way you organize it, very clearly. Here you're saying that this is your opinion, and then you're going to support it with facts. And this is a very interesting one here, that most people don't bring up the fact that it really is against the law, that's good, too. Now look at this verb here. If this is the subject, what verb would you want here? Good, that's the only thing.

Diana goes over the point and some of the punctuation.

Great. You know, your style of writing is a nice combination of really doing it in a formal way, in that you know the right format to do it, and yet you have a casual style, but not slang. It's almost like you're speaking to someone as you're writing, and yet it's organized so well that it really is like a formal piece of writing. It's a very nice combination. Most people aren't able to do that.

Jesse, who was evidently very pleased with Diana's feedback, responded by telling her that when he was in second grade he won a writing competition. In an interview, he conveyed his confidence in himself as a reader and writer, explaining that he didn't need to ask Diana or Bill for help very often because he is good at these subjects, a feeling that Diana was clearly reinforcing.

Bill similarly offered emphatic praise when he was truly impressed with a learner's work. After sitting down next to Oscar and reading one of his papers, Bill said:

"Wow! What an experience!" Oscar explains that it took him two days to write it. It is apparently a personal narrative, including his experience dropping out of eighth grade, and of his drunken father. Bill stops reading and tells Oscar he wants to count the work as two papers. Oscar asks why, and Bill explains, "Because it's so good. It's powerful! The information you chose to put in, it's fascinating. Some people have interesting information, but don't write it well. You write well. It's beautifully written. You're supposed to write a narrative, this is two, because it's so good." Oscar tells Bill, "I'm so glad you let me do it. It got to my pain and anger." They then discuss the writing requirements for the class and set up a time to go over the technical errors in the paper. Oscar tells Bill that while he could always write, he hadn't been focused in the past. Bill asks Diana, who is across the room, if she has seen Oscar's writing, and she agrees that it is always touching. Bill and Oscar finish by discussing future topics for writing assignments.

Praise seemed to contribute to learner engagement in several ways. First, it reinforced learner engagement with materials, by showing learners that they had been successful at working independently. Second, it forged a personal connection between the teacher and the learner, which bolstered engagement with the social system in the classroom. Most important, genuine praise helped the learners to engage with the materials in a more personal way. Teachers drew out the link between who the learner was and the work

being done. In this way, the teacher helped the learner to engage more meaningfully in his or her work, and helped create an investment in future work. As far as praise enhances motivation, it functioned to increase learner engagement.

Learner Engagement with Materials

Despite the important role of the teachers, the interactions between learners and materials were at the center of this class when we observed it. Materials were the subject of virtually all of the transactions between learners and between learners and teachers. When we saw Diana help Oscar learn to navigate through a textbook, the lesson was in direct reference to the next skill sheet he had to complete, and Bill's discussions with learners were tied to the papers they had written or would next write.

Orientation. The primacy of the materials was evident in the orientation each teacher went through with new learners. These orientations stressed procedure, and explained how learners would progress through materials. Diana's initial orientation had two components: explaining requirements, and showing the learner where to find the materials and how to choose them. When Manny arrived for his first day, the room was fairly quiet, and Diana had time to give him a thorough orientation to the course:

> Diana speaks personally with Manny for a couple of minutes, discovering he is from Puerto Rico and sharing some stories from her trips there. She opens his reading folder and explains its contents, which include an orientation checklist, a record sheet, a reading interest inventory, and a reading assessment. She explains the process he will engage in: he will choose a story from a list, answer the questions, have her correct them, check off the completed assignment on the record sheet, and move on to the next assignment. He will need to complete three kinds of tasks: reading comprehension, skill sheets, and short writing assignments. She tells him he is free to use a dictionary and ask other people for help, as long as ultimately he understands the material well enough to earn the 70% necessary to complete the five-credit course. She asks if Manny wants to ask any questions and he says no. Diana explains about the pace of the course: that it is up to the individual learner. Diana leaves Manny to fill out the initial forms and take the reading assessment.

When Manny was finished, Diana got up from working with her learner to orient him to the materials:

> Diana shows Manny the different series of books in the back of the room and explains how many things he will need to read from each. She questions him about his interests and points out a reading he might enjoy. She lets him know that while he has to do everything on the list, he can do it in any order. She then shows him where the copies of the stories and the answer sheets are, and tells him to mark his answers on a separate paper. Because Manny has mentioned that he likes to draw, she concludes by showing

him the learner literary magazine and encouraging him to submit his art. Manny then begins choosing the story he will read, and Diana returns to the learner she was helping.

Bill's orientation was necessarily different, and somewhat less concerned with procedure. On the same day, he oriented Manny, along with another learner, to his English 3 class:

Bill gives each learner a list of the kinds of writing that they will produce. He explains that there will be no literature books or grammar books in this course, because the learner is the writer. Occasionally, he says, learners will use a newspaper for background information, and they can use a dictionary or thesaurus. In one exercise, learners will write in response to a piece of art. Bill tells the learners they can use the computers. He explains that he doesn't use letter grades, and that all evaluation is done by comment. He tells them there is no homework, though work can be taken home.

Before explaining the final exam, and giving some of the history of the course and how it had evolved, Bill advised the learners on how to get help from him when they needed it, saying that the classroom is like a gas station, in that some days the line is longer, and they should always have something to work on.

Both teachers' orientations were fairly succinct and quickly paced. Neither teacher introduced the new learners to others in the room, or dwelled long on how to function in the classroom, but instead gave explanations focused on the requirements and how to fulfill them. The classroom engagement norms were evident during the orientation process in three ways. First, the length and depth of the orientation was determined by the "hassle-factor" in the classroom. That is, when there were fewer learners in the room each teacher had more time to orient a new learner. When Diana oriented Manny, the room was fairly empty. Another new learner arrived on a day when the room was much more crowded, and Diana's orientation reflected this—it took barely half the time that Manny's had. Second, the length and depth of orientation was determined by the needs of the learners. If a learner had many questions about the procedure or the materials, the orientation would necessarily be longer. Third, the orientation was grounded in IGI procedure.

There was, however, contrast between the two teachers' orientations. This had to do with the nature of the materials taught by each. For example, Diana's orientation was considerably more task-oriented than was Bill's, due to the fact that the reading courses required a different kind of engagement than did the writing courses. Each demanded its own type of participation on the part of the learner and feedback from the teacher. Intertwined with this difference in content was the teacher's own definition of his or her role. Since Diana sought to engage learners with a preset curriculum by helping them when they got stuck, and pointing them to selections they would enjoy reading, the point of her orientation was meeting the learner and providing clarity about procedure. Since Bill sought to keep learners engaged and interested in the program, his orientation was

less procedural and more focused on casting the learner in the role of a writer, and giving advice to make the process less onerous.

Solitary Workers. Once oriented to the classroom, learners developed their own systems for working their way through the materials. Most of the time, learners were working alone, reading, filling out answer sheets, checking their work, or writing. Some learners almost always worked alone, and these solitary workers exemplified the high level of engagement learners had with the materials. Marie, who was confident of the system and herself as a learner, rarely interacted with others, except when it was time to get her work corrected. She relied on her previous educational experience, and always copied her work from rough to final draft. Jesse, similarly, avoided talking in the classroom as much as possible, and focused on getting through the work. His system was to do reading one day, and English the next. Another learner who seemed to have a very high level of concentration was Alice, a quiet learner who seemed virtually impervious to the noise that often surrounded her. While others at her table and around the classroom talked,

> Alice reads from her worksheets. She seems to be at the end of the passage. She turns to the exercises based on the passage. She uses pencil to shadow the lines and questions. She turns the pages back to the passage to try to find the answers to the questions at the end of the passage. She does not talk to anyone at the table, except to smile and say hello.

The behaviors of solitary workers were a reflection of, and a contribution to, the engagement norms. Those who could work alone did so. This was set up by the IGI context, in which the goal is uninterrupted, solitary work. The atmosphere in the room, which was quiet and studious, also communicated the norms. When learners got stuck, they asked for help. If they didn't get stuck, they kept working. This was IGI as implemented both by Bill and Diana and by their learners.

Material Content. Despite the general high level of engagement with materials, learners weren't typically interested in talking about the work they had done. In many interviews, learners used the language of "progress" and would talk about this as well as their goals, but were less forthcoming if asked about the specific work they were doing in class. Alice, for example, referred to her assignments generically as "work":

> Interviewer: What do you do when you wait?
>
> Alice: I do work.
>
> Interviewer: You just do other work?
>
> Alice: I do other work and papers, yeah.
>
> Interviewer: OK, so you have more than one task at the same time for reading?

Alice: I just go on to reading and English.

Interviewer: What's the difference?

Alice: I don't know. I haven't figured that out yet. But that's what they have there. They have the reading, they have the folder for reading, which Diana teaches. And then you have the English folder for English.

Jesse, focused on his goal of getting his high school diploma, was explicit about the distinction between work and progress:

Jesse: Like, if I need them [Bill or Diana] to answer something for me, or go over something with me, it takes about 5 minutes, or 10 minutes, depending on how much work it is. I really don't call them much; I really just call them to tell them that I'm finished, or you can correct this, or look over this. Things like that.

Interviewer: And then, they correct it; they look over it. Then they give you something else, or do you have something else in your folder, that you could go on—like, say if they were really busy that day.

Jesse: Right. Well, yeah. It's pretty much, you have other work to do, or if you finish that, and there's something that they want you to get done, they bring it up, tell you, you should do this, or do that. Things like that.

Interviewer: So that works for you.

Jesse: It doesn't matter to me, as long as I receive the credits. (Laughter.) I don't care what work they give.

An exception to this lack of interest in content was the English 3 course, which revolved around the personal writings of the learners. In this case, personal relevance had as much to do with engagement as the motivation to make progress, as evidenced by the way Oscar spoke of his writing exercise as "getting to his pain and anger," and by the conversations that ensued when Bill shared Adnan's writing about immigrating. In an interview, Louie showed this contrast by his answers to questions about what he was working on. When asked what he was reading, he told us:

Louie: I've been doing workbook exercises a lot. Like, a lot of different stories actually. I don't remember, but it's easy for me.

Interviewer: Is it interesting?

> Louie: Yeah, there's some interesting things like, they have, I've been doing famous black people, like Martin Luther King, like, we have Mark Jordon, like sports players. A lot of sports things, I've been doing too.
>
> Interviewer: Do you pick which things you're reading?
>
> Louie: Yeah.
>
> Interviewer: You pick something that looks interesting?
>
> Louie: Yeah.
>
> Interviewer: OK. And then you read a little thing, and then you answer questions about it?
>
> Louie: Yeah, actually, we have like sessions. Like, we have to do like famous black people. Then we have like champions, you know, champions from sports, champions, like different stories. Basically, we read stories then have questions like, what was the story about? Like, different questions like that.

In contrast, he readily answered questions about the writing he had been doing, going immediately to a much greater level of specificity:

> Yeah, I was writing a story for Bill. It was like about, a couple, it was a, I forget, which story was that? Might've been, one of those stories was about an abductor. Like a guy who took a little girl, you know, like, nobody knew who it was. They thought it was this one guy, but, they found out it really wasn't him, so. It's a long story, so.

Asked what he was doing later in the class, he again related the plot of his story:

> Yeah, I think it might've been the second story I wrote. Which was about kids who, they had trouble in the past with each other, for some reason, they didn't like each other, they were into hockey, and they were on the ice, it was the winter, they went to the park, and the water was frozen. They had a hockey game, they had a hockey game, and both teams were like enemies, and somebody from the other team fell into the ice or something like that. And the enemies kind of helped him out, you know, out the ice. And they kind of became friends in the end, after like, he survived. You know, a story like that.

In general, the high engagement with materials had little to do with their content, and more to do with the process of getting though them. This was shaped by the IGI context. In the adult high school, it was also shaped by learner goals—learners knew where they were going. Their engagement was with their goal, and the materials were simply the means of getting there.

Engagement with Other Learners

Learner engagement was also evident in the ways in which learners helped each other in the classroom. As with virtually all of the learning and teaching that occurred, the focus of most helping was on the materials, so observing how learners worked together illustrates the ways in which learners were engaging with materials. Helping episodes also reveal the ways in which learners engaged with each other, which may be an important aspect of their participation in their studies in general.

It was normal for learners to approach other learners for help in this classroom. Typically, an instance of helping was brief, and the conversation terminated when the learner was able to move on. It was common for learners to interrupt each other with a quick question:

> Saidu leans back in his chair to show Ahmad, his friend at the next table, an item on his worksheet. Ahmad addresses his question. Once the problem is solved, they return to their own tasks.

Such help was given and received without ceremony, and didn't tend to lead to more casual conversation. Though Saidu and Ahmad knew each other socially, their interactions within the class almost invariably pertained to their class work. As Ahmad explained in his interview, "…[I]n class, we discuss what we're there for."

Helping episodes between learners who are not friends looked very similar. In such cases, asking for another learner's help may have been a response to waiting for the teacher. Ellen, for instance, is a gregarious Chinese American learner who is something of a fixture in the classroom:

> Ellen is seated at a table with Emily and Diana, who are working together. Ellen is reading a story. As Diana finishes with Emily, Ellen pushes her paper in front of Diana and asks for help understanding the phrase, "a rough and ruddy face." Diana begins to explain, and Ellen moves her chair closer to Diana. Diana helps her with some of the vocabulary and interpretation of the story. Diana then begins to explain plot, setting, and events. Jesse walks up behind them and stands with a worksheet in his hand. Diana notices him, and takes his paper as she continues talking to Ellen. Diana then says to Ellen, "Excuse me, Ellen, he signed in before you, so—did you sign in for me? No, ok, why don't you sign in, I'll come back to you, because he's been waiting. I've been helping Emily for a long time because she and I had some things to talk about. So I'm going to go over to him and then I'll come back to you."

While Ellen was waiting for Diana, she was having further trouble understanding the vocabulary in the story. She asked another learner to explain the word "sanctuary." She then asked one of the researchers doing fieldwork for help. When Adnan arrived for class Ellen immediately called him over for help. Although Adnan and Ellen did not generally

help each other, Adnan was another regular student in the classroom and one Ellen expected could help her:

> Adnan sits next to Ellen and looks over her sheet with her. She asks him for help, but he does not know the answer she is looking for. After a couple of minutes he says, "I have no idea. Is this for Bill or Diana?" Ellen tells him the work is for Diana. Adnan looks around the room and spots Diana working with another learner. He listens to Ellen for another minute. Then he gets up, pats her on the back with a friendly gesture. Ellen smiles back and returns to her work.

Other learners systematically helped each other. Learners were aware of who was ahead or behind in the progression through the materials, and formed alliances with those on the same level. Louie and Paul typically helped each other. They were cousins who came to the program at the same time and were doing the same level of work. They sat together. While they rarely socialized, they would quietly pass work to each other for input. Jumoke and Siaka similarly tended to sit next to each other and apart from other learners, working diligently and quietly consulting each other when questions arose:

> Jumoke is answering comprehension questions based on a passage titled, "Six-legged wonders." Siaka is seated next to her, filling out his own worksheet and consulting a dictionary. Jumoke asks Siaka a question. He flips through her packet and reads from it. Jumoke follows along with what he is saying, pointing with her pencil to different parts of her worksheet. Siaka explains, and Jumoke listens, saying, "Hmmm, um-hmm." Jumoke says, "OK," and after discussing the issue for another minute, each returns to his or her own work.

During an interview, Jumoke watched herself and Siaka working together on video. She explained what they were doing:

> …[M]aybe the teacher is…maybe they will be busy, you know, so you need somebody, and somebody will explain to you like we talk in our local tongue, and I'll ask him, Siaka, do you think…what about this one, I don't understand this, I need help, you know? We are pointing and figuring out.

Although Jumoke pointed out that they needed each other when the teacher was busy, they also helped each other without looking first for a teacher. They had an ongoing helping relationship based on their common language that at times delayed the need for a teacher's help. This, natural among friends, was also a strategic way to facilitate engagement in a busy classroom.

While helping relationships and episodes were often motivated by expediency, they were clearly strengthened by the social networks that existed in the adult high school. On the surface, help between friends can look very much like help between learners who don't know each other's names. Interviews with learners, though, revealed

that there was a pervasive helping network in the school, and that learners were very conscious of this. Marie, for instance, explained the mutually supportive relationship she had with others in the classroom:

> When we [she and Emily] have biology or you know, some word she doesn't understand, you know I help her, and then sometimes she call me at home, and then we talk about the homework we have. How to do this one, how to do what, how to do it; we have each other, so in the biology. And then for Jean, I have him in math, and I have him in writing I have him.

For the most part, learners who helped each other had some aspect of their cultural background in common. Siaka explained how the learners from Sierra Leone were a family, although many met each other for the first time at the Center:

> Interviewer: Do you have family at the Center?
>
> Siaka: Oh, yeah, I got so many family. That's my friends, I got Jumoke, got a seat near Adnan. Oh, it's a lot of people, no?
>
> Interviewer: Right.
>
> Siaka: A yeah, they're family, but you know what I mean by family?
>
> Interviewer: They're not you're brother, but…
>
> Siaka: We are from the same country…yeah, yeah.
>
> Interviewer: OK.
>
> Siaka: So we call it that as a family.

Jean also referred to Marie, like himself from Haiti, as family. Further, he gave the impression that if nothing else, being an immigrant was a cultural meeting point:

> Jean: I don't talk that much with people in here, like American people, but I'm saying those foreign people from Africa, from Haiti, some from Haiti, they're really nice people, you know? Usually just because I don't have that much people from my country in here ….So when I see Marie, Marie is a good person. Me and her are like family and all; we don't have any problem with talking to each other. She gets to call me, we talk on the phone and say hi.

While helping, for the most part, was motivated by the desire to progress through the materials (and thus achieve personal goals), for a few learners it was a more direct

expression of their goals. For some, helping or working with others was directly tied to their identities, and as such was very central to their engagement. Mabinty, a learner with many friends in the program, explained that she was kept engaged by her desire to compete with her friends, which meant that she tried to work alone. Lydia and Tenneh were two learners who consistently sought the role of helper and expressed pride in their ability to do so.

There were essentially two kinds of helping in the classroom. One was governed by expediency. This was when learners asked each other for help based on who they thought would know the answer. This seemed to happen equally between learners who were friends and learners who were not friends. The second kind of helping was systematic. In this case, learners sat together, or had an ongoing helping relationship.

Both kinds of help were governed by classroom norms, in particular the issues that result from the IGI context. When learners got stuck, they needed to shift tactics in order to remain engaged, so they looked to others for help. Teachers modeled this by getting learners unstuck. Because of IGI it was also true that the teacher might be unavailable to help a learner, and learners did not seem willing to disengage until it was their turn with the teacher. Therefore they asked each other for help. Mostly, it was the IGI norm of continuous engagement that caused learners to help each other, randomly and systematically.

Social networks in the adult high school and the broader community also governed the types of helping. There seemed to be a real helping network among learners who were all working toward their diplomas, and they called each other, studied together, and shared notes, even if they were not especially close otherwise. There was also a distinct cultural network of immigrants who helped each other in class and were close outside of the classroom as well. Finally, some learners seemed to genuinely enjoy helping and did so for self-gratification. The conduct of the class was such that, regardless of relationships, help looked very similar across the board: It was brief, to the point, and governed by the hierarchy of advancement through the materials. While helping was bolstered by friendships, within the classroom it revolved around engagement with the materials.

Conclusion

Bill and Diana's classroom had extremely high engagement among teachers and learners. This seemed to be produced by two factors. Most importantly, the learners in this classroom were mostly voluntary learners, who entered the program almost invariably because they had clear goals, both professional and personal, which demanded that they earn a high school diploma. This desire to work produced a studiousness that was

evidenced by the high level of concentration in the classroom and the long-term commitment of the learners.

There was also a strong commitment on the part of the teachers. The teachers defined their roles differently, and therefore engaged learners in distinct ways, but in both cases their self-defined roles were consistent with their teaching styles. They also engaged their learners in different types of work. However, they have together created a classroom in which the norm of working hard and receiving the help one needs is absolute. They both offered praise and an interest in learners, which allowed learners to feel comfortable, and to engage thoroughly in both their academic work and in the program in general. Bill and Diana maintained a functional classroom in which learners could expect to make progress toward obtaining their diplomas.

Despite the strong role of the teachers in this room, there was space for learners to work independently and with each other. Independent work is part of the IGI context, and was implemented in this room successfully, because the learners were given the help that they needed in order to prevent frustration. The space for learners to help each other is also a product of IGI, a system in which there will always be waiting. In this case, learners created a solid network of helping relationships, which allowed both for quicker progress through materials, and for a stronger identity with themselves as learners, working on achieving their goals.

Ray's GED Class

The Classroom

The evening GED class met from 5:30 to 8:30 p.m. Monday through Thursday. Attendance was voluntary and learners could come or leave at any time. It was rare for fewer than 10 learners to be in attendance. Ten to 15 was normal and sometimes more than 15 attended. At times the class felt crowded.

Compared to the other classrooms at the Center, the GED classroom was large. There was a blackboard on one end. Five tables with chairs occupied the central floor; two were single rectangular tables and the other three were much bigger, formed by placing two rectangular tables side by side. Teachers' desks created a small area against the middle section of the long wall between the two doors. One desk faced the classroom, and the other sat against the wall. Along the long wall across from the teachers' desks were bookshelves loaded with GED books, file cabinets containing learners' official folders and test materials, and more cabinets with materials. On the other end there were three old and two new computers, some of which had Internet access. Tables with crates filled with copied materials were located at different places along the wall.

Near the entrance door in two iron crates there were envelopes with learners' names written on them. These envelopes contained learners' work folders. There were scrap papers, pencil sharpeners, a globe, and potted plants on top of the bookshelves and cabinets. The walls were decorated with all sorts of posters and maps, among them were learning-aid posters: "Area Formula," "Right Triangles," "Working with Percents," "Order of Operations," world and United States maps, and an Equipped for the Future wheel. The names of the program's GED graduates were posted on the wall—quite noticeably—with large black print on yellow paper.

Teachers, Aide, and Learners

There were two teachers and one aide in the GED class. Ray was the cooperating teacher researcher in the study. He has a BA in literature and a certificate for teaching elementary school. Ray had about 10 years of teaching experience and had been teaching GED for about 6 years. He had a busy work schedule, also taught a welfare class called Building Educational Skills for Tomorrow (BEST), another GED class in the morning, and the GED class we observed at night. Ray was easy-going and very sociable and he liked to joke with learners and his colleagues. He had a business-like and efficient style when he worked with the learners. Ray tended to talk quickly but very clearly at the same time. His nonteaching transactions with the learners were usually concise. He told us that he usually felt rushed because there are so many learners with different needs who require his attention.

Monty was the second teacher. He taught GED at another learning center during the day and drove to the Center every evening. Monty was an experienced teacher. Although he was friendly with the learners, he was also a serious and business-like teacher. He had a very direct teaching style and usually got right into teaching transactions without exchanging pleasantries. Although his training was in English, he really enjoyed teaching math and was the math teacher of this class. Like all the teachers in the class, his teaching was very test-oriented. He liked to teach learners shortcuts to doing math problems.

Belinda was the aide. She has stayed in the Center since she was a Youth Corps learner at age 16. She had been working there for more than 10 years. Belinda was soft-spoken yet lively, and smiled and laughed a lot.

Ray thought of both Monty and Belinda as his partners. To some extent, the two teachers divided their teaching according to their expertise, although they both knew and could teach everything. Of the five GED subjects—reading, science, social studies, math, and writing—Ray was most comfortable with teaching writing. Monty was best at teaching math. Belinda managed almost all the paperwork but she also helped learners with their materials when the two teachers were busy. Additionally, when the teachers

wished to contact learners who had stopped coming to class, in hope of bringing them back, Belinda was usually the one to do it. She sent "Where are you?" letters to learners or phoned them.

The learners in the GED program varied considerably in age, ranging from 20 to 50 years old. Most of the learners were African American or Hispanic and many were foreign born. Most were employed. Some were married and some had children and corresponding childcare issues. What they all had in common was high motivation to pass the GED tests and get their diploma. Specific reasons for wanting the GED differed. There were native-born learners whose secondary education was interrupted voluntarily or involuntarily. Many wanted their GED to continue on to college or other vocational training. One learner—Aleida—did not graduate from high school because she missed too many days of school due to work. She decided to seek the GED 3 years later. She wanted to work in the hospitality industry. Henry was incarcerated in 10th grade for 16 months for dealing drugs. He hoped to go to college, eventually own a business, and earn a lot of money. Mark attended school up to 10th grade and then quit because he needed money and was working at a nursing home from 4:00 to midnight. At the age of 32, he decided to come back to school because he wanted to do something better for himself and his wife. He was an amateur artist and enjoyed working with the computer. He hoped to combine the two fields in his future vocation.

Others, like Pamela, came because their job required that they have a high school diploma. Pamela was from Trinidad and had lived in the United States for 10 years. She was a childcare provider and was in the program because she needed the GED to fulfill a work requirement. Some learners were foreign-born and needed the GED to get better jobs. Although some already had high school diplomas from their native countries, they wanted to have the GED so that their credentials would be recognized here in the United States. Such was the case for Cecilia, a learner from Brazil.

The length of time that the learners had been in the program also varied greatly. Although Henry had been in the GED program for more than 2 years, some had only been enrolled in the class for a few weeks. Some learners like Anthony, Mark, and Aleida, passed the GED exam within 2 months of starting the program. Some learners were re-testers, learners who needed to test again on one or more subjects because they failed specific tests previously. Andrea, who attended regularly, needed to retest on math and science.

Teaching and Learning

Norms

Because passing the GED tests as soon as possible was the overriding goal of teachers and learners alike, class norms largely supported engagement directed at achieving this goal. These norms included maintaining an environment conducive to engagement,

efficiency of classroom management, and a set of behaviors that we have termed "keeping busy."

Keeping Busy. The norm of keeping busy was the pervasive attitude about working hard and related behavior that resulted in a very task-oriented educational environment. The GED classroom was a busy place in which many different learning transactions took place simultaneously; there was an element of intensity in the air. Ray moved around a lot checking on learners, helping, and assigning materials (e.g., instructional packets, books, additional photocopy materials, tests, paperwork, etc.). He told us that he usually felt rushed because there were so many learners with different needs who required his attention.

Every learner was engrossed in her work, whether by independently engaging in materials, or engaging with a teacher. Sometimes people chatted or laughed about a little joke, but it was usually brief. The class did not have an official break time and learners took their breaks whenever they wanted to. From what we observed, however, most learners did not take breaks except to go to the bathroom. They worked diligently on their materials for the entire class session and the level of engagement was high. Compared to other classes at the Center, there was very little learner-to-learner interaction.

Through observation, students soon learned that they were responsible for their own learning and that the teachers would help them when they needed it. With around 15 learners and only 3 teachers, sometimes learners had to wait to get help. Yet compared with other classes, there was very little waiting in the GED class and learners did not feel that waiting was a problem. Learners usually received help after waiting no longer than a few minutes. If they temporarily disengaged while waiting, they readily re-engaged when help came. This may explain why there was very little learner-to-learner interaction in the GED class, because in other classes, learner-to-learner interaction usually took place during waiting. We asked two learners about waiting during the interviews:

> Learner1: I've found myself on occasion, if I'm waiting for someone to come in and look over my work, and I've already done something, and I see somebody struggling with it, then I'll just go over to them, and well, if you do this, then this times this, and they'll go oh, I didn't know that. You know?
>
> Interviewer: Yeah. But I noticed that waiting is not a problem. You don't really have to wait long.
>
> Learner1: No, no, because usually you have three people there that will cater to you in any way.
>
> Interviewer: Do you have to wait?

Learner2: Sometimes you have to wait till, maybe about two or three minutes, and they'll tell you they'll be a second because they are talking to somebody else or you can go into something else and then they come out and explain to you.

Interviewer: Do you mind waiting?

Learner2: No.

The Classroom Environment. The teachers tried to create a classroom environment that promoted engagement. The classroom had an easy and light atmosphere to it. In the background, there was classical music or light jazz playing at a low volume. Ray had explained to the learners that there had been studies showing that higher-level thinking occurs when people listen to classical music. It helped to create a relaxed atmosphere. Ray was informal and personable in his demeanor, which tended to make people relax. When new learners arrived, during the initial orientation Ray would explicitly tell them to make themselves comfortable.

Teachers' expectations for learner behavior reinforced the notion that the classroom was to be a quiet place for work, free from distractions. When learners entered the class, they were expected to get right to work. Although many activities often went on at the same time in the GED class, the noise level was lower than in any other of the classes studied. Teachers spoke in a low voice when they worked with individual learners and learners did the same when they spoke to each other. If learners took breaks, they did so silently in their seats or left the room. Ray told us that he always tried to create and maintain the image of a classroom where every learner was engaged in learning something that was beneficial for him or her.

Efficiency. Teachers and learners functioned efficiently using IGI to work toward the common goal of passing the GED tests. When learners arrived at the class, the first thing they did was to sign in, and when they left for the day, they signed out. After they signed in, they would pick up the envelope with their work folder in it. If they had unfinished work from the previous class, they began to work right away. If not, they saw a teacher who assigned work to them.

Monty and Belinda had to commute to the Center, while Ray was a full-time teacher who was already in the building when class began. Very often, Ray would be the only teacher available at the beginning of a class and he would be very busy greeting the learners as they came in, finding out where they were with their work and deciding what work to give them. He wanted the learners to start on their work as soon as possible. He did this by pointing to a learner and asking what she or he was working on. Then, based on the response, if he had to assign work, he did. Otherwise he would tell the learner to get her or his materials and get to work. It took learners only a minute or two to settle down and start working on their materials.

In a learner's work folder there was a tracking form with column titles: date, topic(s), and status. The teachers used the form to monitor learners' progress. When learners completed a topic, a teacher would record that onto the form in front of the learner. Since the form was kept in the learner's work folder, they could see what they had learned along the way. The form was also useful for the teachers when assigning new work. For learners who regularly attended class, Ray knew what to give the learner next. However, if the teachers needed to find out where the learners were and what work to give them next, they simply referred to the learner's folder, which contained all the information regarding what the learner needed to work on (from their entry test results), and what they had already accomplished (from the monitor form).

The teachers in the GED class knew the materials thoroughly. Ray knew what portions of the materials were likely to be difficult for learners so he was able to diagnose problems quickly and provide targeted help. He knew precisely which new materials to give learners when they had completed an exercise so such transactions were completed in a matter of seconds. Monty had memorized the answers for many of the math materials and could correct them without resorting to an answer key. There was less waiting for help in the GED class than in any other class we studied. Although transactions between teachers and learners were thorough and cordial, they were also very business-like. The following, for example, is a 30-second episode when Ray gave an orientation to two newcomers:

> Darlene and Rene (they are actually mother and daughter) walk in and stand near the doorway, looking for the teachers. Ray quickly notices them and walks up to greet them. He says, "Hello, is tonight your first night? I am Ray. This is Monty (Ray points to Monty). There is some interesting lab stuff going on from Rutgers (he looks around the classroom and moves his hand a bit to gesture where the observer and videographer are), which is people doing observations. They will come around and explain it to you. I am going to go get your folders. Sign in on the yellow sheet (he points to where the sheet is). Sit anywhere you want (he opens up his arms in a very inviting manner), all right? (The tone in which he asks them shows he really means it.) And I will be right back. Make yourself comfortable though (he walks out at this)."

Efficiency in the GED class was embodied in classroom management as well as the teacher/learner transactions. The teachers in this classroom enjoyed authority and credibility because of their teaching experiences and expertise with the GED tests. Standardized tests can be scary and the learners really admired the teachers due to the expert help they could give for overcoming the hurdles and barriers in the GED tests. The GED teachers made important decisions for the learners, such as what material the learner should work on next, or when a learner was ready for the predictor test or the GED test, which helped the class to be more efficient. There were some exceptions when it came to the decision about readiness for tests. For instance, Henry had strongly requested that he be predictor-tested because he had been in the program long enough and wanted to see how far along he was and if he would be able to pass the tests. Ray

hesitated because he felt that he needed to protect Henry from being terribly frustrated if the results were bad, as he thought they might be. However, Henry did better in the predictor test than Ray had imagined he would and admitted that he could be overprotective.

In sum, the pervasive norm in Ray's class was one that we have termed "keeping busy." Keeping busy had two components. The first was a set of procedural norms established by the teachers that promoted efficiency, thus enabling learners to accomplish as much as they possibly could during a given period of time. The second was a set of behavioral expectations of learners that created an atmosphere conducive to getting work done. Taken together, these two components supported engagement by establishing the expectation that learners would engage and would stay engaged in Ray's class.

Learner Engagement with Teachers

Like almost everything in the GED class, the test influenced the teachers' role. The teachers were there as facilitators, enhancing learners' progress through the materials. Indeed, there seemed to be an implied social contract between the teachers and learners. The learners wanted the GED. The teachers were there to help them get it; nothing else mattered much. The class was like a very serious game in which the teachers were the professional coaches and winning meant passing the GED. Like coaches, the teachers developed and taught strategy to the learners—what was on the test, when to take the test, how to take the test. Like coaches, they motivated performance by building confidence and making sure learners developed the necessary skills to win. The materials taught most of the GED-targeted content. When learners encountered difficulties with the materials, the teachers "got inside" the material. They analyzed it, decoded it, and showed learners how to overcome the problem. In the following quote, Ray explained to Henry the different usages of the comma. Ray asked Henry questions to diagnose whether or not he understood and pointed out to Henry how the uses of the comma are tested and where the tricks lie:

> Ray: Now here the travelers, the tired hungry travelers are tired and hungry right?
>
> Henry: Yeah.
>
> Ray: So you could say tired and hungry right? That would be OK right?
>
> Henry: Yeah.
>
> Ray: So you put a comma.
>
> Henry: Oh, all right.

Ray: If you are describing something with more than one adjective, the quiet, annoyed learners.

Henry: All right.

Ray: All right? So if there is two in a row and you can say "and" or you can use a comma.

Henry: All right, so the comma is the definition of "and."

Ray: It takes the place of "and" a lot of times.

Henry: Yeah all right.

Ray: All right? Now this one you don't need it cause it's two dogs and six mice. It's like we went to class and then we went out and partied. It's two things that we did, it's not three things. It's only two things so we just have "and." Make sense?

Henry: Yeah.

Ray: Good. Now that's a full sentence right? It could be right?

Henry: Yeah.

Ray: Now that's a complete sentence too right? So we've got choices. We could put a period and make a capital H. That's the easy way to do it and that's OK. That's a good way. Another way, and we're going to see both ways, is a semicolon, where you combine two complete sentences and they go together, but they are not the same thing, you use a semicolon and it shows that you want those things together. Now if you put a period down just like that it's just as good. *But you have to know all your choices because on the test you're going to have to pick one. They'll give them to you and you have to see which one to pick.* Me, if I'm already writing a period, I just leave it on. That's what most people do. But you got to know this work, all right? So four is very similar. That's a complete sentence. That could be another complete sentence.

Henry: Period here?

Ray: Period? Not a comma. There are three choices this time. You can make it a semicolon, you can make it comma and…that's what we'll do because that's what we already started to do or you can make a capital and put in a period. Make it two separate sentences but they are all good. So this is one way, this is another way, and the other way you know because you know how to put a capital letter.

Henry: Yeah.

Ray: Right? And here we don't need it because there're only two things that the spacecraft had done. *They're trying to trick you because it looks like the other sentences.* It looks like it is two complete sentences but visited it since 1958…the second part's not a sentence, ok?

In the above episode, Ray facilitated engagement by diagnosing, and helping Henry overcome, the blocks to engagement that he was experiencing, in this case a gap in his knowledge of punctuation that was preventing his progress. Our discussion with Ray revealed that he had a very good understanding of the kinds of hindrances that block learner engagement. He told us that some blocks were inherent in the materials or the nature of the skills. The blocks in "the more technical things" like math and writing were more predictable, such as with grammar and decimals. Other blocks were more individual, depending on learners' prior knowledge. For instance, foreign-born learners sometimes lacked American cultural knowledge and stumbled over vocabulary. On more personal levels, worries over adult responsibilities and relationships, health problems, and emotional distress could distract learners from engaging in their studies.

As part of their role, when the teachers identified a learner who seemed to be disengaged, they tried to find out what was blocking engagement and to do what they could to remove or ameliorate the block. For example, Ray gave whole-group lectures about once a week on important GED test topics such as the Civil War, World War II, basic science, basic geography, and grammar. He called them "lessons on cultural literacy," cultural literacy being the general knowledge he thought adults in the United States should have. In his view, cultural literacy instruction was a way to ameliorate learners' lack of exposure to important information because lack of exposure was a stumbling block in understanding the materials and doing well on the GED tests.

An example of how Ray helped learners engage is his work with Cecilia, a foreign-born learner who had good skills but struggled with English. Although she had a high school diploma from her home country, she wanted to get her GED in English. Ray thought she would do well if there were a Portuguese GED Exam. Vocabulary was a huge block for Cecilia's engagement and she relied heavily on the dictionary. Ray's strategy for improving her English vocabulary was to have her work on pre-GED materials, making sure she learned the words by encouraging her self-confidence and independence in learning the vocabulary on her own. Meanwhile, the teachers tested her constantly so that they would know when she was ready to engage with GED materials. If Cecilia asked Ray about a word that she did not know, Ray usually explained it to her right away, even if he was busy, perhaps because he realized that doing so was important if Cecilia were to continue her engagement, and because it only took a minute.

In the classroom, the teachers facilitated engagement by seeing to it that everyone was engaged in something that was helpful to them, and for the most part, this meant getting the right materials to learners. In the GED class, teachers exclusively assigned the

materials to the learners. When learners completed a materials-based exercise, they signaled a teacher who evaluated the learner's performance, and, based on that assessment, decided what the leaner would engage in next. Learners did not choose additional work for themselves. According to Ray, one reason for this was that learners' self-direction could be problematic. For example, one learner chose a paper from the scrap pile that had math problems on the back and confused this with his math worksheet, thus wasting time doing math problems he didn't need to work on. Ray was a very efficiency-oriented teacher and he wanted learners' time to be on task and productive. When teachers maintained control over the material, it precluded confusion and facilitated engagement.

Another way teachers reduced the chances of engagement being blocked was by preparing learners for the work in which they were about to engage by giving them a brief orientation to the task, and in doing so, informing them about the barriers they might encounter. This enhanced engagement because learners knew what to expect and knowing what to expect reduced confusion and frustration:

> Manuel is finished with his exercise and signals Ray. Ray says, "I will check it." But before he does, he gives Manuel new materials. Ray says, "Almost everyone gets number 1 wrong. Don't fall for the trick." Manuel smiles.

> Ray walked toward Dannika with some materials in his hand. He sat down and started to talk about the work. "OK. This is the same kind of stuff you did in science but this is literature. They give you a definition; they give you a bunch of examples; there is no trick. Then they give you the exercise. They ask you to circle all the correct answers. It may be one, and it may be three. So don't stop when you find one. Keep working, OK? It is not hard. Just take your time. (Ray turns the pages.) Whenever you are done with this page, make me check it. But if you have questions before that, just ask. It is not a test. Now this way you have a choice, you could work on this, or this, or both, whatever you feel like. All right?" "OK." Dannika responded with a nod. This transaction began and finished within a minute.

Teachers continually monitored the class for signs of disengagement. Since learners did not always ask for help when they needed it, disengagement was a signal to teachers that they needed to intervene. For example, when Ray suspected that learners were having difficulty engaging because they were tired, he would sometimes ask them if they were tired. If the answer was "yes," Ray would advise them to go home early. Maria explained this in an interview:

> Maria: I mean there's been days when I come there and I'm exhausted from working all day long and Ray kind of catches up on those things. And he goes, "Oh you don't look all that great," or "You look tired," or "You're not moving all that great. If you want you can go home early." Or, "If you're not in the best of moods what do you want to do? Do you want to keep on going, or do you want to go home?" You know he's always aware of

those things because he knows that people work and then they come to class. It's not, you know, they only come to class and that's it.

Interviewer: And how did you feel about that?

Maria: I was always very comfortable. I always felt like I can come and go as I please and it's not—

Interviewer: He makes you feel comfortable by just, you know, showing he's aware of your situation?

Maria: Right.

Sometimes, however, blocks to engagement were not as visible as physical tiredness. One day Ray read in the local news that a youth was convicted of killing another local youth. Ray suspected that Henry knew the victim and subsequently learned from him that the victim was one of his best friends. Henry was severely distressed. Ray realized that the emotional distress would make it difficult for Henry to engage in the usual GED work so he decided to give him some poems that were about people dealing with random violence. In addition, he assigned him some questions to answer. Henry read Whitman that night. In this episode, concerned with Henry's ability to engage, Ray gave him tasks that would engage him despite his distress. Because of Ray's intervention, Henry continued to engage in academic reading at a time when many learners would have disengaged.

Ray also tried to maintain learner engagement by providing the support learners needed to persist. In one case, a learner could no longer attend class due to childcare issues. When he told Ray his problem, Ray listened carefully and told him that they would figure something out together to allow him to continue. In the end, Ray urged the learner to continue by working on his own, especially in English. Ray then suggested that the learner come in occasionally to update Ray on his progress and give him completed work to correct. He reminded him that although it was going to be difficult to work on his own, it was possible. Ray then gave the learner two books to take with him.

There are three important aspects of the teacher's role in the classroom. First, teachers facilitated engagement by distributing appropriate materials, orienting learners to the tasks beforehand, removing the blocks in materials and tests, and providing necessary support so that it was easy for learners to persist even when confronted with difficult circumstances. Second, teachers developed and taught test strategies. They sought information about GED tests, coached content and skills required by the tests, kept reinforcing the importance of time management while testing, and helped learners to prepare for the tests in all practical ways. Finally, yet importantly, they motivated

learners not only through encouragement, but also through building their skills and allowing them to see their own progress and accomplishments.

Learner Engagement with Materials

Passing the GED tests was a goal that strongly influenced why and how learners engaged, and what they engaged in. The class was almost like a sporting event in which the learners were the players and the teachers were the coaches. Winning was the motivation and the GED tests were the opponent. The whole teaching and learning system was geared toward helping learners pass the GED tests as soon as possible. The curriculum was constructed around the requirements of the GED tests.

Ray showed us a chart entitled "The GED Tests" and told us that the chart highlighted the test requirements and was very important for his teaching. It had the name and duration of the five subject tests, number of questions, and a list of the contents and corresponding percentages on each test.

The teachers frequently gave out information about the GED tests and explained test-taking strategies. During one observation, for example, Monty told a learner that word problems were very important on the math test. Likewise, the day before the GED exams, which under a special arrangement were given at the Center, Ray talked with Aleida about what it was like to actually take the test. He explained what to expect of the test procedures, when test takers got a break, and other such matters. They also had a discussion about appropriate types of food to eat before taking the GED tests.

Passing the GED tests was a very clear objective with a well-defined end point and a highly desired prize for success: a state-issued high school diploma. Achieving the prize motivated learners to engage and provided a very clear focus for learner engagement. Learners welcomed anything that helped them to reach the goal and they were not interested in learning about topics that would not be on the tests. The teachers understood this and motivated learners to engage by teaching to the tests. For example, at the beginning of a weekly group instruction, Ray pointed to questions on the blackboard and told the learners that knowing the answers to the questions would help them do better on the GED tests because these provided important background knowledge.

Since the objective of the class was to prepare learners for success in the GED tests, taking tests was a very important activity is the class. After taking the TABE at intake, new learners were immediately given applied math and reading tests and sometimes GED practice tests so that the teachers could see where they were compared to where they needed to be to pass the GED tests. Learners' entry test results determined the areas of knowledge and skills they would work on, which in turn determined the sets of materials in which they would engage. To learn to test well, learners spent a lot of time

engaging in practice tests from GED books. Learners also took TABE tests periodically to assess their learning gains.

When learners obtained a score or 11.5 or higher on the TABE reading and math tests, they were given the GED predictor tests. The predictor tests are official practice tests developed by the Educational Testing Service. There are half-length and half-timed simulations of the GED tests (except for writing). According to Ray, the predictor tests had been reliable predictors of passing. If learners passed at least three of the five predictor tests, instruction stopped and the teachers signed them up for the real exam.

The GED teachers' main task was to get learners ready for success in the GED exam. What learners engaged in was completely determined by what skills they were lacking for testing well on the GED exam. As Ray told us:

> We're always predicting people, we're always trying to figure out who's going to be ready, and we're always trying to eliminate things that they need to work on, cutting at the corners. If they pass the predictors, they don't have to work in those areas. And since it's such a task-driven program, it's considered a waste of their time to work on those areas at all.…Once they passed the predictor, in that area, which is the official practice test, we pretty much stopped teaching that area.

As in most of the classes we observed at the Center, the instructional system for the GED class was IGI. As in all IGI-operated classes, instruction was centered on materials. In the GED class, however, the materials were all targeted to the knowledge needed to pass the GED tests. The teachers were intimately familiar with the materials. Partially because they had been working with the materials repeatedly for years, they knew which set of materials was appropriate for dealing with what each learner needed to know to pass the tests. It usually took Ray a very short time (ranging from seconds to a couple of minutes) to pull out a particular book or packet for a learner. In one observation, Ray looked at a learner's packet and said, "Wrong book." He then went and got the right book. We discussed Ray's familiarity with the materials with him:

> Yeah, I've been here for six years and most of the time I've been in this room teaching GED, and even when I was out of the morning class, I was with the Youth Corps, and I did ABE, I was always in here at night. The writing materials I pretty much know by heart. I don't even need a textbook to check it, and it's not because I'm such a great editor, it's because I know the answers, from just repetition. Monty knows some of the pages, some of the answers in the math book; he just knows the answers. You know, it looks like he's doing it with his head, but he actually remembers the first ten answers to certain pages, you know. And the math, I don't have it quite to that level like the reading area, because I've been integrating new material for the last two years, since the test changed. It's not quite the same thing, but the more you know your material, the easier your job is, which is, you know, like I know, no matter what level somebody's on, if they don't know U.S. history, I know exactly what book they're going to use to learn U.S.

history. There's one pre-GED book from Contemporary that really covers U.S. history. The questions are easy enough for any of our learners, but the information, most of them have never even encountered before.

Ray believed that reading was the most basic and the most important skill for taking GED tests and that science and social studies depended heavily, "like 95%, on reading skills." He called reading, science, and social studies the "reading" tests. "It's not about knowing science or social studies. It helps to know those things, so we do lessons on that stuff, but its just reading skills." The teachers also reinforced the crucial importance of timing to the learners. They timed learners for some tests taken in class, presumably to help learners develop test awareness and test-taking skills. Ray thought that math was a difficult subject for almost all learners. When Monty taught math, he focused on what he called "the shortcuts," namely, the most efficient, timesaving solutions to solve the problems. He believed that timing was the key to success in the math tests, as learners have to complete 50 problems in 90 minutes.

Conclusion

In the GED class, IGI operated in such a way that the teachers coached the learners to overcome the obstacles in the materials and the tests. The teachers maintained and facilitated learner engagement by detecting and removing the blocks in the way of engagement, either in the materials or with the learner personally. Ray emphasized that the learner understand the knowledge and skills (productive engagement) to be tested because there is an exit gate, namely, the GED exam, to check the products of engagement.

What distinguished the GED class from the other classes was the concreteness and centrality of the goal of passing the GED tests, which provided a clear focus for engagement both for the learners and for the teachers. This explains why the classroom atmosphere, although relaxed, had an element of intensity to it. Efficiency was a highly desirable state of affairs and the teachers put in place procedural norms as well as behavioral expectations to promote efficiency. The awareness of the central goal on the learners' part fundamentally motivated learner engagement with the material, especially during the weeks before the test dates. The focus on the goal highlights how critical the expertise of the teachers (knowledge of the subjects and tests) can be; learners regarded the teachers as authorities on the GED tests and their help was seen as expert help.

CHAPTER FIVE: ANALYSIS

The question that has guided this research is "What are the contextual factors that shape engagement in adult literacy education?" Although in the preceding cases readers have been able to glimpse some of the shaping factors, in this chapter we attempt to address the question in a holistic analysis.

As is evident from the literature review, many researchers conceive of engagement as a cognitive function—something that goes on in an individual's mind and is closely associated with motivation and self-efficacy. Other researchers, however, acknowledge that while engagement is essentially a cognitive function, it is also strongly influenced by the context in which it takes place. This second conception—the one that emphasizes the importance of context—best explains what we have observed in this study.

Context has to do with the structures and processes within a given educational system that support and maintain engagement. From a practical perspective context is particularly important because adult literacy professionals have considerably more control over the educational context than they do over the motivation that learners bring with them. Thus if we are to intervene in engagement, dealing with the educational context is a promising arena.

Within the context of the Center and IGI, the case studies depict three kinds of engagement patterns: learners engaging with materials, learners engaging with teachers, and learners engaging with other learners. For each engagement pattern, we have identified a shaping factor. For learners engaging with materials, the shaping factor is the routines and procedures of IGI; for learners engaging with teachers, the shaping factor is teachers' role behavior; and for learners engaging with other learners, the shaping factor is classroom social norms.

Learners Engaging with Materials

Characteristic of IGI, in all the classes we studied, instructional materials were the focus of engagement. The great majority of learners' time was spent working on materials. When learners interacted with teachers or other learners, their interactions were centered on materials. To a great extent, the materials' directions determined what learners would engage in. The exercises embodied in the materials carried the content of instruction and learners' success in correctly completing the exercises was the most visible marker of learning progress for both the teachers and the learners. While traditional K–12 education is generally teacher-directed, the adult literacy education we studied was materials-driven.

Given the centrality of instructional materials one might question why an educational agency like the Center is needed. Why not simply give the learners their materials and let them work at home? The answer is that in all the classes we studied there were systems in place that encouraged and supported learners' engagement with materials and these systems were important for maintaining a high level of engagement. Teachers developed and maintained these systems. Indeed, IGI management was a critical part of what teachers did.

The IGI process began with diagnostic testing conducted by the counselors to determine learners' skill levels in reading and math. This was an important step in the system because engagement could be impeded if the work assigned to learners was too easy or too difficult. Learners were then assigned to a class appropriate to their skill levels. There they were given an orientation to the IGI system. The orientations were typically brief, especially if the class was crowded. Learners learned the system primarily through observing other learners and by asking questions of the teachers or aides. In all the classes, the system was very routine. Once a learner learned it, it quickly became second nature. Rarely did we observe disengagement because a learner did not understand how the IGI system worked.

Although in Pat and Celia's small-group instruction class the teachers directed when and how learners engaged with materials, in all the IGI classes learners themselves made those decisions. Learners would enter the classroom, pick up their folders from the file crates, take a seat and very quickly begin to engage with their materials. When they completed an exercise, the teacher or aide would correct it and dispense more materials. Waiting for help was sometimes a problem and the wait time varied among the classes. When Silvia's basic-skills class was crowded, learners could wait up to 10 minutes for help. While waiting, learners used that time to help each other, work on other materials, or to disengage for a break. There was very little waiting in Bill's adult high school writing class, Diana's adult high school reading class, and Ray's GED class.

As they worked on their materials, learners would occasionally become blocked. Often the blockage had to do with not understanding the material's directions or the concepts being taught by the exercises. A majority of the learners in all the classes we studied were foreign born, so a common source of blockage was English vocabulary. During blockage, productive engagement ceased and the remedy was help from the teacher or sometimes from another learner. On most days, however, teachers' time was a scarce commodity. In fact, one of the reasons Pat and Celia moved from IGI to small-group instruction was that they could not find enough time to work with their basic-level learners one-on-one. Because time was scarce, and because blocked learners could not re-engage until the block was remedied, all teachers had systems for dispensing help. If they were not busy, teachers scanned the room for signs of disengagement as a signal of blockage.

In Silvia's basic-skills class, learners almost always initiated helping and correcting sessions by signaling with their hands or verbally requesting help. Diana used a sign-up sheet. In her basic-skills class, Patti often circulated through the class and asked those she suspected of needing help whether they did need it. When and how quickly teachers helped was a major factor in maintaining engagement in the IGI context.

How well teachers knew the materials they were using and how appropriately they assigned them were other important parts of the IGI system. In Silvia's and Patti's basic-skills classes, skill levels ranged from near–nonreaders to grade six, and because of continuous enrollment, new learners were always being introduced to the classes. Thus there was a constant flurry of materials being corrected and assigned for a wide range of skill levels. Although we heard no complaints from learners, it stands to reason that the assignment of just the right materials was not always perfect.

In Ray's GED class, however, the assignment of materials was fine-tuned. Ray was very familiar with the GED test and what it contained. Moreover, the available materials were closely aligned with the GED test itself. Thus Ray knew precisely which materials a learner needed in order to progress toward passing the GED tests, and had established a tracking system so that he could tell at a glance what materials learners had completed and what remained to be done. He was so familiar with each set of materials that he could usually predict at what point in the materials learners were likely to become blocked. Learners were constantly tested, both for practice and to provide feedback on their progress toward the goal of passing the tests.

For learners in the IGI classes, IGI was the name of the game and the learners understood this. The routine of the IGI system provided structure and continuity to instruction; progression through the materials was a major marker of progress. Silvia's and Patti's basic-skills classes exemplify the primacy of IGI. Both teachers occasionally did whole-group instruction, but when they did, learners often disengaged from the group lesson and re-engaged with their IGI materials before the group lesson was finished. For learners working in the IGI context, the whole-group lessons were discontinuities that simply lacked relevance.

Conclusion

The instructional system is one of the most important factors that shape engagement. At the Center, the educational system in five of the six classes was IGI, and although one class employed small-group instruction, it too was materials-driven. In IGI, materials are the objects of engagement; their directions guide engagement, and success in progressing through the material is the product of engagement. The IGI system shapes engagement by supporting and maintaining it through skill diagnosis, teachers' assignment of appropriate materials, correcting, assigning new materials, and helping to remove blockages when learners experience them.

Learners Engaging with Teachers

In New Jersey, all adult literacy teachers who work in public school systems must be certified in a K–12 subject. Thus the teachers of the classes we studied all had experience in traditional K–12 education, both as teachers and as students when they themselves attended elementary and secondary school. When they were first employed by the Center, few teachers had experience in either adult education or IGI. Thus they had to redefine their roles from being traditional K–12 teachers to being adult literacy, IGI teachers; they received little guidance for making that transition. Most newly hired teachers observed another class at the Center for several sessions before they took over their own class, and they had the materials the previous teacher had used at their disposal. Day teachers could learn by interacting with the more experienced teachers on the staff, but since night teachers came directly from their day jobs and left as soon as their classes were over, they were more isolated from sources of assistance. For the most part, teachers learned how to function in the IGI context through simple trial and error. Teachers who had worked at the Center for many years—such as Bill, Diana, and Ray—had fine-tuned their IGI systems over time, but newer teachers like Silvia, Patti, Pat, and Celia had less opportunity. Because teachers, in essence, had to self-define their roles in respect to IGI, role behavior varied considerably.

In the IGI context, teaching is primarily one-on-one. Patti, Ray, Silvia, Bill, and Diana taught in this way, while as the case in the preceding chapter explains, Pat and Celia changed from IGI to small-group instruction. One-on-one teaching had two primary components: helping and supporting.

Helping

There were several steps to helping: initiation of the helping session, diagnosis, correcting, checking for understanding, assigning new materials, and closure. How a helping session was initiated varied with the teacher.

In Silvia's basic-skills class, learners typically initiated the session by signaling for help. Silvia would generally begin with a polite greeting such as "How are you?" and then get down to work. Diagnosis of the problem generally came from correcting the learner's completed workbook exercise. If the work was essentially correct, Silvia assumed that the learner understood the material and assigned new materials. Occasionally, if a learner performed poorly on the exercise, Silvia would go over the work, giving the learner the correct answers. In these encounters, there was little dialogue designed to determine whether learners really understood the concept being taught by the exercise. This could be a problem because it was possible for learners to engage in the materials and get the correct answers without thoroughly understanding them. In reading comprehension exercises, for example, it was relatively common for learners in Silvia's class to read the test questions first and then enter the correct answers as they read the

passage. In some cases, learners helped each other to get the correct answers. Thus, although engagement was high in Silvia's class, learners were not always learning what the materials intended them to learn. Silvia always closed a helping session with praise designed to build self-confidence and to signal that the session was over.

When Pat and Celia took over Silvia's IGI class, they functioned quite differently. When learners submitted their exercises for correction, Pat and Celia did not assume that getting correct answers meant that learners understood the concepts the materials taught. Instead they began a dialogue with the learner, which was designed to gauge understanding. If they determined that the learner had a problem with understanding, and they often did, they initiated an in-depth, one-on-one teaching session. The problem was that these one-on-one sessions took so much time that Pat and Celia could not adequately serve the entire class. Faced with this conclusion, Pat and Celia converted the class to small-group instruction, with Pat taking one group of about six and Celia taking the other. Pat and Celia also believed that because their learners were struggling, they needed the support of a group and the sense of community a group could provide. Although learners all worked on materials selected by the teachers, the groups were not permitted to move on to new materials until the teachers were confident that everyone in the group understood the lesson the materials conveyed. Unlike all the other classes we studied, Pat and Celia's class was teacher-directed.

In contrast to Pat and Celia's and Silvia's basic-skills class, Patti's basic-skills class was taught in the evening. Although IGI predominated, Patti used other methods as well. One two occasions, Patti conducted whole-group lessons that appeared to be designed partly as a change from the routine of IGI. In both cases, by the end of the lesson, many learners had disengaged from Patti's lesson and had re-engaged with their IGI materials. When we asked Patti about this, she told us that disengaging from her lesson was fine for her because the learners were adults and could thus make their own decisions about what to work on.

At other times, Patti conducted small-group lessons. Sometimes Patti's helping sessions were very brief; at other times they were protracted. Learners moved in and out of the classroom more than in any other class we studied—they dribbled in late and sometimes left early. In providing help, Patti tried to reach as many learners as she could each night. Sometimes she initiated the helping session if a learner seemed disengaged or she otherwise suspected the learner needed help. Sometimes learners initiated the interactions. By and large classroom aides defined their own roles. One of the aides tended to work with the same group of learners with whom she had developed a special rapport; another worked with all the learners in the class.

In Bill's adult high school writing class and Diana's reading class that occupied the same classroom, both teachers functioned differently although their helping sessions had essentially the same steps. Diana initiated the session with friendly conversation

designed to establish rapport. After she corrected work, like Pat and Celia she would
often enter into dialogue with the learner to assess whether the learner really understood.
If she determined that the learner had a problem, she would work one-on-one with the
learner for several minutes. When the session was over she would close with gentle,
meaningful praise. Bill often initiated his helping sessions with humor or a brief personal
comment. When Bill was teaching beginning writing, which was taught in IGI format, he
functioned much like Diana. In advanced writing, however, learners had to write a series
of brief papers indicative of different types of writing. In these cases, Bill would talk with
learners regarding the topic and organization of their piece. These episodes were often
laced with humor and the sharing of experiences; sometimes other learners would be
drawn into the conversation.

It was quite clear in Bill and Diana's classes that learners were to work
independently, and partly because the class was at a relatively high skill level, nearly all
the learners were able to do so. Some learners rarely needed a teacher's help and their
interactions with Bill and Diana mostly revolved around correcting and assigning new
work.

In Ray's GED class, obtaining the GED was a clear goal, one that all the learners
very much wanted to achieve. Thus the entire class was directed toward enabling learners
to pass the GED tests as quickly as possible. The IGI materials were targeted on the GED
tests; learners often took practice tests, and progress was gauged according to how close
learners were to being able to pass the GED tests. Ray's role behavior was similar to that
of a coach. The GED was the opponent, the learners were the players, and Ray's function
was to make sure they won.

Helping was an extremely important process in the system that supports and
maintains engagement; if learners needed help and could not get it, productive
engagement was stalled and frustration could set in. In deciding how to provide help,
teachers were faced with a dilemma. Either they could spend a little time with each
learner and therefore reach more, or they could spend more time with each learner and
reach fewer. This was a difficult decision and the only guide to making it was experience.
Deciding how much time to allocate to learners was influenced by two factors. First,
attendance varied considerably, and while on some days there might be 6 learners in the
class, on other days there might be 15. Obviously, when the class was crowded it was
more difficult for teachers to ration their time. Second, learners in the basic-level classes
seemed to need help more often and the problems they needed help with were more
complex.

Support

At the Center, teachers' role behavior was directed less at "teaching" and more at supporting learners' individual efforts at IGI. In addition to helping, teachers supported IGI in a number of other ways. The most common was praise. All the teachers praised learners liberally in order to build self-confidence and maintain motivation to engage. Praise was of two types, genuine praise and dismissive praise. Genuine praise came "from the heart" and usually elicited acknowledging body language from the learner, such as a smile. Dismissive praise was routine and generally came at the end of a helping session. It had two messages: praise, and a signal that the session was over. Teachers varied in their proportions of genuine praise to dismissive praise.

The lowest-level learners usually received extra support. In Silvia's basic-skills class, a volunteer tutor was assigned to work with Rina and Mona, two beginning readers who were struggling. Pat and Celia moved from IGI to small-group instruction to provide greater support for their least skilled learners and Patti occasionally worked with her lowest-level learners in a small group format to give them extra help.

All teachers attempted to create learning climates conducive to productive engagement. The classrooms at the Center were clean and well lit, and the learners sat at comfortable tables. Bill and Diana displayed pictures of recent graduates on the wall. Ray played classical music or light jazz in the background during his class. Patti and Bill employed a considerable amount of humor. The atmosphere in all the classes was relaxed. Learners called teachers by their first names, and vice versa, and learners were permitted to move around at will.

Facilitation

In the IGI system then, the teachers' primary functions were to help and support learners. In contrast to traditional teaching, teachers rarely conveyed content. The materials did that. Thus the primary teaching role was that of facilitation, although how teachers facilitated varied somewhat. For example, as noted previously, in her basic-skills class Silvia spent most of her time correcting materials and assigning new materials. Most of her transactions with learners focused on providing learners with the correct answer if their answer was incorrect and she rarely engaged in question-and-answer sequences to diagnose whether the learner really understood. We have termed this style of facilitation "correct and direct." In contrast, Ray's facilitation was directed at helping the learners pass the GED tests as quickly as possible and in doing so he functioned much like a coach.

Conclusion

Teachers' roles as facilitators affected engagement in several ways. In assigning materials, teachers directed what learners would engage in. Obviously the appropriateness of the materials was an important factor in what learners learned and how quickly they progressed. In helping, teachers helped stalled learners to re-engage and in providing support to learners, teachers built and maintained the motivation that is so important to engagement.

Learners Engaging with Learners

The extent to which learners engaged with other learners varied both among the classes we studied and within the classes we studied. There was a considerable amount of learner-to-learner engagement in Silvia, Bill, Diana, and Patti's classes. It was less common in Pat and Celia's basic-skills class and rare in Ray's very task-oriented GED class. Teachers rarely either positively or negatively sanctioned learner-to-learner engagement. For the most part, it just happened.

Learner-to-learner engagement often occurred when learners were waiting for the teachers' help, so in classes where there was little waiting, such as Ray's GED class, learner-to-learner engagement was less evident. Within the IGI classes, there were always learners who preferred to work on their own and seldom engaged with other learners. There were also learners who commonly engaged with other learners. These learners were of three types. The first were learners who were involved in out-of-class social networks that functioned as helping networks within the classroom. In Silvia's, Bill's, and Diana's classes, for example, there were several learners from West Africa who socialized out of class and tended to help each other and seek each other's help while in class. Socially networked learners tended to sit near each other in the classroom. The second type of learner-to-learner engagement was among classroom friends, pairs of learners who tended to engage each other consistently over time but who had no out-of-class relationships. Finally there was serendipitous engagement in which learners engaged with whoever was close at hand.

Learners' engagement with other learners was influenced by classroom norms, informal rules of behavior that governed the purpose and process of interaction. In most cases, teachers established these norms although in some cases they were established by learners. The most important norm for engagement was the norm of "sticking to business" and it was pervasive in every class. Sticking to business was the understanding that learner-to-learner engagement was to focus squarely on the business of the class. Discussion of out-of-class events and off-task socializing were very rare. The great majority of learner-to-learner interactions were helping relationships. Learners helped each other in clarifying the directions of materials, in doing math problems, in defining the meaning and pronunciation of words, and with many other class-related tasks. Thus

learner-to-learner interactions were not a form of disengagement from learning. Rather, they were a shift in engagement from one learning resource—materials—to another resource—a helping learner. Moreover, when learners engaged each other in helping relations, teachers were freed to spend more time with learners.

Another pervasive norm was "freedom to move." Learners could leave the room any time they wished, they could sit wherever they wanted to, and they could use the computer in the classroom at will.

Although "sticking to business" and "freedom to move" were prevalent in all the classes we studied, some norms that affected learner-to-learner engagement were specific to particular classes. In Silvia's basic-skills class, for example, the norm of "getting the right answer" emerged from a group of West African learners and some of their in-class friends. In Silvia's class, learners understood that progress was defined as getting the correct answers on the exercises. Based on this understanding, while they were waiting to have their materials corrected, they would often compare answers. If the answers disagreed, they would discuss the discrepancy and the learners who concluded they had the wrong answer would "fix" it. Thus while the norm of "sticking to business" promoted productive engagement, the norm of "getting the right answer" may have impeded it.

Conclusion

The norm of sticking to business shaped the classes by creating an atmosphere that was task-oriented and conducive to engagement. This norm was supported by learners and teachers alike and was very rarely violated. Sticking to business was primarily an informal and unspoken norm. The only formal rule that we could identify that was associated with it was a prohibition of cell phones. Sticking to business was supported by freedom to move to a certain extent, because if learners felt a need to do something that might be disruptive to others, they could simply leave the classroom and do it elsewhere.

CHAPTER SIX: IMPLICATIONS AND RECOMMENDATIONS

Research

Using qualitative research, we can investigate phenomena holistically and expansively as a first step in generating empirically based models that lead to testable hypotheses. The obvious terrain for model building following this study lies in the relationship between engagement and learning. Although engagement is necessary for learning, it is not learning itself and literacy learning is clearly the most important payoff of adult literacy education. We propose the following model to guide empirical testing, a model which is consistent with our findings and the literature on engagement.

A Model for Engagement and Learning in Adult Literacy

Consistent with the literature reviewed, we conceive of engagement as having two components, a cognitive or "mental" component and a contextual component. The cognitive component is mental effort focused on instruction. It is that part of engagement that takes place in the learner's mind and it includes elements of motivation to learn, metacognition (or thinking about one's learning), and learning strategy. Pintrich (1990) summarized the cognitive component nicely as "will and skill." Based on what we have observed, "will," or motivation, is particularly important. Consistent with Meece and colleagues (1988), motivation can be extrinsic—the desire to obtain tangible rewards associated with educational success such as increased income—or intrinsic. Intrinsic motivation pertains to the desire to satisfy an inner need, such as the desire to shed the stigma of being illiterate. In reality, motivation for most adults is a combination of intrinsic and extrinsic elements and varies in intensity as some needs are met and others emerge.

The contextual element refers specifically to the educational context, which in our case was a class. Every educational context has features that support, nurture, and maintain engagement on one hand and learning on the other. If these features are in place and functioning well, both engagement and learning are enhanced and maintained over time. If the opposite is true, engagement, and thus learning, can be impeded. We have found that three of the critical contextual features for adult literacy education in an IGI context are the IGI instructional system and the processes and structures associated with it, teachers' role behavior, and classroom behavioral norms.

The relationship between these two components is interactive; each affects the other. For example, because they are mostly voluntary learners, motivation to engage is a cognitive disposition that learners bring with them when they enroll in adult literacy classes. This results in an educational context in which the learners are favorably disposed toward learning, at least initially. The educational context, however, has the

potential for increasing, maintaining, or diminishing motivation and whether the context increases, maintains, or diminishes motivation affects learners' engagement. Thus the cognitive component of engagement affects the contextual component and vice versa.

Engagement in this model has three forms that are related to learning outcomes. The first is productive engagement in which engaged learners are progressing to the extent of their ability and achieving their learning goals.

> *Productive engagement* ensues when: (a) learners are engaged, and (b) the processes and structures associated with the educational context support and enhance learning.

The second form is unproductive engagement. In unproductive engagement, although motivated students are thoroughly engaged in instruction, they are not progressing to the extent of their ability. Since even in unproductive engagement learners are engaged, the cause of unproductive engagement logically lies in dysfunctions in the educational context. Hypothetical examples are materials that are too difficult or too easy, and inadequate help rendered by poorly trained teachers.

> *Unproductive engagement* ensues when learners are: (a) engaged, but (b) the processes and structures associated with the educational context impede learning.

The third form of engagement is disengagement, or the absence of engagement. When learners disengage, they cease to attend to instruction and therefore fail to benefit from it. As we noted many times in this study, we observed very little disengagement in the classes we studied.

> *Disengagement* occurs when: (a) learners lack motivation to engage, and/or (b) the processes and structures associated with the educational context seriously impede learning.

Engagement and the Outcomes of Instruction

Perhaps the most serious limitation of the present research was our inability to establish relationships between engagement and important instructional outcomes such as learning gain and persistence. Establishing such a relationship is not something that a qualitative study can accomplish well.

In hope of overcoming this limitation, two other quantitative research projects in progress at the Labsite have been designed to study the relationships between engagement and instructional outcomes. The first employs a paper-and-pencil instrument to measure engagement. This instrument has proved to be valid and reliable in pilot work. The second measures engagement through a classroom observation rating protocol. Both

instruments will be available to researchers in the future. This research is but a beginning, however, and much more work is needed in other adult literacy education contexts.

IGI

Other research being conducted at the Labsite indicates that IGI is a very common instructional system in adult literacy education, particularly for GED preparation, and that IGI is the predominant instructional system in many states. This reality points to a huge gap in the research on adult literacy education. IGI is materials-dependent, and there is virtually no research on the effectiveness of materials, at least in the public domain. What works and what does not are critical questions the field needs to ask of available materials, for until we have research-based answers, teachers will lack a sound basis for selecting the materials that by and large carry the content in IGI-based instruction.

In a similar vein, we have found in this study that in IGI teachers have a very different role than in traditional education—the role of facilitator. Their primary function is to help and support, rather than to convey content, and if they do convey content, it is in response to learners' performance on their materials. This leads to another critical research question for IGI instruction: What constitutes effective facilitation? As with materials, there is virtually no research in adult literacy education that addresses this question.

Finally there is IGI itself. Most programs that adopt IGI do so for very pragmatic reasons. High attrition reduces enrollment over time, waiting students are assigned to classes to fill empty seats; continuous enrollment results. IGI compensates for continuous enrollment in ways that whole-group instruction cannot. Thus it is likely that IGI will be with us as long as high attrition is a contextual reality of adult literacy education. But is IGI effective in comparison to other forms of instruction? If IGI is a reality of adult literacy, how can it be improved? These too are "million-dollar" questions that need to be addressed through systematic research.

Implications for Practice

Motivation

One of the most important findings of this study was that engagement was high in all the classes we studied and to a great extent this had to do with motivation. Learners were motivated to attain specific goals. For GED and adult high school learners, the goal was typically high school certification to fulfill occupational aspirations, and although many basic skills learners also desired high school certification, many had intermediate goals, such as being able to write letters. Motivation was also high because teachers took steps to maintain and enhance it. Implications include:

- Because learners engage in order to meet specific goals, it is important for teachers to understand clearly what those goals are and to organize instruction so that they are met. IGI lends itself well to individualized "packaging" of instruction targeted on learner's specific goals. For example, in one of the basic-skills classes we studied, a learner had the goal of obtaining a driver's license. In response, the teacher obtained a copy of the driver's license examination manual and used it for reading material for that learner.

- In this study, motivation—and hence engagement—was enhanced by teachers through praise and encouragement, most typically given during one-on-one helping sessions. Yet as one teacher cautioned, overuse of praise and encouragement can reduce its reward value and even seem condescending to adult learners. We believe that when and how to provide praise and encouragement is a very important aspect of instruction in adult literacy education, especially in an IGI context in which learners work individually. It should be a topic for professional development.

The Instructional Context

We have found that whether, when, how, and in what learners engage is very much shaped by the instructional context. In this study the processes and structures of IGI instruction, teachers' roles, and class norms were found to constitute the basic elements of context.

IGI Process and Structures

Because IGI was the instructional context in five of the six classes we studied, our implications and recommendations for instructional context relate primarily to IGI. The IGI instructional system is made up of structures and processes that when practiced effectively and efficiently enhance engagement, and conversely, can impede engagement if they are dysfunctional. Implications include:

- Learners' goals and skill levels must be diagnosed accurately.

- Learners must be assigned to classes geared to their skill levels.

- Teachers must assign materials appropriate to learners' skill levels and goals.

- Teachers must be able to render help when it is needed.

- Teachers must maintain an atmosphere conducive to individualized instruction.

The problem is that there is very little—other than experience—to guide program managers and teachers in meeting these conditions. This problem is compounded by the reality that the great majority of teachers who worked with us on this study had neither training in, nor experience with, IGI prior to their employment in adult literacy education and we have found no evidence that the situation is any different elsewhere. After an extensive search, we found very little of what could be described as IGI curriculum and

there is virtually no research on IGI. Although we found evidence of professional development targeted to IGI in various states in the 1970s and 1980s, if there is professional development geared to IGI today, it is sporadic. Given continuous enrollment, mixed skill levels, relatively high absenteeism, and funding based on head count, IGI is a reality of adult literacy education. We need either to make it better or to change the conditions that undergird it.

Teachers' Role

In the IGI classes we studied, the teachers served more as facilitators than as conveyors of content, a role that many teachers may be ill prepared to perform based on prior training and experience. This is true for IGI systems that use paper materials, as well as those that use computer software. Again, there is a great need for professional development and the materials to support it, for if teachers continue to lack training in facilitation, they will continue to learn IGI role behavior by trial and error alone. There are several aspects of facilitation in IGI that are fundamental to IGI and therefore should receive special attention in professional development:

- **Recognizing when learners are "stuck" and need help.** Although monitoring engagement is one useful marker, as we have postulated earlier it is possible for learners to be unproductively engaged—that is, working hard but not learning up to their ability. Diagnosing unproductive engagement is one of the critical skills IGI teachers need to learn.

- **Materials management.** Not only do teachers need to assign materials that are appropriate to learners' needs and skill levels, but they must also avoid learners' disengagement while they are waiting for assistance. Teachers must correct learners' work and assign new work efficiently.

- **Time management.** If teachers spend too little time, learners do not receive sufficient help. Conversely, if teachers spend too much time, too few learners receive help.

Class Norms

Class norms are the formal and informal rules that prescribe how learners and teachers are to behave in an instructional setting. We found that the norm "sticking to business" was prevalent in all the classes we studied and was a very positive force in maintaining a task-oriented environment. Sticking to business meant that learners took care not to disrupt other learners who were engaged with their work, and it meant that when learners interacted with each other, the transactions focused on the business of the class, rather than on matters extraneous to learning. Teachers need to know how to establish norms that promote engagement and how to identify norms that disrupt engagement.

Professional Development

As we have noted, there is virtually no research to shed light on the above issues for practice. Lacking research, we believe that reflective professional development in which teachers share professional wisdom and solve IGI-related problems through collective reflection and action is the most promising approach. We suggest the following:

- **Paired observation:** Teachers observe each other's classes and then meet to reflect on the strengths and weaknesses they observed.

- **Participatory action research (PAR):** Teachers meet to identify instructional problems and then are given release time from teaching to investigate solutions.

- **Materials search:** Publishers of materials generally set up exhibits at national and state professional association meetings. Teachers are assigned to explore in depth the products of one or two publishers and then meet to share and reflect on their assessments.

What Next?

Qualitative research typically raises as many questions as it answers and this report is no exception. Many of these questions pertain to the cognitive, or mental, aspects of engagement. As noted earlier, these aspects were difficult to study with qualitative research. Unanswered questions include:

- Is cognitive engagement a unitary concept or can it, as the research suggests, be divided into component parts?

- What is the relationship between cognitive engagement and learning outcomes such as teachers' assessment of learners' progress, tested learning gains, and persistence?

- What is the relationship between engagement and learners' self-esteem?

- What is the relationship between engagement and background variables such as learners' skill level, age, gender, and first language?

We are currently addressing the above questions at the Labsite with two lines of quantitative research. The first study measures self-assessed cognitive engagement with 14 selected-response items. The questionnaire was developed through an analysis of project video, a review of the literature, brainstorming with adult education experts, and critiques from literacy teachers. The questionnaire was administered to 253 learners at the Labsite and has been shown to have sound psychometric properties. Outcome data were collected from learners' records and teachers' ratings of learner progress. The questionnaire also includes measures of self-esteem, academic self-efficacy, and learner motivation.

The second study focuses on the observable aspects of cognitive engagement. Forty students were videotaped on three separate days. The resulting data consisted of over 700 one-minute clips of learner classroom behavior. The clips will be rated for level of cognitive engagement using holistic scoring. The resulting scores will then be used to determine the impact of observable engagement behaviors on learning outcomes, as well as to identify "marker" behaviors that are most indicative of learning progress.

As we noted in the beginning of this report, our work on engagement breaks new ground in adult literacy education research. If our work has been successful, not only have we contributed to an understanding of engagement but we have also demonstrated the importance of this line of investigation. We hope future research will follow.

REFERENCES

Ainley, M. D. (1993). Styles of engagement with learning: Multidimensional assessment of their relationship with strategy use and school achievement. *Journal of Educational Psychology, 85*(3), 395–405.

Anderson, C. W., & Lee, O. (1997). Will students take advantage of meaningful science learning? *Phi Delta Kappan, 78,* 720–724.

Beder, H., & Medina, P. (2001). *Classroom dynamics in adult literacy education.* NCSALL Reports #18. Cambridge, MA: National Center for the Study of Adult Learning and Literacy.

Connell, J. P. (1990). Context, self, and action: A motivational analysis of self-system processes across the life span. In D. Cicchetti & M. Beeghly (Eds.), *The self in transition: Infancy to childhood* (pp. 61–97). Chicago: The University of Chicago Press.

Corno, L., & Mandinach, E. B. (1983). The role of cognitive engagement in classroom learning and motivation. *Educational Psychologist, 18*, 88–108.

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, *59*, 117–142.

Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to student engagement. *Journal of Negro Education, 62*(3), 249–268.

Fredricks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*, 59–109.

Garcia, T., Matula, J. S., Harris, C. L., Egan-Dowdy, K., Lissi, M. R., & Davila, C. (1995, April). *Worriers and procrastinators: Differences in motivation, cognitive engagement, and achievement between defensive pessimists and self-handicappers*. Paper presented at American Educational Research Conference, San Francisco, CA.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Helme, S., & Clarke, D. (2001). Identifying cognitive engagement in the mathematics classroom. *Mathematics Education Research Journal, 13*(2), 133–153.

Kindermann, T. A. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology, 29*(6), 970–977.

McGregor, H. A., & Elliot, A. J. (2002). Achievement goals as predictors of achievement-relevant processes prior to task engagement. *Journal of Educational Psychology, 94*(2), 381–395.

Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology, 80,* 514–523.

Miller, R. B., Greene, B. A., Montalvo, G. P., Ravidran, B., & Nichols, J. D. (1996). Engagement in academic work: The role of learning goals, future consequences, pleasing others, and perceived ability. *Contemporary Educational Psychology, 21,* 388–422.

Newmann, F. M. (1981). Reducing student alienation in high schools: Implications of theory. *Harvard Educational Review, 51*(4), 546–563.

Newmann, F. M., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. M. Newmann (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11–39). New York: Teachers College Press.

Organisation for Economic Co-operation and Development (OECD). (2003). *Learners for life: Student approaches to learning. Programme for international student assessment, results from PISA 2000.* Paris: Author.

Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323–367.

Pintrich, P.R. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33–40.

Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M. Maehr & P.R. Pintrich (Eds.), *Advances in motivation*

and achievement: Goals and self-regulatory processes: Vol. 7. Greenwich, CT: JAI Press.

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4), 571–581.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Voelkl, K. E. (1995). School warmth, student participation, and achievement. *Journal of Experimental Education*, *63*, 127–139.

Voelkl, K. E. (1997). Identification with school. *American Journal of Education, 105,* 294–318.

Wentzel, K. R. (1989). Adolescent classroom goals, standards for performance, and academic achievement: An interactionist perspective. *Journal of Educational Psychology*, *81*(2), 131–142.

Zimmerman, B. J. (1994). Dimensions of academic self-regulation: A conceptual framework for education. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and applications* (pp. 3–21). Hillsdale, NJ: Lawrence Erlbaum.

National Center for the Study of Adult Learning and Literacy

NCSALL's Mission

NCSALL's purpose is to improve practice in educational programs that serve adults with limited literacy and English language skills, and those without a high school diploma. NCSALL is meeting this purpose through basic and applied research, dissemination of research findings, and leadership within the field of adult learning and literacy.

NCSALL is a collaborative effort between the Harvard Graduate School of Education, World Education, The Center for Literacy Studies at The University of Tennessee, Rutgers University, and Portland State University. NCSALL is funded by the U.S. Department of Education through its Institute of Education Sciences (formerly Office of Educational Research and Improvement).

NCSALL's Research Projects

The goal of NCSALL's research is to provide information that is used to improve practice in programs that offer adult basic education, English for speakers of other languages, and adult secondary education services. In pursuit of this goal, NCSALL has undertaken research projects in four areas: (1) learner persistence, (2) instructional practice and the teaching/learning interaction, (3) professional development, and (4) assessment.

NCSALL's Dissemination Initiative

NCSALL's dissemination initiative focuses on ensuring that practitioners, administrators, policy makers, and scholars of adult education can access, understand, judge and use research findings. NCSALL publishes *Focus on Basics,* a quarterly magazine for practitioners; *Focus on Policy,* a twice-yearly magazine for policy makers; *Review of Adult Learning and Literacy,* an annual scholarly review of major issues, current research, and best practices; and *NCSALL Reports* and *Occasional Papers,* periodic publications of research reports and articles. In addition, NCSALL sponsors the Connecting Practice, Policy, and Research Initiative, designed to help practitioners and policy makers apply findings from research in their instructional settings and programs.

For more about NCSALL, to download free copies of our publications, or to purchase bound copies, please visit our Web site at:

www.ncsall.net