Activity-based Instruction: Why and How

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NCSALL

National Center for the Study of Adult Learning and Literacy

Activity-based Instruction: Why and How

This seminar guide was created by the National Center for the Study of Adult Learning and Literacy (NCSALL) to introduce adult education practitioners to activity-based instructional methods. These instructional approaches emphasize cognitive development, a critical aspect for GED students who plan to enter postsecondary education and training. Programs or professional developers may want to use this seminar in place of a regularly scheduled meeting, such as a statewide training or a local program staff meeting.

Objectives:

By the end of the seminar, participants will be able to:

- List the implications of the research reported in *Cognitive Skills Matter in the Labor Market, Even for School Dropouts*

- Outline the pros and cons of two activity-based instructional methods— collaborative learning and project-based learning

Participants: 8 to 12 practitioners who work in adult education—teachers and tutors

Time: 3½ hours

Agenda:

10 minutes	1.	Welcome and Introductions
5 minutes	2.	Objectives and Agenda
20 minutes	3.	Discussion of the Reading
95 minutes	4.	Activity-based Methods
15 minutes		**Break**
25 minutes	5.	Reflections on Activity-based Methods
30 minutes	6.	Next Steps
10 minutes	7.	Evaluation of the Seminar

Session Preparation:

This guide includes the information and materials needed to conduct the seminar: step-by-step instructions for the activities, approximate time for each activity, and notes and other ideas for conducting the activities. The reading and handouts, ready for photocopying, are at the end of the guide.

Participants should receive the following reading at least 10 days before the seminar. Ask participants to read the report summary, take notes, and write down their questions for sharing at the seminar. Ask them to reflect on the materials and instructional approaches in their programs and whether or not they emphasize cognitive development.

- **Cognitive Skills Matter in the Labor Market, Even for School Dropouts** by John H. Tyler, Richard J. Murnane, and John B. Willett (NCSALL Report Summary #15, April 2000)

The facilitator should read the article, study the seminar steps, and prepare the materials on the following list.

Newsprints (Prepare ahead of time.)

___ Objectives and Agenda (p. 6)

___ Next Steps (p. 10)

___ Useful/How to Improve (p.11)

Handouts (Make copies for each participant.)

___ *Quiz*

___ *A Mingling of Minds: Collaboration and Modeling as Transformational Teaching Techniques*

___ *Project-based Learning and the GED*

___ *Sample Instructional Plan*

Readings (Have two or three extra copies available for participants who forget to bring them.)

___ **Cognitive Skills Matter in the Labor Market, Even for School Dropouts**

Materials

___ Newsprint easel and blank sheets of newsprint

___ Markers, pens, tape

___ Sticky dots

Steps:

1. Welcome and Introductions   (10 minutes)

- **Welcome participants** to the seminar. **Introduce yourself** and state your role as facilitator. Explain how you came to facilitate this seminar and who is sponsoring it.

- **Ask participants to introduce themselves** (name, program, and role).

- **Make sure that participants know** where bathrooms are located, when the session will end, when the break will be, and any other housekeeping information.

> **Note to Facilitator**
> Since time is very tight, it's important to move participants along gently but firmly if they are exceeding their time limit for introductions.

2. Objectives and Agenda   (5 minutes)

- ☐ **Post the newsprint Objectives and Agenda** and review the objectives and steps with the participants.

Objectives

By the end of the seminar, you will be able to:

- List the implications of the research reported in *Cognitive Skills Matter in the Labor Market, Even for School Dropouts*

- Outline the pros and cons of two activity-based instructional methods—collaborative learning and project-based learning

Agenda

1. Welcome and Introductions (Done!)
2. Objectives and Agenda (Doing)
3. Discussion of the Reading
4. Activity-based Methods
5. Reflections on Activity-based Methods
6. Next Steps
7. Evaluation of the Seminar

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3. Discussion of the Reading   (20 minutes)

- 📖 **Explain to participants that in this activity they will be using the article** that they were asked to read in advance of this session.

  [Note to facilitator: **Cognitive Skills Matter in the Labor Market, Even for School Dropouts** summarizes the research that considers data on dropouts, ages 16-21, from New York and Florida who took GED exams between 1986 and 1990. It determines that the average annual income of young dropouts is low and that for whites and minorities, males and females, skills are an important determinant for earnings. The authors discuss the unique nature and validity of their data and methodological approach and provide detailed data analysis. Data analysis reveals that young dropouts with higher cognitive skills can expect higher annual incomes. Inter-group variation exists as females experience higher economic benefits than males. Minorities, especially those with high skills, can expect greater financial returns than white dropouts. Based on these findings, the authors argue that teachers need to help students develop higher cognitive skills rather than merely prepare them to pass the GED test and they conclude with a proposal for policy changes.]

- 📄 **Distribute the handout *Quiz.*** Ask participants to take five minutes to answer the questions independently. Then read the correct responses to them.
  1. b. 30%
  2. c. yes, for whites and minority-group members, males and females, skills are an important determinant of earnings
  3. b. averaged 28% less
  4. a. only individuals who are working are included in the analysis, giving concern about the selection effects associated with who is and who is not working
  5. c. Young people should be encouraged to dropout of high school because they can get the GED and have adequate annual earnings.

- **Invite participants** to share how they felt about this instructional method.
  - **?** How did you feel about taking a "pop" quiz?
  - **?** Do you think that the quiz was an effective review of what you learned from the reading?
  - **?** What suggestions might you have for more effectively processing the information in the article?

? Traditional GED instruction has been similar to this instructional method—reading passages and completing multiple-choice questions. Based on your experience in this seminar with the quiz, what might this mean for GED instructional practices?

4. Activity-based Methods (95 minutes)

- **Explain to participants** that in this activity they will experience alternative ways to approach instruction. Ask the participants to form two groups.

- 🖹 **Distribute the handouts** *A Mingling of Minds: Collaboration and Modeling as Transformational Teaching Techniques* **and** *Project-based Learning and the GED.*

  [Note to facilitator: In **A Mingling of Minds: Collaboration and Modeling as Transformational Teaching Techniques,** the author, Eades, outlines the differences between informational and transformational teaching and describes how she teaches for transformation in a GED class by modeling and encouraging collaborative problem-solving. Eades argues that this approach, which develops social cooperation and individual and group responsibility for learning, shifts learners' perspectives about knowledge.

  In **Project-based Learning and the GED,** the author describes how the Project FORWARD life skills curriculum is used with a GED class to encourage student collaboration as participants work towards their academic and life goals. The author observes that project-based learning prepares students for the GED and helps learners develop a strong sense of personal responsibility, a solid self-image, and good interpersonal skills while learning relevant material.]

- **Ask the participants in one of the groups to read the handout** *A Mingling of Minds: Collaboration and Modeling as Transformational Teaching Techniques.* Ask them to then develop a collaborative approach that will promote readers' understanding of the article. For example, after the participants read the article, they take time to discuss it, using guided questions. Then the group prepares a lesson plan on a selected topic where students work together.

  Ask the participants in the other group to read the other handout *Project-based Learning and the GED.* Ask them to then develop a

project-based approach that might help readers process the information in the article. For example, after the members of the group read the article, they create a poster that shows the steps for developing a project-based activity.

Ask the groups to write their activities on newsprint, so that the other group can use those activities to process the information in the articles. Tell the groups that they have 35 minutes to read the articles and develop the activities.

- **Next ask the groups to switch: read the other article and to use the activities** developed by the other group to process the information. Tell the groups that they have 30 minutes to read and respond to the articles.

- **Reconvene the whole group.** Invite the participants to briefly share in a word or short phrase how they are feeling about participating in an activity-based method.

Break (15 minutes)

5. Reflections on Activity-based Methods (25 minutes)

- **Explain to participants** that in this activity they will continue to reflect on the previous activity and discuss why activity-based methods support cognitive development.

- **Invite the participants to reflect on their experiences. Use the following questions:**
  - ? How did you feel about this learning experience?
  - ? How did it differ from the previous, quiz activity?
  - ? Describe how the role of the facilitator differed between the two activities.
  - ? What higher level cognitive skills might be developed by using collaborative learning and project-based learning?

- **Invite the participants to share their experiences, questions, and objections** to using collaborative learning and/or project-based learning for GED instruction.

6. Next Steps   (30 minutes)

- **Ask participants to take a few minutes to individually reflect on what they experienced and discussed during the seminar** and to state what they might do differently in their instruction as a result. Invite a few participants to share their reflections.

- 📄 Distribute the handout *Sample Instructional Plan.* Ask the participants to take 10 minutes to develop a lesson plan that uses an activity-based instructional method.

- ⬜ **Post the newsprint <u>Next Steps.</u>** Explain that now that the individual participants have plans to try out in their classrooms, the group should make a plan about the group's next steps**.**
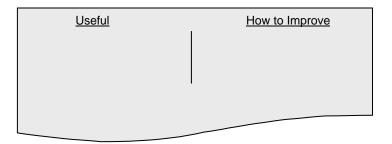
  > **Next Steps**
  >
  > - How might you share with each other how your plans worked, or how might you ask each other questions?

- **Write up potential next steps,** such as scheduling a follow-up meeting or organizing an e-mail list, on the newsprint as the participants mention them. After five minutes of brainstorming, ask participants to silently look at the options and individually decide on two ways for the group to continue the discussions.

- **Hand out two sticky dots to each participant** and ask the group to put their dots next to the one or two ideas that they would most like the group to do. If they don't want to do any of the activities, they should not put their dots on the newsprint.

- **Lead the group in organizing its choice. For example:**

  o If they choose to schedule a follow-up meeting, set the date, time, and place for the meeting, and brainstorm an agenda for the meeting. Determine who will definitely be coming and who will take the responsibility to cancel the meeting in case of bad weather.

  o If they choose to organize an e-mail list, pass around a sheet for everyone to list their e-mail addresses. Decide who is going to start

the first posting, and discuss what types of discussion or postings people would like to see (e.g., asking questions about how to try out their ideas, describing what happened after they tried it, sharing other resources, etc.).

7.   Evaluation of the Seminar   (10 minutes)

- **Explain to participants that, in the time left, you would like to get feedback from them about this seminar.** You will use this feedback in shaping future seminars.

- ⬜ **Post the newsprint <u>Useful/How to Improve.</u>**

Useful	How to Improve

  Ask participants first to tell you what was useful or helpful to them about the design and content of this seminar. Write their comments, without response from you, on the newsprint under "Useful."

- **Then ask participants for suggestions on how to improve the design and content**. Write their comments, without response from you, on the newsprint under "How to Improve." If anyone makes a negative comment that's not in the form of a suggestion, ask the person to rephrase it as a suggestion for improvement, and then write the suggestion on the newsprint.

- **Do not make any response to participants' comments during this evaluation.** It is very important for you not to defend or justify anything you have done in the seminar or anything about the design or content, as this will discourage further suggestions. If anyone makes a suggestion you don't agree with, just nod your head. If you feel some response is needed, rephrase their concern: "So you feel that what we should do instead of the small-group discussion is . . . ? Is that right?"

- **Refer participants to the National Center for the Study of Adult Learning and Literacy Web site (www.ncsall.net) for further**

information. Point out that most NCSALL publications may be downloaded for free from the Web site. Print versions can be ordered by contacting NCSALL at World Education: ncsall@worlded.org.

- **Thank everyone** for coming and participating in the seminar.

Reading 📖

(To be read by participants *before* the session.)

Cognitive Skills Matter in the Labor Market, Even for School Dropouts

By John H. Tyler, Richard J. Murnane, and John B. Willett
NCSALL Report Summary #15, April 2000

Between 1979 and 1996 the median earnings of 25-34 year-old males who left school before obtaining a high school diploma fell by 30 percent; the corresponding figure for female dropouts is a 21 percent decline. Over this same period the earnings premium four-year college graduates received over the earnings of male school dropouts increased from 60 percent to 133 percent. The primary explanation for these patterns is that the demand for unskilled workers declined relative to the demand for skilled workers. While these between-group changes have been well analyzed, little research has examined what is taking place among the least educated in the workforce. Do skills matter among dropouts in this information age economy?

While the average cognitive skill level of school dropouts is quite low, there is considerable variation among dropouts in cognitive skill levels. One could argue that, in an economy in which basic cognitive skills[1] are increasingly valued, differences in skills would translate into earnings differences for dropouts just as they do for workers with greater educational attainments. On the other hand, the economic trends that have depressed the average earnings of the less skilled may have relegated most young dropouts to entry level jobs where skills matter very little and consequently are not rewarded. This could be especially true for minority male dropouts, whose earnings in 1996 averaged 28 percent less than those of white male dropouts. This report presents evidence on the labor market payoff to cognitive skills for school dropouts, and whether the payoff differs by gender and race/ethnicity.

We analyze data containing information on the universe of school dropouts in New York and Florida who took the GED exams between 1986 and 1990 and were aged 16 to 21 when they last took these exams. The data released to us by the departments of education in these states contain basic demographic information and GED test scores. To obtain an outcome measure,

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[1] Basic cognitive skills are defined here as the reading, writing, and math skills, along with vocabulary and background knowledge, measured by tests such as the GED. Other cognitive skills such as problem solving and oral communication are not part of this analysis.

we worked with the Social Security Administration (SSA) to merge the state GED data with Social Security taxable annual earnings via Social Security numbers. These data allow us to address several issues that generally hamper attempts to explore the impact of cognitive skills on labor market performance.

The first problem is that since the test scores that provide the measures of cognitive skills in most data sets are of no consequence to the test-takers, the scores may provide underestimates of true cognitive skills, especially for individuals who find test-taking distasteful. Our measure of cognitive skills is an individual's scores on the GED exams. Since the GED is a high stakes test for the dropouts in our data, we anticipate that these scores more accurately measure the cognitive skills of the dropouts in our data.

Second, test scores may be correlated with unmeasured variables such as motivation levels which affect labor market performance. Consequently, correlations between test scores and labor market earnings may reflect the importance of unmeasured motivation, rather than the causal impact of cognitive skills. All individuals in our data have exhibited a desire to obtain a GED, as evidenced by their willingness to prepare for and attempt the lengthy battery of tests. Consequently, there is probably less unmeasured variation in motivation among individuals in this data set than is the case among participants in other surveys.

Third, many data sets only have information on wages. As a result individuals who are not working are often excluded from the analysis, giving concern about selection effects associated with who is and is not working. We measure labor market performance by annual earnings. This allows us to include dropouts with zero earnings (those who did not work within the year) in our analysis sample.

Finally, we measure labor market earnings five years after dropouts last attempted the GED exams. This reduces the problem of assessing the direction of causation of the correlation between test scores and earnings. Our results, based on the earnings of 21-26 year-old dropouts who attempted the GED exams in Florida and New York in the years 1986 to 1990, have both discouraging and encouraging elements as we think about the labor market prospects of young dropouts in the 1990s.

First, our data show that the average annual earnings levels of young dropouts are quite low. Average unconditional earnings for males range from a low of $9,394 in New York in 1995 to a high of $10,869 in Florida in 1995. The comparable figures for females are a low of $6,886 in New York in 1995 and a high of $7,955 in Florida in 1994. Since these averages contain zero

earnings for individuals who did not work in a year, they represent the combined effect of wages and labor supply on earnings.

More encouraging news is that for whites and minority-group members, males and females, skills are an important determinant of earnings. Our results show that in the labor market of the early 1990s, young high school dropouts could expect higher annual earnings if they had higher levels of basic cognitive skills. Our results also show inter-group variation in the returns to skills, with females generally having higher returns than males, and minority group members, especially those with relatively high skills, having greater returns than white dropouts. For example, among dropouts who scored high enough to be awarded a GED, male and female minority-group members who scored in the upper ranges of the GED had annual earnings in 1995 that were nearly $1,300 to $1,400 dollars higher than lower scoring minority-group members who had a GED. The comparable figure for white females was about $950, and only about $150 (and statistically insignificant) for white males. We also found returns to skills among dropouts whose skills were so low that they were unable to pass the GED exams. Among these lower skilled dropouts the premium for higher GED scores (even though that score was too low to meet the GED passing standard) ranged from about $2,000 for white and minority males to about $3,000 for white and minority females.

The significant economic return to modest skill differences among minority-group male dropouts sheds light on a puzzle in the random-assignment evaluation of the Perry Pre-School Program. As Barnett (1996) has described, black males who participated in the early childhood intervention program did not have greater educational attainments, on average, then did black males in the control group. Yet, the black males in the treatment group did have somewhat higher average earnings at age 27 than did black males in the control group. Barnett speculated that this may have stemmed from the higher average cognitive skills of the treatment group, as measured by test scores during their schooling years. The evidence presented in this paper on the economic returns to skill differences for minority male dropouts supports Barnett's hypothesis.

The research results in this report contain important policy implications. Welfare reform is pushing many low skilled individuals into a labor market where skills increasingly matter. We find that higher cognitive skills mean higher subsequent earnings for dropouts. This is important information for teachers in GED preparation programs who often face pressure from students to teach to the test at the expense of time spent on skill formation. The message they should impart to there students is passing the GED exam is important, but increasing your skills along the way is also important. However, while our estimates of the returns to skills for many

groups are large in percentage terms, we caution that this is largely because these young dropouts have such low average annual earnings to begin with. This is the bad news, and it is a strong argument against a decision to drop out in the first place.

Handout 📄

Quiz

1. Between 1979 and 1996 the median earnings of 25-34 year-old males who left school before obtaining a high school diploma fell by what percent?
    a. 73%
    b. 30%
    c. 17%
    d. 2%

2. Do skills matter among dropouts in this information-age economy?
    a. no, the annual earning levels of young dropouts are quite low
    b. yes, especially for white males, higher levels of basic cognitive skills led to higher annual earnings
    c. yes, for whites and minority-group members, males and females, skills are an important determinant of earnings

3. How did the earnings of minority male dropouts compare to those of white male dropouts in 1996?
    a. averaged 18 % less
    b. averaged 28% less
    c. averaged 38% less
    d. none of the above

4. Which of the following is *not* an issue that the research data in this study was able to address?
    a. only individuals who are working are included in the analysis, giving concern about the selection effects associated with who is and who is not working
    b. test scores may provide underestimates of true cognitive skills, especially for individuals who find test-taking distasteful
    c. correlations between test scores and labor market earnings may reflect the importance of unmeasured motivation, rather than the causal impact of cognitive skills
    d. measuring labor market earnings five years after dropouts last attempted the GED exams reduces the problem of assessing the direction of causation of the correlation between test scores and earnings

5. Which of the following is *not* a policy or program implication from this research?
    a. Welfare reform is pushing many low skilled individuals into a labor market where skills increasingly matter.

b. The message that teachers should impart to their students is that passing the GED is important, but increasing your skills along the way is also important.

c. Young people should be encouraged to drop out of high school because they can get the GED and have adequate annual earnings.

Handout 📄

A Mingling of Minds: Collaboration and Modeling as Transformational Teaching Techniques

By Carol Eades
Focus on Basics, Volume 5, Issue B, October 2001, pp. 26–29

Before speaking, Jim glances out the window at a few snowflakes falling to the slightly frozen November ground. Martha gazes from one side of the blackboard to the other, examining the chalky white set of notes that represents two hours of collaboration. After all seven students in my GED class have generated ideas and shared information, a few offer some closing thoughts.

"My grandmother came from Germany. I never gave much thought to how her life might have been. In fact, I never even knew her. I just heard stories about her when I was growing up. She could have had to move around like that," Jim said, with a new feeling of awareness.
"Yeah. She could have. I work with some people who moved here from India," responded Deborah. "I never thought about that they grew up hundreds and hundreds of miles from here. That must be hard. I wouldn't like that."

"I work on the floor with a guy from China. Nobody can understand him much. I need to try harder to be friendly even if I don't always know what it is he's saying. I'd like to know what it's like in China since I'll probably never get to go," Martha adds.

A sense of camaraderie pervades our group. Earlier we had read about Ellis Island and about the multicultural nature of our nation. We had brainstormed about why people leave their homelands and emigrate, what hardships they may face in getting to their new destinations, and what awaits them upon arrival. Soon my class of American-born, English-speaking students will write an essay on the challenges confronting a family whose members speak little or no English when they move to the United States. This lesson crossed the disciplines in reading, vocabulary, inferential skill building, geography, history, brainstorming, mapping, and other elements of process writing. This class took place at a large university where all the students were employed. Working in this environment brought them into frequent contact with a diverse, international population. From the comments they made, I sense that more has taken place than just preparation for essay writing. Perhaps this collaborative process has led to transformation.

Informational vs. Transformational Teaching

As I reflect on this conversation, I cannot help but remember my own education, as a child and young adult. It was quite a few years ago, in a school system where the teachers customarily assumed almost total responsibility for filling students' minds with information. Those teachers mainly recited facts, gave out practice exercises, and tested us. Only rarely was time devoted to discussion, group projects, or student interaction during class. Paulo Freire refers to such a teaching style as the banking concept of education, implying that the teacher is merely making information deposits into the minds of students (Shor & Freire, 1987). I refer to it as informational teaching. Purely informational learning may be thought of as acquiring or producing descriptive knowledge ("know what") that is new to the learner as well as procedural knowledge ("know how"), which indicates how to do something (Holsapple, 1995). In addition, it may include reasoning knowledge ("know why"), which is concerned with understanding what conclusion is valid when a given situation exists. "Know what," "know how," and "know why" are simple ways of thinking about descriptive, procedural, and reasoning knowledge respectively. Research confirms that informational learning approaches often do not affect students' present beliefs and interpretations or provide new ways of using information (Taylor et al., 2000).

Informational teaching focuses on the transfer of information to a learner. By itself, it is not particularly conducive to motivating learners, nor to helping them accomplish the kinds of changes in their lives that I believe are the purpose of adult learning. To me, adult education should be a means for enhancing and honing social cooperation, collaborative techniques, and individual and group responsibility skills that adult students need.

Transformational learning changes the learner. As such, it is crucial for accomplishing these objectives. Transformational learning enhances informational learning by interconnecting with it. It leads "… deep and pervasive shifts in the learner's perspective and understanding" (Portnow et al., 1998). Transformational learning involves an alteration in how a person filters information, interprets information, and relates it to previously received information, ultimately changing the way in which the person interacts in the world. In other words, a person's view of the world has been altered so that future assimilation of impressions is different, as are the consequent knowledge-based behaviors.

Teaching for Transformation

How do you teach for transformation? I have found that instructional activities involving collaboration and modeling are especially useful. Collaboration

involves having students work together as a community of learners to share knowledge and to create new knowledge. During collaboration, I frequently pose a question, dilemma, or situation and have students collaborate in search of a solution or answer. I used this method in the earlier classroom vignette described above. I presented a short tale about an immigrant that served as a discussion prompt. It led to the class defining immigration and related terms, tracing immigration routes on a map, discussing the history and significance of immigration, and sharing personal stories.

An Adult Educator's Role in Collaboration

To establish a collaborative climate, it's important to provide:

- an opportunity for collaboration

- a model for collaborative activity

- a community where everyone is valued

- equal opportunity for every adult student

- student ownership of views

- time for ongoing response

- minimal input that helps students see new possibilities

- minimal input that helps students see new problems

- an open gate to new awareness learning by asking open-ended questions

- a closed gate to negative criticism that goes beyond beneficial learning through diplomatic validation of differences and conflict resolution

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Another example of the transformational teaching I do involves math. I frequently give math word problems: students discuss the nature of the problem, determine what is being asked in the problem, and decide the best method to use to solve it. Then they may work the problem individually, compare answers, and help each other as needed. We also often compare word problems to real-life situations they encounter. For instance, a math problem involving percentages can easily be transformed into problems about prices of sale items at stores or the return on bank interest rates.

I have always found my students to be very receptive to transformational teaching. An almost irresistible sense of personal connectedness to the subject matter occurs and even the more reticent students become engaged and speak up. Collaboration can also help adult students learn how to conduct themselves, negotiate their own positions effectively, productively assist others' attempts to negotiate their positions, and evaluate others' viewpoints. Communication skills are enhanced as students work to

avoid vague language; mutual responsibility is developed as students work together in collaborative activities (Tipper & Malone 1995). Critical inquiry and analytic thinking take place as students seek to make sense of positions and arguments. A sense of community is achieved as students endeavor in extensive collaborative work to establish open communication, seek to help each other, learn, and trust each other with their thoughts and feelings. In this way, development of more complex, flexible thinking and multiple perspectives leads to a transformational under standing of the adult student's own life and of the world (Taylor et al., 2000).

Modeling

After engaging in collaborative work, I generally follow with a teaching-by-modeling session. Before class ended on the day of the immigration lesson, I explained that the students would be writing an essay on immigration. I provided them with details about the topic and the nature of the writing. At the next class meeting, I modeled an outline of an essay similar to what they might write, beginning by putting the writing topic on the blackboard. The modeled subject must be adequately different from the topic the students will soon write about not to influence the content of their work, yet similar enough to provide a sound model. I chose the topic, "What Immigrants Leave Behind in their Homeland," because students would be writing instead on challenges confronting an immigrant family after moving to America. The general topic of immigration remained intact, but the view was different in the model essay.

Next, I had students spend a few minutes drafting a short list of what immigrants might leave behind. Students voluntarily came to the board and briefly wrote some of their ideas: family, friends, home, familiar environment, job, and money or treasured possessions. Then we discussed and practiced how we might put some of these ideas into sentences. Students wrote some representative sentences on the board. We discussed how these sentences could best be worked into paragraphs and outlined the shape an essay might take using the ideas we had generated. As a last step, we practiced writing one good strong paragraph on the board. The students then indicated that they felt prepared to begin writing on their own. Modeling not only serves as a living demonstration and example but can also ease anxieties that some students may have when initially attempting an academic task.

Putting it Together

Educators can do much to provide a setting conducive to transformational learning by establishing a collaborative climate and providing learners with the opportunity to do so. For some instructors, this will mean suppressing old teaching habits: that all, or most, of the instruction is solely teacher-based. It

may not be easy initially to yield some control and permit true collaboration to flourish. Providing an initial model for a collaborative activity is useful, particularly in classes in which it has not yet been used.

Figure 1.
A Lesson Using Collaboration and Modeling

Present a brief vignette about a father, mother, and three children who are forced to leave their war-torn homeland and flee to America. Ask students, "What will each of these immigrants lives be like during the first year here?"

Phase 1: Collaboration
- Preview vocabulary used in lesson
- Preview historical context of immigration
- Read about Ellis Island
- Discussion of reading
- Map immigration routes in an atlas
- Look at related items of interest on the Internet
- General discussion: why people emigrate; what awaits them in a new land
- Share personal anecdotes

Phase 2: Modeling
- Introduction to topic and writing assignment
- Model writing similar to forthcoming independent writing:
- Prewrite on what immigrants leave behind in their homeland
- Brainstorm from prewriting
- Turn ideas into sentences
- Outline an essay
- Draft a paragraph

Phase 3: Independent Essay Writing
- Prewrite
- Map
- Outline
- Write the draft
- Finalize the essay

Instructors can imaginatively implement collaboration and model teaching techniques in many different ways. A diagram of collaboration and modeling for my lesson on immigration appears in Figure 1. Giving students a similar diagram can help them visualize the direction of the collaboration and modeling session. Students can ascertain at any given time the phase of learning taking place, and note at a glance where the instruction process is leading. An instruction diagram can provide evidence

of a planned process and may very well serve to stave off those "Where is this going?" looks from students.

Conclusion

Collaboration provides an environment for transformational learning and increases the opportunity for immediate as well as future meaning, benefit, and impact. It is a natural precursor to modeling. In turn, modeling helps students progress toward independent performance and usually yields outcomes that are closer to desired educational expectations.

Collaboration and modeling are integrated teaching techniques that can enable students to help each other. When I use collaborative methods, I typically spend less time teaching students individually, allowing more time for all of my students. Adult students are not the only benefactors in this transformational learning process. Instructors have just as much to gain from engaging in transformational teaching. I have come to new awareness and deepened my own ways of seeing, thinking, and knowing as a result of stepping beyond the limiting boundaries of informational teaching. I have lost any tendency to make dogmatic prior assumptions about what my students may or may not know, while gaining a greater ability to communicate with them. I am more willing to let my students think for themselves and teach each other. Rather than having all the answers myself, my students and I find answers together. That makes me a better teacher and my students better learners.

References

Holsapple, C. (1995). "Knowledge management in decision making and decision support." *Knowledge and Policy*, Vol. 8, No. 1, 5-22.

Portnow, K., Popp, N., Broderick, M., et al. (1998). "NCSALL's research findings: Transformational learning in adulthood." *Focus on Basics*, 2 (D).

Shor, I., & Freire, P. (1987). *A Pedagogy for Liberation: Dialogues on Transforming Education.* New York: Bergin & Garvey.

Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing Adult Learners.* San Francisco: Jossey-Bass.

Tipper, M., & Malone, M. (1995). "Conflicting demands in writing response groups." *The Writing Instructor,* (Summer).

About the Author

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Handout 🖹

Project-based Learning and the GED

By Anson Green
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A few years ago, I was hired to teach a General Educational Development (GED) class for public assistance recipients in San Antonio, Texas. I had been teaching Western humanities classes to freshmen and sophomores at Florida State University and had no training in teaching under-prepared adults. Though I could tell that the multilevel nature of the class would make the lecture approach I used in the university unworkable, I was most comfortable with a teacher-centered classroom. I adopted an approach where students silently studied individual subjects of the GED test using commercial GED textbooks, and I provided individual instruction.

This was somewhat successful in moving high-level students through the GED, yet I felt stymied in my efforts to motivate and educate those who required more remediation. Months of diligent work writing essays from GED textbook prompts or studying a science book often left them frustrated. In addition, I felt that most students who left class, with or without their GEDs, still lacked the self-esteem, motivation, and teamwork skills needed to get off public assistance and enter the workforce.

My frustration was relieved when I was introduced to the Project FORWARD life skills curriculum from El Paso Community College.[1] The curriculum stresses reading and writing activities that foster confidence and motivation by encouraging students to work together toward their academic and life goals. My quiet classroom began to give way to an excited, open community of learners. By connecting class activities to my students' world a world where poverty, domestic violence, abuse, and brushes with the law are a commonality I was able to increase their motivation to learn. Though their ages, educational backgrounds, and race varied, their shared experiences became the basis for instruction.

In September, 1996, Project FORWARD invited me to join a cadre of adult education teachers to explore innovative teaching techniques. A major objective was to implement a student project in our class. Though class projects seemed like an exciting idea, I never thought that they could be a viable means of producing the more defined skills needed to pass GED tests. Our initial meeting with Project FORWARD Director Barbara J. Baird and education consultant Heide Spruck Wrigley was spent defining the theory and discussing methods of implementation.[2] While the approach seemed exciting,

I had reservations about how a project could be tied to the GED competencies and how my students, who are often very test driven,' would react to the idea.

Our First Project

Students in my open-entry class must attend class 25 hours a week to receive their welfare benefits; thus we provide five hours of instruction per day, five days a week. As test-driven' as my students can be, they rarely studied for their GED tests five hours a day. After some diligent work in the morning, they were usually less productive in the afternoons and turned to reading magazines, chatting, and even sleeping if they had spent a long night up with a sick child. When I undertook this new teaching initiative for Project FORWARD, I was hoping that we could make the afternoons more productive by using them for project time.

Much to my surprise, my class was very excited when I introduced the idea of spending our afternoons working on a project. I think part of my success in turning them from more traditional work lay in the way I introduced the idea. Rather than telling the class we were going to do projects in the afternoon, I asked them if they had any ideas that might improve the class and add some spice to our usually slow afternoons. I briefly mentioned the idea of working on a class project and at the same time passed around a book of student poems compiled by another class. All but two of my 20 students were interested, and ideas on what we could do began to emerge.

That year, my class produced a handbook for students designed to help new learners on public assistance feel more comfortable coming back to school. The idea came from two new students who suggested we make a one-stop resource outlining Aid to Families with Dependent Children / Job Opportunity and Basic Skills Training (JOBS) requirements and containing information on the GED test.[3]

The project was a great success for all; students excitedly compiled a useful handbook, and I was pleased by the amount of quality essay writing and editing skills gained in the process. Students edited each others' work and commented that they enjoyed debating and arguing over points of grammar rather than using worksheets to gain the knowledge. Since the handbook was designed for and by JOBS students, the class really began to grow as a community. Students realized that they had common hardships and concerns; new friendships developed, and students enjoyed working together to solve new problems. When we turned from the project to more traditional GED work, I sensed new motivation and excitement in the classroom.

When we finally received the bound copies of our student handbook after a brief summer break, only two students remained in our open-entry open-exit class who had been involved in creating it. The booklets made a strong impression on the new students, and they became eager to "one up" the previous class. I was pleased by the motivation and had high hopes for our next project.

This Year's Project

This year, my class took on a project that moved them from enriching their environment in the classroom to reaching out and becoming actively engaged in their community: a tall order, but one that evolved naturally within the class.

Last September, one student, Jennifer, suggested that our class give younger students advice on the dangers of dropping out of school. Dropping out and the unexpected pregnancy that often preceded it were experiences that most of my students had in common. I saw a perfect opportunity to develop a powerful project. The potential for building self-esteem, teamwork, and communication skills seemed limitless; plus, the project would demand many academic skills. Unfortunately, only about five of my 16 students seemed really interested. They persisted, however, and, as ideas began to come together, more and more students began to provide input.

On the suggestion of Jennifer's case manager, we found a contact at a local junior high school who was a counselor. The counselor came to hear my students' intentions and left very interested in hosting our presentation. The meeting was a true watershed. My class began to truly see the potential for the project. A counselor, who, when my students had been in high school, might have been a figure to be avoided, was now inviting them to use their experiences as a positive teaching tool for others. Two of my students had dropped out of this same school, making the significance of the project even more profound.

In class, we spent anywhere from 20 minutes to a few hours a day working on the details of the project; the remainder of the class time was spent focused on specific GED work. Some days, when attendance was poor or students felt a pressing need to cram for the GED tests, we did not work on the project at all. We assigned several students to be in charge of particular sections of the project so that when someone was absent or left the class, progress on that section could continue. We kept an informal list of who was working on what and found it to be a successful way to manage the work.

The project seemed to be well underway when we ran into a glitch that brought it to a halt. Before Thanksgiving break we received a phone message

confirming that we had approval to do a presentation, but that the topic of pregnancy could not be brought up. I tried to contact the counselor for clarification, but was told she was already out of her office for the break.

Even though my students range in age from their late teens to mid-30s, early pregnancy had been a major contributor to all of their loss of education and opportunity. If they could not candidly advise students on this point, how could they truly feel like they were making a difference? Despondent, we left for Thanksgiving break. The next week our class resumed, and, as I expected, work on the project ceased. My students had lost the impetus to continue.

Fortunately, I reached the counselor the following week and received some encouraging news. The controversy lay in the way we treated the subject of pregnancy. As long as the topic remained in the personal stories of my students, it was acceptable. We were, however, not allowed to direct questions to the students that pertained to premarital sex or contraception. Though it was an added challenge, the stipulation allowed me to involve the class in a very real critical analysis of a subject that is still controversial in the South.

After several more weeks of dedicated rehearsal, my class delivered a series of presentations to students at the Anson Jones Middle School. Our presentations, entitled "Something to Think About," focused on the extreme hardships and almost insurmountable obstacles my students faced after dropping out of school. They included a question and answer session on the realities of dropping out of school, a budgeting game that emphasized the impossibility of making it on minimum wage with no diploma, and concluded with personal testimony from my students.

The presentations were a great success. My students were congratulated by counselors, teachers, and, most importantly, the middle school students themselves. Imagine a scene where 70, 12 to 14 year old boys, many of whom are heading for gangs, are struck silent by a tale of abuse, alienation, and abandonment told by a young woman only a few years older than themselves. My class had made a significant impression on a usually impenetrable group.

Following the presentations, my students were over owing with confidence and actively critiqued their performance, while discussing what they wanted to do next time. They demanded we schedule more presentations at other schools. The few students who had preferred to be backstage participants, facilitating the presentation, suddenly gained the confidence to volunteer their stories.

My class worked like never before toward perfection, probably because they were addressing issues in which they were the experts. They also recognized the need to connect successfully with the students. In a sense, they were creating their own curriculum to teach others. As they wrote their autobiographies, rehearsed them in front of a borrowed video camera, and rewrote them again and again, they developed the critical analysis and writing skills needed for the GED essay test. They were writing about their lives, so they went at it with a passion that a textbook or exam could never inspire.

While creating the budgeting game, students gained solid math skills in truly contextual learning. What started out to be a simple process of adding and subtracting paychecks and debts became a lengthy lesson in finance supplemented with GED textbook work in percentages and decimals. Real-life problem solving entered the class: What exactly was the F.I.C.A. tax, and how do we figure it? What are fixed and flexible payments? Is cable TV really a necessity? They debated what to include and how to figure costs, figuring and refiguring until a consensus was found and the presentation planned.

Besides academic remediation, my students started gaining the self-esteem, motivation, and group interaction skills necessary for success in the workplace. Pat, a mother of four, successfully entered a highly competitive air conditioning and heating program taught by Texas A & M University just days after our presentations. Though very motivated on her own, Pat commented that working on the project helped boost her confidence, making the transition to a completely male vocational classroom less daunting. Now, several months later and still the only woman in the program, Pat has been appointed shop foreman over 28 men in her class. Accomplishments like this are truly tangible examples of the intrinsic qualities gained from project work. Relying solely on the GED to ensure success is not realistic. A strong sense of personal responsibility, a solid self-image, and good interpersonal skills are a vital addition to the credential. By working as a team, my students were able to turn past mistakes into a positive learning experience for themselves and others.[4]

This project was ambitious; however, implementing project-based activities in class need not be so intensive. Students find it easy to write about their families. Using inexpensive three-ring binders and photographs from home, students can create and compile autobiographies. Writing comes more easily and students gain the marketable skills of editing, laying out, and organizing a text that is their own. Pooling the diversity of the class into a peer-edited cookbook, a collection of student autobiographies, or a letter to the local transit authority to request better bus service to your program can provide a rich forum for building a tight community in the classroom, in addition to working on skills needed for the GED.

The Teacher's Role

Project-based learning allows students to become actively engaged in their learning experience. The instructor takes a back seat while students initiate, facilitate, evaluate, and produce a project that has meaning to them. Instead of creating and directing exercises for passive students, instructors become coaches, facilitators, and sounding boards for student ideas. As a teacher, I constantly listen for issues that really engage the class. This conscious listening helps me identify key issues that are important to my students. I then use these issues as catalysts for student activities or projects.[5] Rather than trying to teach students how to be critical thinkers by providing readings and writing samples on the Louisiana Purchase or cellular mitosis from GED textbooks, I take themes that are important to them and help them create activities that develop strong thinking and language skills. Since the focus is relevant, learning becomes natural, unforced, and engaging. Students work, not simply to pass a test but to create change or add refined meaning to their lives.

This approach means I had to look at my classroom in a different light. When I began teaching, I saw talking, interaction, and commotion in the class due to outside issues as deviation from learning. I felt safe with teacher-guided activities that produced quiet, individualized learning. Channeling students' energy and concerns into a quiet classroom was often difficult. Now, I capitalize on this energy and information and use it as raw material for student work. Furthermore, students who once expected straightforward test preparation, but usually dreaded it, find the open, participatory environment more conducive to learning. Students who had difficulty writing half a page on a regular GED topic were amazed to find themselves writing four or five pages of analysis on their own lives for our project. Math work, which often seemed oppressive, was eagerly tackled for our project because it truly seemed relevant.

I feel that much of the success of project-based learning activities rests on the creation of a comfortable, risk-free classroom environment. Students must feel they can discuss their lives, beliefs, and mistakes without fear of criticism or judgment. Only then can the instructor locate real issues of importance to build on in class. For the instructor, the challenges lie not so much in carrying out the actual project but in being able to assume effectively the role of mentor and coach rather than dispenser of solutions. Being actively involved in the salient issues of the class and then teasing out what is evocative and meaningful to the students is crucial. Distilling these into a class project, though, usually takes care of itself. Students are experts in their own reality; the biggest challenge is letting them guide you through it.

Endnotes

[1]Project FORWARD is an 80-lesson life skills curriculum funded through a special projects grant from the Texas Education Agency. For information on obtaining the curriculum on disk, contact The Texas Center for Adult Literacy and Learning Clearinghouse at 1-(800)-441-7323.

[2]See chapter two of Heide Spruck Wrigley and Gloria Guth's *Bringing Literacy to Life: Issues and Options in Adult ESL Literacy* (San Diego: Dominie Press Inc., 1992) for a thorough account of a variety of classroom approaches that emphasize student participation and meaningful learning. Elsa Roberts Auerbach's *Making Meaning, Making Change* (McHenry, IL: Center for Applied Linguistics and Delta Systems Inc., 1992) is also indispensable on these points.

[3]This student project, "RULER," accompanied by a "How To" guide, is available through The Texas Center for Adult Literacy and Learning Clearinghouse at 1-(800)-441-7323.

[4]The project, "Something to Think About," has been published on the Internet at http://members.aol.com/CulebraMom /jrhigh.html. Print copies are available from The Texas Center for Adult Literacy and Learning Clearinghouse at 1-(800)-441-7323.

[5]Auerbach (note 2), page 43. Chapter four of this book, "Ways In: Finding Student Themes," provides some useful tips on identifying issues important to your students.

About the Author

Anson M. Green is the instructor for the Culebra Road JOBS class for Northside ISD in San Antonio, Texas. For the past two years, he has been a member of the Project FORWARD Master Teacher Initiative. He also teaches English at Texas Lutheran University and Humanities at San Antonio College. E-mail is welcome at: Ansongreen@aol.com.

Student Stories

Untitled
by Margarita Roman

Participating in this presentation has made me become a better person in school. It has also helped me speed up in all skills.

The presentation I did with the group was progress for myself and also helped others. I participated by letting students know how dif cult it was for me since dropping out of school. It was not a good decision.

My story was part of my life. I advised students on the importance of staying in school. I shared my education and how I've progressed in the past year. I shared how I've managed 12 years of my life raising my three kids with the help of the government, which won't be there for me much longer. I spoke on how I've budgeted my assistance through the month with three kids. I also shared what it's like returning to school and beginning learning again, building up new skills, and also building up self-esteem and positive attitudes towards education.

The presentation was very interesting. Our group had all the attention of the students. It felt great having so much attention. Also our group had a lot of questions from the students at Anson Jones Middle School. I feel like it was very successful.

Untitled
By Linda Yzaguirre

The biggest mistake I ever made was dropping out of school. I thought going out and working were more important, but all I got by dropping out was working minimum wage jobs, hanging out with gangs, and eventually getting arrested. I spent time in jail and am currently serving a ten year probation sentence.

I decided to do our "Something to Think About" presentation because I thought that if young students heard my story and all the mistakes I made, they might think about what they are doing now and how it will effect them later. I never did.

In our presentation, I wanted to stress how important it is to graduate and go to college. A high school diploma is no longer enough to get a good job. I feel better knowing that maybe I helped someone from making the same mistakes I made. Maybe by hearing my life story, they will decide that they don't want to take the same road I did. Since doing the presentation, I now have more confidence in myself. I'm now in junior college and feel like I can do anything I put my mind to.

About the Authors

Margarita Roman is a 28-year-old single mother. She likes to spend lots of time with her three kids, Ernest Jr., Alfonso, and Concepcion Margarita Diaz. She enjoys eating out on weekends and going out to recreation parks. She also enjoys helping her kids with their homework, which has helped them improve in the second nine weeks of school, and they also have perfect attendance. She enjoys reading books with them.

Linda Yzaguirre was a student of the Culebra Road JOBS class in 1997 and is currently attending San Antonio College, where she is studying computer programming. When she's not in school, she likes to spend time with her son Brandon.

Handout 📄

Sample Instructional Plan

Student Name: **Date:**

Learning objective(s):		
Skills	**Activities**	**Materials and Resources**

Homework:

Student Comments:

Instructor Notes:

Information About NCSALL

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 among 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 (ABE), English for Speakers of Other Languages (ESOL), and adult secondary education services. In pursuit of this goal, NCSALL has undertaken research projects in four areas: (1) student motivation, (2) instructional practice and the teaching/learning interaction, (3) staff development, and (4) assessment.

Dissemination Initiative

NCSALL's dissemination initiative focuses on ensuring that practitioners, administrators, policymakers, 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 policymakers; *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 policymakers apply findings from research in their instructional settings and programs.

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