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## The Effectiveness Of Project-Based Learning In Teaching Adult ESL Students How To Locate, Evaluate, And Use Evidence From Texts

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THE EFFECTIVENESS OF PROJECT-BASED LEARNING  
IN TEACHING ADULT ESL STUDENTS HOW TO LOCATE, EVALUATE, AND USE  
EVIDENCE FROM TEXTS

by

Shoshana Hoose

A capstone submitted in partial fulfillment of the requirements for the degree of Master  
of Arts in English as a Second Language

Hamline University

Saint Paul, Minnesota

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## **CHAPTER ONE**

### **Introduction**

Adult English as a Second Language (ESL) classes in community programs traditionally have taught students the basic communication skills that they need to negotiate daily life. Students have learned the vocabulary required to shop for groceries, rent an apartment, follow directions, and apply for low-skill jobs (Parrish, 2015). They have studied verb tenses and basic grammar, such as how to ask questions or give commands.

Those rudimentary communication skills are not sufficient to prepare English language learners for college, the demands of the 21<sup>st</sup> century workplace, and tasks of everyday living such as choosing a credit card or a health insurance plan. Many jobs now require postsecondary training, advanced communication skills, and critical thinking skills (Eyring, 2014; Johnson & Parrish, 2010, Parrish, 2015). As a result, adult ESL and basic education programs are being called on to prepare students for postsecondary education and the advanced skills needed to compete for jobs (Eyring, 2014; Parrish, 2015; Pimental, 2013).

The U.S. Department of Education's College and Career Readiness (CCR) standards for English Language Arts that are now being implemented throughout the country reflect the effort to infuse critical thinking skills and more advanced communication skills into adult education curricula (Pimentel, 2013). Some English language learners face special challenges in meeting those standards because they have

limited formal education as well as limited language skills. Many immigrants come from educational backgrounds that emphasize memorizing facts rather than analyzing and synthesizing multiple sources of information (Parrish, 2015). Even English language learners with college and professional degrees may lack some of the skills needed to succeed in U.S. colleges and workplaces.

One teaching approach that could help implement the CCR standards is Project-Based Learning (PBL). This approach has students research a real-world issue or topic and create a product or presentation to demonstrate their learning. Typically, projects take place over several weeks or months, students make some decisions about the choice of subject and/or how they will present their work, and they collaborate with classmates on at least part of the project (Alan & Stoller, 2005; Stoller, 2006). PBL has proven to be effective in helping students acquire a wide range of skills while encouraging use of their creativity and complex thinking skills (Beckett, 1999; Beckett & Miller, 2006; Halvorsen Duke, Brugar, Block, Strachan, Berka & Brown, 2012). I conducted a mixed methods study of a PBL unit in an adult ESL class to determine whether the unit helped students develop proficiency with the academic skill of locating, evaluating, and using evidence from texts in their reading and writing, as called for by the CCR standards (Pimentel, 2013).

This chapter explains why knowledge of academic skills is increasingly important for English language learners. Building on previous research, I present reasons why PBL is a promising approach to provide that instruction. I then explain how I became interested in the use of PBL with adult ESL students. I conclude with an overview of my research question, and a preview of the next four chapters.



## **The Need for More Rigor in Adult ESL**

Since the 21<sup>st</sup> century workplace requires critical thinking and problem-solving skills, English language learners increasingly will need specialized training and/or postsecondary education (Eyring, 2014; Johnson & Parrish, 2010). A 2011 study by Foster, Strawn & Duke-Benfield projects that nearly two-thirds of the jobs in 2018 could require education beyond a high school degree. In 2016, Americans without a high school diploma had unemployment rates more than twice as high as those with an associate's degree; unemployment rates dropped as college education levels increased (U.S. Bureau of Labor Statistics, 2017). Postsecondary education also improves workers' income; workers with an associate's degree earned about 63 percent more than those who have not finished high school (U.S. Bureau of Labor Statistics, 2017).

Research by Johnson & Parrish (2010) found that upper-level Adult Basic Education (ABE) teachers are not teaching many of the academic skills that English language learners and other students need to succeed in college, such as conducting research, summarizing, analyzing and synthesizing information from multiple sources, collaborating with peers, and presenting one's findings in oral and written reports. English language learners face the additional challenges of acquiring academic vocabulary in English, and becoming accustomed to classroom norms that may be dramatically different from their previous educational experiences.

The CCR standards call for major shifts in how adult education programs teach English Language Arts/ Literacy in order to emphasize academic skills (Pimentel, 2013). The shifts include building knowledge through content-rich nonfiction and practicing

academic reading skills with complex texts. The standards were not written for ESL students, yet states are expected to develop programs that meet academic standards like the CCR (Workforce Innovation and Opportunity Act, 2013-2014). That requires new approaches to teaching ESL that integrate academic skills such as researching multiple sources, analyzing them, and using evidence from texts to support claims.

### **The Promise of PBL**

Research on PBL in ESL classes demonstrates the value of this approach in providing opportunities for students to develop some of the skills needed for future academic and workplace success, including critical thinking, presentation skills, and collaboration (Alan & Stoller, 2005; Beckett, 2006; Stoller, 2006; Warschauer, 2000). Most of the PBL research has focused on K-12 settings, with relatively few studies looking at the adoption of this approach in adult ESL classes. Few researchers have investigated how PBL could help implement the shifts called for by the CCRS for adult education. That is the underlying question of this study.

### **Background of the Researcher**

I became interested in trying a project approach with my adult ESL classes after seeing its successful use in K-12 classes in my district. Prior to the research described in this paper, I planned and taught two PBL units during the 2015-2016 school year. In the first unit, my advanced (level 5) ESL students learned about our community, including the historic role of immigrants in building the city. They then compared our community to the community where they grew up or to the home community of another student. A rubric used for assessing the outcomes of the project called for students to identify similarities and differences between the communities studied. They could choose the

specific topics that they compared, such as education, housing or the role of women.

Students wrote reports about the two communities, and they gave oral presentations to the class. They assessed their own work, and they also were assessed by the teacher and a panel of school administrators and community members, using the rubric referenced above.

For the second project, students investigated a career that they had previously worked in or that interested them. They interviewed someone currently working in that field to find out about the training required, the availability of jobs, and the range of jobs in that career field. The project required them to write interview questions, conduct the interview, and write thank-you letters. They shared what they had learned about their chosen careers by writing reports and giving short oral reports. The oral reports were assessed by the students themselves, the teacher, and classroom volunteers.

Both assignments gave students an opportunity to practice language skills in all four domains. They honed their editing skills as they worked on second drafts of their written reports. They improved oral presentation skills such as speaking slowly and clearly and making eye contact with the audience. They also gained experience in some of the skills that they will need if they go on to college, such as breaking down a multi-week project into manageable steps, using rubrics to guide their work, and organizing and presenting their findings.

The CCR standards call for students to research a topic using print and digital sources and to summarize what they have learned (Pimentel, 2013). That is exactly what was done in these projects. Students took the assignments very seriously. Their responses to a questionnaire about the career project showed that most of them enjoyed

working on the assignment, that they felt it had improved their English skills, and that they learned useful information to shape their future goals. My experience with the two projects spurred me to want to learn more about how PBL could be used effectively in adult ESL classes.

### **Guiding Question for the Current Study**

Finding and using credible evidence to support claims is one area of particular interest in the CCR standards. Learners need to learn how to locate, extract, and analyze information from written texts, graphics, the Internet and other sources. They also need to learn how to back up their opinions by drawing on factual sources. Given that PBL provides learners with experience in researching information from a variety of sources and synthesizing that information into a final product, I wanted to determine whether a PBL unit could help implement the CCR standards by teaching students to gather, analyze, and use evidence from texts. My research question was: To what extent is PBL a useful teaching approach to help students learn how to extract, analyze, and use evidence to support claims?

### **Chapter Overviews**

In Chapter One, I have introduced my research by showing the context of changes in adult ESL curricula, the reason why PBL could help implement a more rigorous and academic-focused curriculum, the need for the current study, and why the results might be significant. I also have described my previous experiences using a project approach in adult ESL classes. In Chapter Two, I will review literature relevant to PBL from the fields of adult education, Second Language Acquisition and teaching English as a Second Language. I will provide a definition of PBL and examples of its use in ESL classes,

some of the benefits and challenges of PBL, effective practices for PBL as described in research findings, and how PBL could relate to the shifts underway in adult education as a result of the CCRS. In Chapter Three, I will describe the research design and methodology of this study. In Chapter Four, I will present my results. In Chapter Five, I will make observations about the data that I gathered and its significance. I also will describe the limitations of this study, and offer recommendations for future research.

## **CHAPTER TWO**

### **Literature Review**

My study of an adult ESL class investigated whether a PBL unit on students' chosen careers helped them learn academic skills related to gathering, analyzing, and using evidence from texts, as called for by the CCR standards for adult education. In this chapter, I will define PBL further, and describe how it has been used in ESL and English as a Foreign Language (EFL) classes. I will show the documented benefits and challenges of this approach, and I will describe effective practices for its implementation. I will review the CCR standards as they apply to ESL. Drawing on research findings, I will explain why PBL could be useful in the implementation of the CCR standards and the broader goal of preparing ESL students for future academic and workplace success.

#### **Defining Project-Based Learning**

PBL has a long history dating back more than a century. The 1918 publication of a pamphlet by William Heard Kilpatrick titled "The Project Method" (as described in Beckett, 1999) touted the approach as a way for students to learn content while solving real-life problems. PBL was embraced by some followers of John Dewey because it reflected their focus on student-centered learning (as described in Beckett & Miller, 2006). In today's implementation, some projects teach students how to advocate effectively so that they can have a voice in community issues that concern them, thus reflecting Paulo Freire's philosophy that people who traditionally have been dominated

and victimized should gain the skills to participate in democracy (as described in Schugurensky, 1998).

While classroom projects vary greatly, those described in the research on PBL (Beckett, 2006; Moss & Van Duzer, 1998; Stoller, 2006; Tims, 2009) typically have these characteristics:

- The project lasts for several weeks or even months.
- Students have some role in choosing the topic and/or the approach to the project.
- The projects require students to use their language skills in real-world settings.
- Students learn about content as they are improving their language skills.
- Students do at least part of the work as a group. Learning how to collaborate is part of the purpose of the project.
- Students often do research that goes beyond reading books and searching for information on the Internet. Research may involve data collection, observations, and/or interviews.
- Students are involved in an activity that has a real-world purpose. Often, the project helps address a community problem.
- Students use their research to create a product and/or to give a public presentation of what they have learned.
- Students reflect on and assess their own work, in addition to the assessment provided by teachers. After initial feedback, they make revisions. Outside observers and other students may participate in the assessment of the final product or presentation.

Projects often require students to read and analyze data, charts, graphs, and other complex texts. Learners typically must synthesize information from multiple sources. Students often are expected to develop and/or consider multiple alternative solutions to a problem, and to give reasons why they recommend one alternative. Projects usually result in a final presentation of students' work, such as a report or oral presentation. All of those activities give students practice in academic skills that are needed for postsecondary education (Johnson & Parrish, 2010; Pimentel, 2013).

ESL and foreign language classes have used PBL for more than 35 years as a way to provide students with integrated practice in the four skill areas of speaking, listening, reading, and writing (Beckett & Miller, 2006). Projects require students to apply their language skills in authentic contexts such as conducting research, interviewing subjects, and negotiating with peers. Many schools use PBL as a way to simultaneously teach English language skills and other subjects such as science, social studies, or citizenship (Colombo, 2002; Halvorsen, Duke, Brugar, Block, Strachan, Berka & Brown, 2012; Nash, 1999).

Research studies have documented many examples of PBL in ESL K-12 classes. They include fifth graders doing research on vernal pools, middle school ESL students producing video reports, and ESL high school students creating educational projects about child abuse (Beckett, 2006; Colombo, 2002; Green, Inan & Maushak, 2014). Beckett (2006) described how three teachers in a Vancouver, British Columbia high school used a project-based approach in ESL classes with 73 Chinese students; goals included helping students take more initiative for their own learning and encouraging their creativity, critical thinking, and cooperative learning. For one project, students



collected data about child abuse and gave oral presentations. Beckett observed that “students gain deeper understanding of a topic when they are asked to choose, conceptualize, research, and reflect on their own projects” (p. 58).

There have been fewer studies of PBL in adult ESL classes. Moss & Van Duzer (1998) described two projects undertaken at the Arlington Education and Employment Program in Arlington, Virginia. One project involved parents in an ESL class working with their children to make a coloring book/guidebook about the services available for families in their neighborhood. Parents researched the topics and oversaw production; some participated in a “Meet the Authors” day at the local library at the project’s conclusion. An advanced ESL class in the same program developed and taught lessons to other classes on topics such as how local government works and how to get rid of cockroaches (Moss & Van Duzer, 1998). In both projects, students evaluated themselves as well as receiving teachers’ evaluations. Ramm (2009) documented how students in her adult basic education ESL class at Eastern Michigan University created a city guide describing places of interest. Ramm reported that the project motivated students while teaching them language skills.

In an overview of PBL in adult ESL, Finn Miller (2010) cited examples of adult English language learners researching immigration law, creating a TV news program, and conducting surveys. She observed that PBL can increase adult ESL students’ engagement in school. Since their school participation is voluntary, that is a critical factor in their successful acquisition of language skills.

While this study focuses on an ESL class, PBL also has been used in adult EFL classes. Alan & Stoller (2005) documented a project in an EFL class at a Turkish

university where students studied the local tramcar system. The project taught them new vocabulary, and they also learned about writing letters and conducting interviews and Internet searches. Students presented their findings at a forum and in a letter to local authorities. Alan & Stoller stated that PBL can help motivate students, improve their language proficiency, and encourage them to use their critical thinking skills.

### **Benefits and Challenges of PBL in ESL Instruction**

Research investigating the impact of PBL in ESL classes has taken many forms. Stoller (2006) analyzed outcomes reported in 16 publications about PBL in second language and foreign language settings. Stoller identified eight major benefits from use of this approach: improving students' language skills; increasing students' motivation and engagement; boosting students' self-confidence; providing authentic tasks to practice language; helping students become better collaborators; teaching content knowledge; helping students take charge of their learning, and improving students' skills in analysis, problem-solving and critical thinking.

Other studies have shown that PBL can hone students' research skills, tailor learning to their individual needs and interests, and provide students with opportunities to use technology (Colombo, 2002; Tims, 2009; Warschauer, 2000). Beckett (2006), a leading researcher in the field, cited PBL's "great potential for teaching languages meaningfully" (p. 67).

**ESL teachers' responses to PBL.** Some research studies have surveyed ESL teachers and/or students about their experiences with PBL. Beckett (1999) found that teachers in Canadian high school ESL classes mostly saw projects as positive; students learned and used language, gained research skills, demonstrated creativity, and

recognized their strengths and weaknesses as learners. ESL staff at two Canadian schools serving adults also gave project work positive reviews, according to Petersen (2008).

Petersen & Nassaji (2016) reported that Canadian adult ESL and EFL teachers considered projects as an effective way to teach languages skills, to get students involved, and to cater education to students' individual needs or interests.

A 1989 study by Eyring (as cited in Doherty & Eyring, 2006) compared the experience of a teacher leading a PBL unit in an adult ESL class with a teacher using a more traditional approach. Eyring reported that the PBL teacher spent more time on planning, research, and assessing work. Overall, the project teacher found the experience stressful, and some students reacted negatively to the unit.

An action research study by Doherty & Eyring (2006) documented the experience of teachers and adult students in an advanced ESL writing and grammar class in California during a project unit on the impact of 9/11. The study found that teachers needed to be flexible as they faced challenges such as fluctuating attendance, a mix of language skill levels, and students having too many responsibilities outside of class to complete the project work. The instructors concluded that they should focus more on the process of group work than the project's end product.

**ESL students' responses to PBL.** Research on ESL students' responses to PBL has revealed a range of attitudes, from enthusiasm to skepticism and even resistance. All 10 adult ESL students in the 2006 Doherty & Eyring study said they liked the experience, and nine said that it helped them learn English. Adult ESL students in Petersen's 2008 study also gave generally positive responses in questionnaires about their experiences with PBL. They described the PBL experience as "motivating," and said that it helped

them improve their English skills, become more confident in speaking, and learn about working in teams (Petersen, 2008, p. 77).

By contrast, Beckett (1999) found mostly negative responses to PBL among 113 ESL high school students. Beckett conducted interviews, analyzed documents, made observations in and outside of classes, conducted discourse analysis, and reviewed evaluations. While the teachers in the study saw PBL as an effective means of teaching language skills, more than three-quarters of the students had mixed or negative reactions. They wanted language class to focus on language rather than other topics, and they did not like the lack of structure inherent in project work.

Beckett and others have observed that students accustomed to more traditional educational approaches may resist PBL because they do not see the connection between the project and their acquisition of language skills (Beckett, 1999; Beckett & Slater, 2005). Petersen & Nassaji (2016) also found that many students were unaccustomed to group work in their previous schooling, and they reported problems working with their groups. Petersen & Nassaji suggested as an area for further study whether students' responses to projects could be affected by their cultural backgrounds.

Tims (2009) conducted and analyzed in-depth interviews with six advanced ESL students at a community college in the Southwest U.S. The students, ages 20 to 47, all had experienced a project-based curriculum; they conducted projects on topics ranging from diabetes to researching their chosen careers. Tims found that students liked having some voice in what they were learning. Many students also liked having the opportunity to give presentations as part of the projects, and they reported that project work helped them become more confident speakers. However, some of those interviewed felt that

they were wasting their time working on projects, and that they wanted the project to focus on a specific grammar point or other skill. Students also reported that they did not have enough time to do the project work, and that they needed more input from teachers as they developed their projects.

In order to counteract the skeptical and negative responses of many ESL students to project work, teachers need to clearly explain how projects can help students improve their language skills. Some research has focused on teaching techniques that achieve that goal, as described in the following section.

### **Best Practices for Implementing PBL**

Beckett & Slater (2005) found that students in a college ESL class responded positively to project work when the teacher explicitly connected class projects to the acquisition of English skills. That study described how students kept diaries and graphically charted their project work. Doherty & Eyring (2006) recommended methods such as checklists and questionnaires to help students see their progress throughout a project.

Tims (2009) underscored the importance of teachers considering the needs of individual students when planning projects. Tims also recommended giving a rubric, providing students time to talk to the teacher about how the project is going, and constantly reminding students of how the project relates to learning English skills.

One of the big challenges for ESL teachers using a PBL approach is to provide sufficient support for students to scaffold their learning while still giving them some voice in the project. Moss & Van Duzer (1998) cited the importance of pre-teaching specific language skills, such as making questions in English. They also stressed the

need to teach skills related to carrying out the project, such as how to conduct an interview, how to take notes, and how to negotiate with other group members.

Alan & Stoller (2005) asserted that the most successful projects last for an entire instructional unit. It is possible that one benefit of longer projects is that teachers have enough time to provide scaffolding lessons that will help students succeed in their independent project work.

Teachers' willingness to improvise and remain flexible also is crucial, since projects often run into unexpected problems. In the study by Doherty & Eyring (2006), teachers originally planned project materials about the impact of 9/11 that were too complex for many students. Students became sidetracked discussing their own experiences after 9/11, and that ultimately became the focus of their projects.

### **The Shifts Underway in Adult ESL Instruction**

In 2010-2011, 42 percent of the students enrolled in U.S. adult education programs were working to improve their English proficiency (U.S. Department of Education, 2013). An unknown number of additional English language learners were enrolled in Adult Basic Education (ABE) and Adult Secondary Education classes that year (U.S. Department of Education, 2013). While many adult ESL and ABE programs are working to prepare students for college and careers, there is a gap between what students typically learn in those classes and the skills they need to succeed in postsecondary education.

Johnson & Parrish (2010) surveyed ABE teachers and college instructors in Minnesota to find out how well the ABE teachers were preparing students for college. At least a quarter of the students taught by both groups of instructors were English language

learners. The survey found that students were receiving inadequate instruction in several skills related to academic success, such as critical thinking, synthesizing information from several sources, summarizing, giving oral presentations, taking notes, and conducting Internet research.

The CCR standards seek to explicitly teach academic skills that will better prepare students for postsecondary education and the jobs of the future (Pimentel, 2013). While the standards include mathematics, this paper focuses on the three major shifts in English Language Arts/ Literacy because of their relevance to English language learners. One of the shifts calls for instructing students in how to conduct research, analyze sources, and cite evidence from texts to support claims in their speaking and writing (Pimentel, 2013). The standards call for students at level C, which includes the level of the students in this study<sup>1</sup>, to acquire these specific skills:

CCR Reading Anchor 1: “Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text” (Pimentel, 2013, p. 14).

CCR Writing Anchor 7: “Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic” (Pimentel, 2013, p. 27).

CCR Writing Anchor 8: “Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources” (Pimentel, 2013, p. 27).

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<sup>1</sup> Level C equates to CASAS scores of 211 to 220. Most study participants had CASAS scores in that range or slightly higher.

CCR Writing Anchor 9: “Apply Reading standards from this level to informational text (e.g., ‘Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s)’)” (Pimentel, 2013, p. 28).

PBL often gives students practice in the very skills called for by the CCR standards, such as conducting short research projects, reading informational texts, analyzing sources, and accurately quoting and referring to evidence from texts to support claims in speaking and writing. PBL also has been shown as an effective approach for encouraging critical thinking and creativity (Beckett, 2006; Von Kotze & Cooper, 2000). Warschauer (2000) cited PBL as a promising way to help prepare students for jobs requiring advanced language skills such as analyzing problems, persuading others, and creating multimedia presentations.

The National High School Alliance recognized the effectiveness of PBL in transforming high schools to prepare all students for college, careers, and citizenship (Manzo, 2005). The Alliance called for greater use of PBL as one of its key recommendations. However, to the best of my knowledge, researchers have not considered how PBL might help adult ESL programs make the shifts called for by the CCR standards. My study seeks to address that gap by looking at how PBL could help implement the shift related to finding and using evidence from texts to support claims, thus better preparing students for postsecondary academic and workplace success.

Understanding that the CCR standards are being implemented by adult education programs nationwide, the current investigation addresses this question: To what extent is PBL a useful teaching approach to help students learn how to extract, analyze, and use



evidence to support claims? My overall goal was to determine whether PBL could help educators align ESL curricula with the CCR standards.

### **Summary**

This chapter included a definition of PBL and described how it has been used in ESL and EFL classes. Research on PBL indicates that there are both benefits and challenges of PBL; the studies reviewed present teacher and student reactions to it, and suggest best practices for its implementation. Adult ESL programs are placing greater emphasis on academic skills, as called for by the CCR standards, suggesting that PBL could be useful in implementation of the standards, and in meeting the broader goal of preparing ESL students for future academic and workplace success. The next chapter describes the study's setting, participants, the methods used to gather data, and the way that data was analyzed.

## CHAPTER THREE

### Methods

#### Introduction

This chapter includes a description of the methodology used to assess whether a PBL unit on students' chosen careers helped them acquire academic skills related to the CCR standards. The research question explored was whether PBL is effective in teaching adult English language learners how to locate, evaluate, and use evidence from texts to support claims. The following sections include descriptions of the setting of the study, the participants, the instructional procedures used, the procedures and tools used to collect data, and the data analysis process.

#### Overview of Methodology

This was a classroom-based, mixed methods study that collected and analyzed both quantitative and qualitative data elicited from assessments, text analysis, surveys and teacher field notes and observations. According to Mackey & Gass (2016), "multiple approaches often are needed to understand a particular second language issue" (p. 276). My goal was to draw inferences about the value of PBL in teaching the academic skill of finding and using evidence to support claims. I chose a mixed methods approach in order to investigate the topic from several perspectives.

For the pre-test and post-test, I used quantitative data from an assessment of critical reading skills that involved finding, evaluating, and citing evidence in texts. I used a combination of quantitative and qualitative data to gauge students' success in

finding, evaluating, and attributing relevant information to back up claims in their draft reports and final reports. The study also included quantitative and qualitative data from students' responses to questionnaires, and an analysis of my field notes and observations. That multi-faceted approach helped provide a rich picture of the unit and how study participants experienced it.

### **Data Collection**

**Participants.** The study took place in the winter of 2017 in an advanced (level 5) ESL class. Of the 28 students initially enrolled in the class, eight dropped out over the course of the semester, and four chose not to participate in the study. Twelve of the study participants completed the entire project, including the pre-test, post-test, draft and final written reports, and the oral presentation. Four additional participants completed the draft and final written reports but missed at least one other part of the study; their results are shown only for the analysis of the draft and final written reports.

The CASAS reading test, given by the adult education program upon enrollment and every spring, is used as an important gauge of students' English levels. Students in level 5 typically have CASAS scores between 220 and 230; all but one of the participants in the study had scores in that range.

Table 1 provides demographic information about the participants, including gender, home country, first language, previous education, and occupation. (Pseudonyms are used in this table and all future references to participants to ensure anonymity.) The table shows that participants came from nine countries. Half of the 16 participants were from the central African countries of Cameroon, Congo Brazzaville, the Democratic Republic of Congo, and Burundi. The remaining participants were from countries around

Table 1  
*Demographic Summary about Participants*

Name	Country of origin	Primary language(s)	Highest educational level	Profession (in home country or US)	Gender
Abdi	Djibouti	Somali	Bachelor's	accountant	Male
Ancille	Burundi	French	Bachelor's	boutique owner	Female
Ann	China	Chinese	High school	nurse	Female
Azhar	Iraq	Arabic	High school degree	housekeeper	Female
Bushra	Djibouti	Somali	Some college	secretary	Female
Colette	Congo Brazzaville	French	Finished 12th grade	hotel attendant	Female
Daniella	Guatemala	Spanish	Some university	Latino pastoral coordinator	Female
Ernest	Burundi	Kirundi	University degree	TV journalist	Male
Esperance	Burundi	French	Master's	N/A	Female
Hamid	Djibouti	Somali	High school degree	N/A	Male
Maria	Venezuela	Spanish	Advanced degree	professor of finance	Female
Odile	Burundi	French	Attended high school	secretary	Female
Patience	Democratic Republic of the Congo	French	5 years of college	IT assistant	Female
Richard	Cameroon	French	Some college	taught computer science	Male
Sacha	Democratic Republic of the Congo	French	Associate's degree	airline worker	Male
Zahra	Iraq	Arabic	Attended college	teacher	Female

the globe, including eastern Africa (Djibouti), the Middle East (Iraq), Latin America (Guatemala and Venezuela), and Asia (China). The table also shows that seven of the 16 participants spoke French as their first language. Other first languages included Somali (three participants), Arabic and Spanish (two participants each), and Kirundi and Chinese (one student each). As can be seen in Table 1, all but two study participants have at least a high school degree. Eleven of the 16 participants attended some college before coming to the U.S., and seven of them earned a college degree. The table points out one weakness of the study; there is a gender imbalance, with 11 of the 16 participants being women.

Table 1 shows that about half of the study participants held professional jobs in their home countries, such as interpreter, accountant, logistics planner, nurse, TV broadcaster, IT assistant, and university professor. Other jobs previously held by participants included shop owner, nun, and secretary.

The participants had varying goals for enrolling in the class. Twelve were working toward earning a U.S. high school diploma and/or preparing for college in order to pursue careers in professions such as journalism, data systems management, accounting, and teaching. Some students planned to pursue jobs in fields requiring short-term, specialized training, such as medical assistant or bus mechanic. Some students had personal goals for attending class, such as being able to converse easily with co-workers and to talk to their doctor without an interpreter.

Participants knew that they were involved in research on effective teaching methods, but they were not told about the specific approach (PBL) that was being studied.

That was done to avoid biased results from students who might respond positively to the unit in order to please the teacher (the halo effect) (Mackey & Gass, 2016).

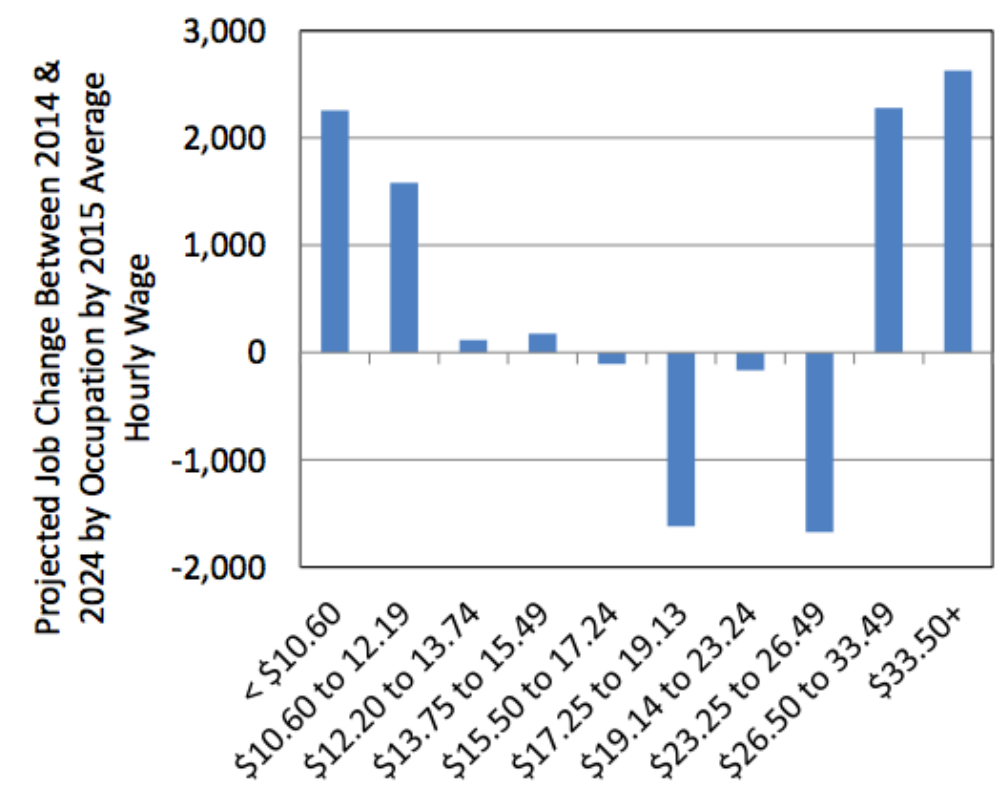
**Location/setting.** Participants were enrolled in the adult education program run by a public school district in a small Northeastern city in the United States. That city has become home to many communities of refugees, immigrants, and asylum seekers during the past 40 years. During the period of 2010 to 2014, 13.2 percent of city residents were foreign-born (U.S. Census Bureau, 2015).

The city's adult education program saw an increase in ESL enrollment of nearly 50 percent in a recent, five-year period (Portland Adult Education, 2014). The number of students rose from 1,169 in 2010 to 1,742 in 2014 (Portland Adult Education, 2014). In 2016, the program served students from 78 countries, with the largest number coming from the Democratic Republic of Congo, Angola, Iraq, Somalia, and Burundi (Portland Adult Education, 2016). Many of the current students are asylum seekers who have moved to Maine in part because asylum seekers qualify for limited welfare assistance, a benefit that is unavailable nearly everywhere else in the U.S. (Stickney, 2016).

The class in the study met twice a week, for 2.25 hours per class. Attendance fluctuated, as it does for all classes in the program. Of the 23 students who initially participated in the study, 16 completed the written report. Twelve of those students also completed both the pre-test and the post-test; the other four students did either the pre-test or the post-test, but not both. Two of the 16 students did not do oral presentations. While those presentations were an important part of the class project, I did not collect data from them except for my notes.

**The project unit.** The project began with students reviewing the Project Overview and Rubric (Appendix A), and a Template of the Written Presentation (Appendix B). They also completed the Pre-test (Appendix C), which assessed their critical reading abilities in the areas of identifying information in texts and graphics and using evidence from those sources to back up claims.

Students then worked with partners to review a list of high-wage jobs with the largest number of openings projected between 2014-2024 in the state where the study occurred, and the salary and education required for those jobs. Students compared jobs based on those three criteria. The material provided rich language, as called for by the CCR standards, while still being accessible for ESL level 5. The lesson incorporated



*Figure 1:* Maine projected job changes (2014 to 2024) by average hourly wage (Center for Workforce Research, 2014).

informational graphics such as the one in Figure 1. These are the types of complex texts that the CCR standards suggest should be included in adult education curricula. I instructed students about how to read and interpret the graphs and tables. Students then worked in pairs to use the graphs and tables to gather information about specific careers.

Each participant chose a career field to research based on his or her interests. We spent part of a class period in the school's computer lab, researching those careers using websites created by the U.S. Labor Department, the Finance Authority of Maine, and individual colleges. Some participants also found information on additional websites such as salary.com and gladeo.org.

I arranged for 13 participants to interview someone working in their chosen field, or a closely related field. (The others found their own interviewees.) I pre-taught the skills that students needed to conduct interviews, such as developing yes-no questions, informational questions, and open-ended questions, taking notes during an interview, and summarizing and paraphrasing information without copying it. Students primarily accessed resources that I helped them find for their projects, although some took the initiative to conduct additional research on their own.

During the unit, I discussed with students the difference in validity between various sources of information (i.e. the websites of private, for-profit colleges versus the websites of government agencies that oversee career training programs). I stressed the importance of citing where they found factual information, and I taught students how to do so. Students practiced, using sentence frames such as “According to (name of the text)” and “The U.S. Labor Department chart shows...” They also learned about how to



use a direct quotation in a text. Since students had difficulty with summarizing and paraphrasing, we worked on this skill over the course of several classes.

The project rubric instructed students to provide specific factual information in their written reports, such as the estimated number of available jobs, typical pay, required education or training (if any), the name of at least one school where that training is available, and the cost of the training, in addition to their more general descriptions and observations about the career. The rubric also instructed them to provide the sources of factual information. The rubric aligns with CCR Writing Anchors 7, 8, and 9 (Pimental, 2013).

All 16 study participants wrote first drafts of their project reports. I reviewed the drafts and collected data using the tool: Use of Evidence to Support Claims in Student Drafts and Reports (Appendix D). I identified areas where participants had omitted information, used irrelevant information, failed to provide attribution, or did so incorrectly. The class volunteer and I met individually with students to review their first drafts and the comments on them. Students were told to revise their drafts based on the comments, and to submit a second draft.

For the second drafts, I collected evidence and attribution data in the same way as described above, using the tool in Appendix D. Many students also wrote third and even fourth or fifth drafts. I did not collect information about those later drafts because students primarily focused on resolving editing issues, and because there was no consistency in the number of drafts submitted by study participants.

Once written reports were completed, students turned their attention to preparing short, oral presentations about their chosen careers, using the Oral Presentation Rubric in

Appendix E. I taught two short lessons on public speaking. Students rehearsed their oral presentations with peers in class. Each student also rehearsed for the teacher or volunteer, and received feedback in meeting the standards on the rubric.

The project culminated with students presenting their written reports and giving their oral presentations at a Career Fair. The fair was attended by other students in the school, interviewees, family members, friends, tutors, school department officials, and other guests. During the fair, each student gave his or her presentation several times to individuals or small groups. Evaluators, who had not been previously identified to the class, circulated during the fair and evaluated the presentations using the project rubric. Students also evaluated each others' presentations and completed self-evaluations, using the Student Peer and Self-Assessment in Appendix F.

At the project's conclusion, students received feedback about their oral presentations from the evaluators and their peers. They took a Post-test (Appendix G) that was similar in design to the Pre-test. They also anonymously filled out the Student Survey about the career project (Appendix H).

Throughout the unit, the class did several activities and homework assignments aimed at improving students' critical reading skills, specifically their abilities to extract information from texts and to use it to bolster their claims. They also practiced reading and extracting information from informational graphics, and they created a bar graph based on a class poll. The Project Schedule and Lesson Plans are in Appendix I.

**Group work in the project.** Group work is a hallmark of PBL. Projects give students opportunities to use their language skills to make plans, negotiate, and collaborate with other members of their group (Moss & Van Duzer, 1998; Stoller, 2006).

However, group work also creates several challenges that are well documented in previous studies, such as projects bogging down when one or more members are absent, students of varying skill levels struggling to work together, and students reverting to their first language rather than using English in the group (Doherty & Eyring, 2006; Tims, 2009). In this study, students worked in groups in the initial stage of the project. In addition, a few students interviewed someone working in their chosen field as a group. The rest of the work was done individually.

**Other logistical issues.** Whenever possible, students' interviews with people working in their chosen career fields took place during class time. That avoided another problem cited in previous research: that adult ESL students often have too many work and family responsibilities to be able to complete time-intensive independent projects outside of class (Doherty & Eyring, 2006; Tims, 2009).

### **Data collection tools**

**Pre- and Post-Assessments.** I was unable to find a normed assessment to gauge knowledge of the skills taught through the project work. Therefore, I worked with my Capstone advisor to create the assessments that appear in Appendices C & G for use as the pre-test and the post-test. The pre-test has different questions than the post-test.

While both assessments have the limitation of not being normed, they gauge students' abilities to read and interpret informational graphics, and they measure students' abilities to read, understand, and use information in nonfiction texts to support claims. For example, one test item is a chart showing the immigrant enrollment in the school's adult education program by country of origin. Students must read and interpret the chart in order to answer questions about where most of the students come from. Another test item

describes the growth of a local company's internship program. Students must find information in the text to explain why internships can be helpful to job seekers.

Participants were given the pre-test at the unit's beginning. They had 40 minutes to complete it. They were given the post-test assessment at the unit's conclusion. They also had 40 minutes to complete it.

**Analysis of student writing.** I collected data on evidence and attribution in the first drafts of participants' written reports using the tool in Appendix D (Use of Evidence to Support Claims in Student Drafts and Reports). I used the same tool to collect data on evidence and attribution in participants' second drafts. In the comments section of the tool, I gave examples of how participants provided attribution and problems that arose in doing so.

**Survey.** At the unit's conclusion, participants were given a questionnaire about their responses to the project, as shown in Appendix H. The questionnaire included two open-ended questions and six questions where participants had a choice of four responses.

**Teacher's notes and observations.** Throughout the project, I kept informal notes and observations that appear in Appendix J. At the end of each class, I recorded how participants responded to activities designed to teach the focal skills. I noted times when participants seemed particularly challenged to learn new skills, and times when they seemed to catch on. I also noted the degree to which participants completed homework assignments, took part in class discussions and otherwise seemed involved in the project.

**Data analysis**

**Assessments.** I analyzed the results of the pre-test and the post-test for each participant to determine the change, if any, in his or her knowledge of how to find, use, and attribute relevant evidence from informational graphics and texts. I tabulated how many participants improved in their mastery of these skills between the pre-test and post-test, how many stayed the same, and how many had lower scores on the post-test than the pre-test.

**Analysis of student writing.** Using the tool in Appendix D, I analyzed participants' knowledge of how to find relevant information in texts to back up claims, and when and how to attribute that evidence, as shown in the first and second drafts of their written reports. I tallied the number of relevant sources cited in the first draft, and compared that to the number of relevant sources cited in the second draft for each participant. I also compared the ways that participants provided attribution in the first draft compared to their second drafts to determine whether they improved in their ability to attribute appropriately.

**Survey.** I identified common themes in participant responses to the open-ended questions in the survey (question numbers 1 and 2). Those themes were summarized in prose and question 3 responses were tabulated.

**Teacher's notes and observations.** I reviewed and analyzed my observations for trends and themes that emerged, including any insights about difficulties faced by many participants during the course of the project, approaches that were successful in teaching specific skills and the impact of the project on student learning.

**Ethics**

This study followed the guidelines set forth by Hamline University's Human Subjects Committee, and it received approval from that committee. All students in the class studied were told by the coordinator of the ESOL program that their participation was voluntary, that there would be no consequences for opting out, and that they could leave the study at any time. All participants in the study signed an informed consent form. All data was collected in a way that preserved the anonymity of the subjects, and it was destroyed at the conclusion of the study. The study's results were made available to all participants.

**Summary of methodology**

This study used two quantitative measures and two qualitative measures to assess and analyze student learning and overall responses to a PBL unit about their chosen careers. Triangulation is the technique of collecting quantitative and qualitative data at the same time in order to better understand the research question and enhance the validity of the research. That approach was used in this study.

The purpose of the study was to determine whether the project helped students acquire academic skills relating to finding relevant evidence from text to support claims and providing appropriate attribution for that evidence. This chapter described the study's methodology, the participants, the setting, the data collected, and ethical considerations. The next chapter presents the results of the study.

## CHAPTER FOUR

### Results

#### Introduction

This chapter presents the results of a study assessing whether a PBL unit on students' chosen careers helped them acquire academic skills related to the CCR standards. The research question was whether PBL is effective in teaching adult English language learners how to locate, evaluate, and use evidence from texts to support claims. This chapter includes a summary of results of the two quantitative measures and the two qualitative measures used in the study. It also points out caveats about the data and shortcomings in the study that could be addressed in future research.

For the pre-test and post-test, quantitative data was gathered from assessments of critical reading skills (Appendices C and G) that involved finding, evaluating, and citing evidence in graphs and texts. Both quantitative and qualitative data were gathered from the tool in Appendix D (Use of Evidence to Support Claims in Written Presentations) to gauge students' success in finding, evaluating, and attributing relevant information to back up claims in their written reports. The study also included quantitative and qualitative data from students' responses to a questionnaire about the project (Appendix H), and qualitative data from my notes and observations about the unit (Appendix J).

#### Study Results

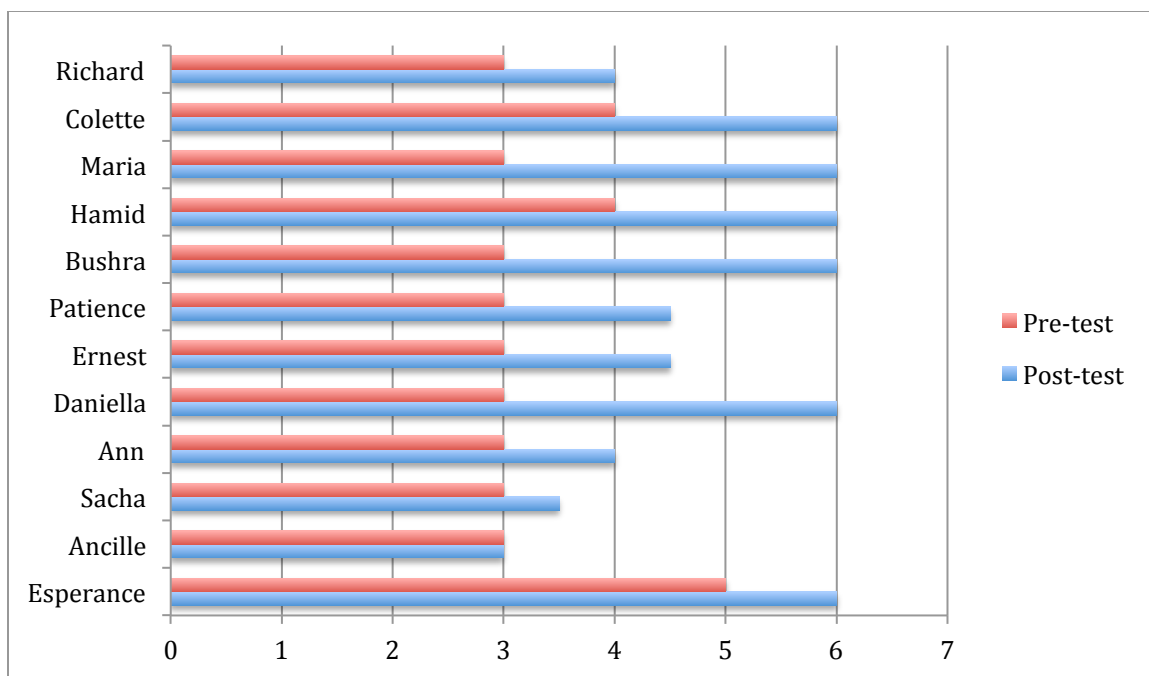
**Results of the pre-test and post-test.** I created the pre-test and post-test in Appendices C and G with my Capstone advisor to assess students' abilities to find, use,

and attribute relevant evidence from informational graphics and texts. The assessment was not normed. The assessment had an additional design flaw; the post-test included seven questions, while the pre-test only had six. One question in the pre-test (Number 5) stumped the entire class. The question required study participants to use both literacy and numeracy skills, which may have added to its difficulty. Participants read a text that gave the percentage of Maine engineering graduates who leave the state, and they had to determine the percentage of graduates remaining in the state.

Participant scores on the pre-test ranged from three to five out of six correct answers. While every student taking the post-test made at least one error, there was no single question that the entire class got wrong. Participant scores on the post-test ranged from three to six out of seven correct answers.

Figure 2 shows the difference in each participant's performance between the pre-test and the post-test. As the figure shows, one of the 12 participants had the same score (three correct answers) on both tests. All of the other participants improved in their performance on the post-test compared to the pre-test. Four participants had their scores increase by 50 percent in the post-test compared to the pre-test. An additional three participants doubled their pre-test scores on the post-test. Those results suggest that the participants gained skills in finding, using, and attributing relevant evidence from informational graphics and texts throughout the course of the project unit.





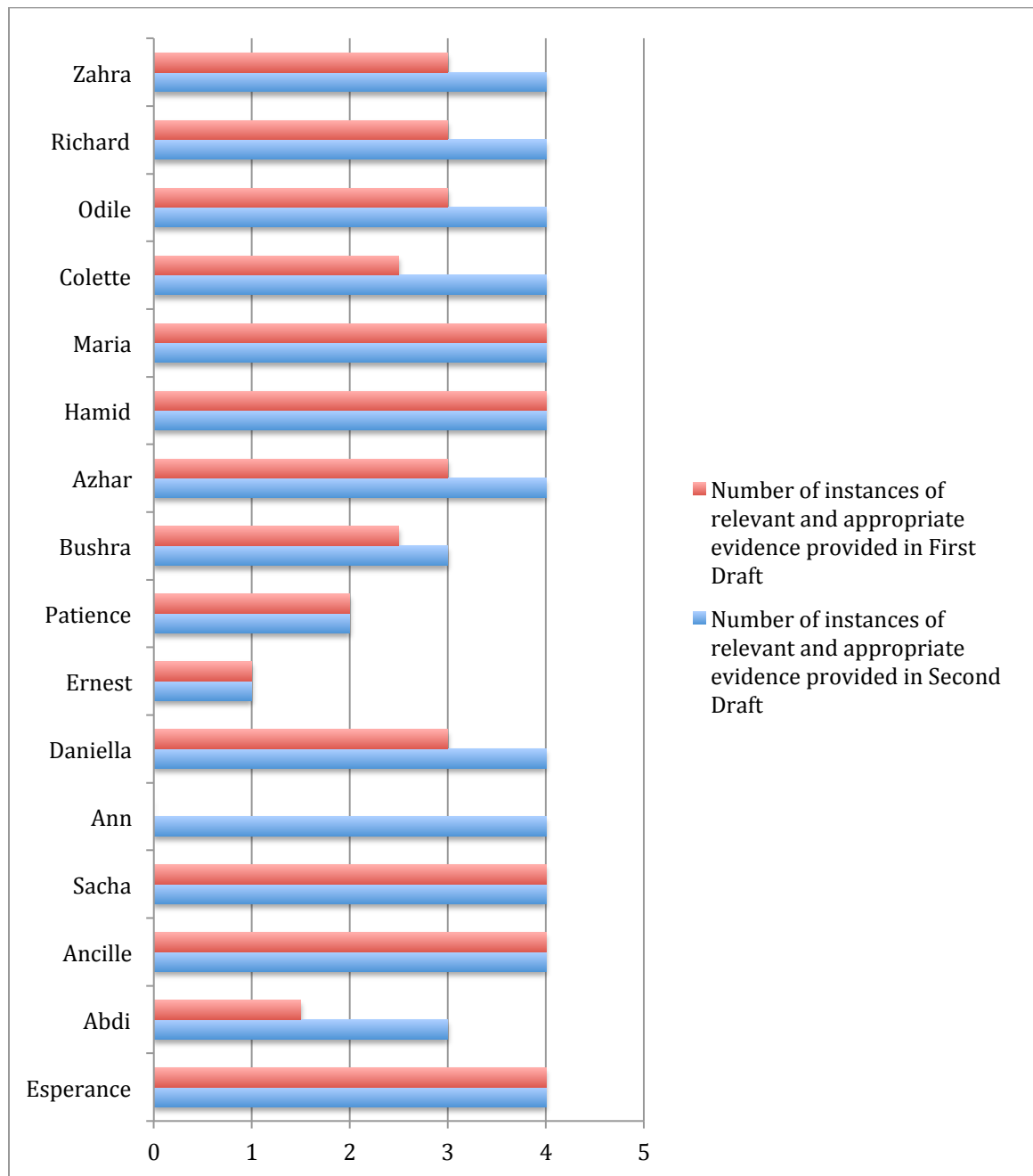
*Figure 2: Difference between participants' performances on the pre-test and the post-test*

The Pre-test has six items, and the Post-test has seven items.

**Analysis of student writing.** Using the tool in Appendix D, I analyzed students' knowledge of how to find relevant and appropriate evidence in texts to back up claims, and when and how to attribute that evidence in their written reports. Figure 3 shows the number of times study participants provided relevant and appropriate evidence in their first drafts, and compared that to the number of times they did so in their second drafts. Figure 3 shows that nine of the 16 participants provided more relevant and appropriate evidence to support claims in their second drafts than in their first drafts.

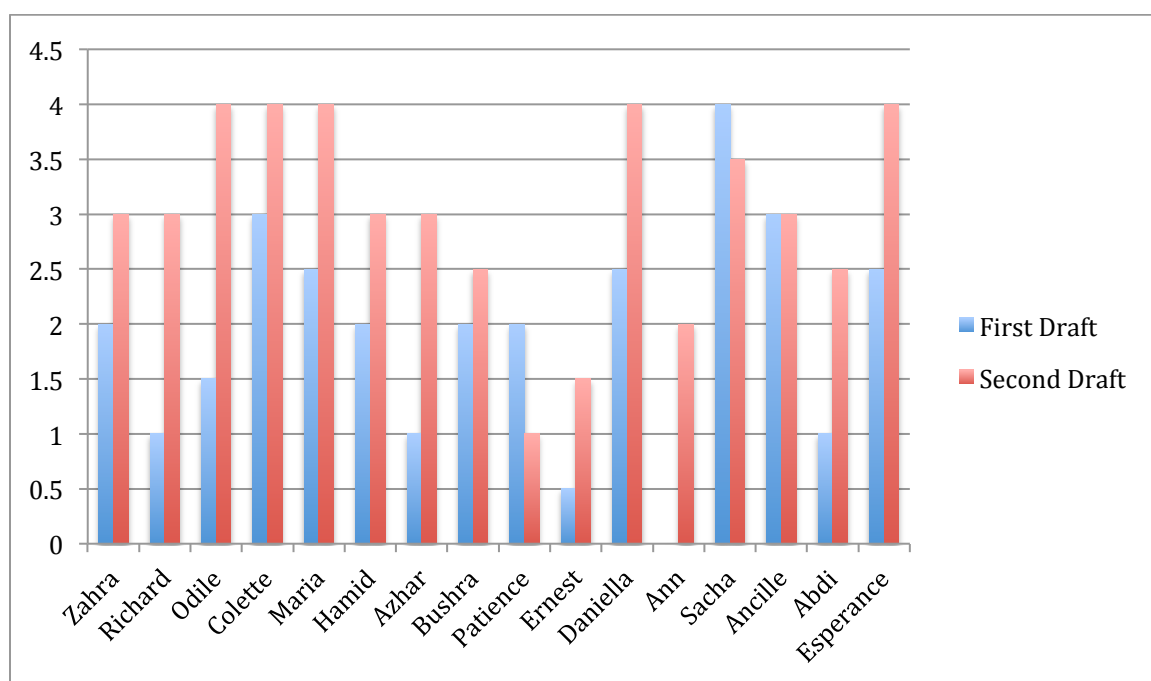
Figure 4 compares the number of correctly written citations on participants' first drafts to the number of correct citations in their final reports. On their first drafts, five participants copied parts of their evidence verbatim from sources, often without attribution. Three participants provided incomplete attribution. For example, one of the

participants gave a job's pay scale without clarifying whether it came from a national or local source. Two participants gave no attribution for some evidence, two participants gave unclear or confusing attribution, two provided incorrect information in their first drafts, and one included irrelevant information.



*Figure 3:* Number of times participants provided relevant evidence in written reports

Copying verbatim from the source declined notably in the second drafts; only two participants copied parts of their evidence. However, a greater number of participants (six) provided incomplete attribution. The one participant who had irrelevant information in the first draft also had it in the second draft. My review of the second drafts found several examples of participants formatting attribution incorrectly - for example, by misspelling the name of the source. Overall, though, the vast majority of participants (13) improved in their ability to write correct citations between the first and second drafts. One student stayed the same, and two had fewer correct citations on their second drafts.



*Figure 4:* Number of correctly written citations in participants' reports

**Survey.** All but two of the 16 study participants completed surveys at the project's conclusion. Table 2 summarizes participant responses to the two open-ended questions. Eight of the 14 participants, or 57 percent, said that their favorite part of the project was giving the oral presentation. The other most popular parts of the project were

researching the career and conducting the interview with someone in that field. One participant wrote, "For me, all the project was great." Eight participants said that giving the oral presentation was the most challenging part of the project, followed by organizing and writing the report (three participants) and telling the sources used (two participants).

Table 2

*Major Themes in Participant Responses to Open-ended Survey Questions*

Question 1. What was your favorite part of the project?<sup>1</sup>

Giving the oral presentation, answering questions about it	8
Writing the report, describing the career	1
Writing questions and interviewing someone working in my field	3
Researching and finding information	3
The whole project	1

Question 2. What was the most challenging part of the project?

Giving the oral presentation	8
Organizing and writing the report, deciding what to include	4
Researching and finding the sources of information	2

Table 3 presents results from the seven quantifiable questions in the survey. Despite students' prior education and job experience, many had little or no previous experience in the six skill areas listed: reading charts, writing interview questions, conducting an interview, using information collected through research to write a paper,

<sup>1</sup> Some participants gave more than one response.

telling where information came from, and revising the research paper. The overwhelming majority of participants found that the project helped them improve in each of those areas.

Table 3

*Results of Participant Survey*

	Yes, the project helped a lot.	The project helped a little.	No, the project didn't help.	I already knew how to do this.
Reading charts	10	2	0	2
Doing research	11	0	0	3
Writing questions for an interview	12	2	0	0
Conducting the interview	14	0	0	0
Using information from my research to write a paper	13	0	0	1
Telling where I found the information in my paper	10	2	0	2
Rewriting my paper <sup>1</sup>	14	0	0	1

The survey results clearly show that giving students an opportunity to share their work at the Career Fair was a rich part of the learning experience. The results also show that the project helped students hone skills incorporated in the CCR standards, such as reading and interpreting informational graphics, synthesizing information from multiple sources, and providing evidence from research to back up claims.

**Teacher Notes and Observations.** As in all teaching experiences, this one involved unexpected developments that required me to improvise. An unusually large number of snow days wreaked havoc on the scheduling of interviews, though all eventually took place. New students arrived a month or more into the project, and I had to help them catch up.

The project had three critical junctures: writing the interview questions, completing a written presentation that synthesized information from multiple sources, and preparing an oral presentation. Despite my efforts to provide sufficient instruction, there were students who faced uncertainty about how to proceed at each of those junctures. Recognizing those difficulties, I doubled back to provide additional instruction, especially on the topic of summarizing and synthesizing information.

Many of the participants' first drafts were data dumps: collections of quotes and other information copied from websites and/or their interviewee. During class and in my notes on students' first drafts, I stressed the importance of summarizing and synthesizing information in their final reports. I taught a couple of lessons about how to summarize from texts and from informational graphics. Both of those skills were challenging for many students, and the explicit instruction seemed to help them. That was reflected in more summarizing and less copying on their second drafts than their first drafts.

One of the lessons on interpreting graphs seemed particularly challenging to students, as noted by the classroom volunteer. I was surprised when a student approached me after class with a big smile on his face. I asked him what he thought of the lesson. "Is good," he replied. "I like it."

I taught a lesson on the importance of providing sources to help readers gauge the validity of information. During the lesson, I showed fake news sources as well as legitimate ones, and we discussed how one could tell them apart. The discussion took place against the backdrop of a national debate over fake news and unsupported claims being made by President Donald Trump. That made the lesson particularly relevant. After class, a student thanked me for providing the information.

Most participants seemed quite engaged in the career project, and they worked hard on their written and oral presentations. That was reflected by the fact that most completed at least two drafts, and some wrote three or more drafts. (For the purposes of this study, I only collected data on the first two versions.) In addition, three students handed in extra work related to the topic. For example, one student did a practice interview with his supervisor.

Participants' interest was sparked in large part by the opportunity to meet and talk to someone working in their chosen careers. One student had two meetings with his interviewee, an IT network engineer. Another student, a former TV journalist, spent an evening at a local TV station watching the broadcast of the local news and then interviewing one of the anchors. That student continued to stay in contact with the retired TV news producer who had arranged the visit. A third student met with a bus mechanic from a neighboring school department. After the interview, the mechanic spent months trying to arrange an apprenticeship for the student. Those types of ongoing mentoring relationships were an unexpected bonus of the project.

Having students present their work to others at the Career Fair seemed to make it more real to them. One student finished her written presentation a couple of weeks

before the others, and did a marvelous job meeting all of the standards. I mounted her work and showed it to the class; that seemed to spur others to work hard on their own presentations. The fact that their peers, friends, family members and interviewees would see the work also seemed to motivate them to polish their written and oral presentations.

Many students began the Career Fair nervous about public speaking. It was very helpful that they had several opportunities to give their presentations to small groups of visitors over the hour-and-a-half event. Afterward, students received feedback about their presentations from others in the class and from an adult education staff person who I had asked to evaluate them. They also critiqued their own performances. The self-evaluations showed that they learned valuable lessons, such as the importance of smiling, speaking slowly and clearly, rehearsing enough that they didn't have to read their presentation, and asking at the end if anyone had questions.

### **Summary of Results**

Quantitative results from the pre-test and post-test in this study show that adult ESL students improved in their ability to locate relevant evidence from texts to support claims as they worked on a semester-long project about careers. The study participants also improved in their ability to provide appropriate attribution and to correctly write citations for that evidence, as shown by a review of their writing. Survey results found that participants felt the careers project helped them develop and/or improve academic skills such as researching a topic, conducting interviews, writing and editing papers, and giving oral presentations. Students were engaged in the project, and it motivated them to work hard, according to the teachers' notes. The project also had other positive consequences, such as forging mentoring relationships between students and community



members and developing esprit de corps in the classroom. The next chapter discusses the results and their implications for future research.

## CHAPTER FIVE

### Discussion

#### Introduction

This chapter includes a discussion of the implications of my study about using PBL with adult English language learners to help them meet the CCR standards now being implemented by adult education programs throughout the United States. Students in the study spent a semester researching a chosen career and presenting their findings in written and oral presentations. The study investigated whether the project helped them acquire the academic skills of locating, evaluating, and using evidence from texts to support claims. After discussing the findings, I point out shortcomings in the study and suggest areas for future research.

#### PBL helps adult students learn academic skills

This study builds on previous research showing the effectiveness of a PBL approach in helping students develop some of the skills needed for future academic and workplace success, including critical thinking, presentation skills, and collaboration (Alan & Stoller, 2005; Beckett, 2006; Stoller, 2006; Warschauer, 2000). This study looks specifically at how PBL could help implement the shifts called for by the CCR standards for adult education. Students in the study spent the semester researching a career that interests them. The project unit helped them acquire the important CCR skills of locating, evaluating, and using evidence from texts to support claims. That is shown by the increase in scores from all but one study participant between the pre-test and the post-test.

In addition, the study shows an improvement in students' use of evidence to support claims between the first and second drafts of their written reports.

Teacher observations and participant surveys show that most participants were highly engaged in the career project, and that they felt that it helped them gain new skills. Results also show that the career project had many concrete and positive results, some of which were not anticipated. Students improved in their abilities to write a research paper, conduct an interview, and give an oral presentation. Some participants forged relationships with people in their chosen fields who expressed a willingness to provide them with ongoing guidance. One student, who hopes to become an electrician, learned about an opportunity for free training through a union apprenticeship program. Another participant, who investigated a career as a bus mechanic, may have an apprenticeship arranged by the person who he interviewed. One intangible result of the career project was building relationships between students in the class and creating a more supportive learning environment. Moreover, the impact of this study went beyond the participants. Everyone at the school had the opportunity to see student work. Several classes visited the fair and used it for learning activities.

### **Connections to previous research**

This study found many of the same positive results of a PBL approach that had been reported by Alan & Stoller (2005), Finn Miller (2010), Stoller (2006), and others, such as ESL students being motivated and engaged in class activities, improving their abilities to conduct research, using their critical thinking skills, and making gains in content knowledge.

The participants in this study were enthusiastic about the project approach, as shown by the survey results and teacher observations. Of the 14 participants who completed surveys, between 10 and 14 reported gaining knowledge of each of six skill areas. Doherty & Eyring (2006) and Petersen (2008) also found positive student responses to PBL. By contrast, more than three-quarters of the students in Beckett's 1999 study had mixed or negative reactions to projects; they wanted language class to focus on language rather than other topics, and they did not like the lack of structure inherent in project work. Beckett's study involved ESL high schools students, while the current study and the others cited above involved adults; that could be a factor in the different results. It is also possible that the projects in the current study and in those conducted by Doherty & Eyring and Petersen were more relevant and meaningful to students than the project in the Beckett study.

The current study benefited from previous research showing that ESL students want explicit information about how working on a project improves their English (Beckett & Slater, 2005; Doherty & Eyring, 2006; Tims, 2009). Throughout this study, efforts were made to connect assignments to students' work on improving their reading, writing, speaking and listening in English. The study also drew on previous research showing the importance of giving students rubrics, teaching specific skills needed in the project such as how to write questions and how to take notes, and providing time to talk to the teacher about their progress (Moss & Van Duzer, 1998; Tims, 2009). All of those features were incorporated into lesson plans. Moreover, classroom instruction underscored repeatedly that students would benefit in their future academic work and

careers by acquiring skills such as conducting research, providing evidence to support their claims, and making oral presentations.

### **Implications of this Study**

While the study results show the success of this particular project, it is not known whether other uses of PBL would have similar success. Given that caveat, this study provides strong evidence that PBL can be an effective way to teach two of the three major shifts called for by CCR standards in ELA/Literacy instruction: building knowledge through content-rich nonfiction and practicing with complex text (Pimentel, 2013). Those skills are needed in the workplace as well as in academic settings. Explicitly teaching the skills and then requiring students to practice them during the course of a project unit will benefit all students, regardless of whether they plan to pursue further academic work or go directly to a job.

### **Limitations of the Study**

This study had the limitation of using assessments that were not normed. That could have affected the pre-test and post-test results. Future research would benefit from using normed assessments.

It is not possible to know whether the improvement in students' use of evidence to support claims between their first and second drafts was prompted by the lessons on that topic incorporated into the career project. Another possible explanation is that students simply heeded teacher comments on their first drafts, and attempted to revise them according to my instructions. If the latter were the case, then the study would show that students pay attention to at least some of the items that teachers highlight in their work, but the role of a PBL approach in teaching those skills would be less clear.

Another shortcoming of the study is that it relied on only one type of project. It is likely that some projects are more effective than others in garnering student interest and teaching skills such as those investigated by the study.

Yet another shortcoming involves the group of participants in this study. Eleven of the 16 participants had at least some college education. Their educational and professional backgrounds may have affected their abilities to acquire the focal skills in the study. Further research should investigate the impact of PBL in teaching CCR skills to people with less formal education.

### **Recommendations for Future Study**

Future research would benefit from using normed assessments to measure the impact of a PBL approach to teaching CCR skills. The study described in this paper took place in an advanced ESL class; a project approach should be adapted to lower-level classes to see whether it can be similarly effective.

It also would be worthwhile to investigate the effectiveness of different types of class projects, including some that occur over a shorter period of time and/or entail less work on the part of the teacher. The career project in this study required many hours of advance preparation and the recruiting of 18 interviewees to work with students. In some cases, it took many emails to find a person working in the field that students were researching. All interviews had to take place in a short timeframe (about three weeks) in order to fit within the semester schedule. A trained and dedicated classroom volunteer played an important role in the project's success, as described in Teacher's Notes and Observations (Appendix J). Projects requiring less intensive preparation on the part of the teacher would be more realistic for many ESL classes.

### **Plans for Communicating the Results**

I have already had the opportunity to share preliminary results of this study with members of the Maine Adult Education Association. I gave a workshop on using PBL in adult ESL classes at the association's annual conference in June 2017. I will give a similar presentation at the annual conference of Northern New England Teachers of English to Speakers of Other Languages in November 2017.

The adult education program where I work has by far the largest ESL population in our state, and our program is seen as a statewide leader in ESL teaching. I applied for and received a competitive grant from the Portland Education Foundation to create an ESL curriculum unit on immigration to our state during the summer of 2017. The semester-long curriculum will incorporate a project approach, and it will be used to teach CCR standards. The unit will culminate with students hosting a U.S. naturalization ceremony and presenting a public exhibition of their projects about local immigrant communities at City Hall. Our school will use the curriculum in the fall of 2017 for two levels of ESL, and it will be made available to high school ESL classes in our district. I have been hired to create additional curriculum materials during the 2017-2018 school year using a similar, project-based approach.

### **Conclusion**

My initial use of a project approach in my adult ESL classes led me to believe that it could be an effective technique to teach the rigorous skills called for by the CCR standards. I saw how most students responded enthusiastically to working on long-term projects that allowed them to delve into a topic of interest and then present their research to an authentic audience. This study showed how PBL can help students learn a skill that

is critically important to their future academic and workplace success: marshaling and presenting evidence to support their claims. The project used for this study also had other positive impacts. Students learned how to read, understand, and describe complex texts presented in graphics and on websites. They gained and/or improved their skills in interviewing, summarizing and synthesizing information, and giving written and oral presentations.

A large and growing body of evidence shows how PBL is being used effectively to teach English to students in kindergarten through 12th grade. This study adds to the much smaller body of research on using a similar approach with adult ESL students. The study suggests several areas where further research is warranted.



## REFERENCES

- Alan, B. & Stoller, F. (2005). Maximizing the benefits of project work in foreign language classrooms. *English Teaching Forum* (43)4.
- Beckett, G.H. (1999). *Project-based instruction in a Canadian secondary school's ESL classes: Goals and evaluations* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses A&I. (304576857).
- Beckett, G.H. & Slater, T. (2005). The project framework: A tool for language, content, and skills integration. *English Language Teachers Journal*, 59(2), 108-116.
- Beckett, G.H. (2006). Project-based second and foreign language education: Theory, research, and practice. In Beckett, G.H. & Miller, P.C. (Eds.) (2006). *Project-based second and foreign language education: Past, present, and future*. Greenwich, Ct.: Information Age Publishing.
- Beckett, G.H. (2006). Beyond second language acquisition: Secondary school ESL teacher goals and actions for project-based instruction. In Beckett, G.H. & Miller, P.C. (Eds.) (2006). *Project-based second and foreign language education: Past, present, and future*. Greenwich, Ct.: Information Age Publishing.
- Center for Workforce Research, Maine Department of Labor (2014). *Maine workforce outlook: 2014 to 2024*. Retrieved from [http://www.maine.gov/labor/cwri/data/projections/2024/2024\\_Outlook.pdf](http://www.maine.gov/labor/cwri/data/projections/2024/2024_Outlook.pdf)

- Colombo, M.W. (2002). English language literacy: Motivating culturally diverse students to improve reading and writing skills. *New England Reading Association Journal*, 38(3), 10-14.
- Doherty, D. & Eyring, J. (2006). Instructor experiences with project work in the adult ESL classroom: A case study. In Beckett, G.H. & Miller, P.C. (Eds.) (2006). *Project-based second and foreign language education: Past, present, and future*. Greenwich, Ct.: Information Age Publishing.
- Eyring, J. L. (2014). Adult ESL education in the U.S. *CATESOL Journal*, 26(1), 120-149.
- Finn Miller, S. (2010). Promoting learner engagement when working with adult English language learners. *CAELA Network Brief*. Washington, D.C.: Center for Applied Linguistics. Retrieved from <http://www.cal.org/caelanetwork/pdfs/LearnerEngagement.pdf>
- Foster, M., Strawn, J. & Duke-Benfield, A. (2011). Beyond basic skills: State strategies to connect low-skilled students to an employer-valued postsecondary education. *CLASP*. Washington, D.C.: Center for Postsecondary and Economic Success. Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/Beyond-Basic-Skills-March-2011.pdf>
- Green, L.S., Inan, F.A. & Maushak, N.J., (2014). A case study: the role of student-generated vidcasts in K-12 language learner academic language and content acquisition. *Journal of Research on Technology in Education*, 46(3), 297-324.
- Halvorsen, A.L., Duke, N.K., Brugar, K.A., Block, M.K., Strachan, S.L., Berka, M.B. & Brown, J.M. (2012). Narrowing the achievement gap in second-grade social

- studies and content area literacy: The promise of a project-based approach. *Theory & Research in Social Education*, 40(3), 198-229.
- Johnson, K. A. & Parrish, B. (2010). Aligning instructional practices to meet the academic needs of adult ESL students. *TESOL Quarterly*, 44(3), 618-628.
- Larmer, J., & Mergendoller, J.R. (2010). Seven essentials for project-based learning. *Educational Leadership*, 68, 34–37.
- Mackey, A. and Gass, S. (2016). *Second language research: Methodology and design* (2<sup>nd</sup> ed.). New York: Routledge.
- Manzo, K.K. (2005). Alliance issues strategies for high schools. *Education Week*, 24(32), 3.
- Miller, Paul C. (2006). Integrating second language standards into project based instruction. In Beckett, G.H. & Miller, P.C. (Eds.) (2006). *Project-based second and foreign language education: Past, present, and future*. Greenwich, Ct.: Information Age Publishing.
- Moss, D. & Van Duzer, C. (1998). *Project-based learning for adult English language learners*. Retrieved from ERIC Digest:  
<http://files.eric.ed.gov/fulltext/ED427556.pdf>
- Nash, A. (1999). *Civic participation and community action sourcebook: A resource for adult educators*. Boston: World Education, Inc.
- Parrish, B. (2015). *Meeting the language needs of today's adult English language learner: Issue brief*. Literacy Information and Communications System.  
Retrieved from  
[https://lincs.ed.gov/sites/default/files/ELL\\_Increasing\\_Rigor\\_508.pdf](https://lincs.ed.gov/sites/default/files/ELL_Increasing_Rigor_508.pdf)

- Petersen, C. (2008). *Project-based learning through the eyes of teachers and students: Investigating opinions of PBL in adult ESL* (Masters dissertation). Retrieved from ProQuest Dissertations and Theses A&I. (304435241).
- Petersen, C. & Nassaji, H. (2016). Project-based learning through the eyes of teachers and students in adult ESL classrooms. *Canadian Modern Language Review*, 72(1), 13-39.
- Pimentel, S. (2013). *College and Career Readiness Standards for adult education*. Prepared by MPR Associates, Inc. for the U.S. Department of Education, Office of Vocational and Adult Education. Retrieved from <http://lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf>.
- Portland Adult Education (2014). *Enrollments 2010-2014*. Unpublished.
- Portland Adult Education (2016). *PAE immigrant enrollment chart 2016*. Unpublished.
- Ramm, L. (2009). Oh, the places you'll go: creating a class city guide. In Rilling, S. & Dantas-Whitney, M., (Eds.), (2009). *Authenticity in the language classroom and beyond: Adult learners*. Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- Schugurensky, D. (1998). The legacy of Paulo Freire: A critical review of his contributions. *Convergence*, 31(1-2), 17-29.
- Stickney, B. (2016). Private correspondence.
- Stoller, F. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In Beckett, G.H. & Miller, P.C. (Eds.) (2006). *Project-based second and foreign language education: Past, present, and future*. Greenwich, Ct.: Information Age Publishing.

- Tims, N.R. (2009). *Project-based learning (PBL) in adult English as a Second Language (ESL) programs: Students' perspectives* (Doctoral dissertation). Retrieved from ProQuest Dissertations Publishing (3391961).
- U.S. Census Bureau (2015). *Quick facts about Portland, Maine*. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/2360545>
- U.S. Bureau of Labor Statistics (2017). *Unemployment rates and earnings by educational attainment*. Retrieved from [http://www.bls.gov/emp/ep\\_table\\_001.htm](http://www.bls.gov/emp/ep_table_001.htm)
- U.S. Department of Education (2013). *Adult Education and Family Literacy Act of 1998: Annual report to Congress program year 2010-11*. Retrieved from <https://www2.ed.gov/about/offices/list/ovae/resource/aepla-report-to-congress-2010-accessible.pdf>
- Von Kotze, A. & Cooper, L. (2000). Exploring the transformative potential of project-based learning in university adult education. *Studies in the Education of Adults*, 32(2), 212- 228.
- Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly*, 34(3), 511-535.
- Workforce Innovation and Opportunity Act, H.R. 803, 113th Cong. (2013–2014). Retrieved from <https://www.congress.gov/bill/113th-congress/house-bill/803>.

**APPENDIX A**

**Project Overview and Rubric**

### Project Overview and Rubric

We are going to work on a class project this semester. Each student will research a career.

You can choose any career that interests you.

You will interview someone working in that field or a related field. (I will arrange that.) You will collect information about the career from articles and websites. Then, you will write a report and make a poster showing what you have learned. You will share your poster with others at a career fair.

The purpose of the project is to improve your English. You will read several articles, get information from charts, prepare questions for your interview, take notes, write a report and edit your work. You also will learn skills to help you prepare for college and the workplace, such as giving a presentation.

Here is a schedule for the project:

- January 23: Learn about careers that have a lot of jobs available. Choose what career you want to research.
- January 25: Visit the computer lab to do research on your career.
- January 30-February 1: Write interview questions. Arrange for your interview.
- February 6-15: Conduct your interview. Continue your research.
- February 27: Write a draft of your report.
- March 8: Rewrite the draft. Make your poster.
- March 13-15: Practice giving a talk about your career.
- March 20: Career fair

### Jobs Project Rubric

My presentation describes a career in the U.S., and the types of jobs done by people in that field. I told where I found the information.
I described the education and training required for the career. I also told the name of at least one school that provides that education, and how much the education costs. I told where I found the information.
My presentation tells how much money people in that career typically earn. I told where I found the information.
I gave information about the demand for jobs in my chosen career, in Maine and in the U.S. I told where I found the information.

I told what I found interesting about my chosen career.
My presentation includes at least one visual image, and tells where it was found.

<b>Project Content</b>	<b>Student</b>	<b>Teacher</b>
The presentation tells what I learned about a career in the U.S. and the types of jobs done by people in that field. I told where I found the information.		
The presentation describes the education and training required for the career. I told where I found the information.		
The presentation gives a pay scale for the career. I told where I found the information.		
The presentation tells about the availability of jobs in the career in Maine and in the U.S. I told where I found the information.		
The presentation tells what I found most interesting about my chosen career.		
The presentation includes at least one visual image, and tells where it was found.		
<b>Project Writing</b>		
All sentences begin with capital letters, and all proper nouns begin with capital letters.		
Punctuation is used correctly. (See your punctuation sheet for details.)		
Every sentence has a subject and a verb.		
Verbs agree with subjects in number. (i.e. A singular subject has a singular verb.)		
Verbs are in the correct tense.		
Words are spelled correctly.		
Paragraphs begin with a topic sentence.		
The final paragraph sums up what I learned from the project.		
Other comments		
<b>Oral presentation</b>		
The presentation was three to five minutes.		
I spoke in a way that other students could understand (slowly and clearly).		
I made eye contact with the audience most of the time.		
I began with a statement of my topic.		
I cited the sources of information used in my presentation.		
I ended with a summary of what I had learned.		
I used at least one visual image.		
Other comments		



**APPENDIX B**

**Template of Written Presentation**

## Adult Education Teachers Find Many Rewards Despite Low Pay



I interviewed Shoshana Hoose about her job as an adult ESL teacher. She has taught at Portland Adult Education (PAE) for three years. Before that, she volunteered at PAE for 10 years while working as the communications director of the Portland Public Schools.

Ms. Hoose loves teaching adults the English language, even though it has some crazy rules. She enjoys working with students from all over the world and learning about their cultures.

“I admire students who come to class even though they are very tired from long work days and family responsibilities,” she said. “I know that they really want to learn.” She wants to help her students achieve goals such as graduating from high school, getting a better job and going to college.

Ms. Hoose said people can take many paths to become an adult education teacher. Some people earn their teaching certificate for elementary school, middle school or high school and then start teaching adults. Others get training in the subject that they will teach, such as mathematics, business or ESOL.

Ms. Hoose has a bachelor’s degree and a graduate certificate in Teaching English to Speakers of Other Languages (TESOL). She now is completing a master’s in teaching ESOL through a university in Minnesota. She is taking the program online because there is no college in Maine that specializes in adult ESOL. The master’s program costs about \$12,000.

Adult education teachers may work in community programs such as PAE, or for colleges or businesses, Ms. Hoose said. Most of the jobs at community programs are part-time, and they pay a lot less than other education jobs, she said.

Moreover, Ms. Hoose said that most adult education teachers do not get health insurance, sick pay, vacation pay or any other benefits. That is why many young teachers leave PAE for better-paying jobs at high schools or colleges. Ms. Hoose said she is one of many teachers who began working at PAE after they retired from other careers.

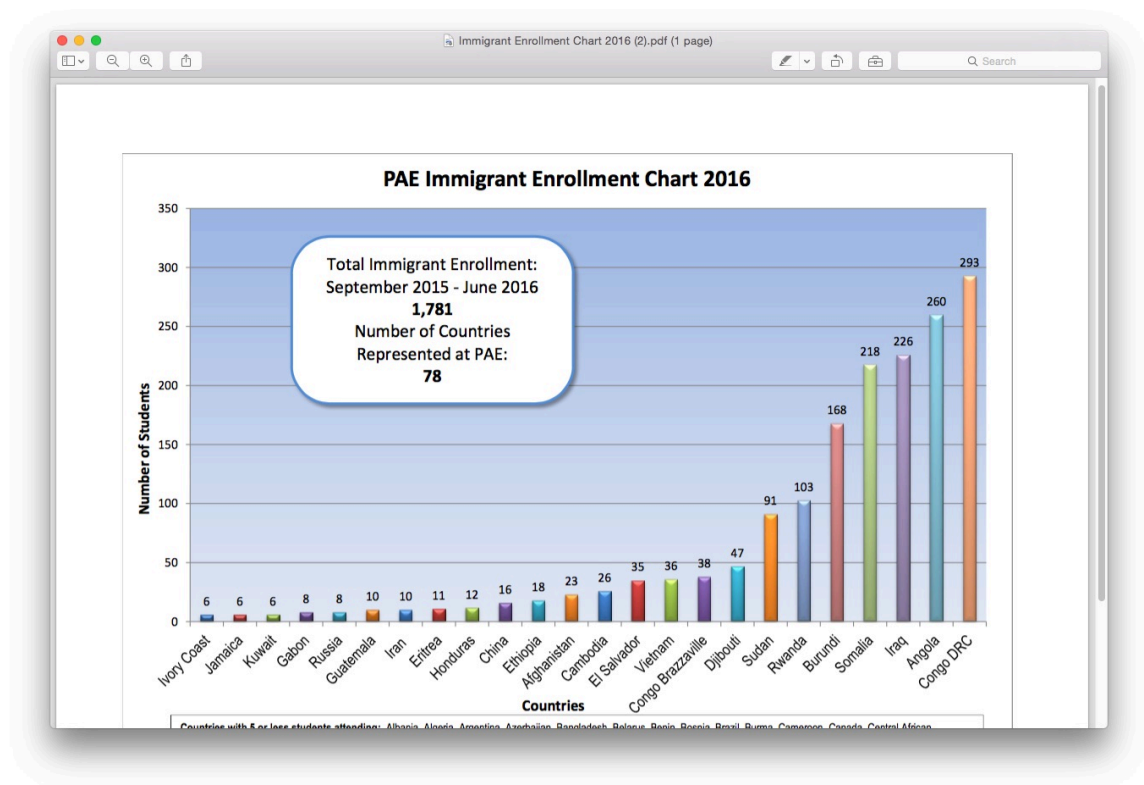
According to the Maine Center for Workforce Research and Information, there were only 114 people working as adult education teachers in 2014. In 2015, the average wage statewide was \$19.78 per hour. The center projects that the number of jobs will decrease to 110 by 2024.

The opportunities for adult education teachers are better in other parts of the U.S. According to the U.S. Bureau of Labor Statistics, there were 65,110 people working as adult education teachers in 2015. The U.S. Bureau of Labor Statistics reports that the mean hourly wage was \$24.17. Nearly a third of the jobs were at community colleges. The states with the most jobs were California, Washington, New York, North Carolina and Texas. The U.S. Bureau of Labor Statistics projects that the number of adult education jobs nationally will rise by 3.6 percent per year.

My research taught me that it would be difficult to support myself as an adult education teacher. However, I also learned that it is a very rewarding job.

**APPENDIX C**

**Pre-Test**



1. Most students enrolled at Portland Adult Education in 2015-2016 were from Africa.

True

False

2. Using the information in the chart, explain how you know that:

3. According to the chart, which of these statements is true?

a) Enrollment at PAE increased between Sept. 2015 and June 2016.

b) More than half of the PAE students came from five countries.

c) Most of the 78 countries represented in the program had at least 15 students at PAE.

*Maine schools will not graduate enough engineers in the next decade to keep up with the demand, according to many engineering professionals and educators. They say that could hurt the state's economy.*

*About 27 percent of Maine engineers are near retirement age, said Dana Humphrey, dean of the University of Maine College of Engineering. He said that Maine will need about 2,560 new engineers in the next decade to replace them and to fill new engineering jobs. But the university will only train about 1,300 engineers during that time.*

*There is a lot of competition for engineering graduates. Many companies in other states pay engineers higher salaries than they can earn in Maine. About 40 percent of Maine engineering graduates leave the state.*

*“Maine needs every engineer we can get, plus more,” Humphrey said.*

4. According to the text, which of these statements is true:

- a) Most Maine engineering graduates stay in the state.
- b) Maine needs 1,300 engineers by 2027.
- c) About 27 percent of Maine engineers will retire in the next five years.

5) According to the text, why do many Maine engineering graduates leave the state?

6) According to the text, what is one likely result of not having enough Maine engineers:

- a) The University of Maine will expand its engineering program.
- b) The state’s economy will grow at a slower pace.
- c) Some engineers will not be able to retire.

**APPENDIX D****Student Use of Evidence to Support Claims in Written Presentations**

Name of Student *** Draft or final report	Did the student provide evidence to support claims?	Was the evidence relevant and appropriate to support the claim?	Was the evidence written in a correct format (i.e. cited properly)?	Comments
General information about career				
Education, training				
Pay scale				
Job availability				



**APPENDIX E**

**Oral Presentation Rubric**

### Oral Presentation Rubric

<b>Student's Name</b>	
Presentation was 2-3 mins.	
Student spoke slowly, clearly and loud enough to be heard.	
Student spoke with energy and enthusiasm.	
Student made eye contact with the audience. (He or she did not read the report.)	
Presentation was well organized.	
Student told at least three interesting things about the career.	
Student began by giving the topic.	
Student ended with a summary of what he or she had learned.	
Student told the sources of information used to prepare the report.	
Other comments:	

**APPENDIX F**

**Student Peer Assessment and Self-Assessment**

**Part I:** *Please listen to two or three other students' presentations during the Career Fair. Choose students who you do not know well. Answer these questions about one of their presentations.*

1. Name of presenter \_\_\_\_\_
2. Tell one thing that he or she did well.
  
3. Was there any information that you wish had been included in the presentation? If so, what was it?
  
  
  
4. Give one suggestion to that student for improving the presentation.

**Part II:** *Answer a few questions about your oral presentation. Please do this tonight, while you still remember it.*

1. Tell one thing that you did well.
  
  
  
2. Tell one thing that you would do differently next time.
  
  
  
3. Tell what questions you were asked. That could help you know what information to include in your report next time.

**APPENDIX G****Post-test**

*Tyler Technologies Inc. is a Texas-based software developer that employs about 600 Mainers. The company plans to hire 500 more employees in the coming year.*

*“We are expanding our internship program as a way to attract employees,” said Liz Rensenbrink of the company’s human resources department. “We’re looking at anything we can to develop talent in Maine and attract people to Maine.”*

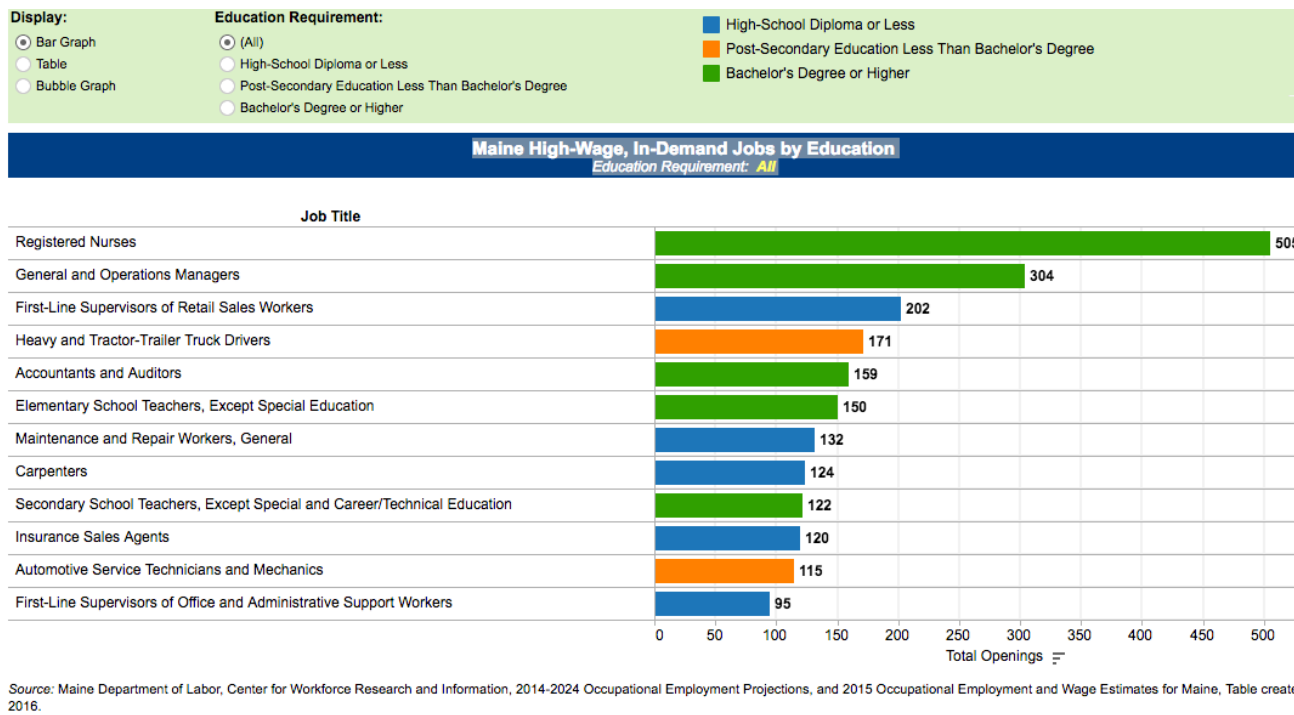
*Tyler Technologies plans to offer 27 Maine student internships this year, in areas such as computer science and marketing, Rensenbrink said. She added that many of those internships will lead to permanent jobs.*

*The National Association of Colleges and Employers reports that 73 percent of all U.S. students who interned last year later were offered a full-time job at the same company.*

1. According to the text, which of these statements is true:
  - a. Tyler Technologies will offer full-time jobs to 73 percent of its interns this year.
  - b. Tyler Technologies will offer 500 internships this year.
  - c. Tyler Technologies will use its Maine internships to find permanent employees.
2. What information in the text shows that internships are a good way to get hired full-time in many companies?
3. Does the text give information saying whether software developers offer more internships than other firms?

\_\_\_yes

\_\_\_no



4. Make one sentence that summarizes the most important information in this chart.

5. Use the information in the chart to determine which of these statements is false:

a. The Maine Department of Labor predicts that there will be more openings for insurance sales agents than for accountants and auditors between 2014 and 2024.

b. The Maine Department of Labor predicts that the jobs with the largest number of openings between 2014 and 2024 will be registered nurses, general and operations managers and first-line supervisors of retail sales workers.

c. During the decade that begins in 2014, the Maine Department of Labor predicts that there will be approximately the same number of openings for carpenters, secondary school teachers and insurance sales agents.

6. Use the text to determine whether these statements are true or false:

a. The chart shows expected changes in high-wage, in-demand jobs over a decade.  
 \_\_\_ True \_\_\_ False

b. The Center for Workforce Research and Information is part of the U.S. Bureau of Labor Statistics. \_\_\_ True \_\_\_ False

**APPENDIX H**

**Student Survey**



1. What was your favorite part of the project?

2. What was the most challenging part of the project?

3. Tell whether the project helped you learn these skills:

	Yes, the project helped a lot.	The project helped a little.	No, the project didn't help.	I already knew how to do this.
Reading charts				
Doing research				
Writing questions for an interview				
Conducting the interview				
Using information from my research to write a paper				
Telling where I found the information in my paper				
Rewriting my paper				

**APPENDIX I**

**Project Schedule and Lesson Plans**

1/9/17: Semester began.

1/11/17: I explained that I was doing research in the class for an ESL master's thesis. I then left the room as the school's ESOL director reviewed the release form and explained that students had a choice about whether to sign it. She stressed that there would be no negative consequences for those who opted out. Most students signed the form.

1/16/17: Martin Luther King holiday

1/18/17: I gave the class the project overview and rubric. We read it aloud and I went over the vocabulary. Then, I gave students my template of a written report about a career. They read it and answer the questions at the end; then, we reviewed it.

1/23/17: Students took the pre-test.

Working with partners, they reviewed three charts: high-wage Maine jobs with the highest number of openings projected between 2014-2024; the education required for those jobs, and the average salary for those jobs. They compared jobs based on those three criteria.

Their homework was to decide on a career for their research project. (I explained that it did NOT have to be something on the list of high-wage, in-demand jobs in Maine.) They also were told to use the project rubric to make a list of all of the information about their jobs that they need to get in the computer lab during the next class.

1/25/17: I returned students' graded pre-tests and reviewed the answers with them.

We spent an hour in the computer lab, gathering information about students' chosen careers. I explained how to use the U.S. Department of Labor website, [mynextjob.org](http://mynextjob.org), and another site (FAME Maine) that has information about Maine college programs in a wide variety of fields.

For homework, students did a critical reading exercise using an article about sanctuary restaurants.

1/30/17: I explained the difference between summarizing and copying, and then taught strategies for doing the former. Students worked in groups to practice. We reviewed their summaries as a class to see if they were copied verbatim, and whether they were accurate, precise, and contained the most important information.

We examined a simple graph, and I talked about how to summarize the information in the graph. We also reviewed three ways to provide attribution for the information. Students practiced those skills.

2/1/17: More than half of the students received contact information for the person who they will interview about their chosen job. We discussed what questions to ask, and how

to phrase the questions. I reviewed the difference between open-ended questions and yes-no questions, and we discussed the advantages and disadvantages of each.

Students worked in pairs to write open-ended questions on three topics:

- What the interviewee does during their work day
- The interviewee's advice for people entering the field
- The types of jobs that the interviewee has done

We reviewed the questions. Then, students asked their questions to a class volunteer who works as a lawyer. After 15 minutes of questioning her, they wrote a summary of what they had learned.

For homework, students wrote questions for their interview.

2/1/17: The volunteer and I conferenced with several students to provide information about their interviewees, review their interview questions, and discuss next steps.

During the second hour, I taught a lesson on how to figure out whether information is valid. I showed students the for-profit nursing programs that popped up at the top of an Internet search, and the additional searching that was needed to find a list of all accredited nursing programs in Maine.

Students worked in pairs to read an article about fake news and to answer questions about it. Then, I showed the class the Wikipedia list of fake websites. We looked at the real and fake ABC news one, and noticed how the logos are nearly the same. But the fake one had crazy stories, such as one claiming that more than 300 people were shot in Chicago in a single night. Finally, I showed how they could use sites such as snopes.com to separate truth from fiction.

2/8/17: Most students had their career interviews this week.

In class, we did another critical reading activity, this one as a jigsaw. I gave pairs of students one of three texts about a recent hate crime against African Muslim students in our community, the school superintendent's strong response, and criticism of him by the state's Republican party.

Each person then joined a table with two others who had read the other texts. They shared information and answered questions about the incidents described in the texts.

For homework, I gave them all three texts. I asked them to summarize the incident and to give an opinion about the appropriate response, drawing on the texts and citing from them.

2/13/17: Snow day

2/15/17: I reviewed with students how to write a first draft of their report, using the project rubric as their guide. We discussed what information should be included, what sources to draw on, how they could attribute information from those sources, whether information should be copied, and strategies for organizing their report.

Students did an exercise that involved conducting a poll, calculating percentages, making a bar graph, and writing sentences about the information in the graph. I presented sentence frames to help them do the last item.

For homework, students were to write a first draft of their report. Three students already submitted pre-drafts.

2/20/17 and 2/22/17: Vacation. The volunteer met with some students one day to provide help with their drafts.

2/27/17: More than half of the class completed first drafts. The volunteer and I conferenced with students to review them, using the rubric to point out information that was or was not included. We also pointed out places where students had not cited evidence to back up their claims, or neglected to say where that evidence came from.

I gave students the date of the Career Fair, told them who would be invited, and explained that each of them would give oral presentations about their chosen careers at the fair. A student volunteered to make a poster about it.

3/1/17: The volunteer and I did more conferencing with students to review first drafts of their written reports.

Working in groups, students wrote an article for the school's student newsletter about the Career Fair.

I gave the class a modified version of the Purdue University Online Writing Lab handout on paraphrasing. We reviewed it, then students tried paraphrasing, using an article in the local newspaper about a family with two students in our class who had a relative caught in Trump's travel ban.

Homework includes completing a second draft of their reports.

3/6/17: About a third of the class has now completed a second draft, and all but three students have written a first draft. Individual conferences continued. Meanwhile, students worked in groups to edit the class article about the Career Fair. We reviewed the errors at the end of class.

3/8/17: I reviewed tips for giving oral presentations. Rather than trying to tell everything that they had learned about their chosen career, I encouraged students to choose three or four highlights to include, and suggested that they consider these questions:

What did you learn that surprised you?

What did you learn that was useful?

What did you go home and tell your friends and family about?

I gave students notecards to write their main ideas, and told them to then share the ideas with a partner to get feedback.

I also gave students a rubric that will be used to evaluate their oral presentations, and I explained that someone at the fair who they might not know would do so. Homework included practicing their talks and timing themselves.

3/13/17: The written reports are coming along well. All but two students have completed a second draft. But I realized that many students were confused about how to do the oral presentations, so I reviewed the rubric.

I also gave students new index cards. Some were confused about what to do with them. I explained that they were for notes. I wasn't going to look at them- they were just to help students give their oral presentations. I stressed several times that the presentations should not be read; rather, students should make eye contact with the audience.

For homework, students were to keep honing their oral presentations.

3/15/17: I showed a clip with comedian Jerry Seinfeld talking about public speaking. He said most people rank it up there with death as the two things that they most dread. I stressed the importance of becoming comfortable as a public speaker for their future work lives. I also told them that they have a leg up because they have had the experience of speaking a language that they don't fully know or understand, an act that requires courage.

Then, I played a clip of a young man giving a presentation, with tips for how to do it well (dress formally, smile/ have "good energy") and how not to do it (talk on your phone, turn your back to the audience, read from notes, speak in a monotone). Students practiced taking notes by writing down the tips. We added a few of our own, such as: Ask at the end if the audience has questions.

Six students were ready to practice their oral presentations with classmates. The others talked to a classmate about what they had learned about their chosen career.

3/20/17: Most students took the post-test. Afterward, students practiced their oral presentations in small groups and gave each other feedback. Meanwhile, the volunteer and I circulated and critiqued them, using the Oral Presentation Rubric. Several students stayed after class to help make the panels for the Career Fair.

3/22/17: Several students arrived early to help set up the Career Fair. Those students who missed the post-test took it. We reviewed plans for the day, including the fact that each of them would be evaluated sometime during the afternoon.

Then, we went downstairs to the fair. There was a great turnout. Each student gave his or her oral presentation multiple times to individuals or small groups. I also asked students to leave their posts at some point to listen to a few other students' presentations, and to evaluate them.

3/27/17: We did a wrap-up of the Career Fair. I gave students the feedback that they received from their evaluator about their presentations, as well as any feedback from other students. (All feedback was anonymous.)

The class anonymously filled out a survey about students' experiences doing the project. Then, I gave them their post-tests, graded, along with the comparison of their pre-test scores. (I called it a reading activity.)

With the work out of the way, it was time to celebrate. I showed the class an article about the Career Fair that was posted on the district website, and also the photos taken of the event. We gave the class volunteer letters and cards thanking her for her work helping students with their projects.

For homework, students read an article about a program based at our school that can help them find jobs and plan careers. They were asked to answer questions about the reading, and to write questions for the program director.

3/29/17: The director of the program described in the previous entry came to class to answer students' questions about how the program can assist them in pursuing their career goals. I met with students individually to review their work for the semester and their placement for next semester.

**APPENDIX J**

**Teacher's Project Notes and Observations**



1/18: I gave the class the project overview. We read it aloud, and I went over the vocabulary. Then, I gave students the template of a written presentation, and asked them to read it and answer questions about it. Some were confused; they thought I wanted them to repeat specific information about the adult education teacher job rather than giving general categories of information (pay, benefits, training) that were included in the report. They worked on the questions in groups for about 15 minutes, then I reviewed answers with the class.

1/23: Students did the pre-test. It took most about 15- 20 minutes. No one seemed very stressed by it- at least, they didn't say anything.

I only counted correct answers for the pre-test results. I gave students credit for #2 if they explained that they had counted the students from African countries and compared that to the whole, even if their math was a little off. Here is an overview of the pre-test results:

- Students who got six correct: 0
- Students who got five correct: 1
- Students who got four correct: 4
- Students who got three correct: 15
- Students who got two correct: 2
- Students who got one correct: 0

I noticed that question 4 tripped up everyone. I think part of the reason was that students didn't understand that someone could be of retirement age but choose not to retire. In other words, the question was worded poorly. On the other hand, they also didn't notice that if 40 percent of UMaine engineering graduates go out of state, 60 percent stay in Maine.

I asked students what information they would want before deciding on a career. They mentioned salary, hours, where training is available, and the number of openings. (No one mentioned the amount of training or education required.) I then explained that we were going to look at three things: Maine fields with the highest number of openings projected between 2014-2024; education required for those jobs, and average salary for those jobs.

Working with a partner, students reviewed the list of high-wage, in-demand Maine jobs. Susan, the class volunteer, and I answered questions such as: What is the difference between a registered nurse and a nurse practitioner? Are there auditors in Maine? Students chose three jobs on the list. Then, I gave them three charts showing the amount of education required, and they found that information for each of the jobs. Finally, I gave them a chart with average wages for those jobs. Most found their jobs on the chart, but Susan and I had to look up a few on the computer.

Their homework was to decide on a career for their research project. (I explained that it did not have to be on the list of high-wage, in-demand jobs in Maine.) Then, they were

told to use the project rubric to make a list of all of the information about their jobs that they need to get in the computer lab on Wednesday.

1/25: After I handed students back their graded pre-tests, two students asked me why they got question 4 wrong. At the start of class, I explained that most students had difficulty with two questions, and both involved reading carefully. We reviewed question two. I asked students to explain what “most” means. Responses included “a majority,” “a lot,” etc. Finally, one student replied, “More than half.”

I then asked, “In this chart, how many students would have to be from Africa to make it ‘most?’” Azhar did the math and replied, “890.” I said it would actually be 891, since it must be more than half. We then discussed how students could show me that more than half of the PAE students came from Africa: by adding up the numbers from the top five or six African countries.

We then turned to question four. I asked a student to reread the sentence about how many UMaine engineering graduates leave the state. “If 40 percent leave the state, how many remain?” I asked. Some students understood right away that a majority remained. Other didn’t seem to get that, perhaps because their math skills weren’t developed.

A student then asked why the first answer, about retirees, wasn’t correct. I had a student reread the key sentence, about 27 percent of retirees nearing retirement age. I explained that just because you reached age 62-70, you didn’t have to retire. Moreover, the text did NOT say that 27 percent would retire in five years. Once again, I pointed out, they need to read carefully.

I gave them an article about sanctuary restaurants for homework. I told them to read carefully before answering the questions.

We spent an hour of class in the computer lab. I explained beforehand that we were going to use a website with information about careers in the U.S. (as opposed to the Maine-specific information that we looked at on Monday.) I walked them through how to use the site ([mynextjob.org](http://mynextjob.org)). After some initial problems with the site crashing, everyone got on it. Those who completed gathering information there about careers of interest moved on to the FAME Maine website to investigate Maine college programs in their chosen fields. Students worked hard throughout the hour and most seemed engaged; in fact, I had to drag some out of the lab.

1/30: I began by doing a lesson on summarizing. We reviewed what that word meant (giving a short version with the most important information). We talked about the difference between summarizing and copying. I gave them the fear-of-God speech of what will happen if they copy in college (i.e. get kicked out.)

Then I tried to break down the skill of summarizing by having them substitute a word that means the same thing. They had a text and were asked to give examples of words that

meant the same as growing older (aging), median (average), and U.S. (country, in second context).

Then, they tried summarizing the text. I wrote their summaries on the board. We reviewed them to determine if they were accurate (a few were not), whether they copied (a couple did), whether they were precise, and whether they had the most important information. One came closest to meeting those criteria, but had grammatical issues that I tried to address.

We reviewed a simple graph showing the change in Maine's population over time. I talked about the importance of being accurate and precise in giving information from a graph. We also reviewed three ways to attribute (tell where the information came from).

Students wrote sentences with information from the graph. We reviewed a few for accuracy (most were) and precision (some were more than others). Then, they were given a second, more complicated graph to describe in a sentence. Some groups needed help understanding what the graph showed. They worked hard on the summary sentences, some with more success than others. Susan remarked that it was a difficult assignment.

At the end, Sacha had a smile on his face. I asked him what he thought. "Is good," he replied. "I like it."

2/1- I began giving students their interview assignments today; at least half of the class is matched. Daniella arranged her own interview, with a translator, and said it went well. I had asked her to do it in English even though the woman is a native Spanish speaker, like Daniella. Apparently she did so.

In class, we reviewed the purpose of the interviews (to get information for their reports, NOT to get a job). We also discussed different types of questions that they could ask. I asked Sacha, "What kind of work have you done in the past?" I then asked Francois, "Have you been a cook?" I asked students what kind of answer I got to the second question (yes or no) versus the first (more information).

I encouraged them to write open-ended interview questions that would elicit a lot of information from their interviewees. Then, I asked for an example. A student said, "How long have you done this work?" That was an informational question, but I tried to explain that it was likely to result in a short answer- not really open-ended. Other students came up with broader questions: "How did you get this job? Why are you interested in this job?"

Students then worked in pairs to write open-ended questions on three topics:

- What the person does during their work day
- Advice for people entering the field
- The types of jobs the person has done

Susan and I circulated to help. One student asked me how to ask about salaries; she had noted that Americans don't like talking about that. I addressed that with the whole class, and we came up with indirect approaches. For example, that same student asked, "How much would I earn if I started in that job?"

Another student asked me about recording the interview. That segued well to talking about strategies for taking notes, and the importance of asking for clarification, if needed.

Students practiced for their interviews by asking some of their questions to Susan about her job as a lawyer. Richard asked, "Do you like your job?" I asked if anyone could reword the question to make it more open-ended. Azhar did so, asking "What do you like about your job?"

After 15 minutes of questions, I asked them to write a short summary of what they had learned about Susan's job. Most got the gist of it right.

2/6- I have three new students. I am not sure how I will integrate them into the project. Zahra has been in the course since the beginning, but missed several classes because her husband had a heart attack. I met with her before class to go over how she can get started on her project.

We had a flurry of planning for the interviews during class yesterday. Esperance called Eve, the volunteer who arranged her interview with a business management, and made plans to meet her.

Ernest and I called Peter Weyl, a former TV news producer who arranged for Ernest to visit WCSH6 for a newscast and talk to a reporter there. Ernest's face lit up when I gave him the phone and Peter spoke to him in French.

Ali had his interview on Friday with an interpreter for the school district. He said it was very helpful in informing him about next steps.

After Susan found a paralegal to talk to Alain, he said he wants to choose a different job because that one would be too difficult to get into. He chose banking. Susan kindly offered to find someone for him to talk to in that field.

For homework, students were told to write their interview questions. I gave them a sheet reminding them of what they should include. I had Susan circulate during the second hour, reviewing the questions with those who will have interviews this week. A couple of students had not written any questions. Susan helped others with the wording. That was a very helpful step.

During the second hour, we focused on how you figure out whether information is valid. I wrote "valid" on the board and we defined it (true, supported by facts, etc.) I asked if all information on the Internet was true, and they said no. I then asked why. They were

able to explain that some information is made up by those with a point of view, but they did not initially bring up financial motives for fake news.

I showed them how I searched in Google for Maine nursing programs, and the first ones that popped up were expensive private colleges. By contrast, lower-cost public colleges were low on the search list. The search did not immediately show the state government office that lists all accredited nursing programs, but I said that is where I would look first.

We then turned to fake news. Students read an article about it in groups and answered questions. While most did well with the two open-ended questions, many were tripped up by a multiple-choice question that required comprehension of one part of the article.

I then showed the class the Wikipedia list of fake websites. We looked at the real and fake ABC news one, and noticed how the logos are nearly the same. But the fake one had crazy stories, such as one claiming that more than 300 people were shot in Chicago in a single night. I scrolled past another story that mentioned Trump's penis, and quickly closed the site as students laughed.

Finally, I showed them snopes.com as a place to sort truth from fiction. We looked at a story investigating the claim that immigrants who are not citizens were added to voting rolls without their knowledge. It turned out that that happened in a limited way in Vermont before it was stopped, but not elsewhere.

Students seemed engaged by the lesson. One of the new students, an Iraqi man, thanked me afterward.

2/8- Most interviews will take place in the next week, and a few things are not working as planned. Ahmed told me on Monday that he will miss his interview with Nancy, an accountant. Since another student, Abdi, also will interview her, I suggested that Ahmed use Abdi's notes.

I have failed to find a supply chain manager. I am hoping that I can arrange for that student to go to the bank instead.

I went to great lengths to arrange for Francois to interview the school district's bus mechanic. That involved getting permission from the head of the transportation department and the head of transportation for the neighboring school system that oversees maintenance for our district's buses. The mechanic, Aaron, agreed to travel from that other town to our town to meet with Francois, and I found a space for them to do so. I was upset last night when Francois wrote to say he wasn't going to make it because he didn't feel well.

I wrote back, saying that a lot of people went to a lot of trouble to arrange the interview, that he wouldn't have another chance, and that it is part of the major project of the class. He agreed to go. Whew!

2/9- I picked up Francois yesterday morning and took him to the interview with the bus mechanic. On the way, he told me that he didn't realize at first that this was a real interview; if I understood him correctly, he might have chosen another job otherwise. He has limited work experience, having held various jobs (including cook) while in school in his home country. It also became clear from my conversation with him and a couple of other students yesterday that they didn't understand what they were supposed to write for their reports; I will review this next week.

We arrived early at the vocational school where we were meeting Aaron. I gave Francois a little tour, showing him the auto mechanics area, construction, boat repair, video classroom, etc. I left him alone with Aaron for the interview. Aaron seemed very friendly, but he was talking fast; I hope Francois got enough of it. Aaron kindly offered to take Francois around the bus repair facility at a future date.

I texted the three students who had interviews in class yesterday to remind them. All showed up, as did their interviewees, and the interviews seemed to go smoothly. Richard seemed the least prepared, but spent the most time (about an hour) with Mostafa, the district's network engineer. I think Mostafa really tried to be helpful.

In class, we did another critical reading activity, this one as a jigsaw. I gave pairs of students one of three texts about a recent hate crime against students at one of our city's high schools. Students seemed very engaged by the topic.

After each pair had read their text, I reorganized them in tables with two others who had read different texts so that they could share information and answer questions together. That part was difficult, especially the first question which asked them to organize events in chronological order. But they worked hard on the assignment until we ran out of time. For homework, I gave them all three texts. I asked them to summarize the hate crime incident and to give an opinion, drawing on the texts and citing from them. I told them I did not want them to copy. We will see how they do.

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Three students gave me unsolicited writing related to their projects:

- Daniella wrote a draft and asked me to read it. It looks very comprehensive. From a brief glance, it appears that she needs to integrate the information better.
- Abdi wrote an overview of accounting jobs along with his questions for his interview. I was impressed with his taking the initiative to do that.
- Sacha misunderstood the assignment of writing questions for his interview with Abdi, a factory technician. Instead, he wrote questions and asked them of a supervisor at the group home where he works.

2/15- The past week included 3.5 snow days over four days of school. Very fortunately, this class missed only one session, on Monday (2/13). About half of students' interviews were set to take place this week, and I had to reschedule several because of the snow. But by the end of the week, when vacation begins, all but a few students will have had their interviews.

Susan, my classroom volunteer, and Eve, who volunteers in another of my classes, have been a huge help. Susan arranged two of the interviews (banker and receptionist). Eve arranged a third (management analyst). Both took students to interviews yesterday, as the latest storm began. Two other students, Bushra and Odile, left class to interview Suzanne, in our school's office, about her job as a secretary.

Abdi Ahmed came to class yesterday to be interviewed by Sacha about his job as a technician. Before they headed off, Abdi spoke to the whole class a little about his life. After arriving here from Somalia, he went to the adult education school to learn English, then found a job that paid 80 percent of the cost for him to attend community college and earn an associate's degree. He encouraged students to focus on their goals and not get derailed. They seemed to appreciate his encouragement.

I spent about 20 minutes reviewing with the class how to write a draft of their reports. I began by asking them to find the project rubric. Most did. I told them that should be their guide for the information that must be included, but they could include more than that.

Following Betsy Parrish's advice, I then asked students a series of questions:

- What sources of information should you use in your report? (Information from your interview, the U.S. Department of Labor websites, the Maine Department of Labor website, the FAME ME website, and any college websites that they used. I noted that one student also used salary.com.)
  - How do you tell where the information came from? (Use attribution.) We reviewed how to do that.
  - Do you include every piece of information? (No, provide highlights.) I reminded the class of the audience: other students who want to learn about these careers.
  - Do you copy information? (No, summarize in your own words. But you can use quotes from the interview. I showed how to do that.)
  - Do you need anything besides the written report? (Yes, at least one image. It could be a photograph of the person you interviewed, a company logo, a photo of the place where the person works or an image from the Internet. I told them that generally, it is best to get a photo of the person you interviewed because that will be of most interest to readers.)
  - How should you organize the report? Students suggested three ideas:
    1. Tell about the interviewee: where they work, why they chose the job, their experience, etc.
    2. Tell why you are interested in the job. Tell what you learned from all of the sources.
    3. First, describe the job. Then, introduce the person who you interviewed.
- I told them that there was no one right way of organization, but it was important to have a plan. I also told them that they could pull out some facts and display them in a textbox to accompany the main report.

Susan kindly offered to come in for two hours during vacation to help students with their reports. I hope some take her up on that.

Later in class, we did an exercise in the textbook that showed how to calculate percentages and read bar graphs. Students then did activities with data from a class poll on volunteering to calculate percentages, make a bar graph, and make sentences describing the poll results.

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I read Daniella's draft yesterday, and I was impressed! First, she handed it in way ahead of the deadline. Second, it was very comprehensive, and drew on all of the sources of information mentioned above, plus another. Third, she wrote it in a compelling way, highlighting the parts of the job that she found most interesting. It felt like reading a college paper - an experience that I haven't had before at adult education.

There were some problems in her use of evidence to support claims. For example, she had contradictory information about the demand for interpreters in the country as a whole (large) and the demand for Spanish-speaking interpreters in Maine (small) that was not explained well. I wrote comments and talked to her about the report afterward.

2/25- Although I spent a half-hour or so during the last class reviewing how to write the jobs reports, and reminded students to use the rubric as their guide, some students remain unsure about what to do. Hamid and Sacha emailed me to ask about that. Susan met with three or four students last week, during vacation, and none seemed to know how to proceed with the writing.

Daniella perhaps is an outlier. She was the first to hand in a draft, and she did an excellent job of rewriting it. She provided ample and appropriate evidence to support all claims in the key areas (job training required, job prospects, average pay, etc.)

I matched the last student (Celia, who entered the class late) with an interviewee last week; she met Becky Wartell to learn about massage therapy. I updated my jobs database; after two years, I now have about 65 names in it of people in a wide variety of jobs, from architect to phlebotomist, dentist, interior designer and truck driver.

2/28- Students began emailing me their draft reports over vacation. Thusfar, I have received first drafts from Azhar, Maria, Celia, Ann, Abdi, Hamid, Francois, Ernest, Ali, Daniella, Sacha, and Zahra. Other students who have told me that their drafts are in progress are Esperance, Khadro, and Colette. Ancille just completed her interview yesterday. I have received second drafts from Daniella and Ali.

Here are my overall impressions:

- A few students understand the idea of writing a report that integrates information from all of the sources that they used in their research (websites, interview, charts



in class). Daniella's draft stands out as the best, but Celia, Maria and Abdi are on their way, too.

- Many students, including Francois and Hamid, essentially did data dumps. They compiled all of the information, but did not write an integrated report.
- Many students have given attribution, but it often is partial. For example, they cited the website mynextmove.org, but failed to explain that the U.S. Department of Labor manages that site.
- Despite my numerous reminders not to plagiarize, and all of our practice on how to summarize, several students copied paragraphs, charts, etc. verbatim from the websites that we used in class, Wikipedia and other sources.

Yesterday, Susan and I met with about 12 students to review their reports. We used the rubric as our guide to point out what information was there, what was missing, and whether they provided attribution. We avoided reviewing the spelling and grammar; the first step is to reorganize the report.

I told the students the date of the Career Fair (March 22), and Maria volunteered to make an invitation. (She had two versions waiting for me this morning!) I explained that we would invite all of the people who they interviewed and others who helped us on the project. I also said that students would give short, oral presentations at the fair. Hopefully, that made an impression on them that this assignment is to be taken seriously. I am going to post Daniella's project on a panel to show the class next week as an example of what they should be doing.

3/1- Susan and I had a few more conferences with students yesterday to go over first drafts, and Daniella's third draft. A common theme is students neglecting to include the general information about their careers that they found on websites, and only drawing from the interview. For their homework, they are supposed to complete a second draft.

Yesterday, they worked in groups to write articles for the school's student newsletter about the project. Next week, we will combine those articles into one and edit it.

I gave them a modified version of the OWL (Purdue University Online Writing Lab) handout on paraphrasing. After we reviewed it, they tried paraphrasing. To practice, we used an article about an Iraqi family that has two students (father and daughter) in our class. I chose the article because of that personal connection, hoping it would have high interest for students. The article tells how a young woman in the family was caught in the Trump travel ban, eventually made it to the U.S. with the help of our congresswoman, and then sat with her in the Capitol at Trump's congressional talk this week.

3/5- I sent invitations to the Career Fair, and included this note to the people who were interviewed:

Dear Friends,

Many thanks for your help in our class' research project about careers. The highlight of the project for students was the opportunity to talk to someone working in the field - and you made that possible.

Students will present their work in written form and in short oral presentations at a Career Fair on March 22 from 3:30-5 p.m. at Portland Adult Education. The specific location is the basement area. An invitation is attached.

I hope you will be able to attend, for two reasons. First, I know the students will appreciate it. Second, it would extend their learning if you were able to read what they wrote about the interview and to check it for accuracy. I know from my own reading of a few papers that some things are lost in translation! It would be good for students to hear from you about anything that they misinterpreted.

If you are unable to attend that day, the panels will be on the wall through the end of March.

Thanks again for your help.  
Shoshana Hoose

3/7- I have lined up two people from the New Mainers Resource Center to evaluate students' oral presentations at the Career Fair. I will try to find two more evaluators, and I will give them the Oral Presentation Rubric to use.

Students continue to hand in drafts of their jobs projects. At this point, one student (Daniella) is done, six students have handed in second drafts (i.e. they are almost done), and a total of 19 students have done first drafts. One or two students have dropped out of the class. That leaves three students who completed interviews but have not yet handed in a first draft. (NOTE: The statistics above include students not in the study).

During the second hour of class yesterday, students edited the class article about the career fair. Meanwhile, Susan and I pulled out students and worked with them individually. I had three computers in the classroom. Susan helped some students find missing information for their reports on the web. I met with others to review their drafts or to inquire about the status.

My overall impression is that students are taking this assignment seriously. I told the class that I had invited a lot of people to the Career Fair over the weekend, and a lot are coming. I didn't tell them that that includes a lot of movers and shakers in the school department.

3/8- There is a nuance about attribution that has eluded most students, despite my efforts. Perhaps it is too much to expect them to get it. Several have cited mynextjob.org as a source of factual information about careers. But few have explained that the information comes from the U.S. Department of Labor, despite my underscoring that from the beginning and specifically asking them to do so in my comments on their first drafts.

Here is an overall point about the study: If students show improvement between their first and second drafts, it could be because of my teaching on the topic (though I did teaching on it before the first draft). Or, it could be because of my comments on their first drafts, and my specific instructions to attend to certain points. In that case, the take-home lesson from the study could be that students pay attention to at least some of the items that teachers showcase in their work. The role of the project would be less clear.

For the purposes of this study, I looked at and compared the initial draft with a second one (considered the final report). In fact, most students wrote a third draft, and some did even more revisions. The focus after the second draft was on copyediting changes, not using evidence or other aspects of the content. That is why I didn't include it in the study.

During the Wednesday class, I reviewed tips for giving oral presentations. I told students to choose three or four highlights to include, and suggested that they consider these questions:

- What did you learn about your chosen career that surprised you?
- What did you learn that was useful?
- What did you go home and tell your friends and family about afterward?

I gave them notecards to write their main ideas and told them to share the ideas with a partner to get feedback. Homework included practicing their talks and timing themselves. Next week in class, they will practice with Susan and I.

I told the class that learning to give oral presentations is an important skill for high school, college, and work. I also told them that their talks will be critiqued at the Career Fair by someone they don't know.

During class, Susan and I also met one-on-one with several students to help them with their written reports. Everyone seems to be taking the project seriously.

3/10- Yesterday, I saw Mostafa, the district network engineer who had been interviewed by one of my students (Richard). Mostafa had come to our school to meet Richard again, to help him with the final draft of his paper. That was really going above and beyond. Mostafa seemed to enjoy being able to lend a helping hand to an ambitious young man who, perhaps, reminded him of his younger self.

I posted Daniella's report on a display board, and showed it to students as an example. Of the 19 people in the study, 17 have submitted first drafts (the other two seem to have dropped out of class), and 12 have submitted two or more drafts.

3/14- The written jobs reports are going well. All but two students have given me a second draft. At least four students in the study (and seven in the class) are all done.

For homework due yesterday, students were supposed to come up with three highlights to share in their oral presentations. But many seemed not to have done that.

I reviewed the oral presentation rubric to make it clearer what they were supposed to do. I also gave students new index cards. Some were confused about what to do with them. I explained that they were for notes to help students when giving their oral presentations. I stressed several times that the presentations should not be read; rather, students should make eye contact with the audience.

Maria and Daniella, the two students who have been leaders in completing the project, had already planned their oral presentations. They asked my help in reviewing them.

Maria had two ideas for approaching her talk about cooking careers - one focusing on general information about the career, and another using a more informal tone. I encouraged her to use more information from her interview with a chef at a well-known, local restaurant. I told her that I thought people would be drawn in by that, and that she should point out his photo on her display board when giving her talk.

Daniella had written out her whole “speech,” as she called it. I said again that it should not be read, but she clearly felt more comfortable having the whole thing in front of her. In her written report, she did an excellent job of integrating her interview with factual information about an interpreting career, but the oral presentation that she showed me focused only on the facts. I encouraged her to include parts of the interview.

We have another snow day (or maybe two??) this week, which is complicating efforts to finish the project. I will email several students today to tell them about next steps.

Overall, the class seems to have bonded more than usual, perhaps because of the project. I noticed that yesterday before class, when students who had not previously seemed close (Hamid, Bushra, Azhar and Daniella) all gathered at the back of the room and chatted.

3/15: Just a few students have second/final drafts to hand in. Most of the rest of the reports are printed and ready to hang on Monday. There are plenty of errors in the grammar, spelling, etc., and more copying from websites than I would like. But I am very pleased with how hard students worked and how seriously they took the project.

Today, I began by showing them a clip by Jerry Seinfeld about public speaking. He said most people rank it up there with death as the thing that they most dread. I stressed the importance of being comfortable as a public speaker for their future work life. And I also told them that they have a leg up in facing fears about public speaking, because they have had the experience of speaking in a language that they didn’t fully know or understand.

Then, I played a clip of a young man presenting, with tips for how to do it well (dress formally, smile, have “good energy”) and how not to do it (talk on your phone, turn your back to the audience, read from notes, speak in a monotone). I had students practice

taking notes by writing down the tips. We added a few of our own, such as: Ask at the end if the audience has questions.

While the speaker in the video used Powerpoint slides, I suggested that students could use the photos of their interviewees and graphics in their reports as visuals.

Six students were ready to practice their oral presentations with classmates (Daniella, Maria, Patience, Khadro, Azhar, Hamid). I had the others talk to a classmate about what they had learned. I circulated, asking students the same questions.

Although we had been talking about the oral presentations for at least a week, it hit home today that they actually have to do it next week. They had a lot of good questions. For example, what if someone asks them a question and they don't know the answer?

Esperance shared a good tip with the class: begin by giving your name. I suggested that they also say their chosen career right away and, if necessary (as with phlobotomy or management analyst), explain what it is.

3/20: I gave the post-test. Four students weren't there- Ann, Azhar, Abdi and Ahmed. Abdi had been very conscientious about attending class until he went through a recent move. I feel pretty certain that all but Ahmed will be there on Wednesday for the Career Fair. Ahmed is the only student who did not finish a second draft of his project.

During the second hour, students practiced their oral presentations in small groups and gave each other feedback while Susan and I circulated and critiqued them, using the rubric. That seemed to make the upcoming event real.

Ishmael was clearly disorganized when he practiced his talk with me, and went over the allowed time without coming close to finishing. When I pointed that out, he observed, "This is the point of practicing, right?" Ishmael's project is about interpreting- and as luck would have it, he has an interview today for an interpreting job at Catholic Charities Maine. He asked me to be a reference, and of course I agreed.

Students seem into the Career Fair. Several students (Richard, Esperance, Khadro, Maria, Hamid) stayed late yesterday to help me make the display panels. Esperance and Khadro were exacting in using the paper cutter to cut each report as perfectly as possible.

Several students also volunteered to come early tomorrow to help me move furniture. I more or less have permission from the school to do that, but regardless, we will!

3/22: Four students (Azhar, Ann, Abdi, Ahmed) did not attend class on Monday. That meant they did not take the post-test, and they did not get a chance to practice their oral presentations.

With the exception of Ahmed, all have attended class regularly for all or most of the semester, though Abdi's attendance declined recently due to a move and other family

obligations. I wrote and emailed all of them yesterday to ask if they would be at the fair today. Ann and Azhar said yes, and also agreed to come early to take the post-test (or, as I put it, reading activity). I did not hear from Abdi. Ahmed wrote to say that his wife is very ill, needs surgery, and he has been with her in the emergency room. He apologized for dropping out at this late point in the semester.

A fifth student, Ernest, recently started a job that conflicts with class. Despite that, he has made a real effort to complete the semester's work. He came at the end of class one day to go over his final report. He came again on Monday to practice his oral presentation, and he promised to be there today. He asked me what he should wear.

There are lots of details to attend to, but I feel pretty organized. I know the students are excited. I saw Maria practicing her presentation yesterday with her tutor.

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Ann and Azhar showed up early to take the post-test. But Azhar left the room afterward. I found her in the hall, crying. She had just gotten bad news from the doctor about her pregnancy. She was in no state to present at the Career Fair, so she went home.

Abdi never showed up. That was a disappointment.

Everyone else was there, and many students came early to help set up. They dressed up- Ancille spent five hours braiding her hair with silver, Sacha wore an emerald blue shirt with a bold design, just about everyone looked sharp. They worked well together moving furniture, putting up the panels, etc. We had a little time in class, then I gave them cookies and we headed downstairs. Already, a few people were waiting.

People arrived at the Career Fair steadily throughout the afternoon, enough to keep the students busy giving their talks. There were students from at least three other adult education classes, plus family, friends, tutors, some of the interviewees, the adult education director and the assistant superintendent.

Many people praised the students' presentations, and several teachers told me that they thought the project was a great idea. Aaron spent a long time talking to Francois, and said he is trying to arrange an internship for him. Some other students also made potentially helpful contacts.

I liked the way that the students got to know each other and bonded through the project. Francois teased Ancille about attracting lots of men to her exhibit because they wanted to date her. Ishmael and Ahmed chatted. (They both served as interpreters for the U.S. military, in Iraq and Djibouti, respectively.) Maria and Daniella, the rock stars of the class, seemed to be friends with everyone.

Susan helped wherever needed - getting out food, directing guests, talking to nervous students. Three adult education staff members and volunteers evaluated the students' presentations using the rubric that I gave them.

3/23:

(email to Betsy Parrish, Capstone advisor:)

Dear Betsy,

We had the Career Fair yesterday- the culmination of our semester-long class project and also my Capstone research. I don't know what the research results will show. But I can tell you that the experience was a great success for the students, and a shining moment in my short teaching career.

The project required students to do multiple drafts of their written reports. I often have difficulty getting students to do that, but this time they were motivated by knowing that others would see their work. Panels with their reports are on display on the lower level of our school.

We had enough time to practice the oral presentations so that students could improve. Some were quite nervous at first, but the set-up of the Career Fair gave them several opportunities to give their talks. (Visitors went from panel to panel, listening to the talks and asking questions.) That was a much better format than having each student give one talk to the whole group; students had lots of practice in presenting, and it was less daunting to do so before a small group. Evaluators (mostly teachers) circulated throughout the afternoon and took careful notes on each talk, using the rubric that students had used to plan their talks.

Those in attendance included students from a few other classes, some of the people who had been interviewed, students' family, friends and tutors, other adult education teachers, school leaders, the district's assistant superintendent, and assorted others.

The Career Fair gave students in those other classes a chance to learn about careers that might interest them. Some teachers also used it as a way to show what level of work is expected in ESOL5. I made an activity sheet that can be used by classes that visit during the next 10 days, while the exhibit is still on the wall.

I wrote to the interviewees ahead of time and asked them to show students any places where they had made mistakes in understanding the information that was given to them. At least one student reported that he spelled someone's name wrong. That was a good learning experience.

The class took the project very seriously. Students stayed late on Monday and arrived early yesterday to help me set up. They dressed to the nines for the event; one woman spent five hours braiding her hair with silver.

Throughout the past week or so, I saw students in the class making new friendships and bonding in interesting ways that were not apparent earlier in the semester. That was a surprise.

As is always the case with adult education, there also were students who couldn't show up at the last moment because life happens, especially when you are poor and an immigrant. One man dropped out of the class a couple of weeks ago because his wife faces emergency surgery. Another man recently moved and seems completely overwhelmed by family responsibilities. A young woman who is pregnant showed up yesterday, then rushed out of the class in tears. She had just heard from her doctor that her pregnancy is imperiled. Of course, she was in no condition to participate in the event.

Perhaps the most heartening part of this project was the way that the people who helped me set up the interviews, including those who were interviewed, became involved, and wanted to do more to help our school's students.

I had arranged for the man who repairs Portland's school buses to talk to one of my students, who wants to be a bus mechanic. That man showed up yesterday, stuck around for hours, and told me about his behind-the-scenes effort to arrange an internship for my student. When he asked for my help, I told him that there were others in the building who worked on internships and that I was "just an English teacher." He replied, "I am just a bus mechanic, but sometimes it's people like us who get things done." Amen.

A retired newscast producer at a local TV station also showed up; he had arranged for a former TV journalist from Burundi to attend a newscast and interview an anchor, as well as the station manager. The retired producer now has an ongoing relationship with my student; they text each other in French. The project has forged other, ongoing relationships, too.

Perhaps the most surprising aspect of the event was how other teachers at Portland Adult Education saw it as an example- something they might try to emulate. One of the school leaders particularly liked the way that it connected our school with the community.

I am attaching a couple of photos.

Sorry this is so long- I just thought you'd appreciate hearing what the experience was like, as well as the data.

Shoshana

3/27: Today we did a wrap-up of the project. I gave students the forms with feedback about their oral presentations. I had students anonymously fill out a survey about their experiences doing the project. Then, I gave them their post-tests, graded, along with the comparison of their pre-test. (I called it a reading activity.)

With the work out of the way, it was time to celebrate. I told students that many teachers had complimented them on their work, and that many students saw the exhibit since Wednesday.



I showed them the article about the exhibit that I wrote for the district website, and also the photos taken of the event.

Finally, we gave Susan, the class volunteer, all of the letters and cards that students and I had written for her, thanking her for her help. She read them aloud. She managed to keep it together, but I cried throughout. She told me afterward that working on the project really enriched her experience as a volunteer, in part because she got to know just about all of the students.

For homework, students were given an article about the New Mainers Resource Center to read and questions to answer. The center, based at our school, helps immigrants find jobs and pursue career goals.

Richard was the last student to leave the room after class. He surprised me by saying, “I am very, very glad to have a teacher like you...who can show what they know by their heart.”

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I knew the project had been a success in terms of student learning and engagement. But I didn't know until yesterday whether the pre-test/ post-test scores would reflect that.

Lo and behold, they did so, unambiguously. Of the 12 people in the study who took both tests, one had the same score for the second, and the other 11 students all went up on the post-test. Many doubled their scores.

One caveat: the first test had six questions, and the second one had seven (or, rather, six questions with one having two parts). I gave half-credit to some students for some answers.

There was one unexpected but interesting aspect of my focus on showing evidence to back up claims. During the past two months, as the class has studied that, there have been many instances when President Trump and his associates have been asked publicly to provide evidence to back up his claims. So the topic of using evidence to support arguments is very much front-and-center in the country's discourse. Conversely, there also is much talk about saying lies/untruths that have no evidence behind them.

3/29: This is the last day of class. The director of the New Mainers Resource Center came to class to answer students' questions about how the program can assist them in pursuing their career goals.

I met with students individually to review their work for the semester and their placement for next semester.