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RESEARCH

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FORUM

House of Cards: Analyzing "Making Skills Everyone's Business" By Ralf St. Clair

House of Cards – or – Trojan Horse?: A Response to Ralf St. Clair's House of Cards: Analyzing "Making Skills Everyone's Business" By Ellen Scully-Russ

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JOURNAL OF RESEARCH AND PRACTICE FOR Adult Literacy, Secondary, and Basic Education

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JOURNAL OF RESEARCH AND PRACTICE FOR ADULT LITERACY, SECONDARY, AND BASIC EDUCATION

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If there's one characteristic that all of us in the adult education field possess, it's our desire to make a difference. We know that every day that we go into the "office," we have an opportunity to change someone's life for the better.

On July 1, those of us you have elected to the COABE board know that we have the ability to change—for the better—the adult education profession. Armed with a new strategic plan shaped by the membership, we're taking steps to address professional development and to position our organization to be the leading voice on behalf of our learners, teachers and practitioners.

Already, the board has hired its first executive director, Sharon Bonney, who has worked alongside us for many years. Now we are giving her the tools to help the organization succeed by addressing the four key components of the plan: advocacy, developing the profession, providing leadership and implementing operational changes.

I'm honored to become president of the organization, but I can assure you that our success will be built on the membership's collective efforts. COABE is standing on the shoulders of everyone that has been a part of the adult education field. We are committed to raise the level of public discourse on our issues and to bring substantive improvements to the profession.

You can help on many levels. Most importantly, I encourage you to submit an application for our talent bank, which will allow for others in the field to benefit from your expertise and experience. Just as learners benefit from our skills and passion, our field becomes stronger when we can learn from one another.

Like many of you, I entered adult education simply by raising my hand 29 years ago. I've been involved in four different programs in Maine and am humbled at how they have grown. I'm thrilled by the opportunity to work on behalf of our profession and membership on this national scale, but I need your involvement and suggestions along the way to build on this momentum that we've been able to craft together.

Thank you for your faith, support and contributions to this organization, and for making a difference in the lives of tens of thousands of Americans each and every day.

Jom Jask
Tom Nash
President

Commission on Adult Basic Education



JOURNAL OF RESEARCH AND PRACTICE FOR Adult Literacy, Secondary, and Basic Education

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THE COABE JOURNAL, CELEBRATING 36 YEARS AS A MAJOR VOICE IN ADULT EDUCATION

Dear Readers,

We are very excited to send you our summer issue. In this issue we are inaugurating a new feature—a Forum section. The Forum section will allow for discussion of issues of importance to practitioners, policy makers, and researchers. We are particularly happy to kick off this section with a lively discussion of the U. S. Department of Education's Office of Career, Technical and Adult Education's white paper: Making Skills Everyone's Business: A Call to Transform Adult Learning in the United States. As the first step in this discussion, Ralf St. Clair performs a major task by analyzing some of the pieces of this report and their implications for adult education practice. There has always been a tension in American adult education (and all education, for that matter) between education for work and education for all the other parts of life. So what exactly should this education look like for adult learners now that we are firmly in the 21st century? Ellen Scully-Russ adds to the discussion from the perspective of a workplace educator and labor activist. She extends St. Clair's critique while remaining hopeful. Finally, JoAnn Weinberger draws on her years of experience as an adult educator to elaborate on St. Clair's analysis by focusing on what adult educators in particular bring to the change process. We hope that the forum will open up further discussion and allow us all to think about research, practice, and policy in more complex ways relative to the changing policy landscape of the Workforce Innovation and Opportunity Act that is so closely aligned with this document.

In addition to this forum, we are also happy to include three other important papers. Esther Prins and Cathy Kassab's article on the educational, demographic, and financial characteristics of GED holders who apply for federal financial aid is a fascinating use of a previously unexplored data set. This article provides key insights on the demographics of GED holders who move on to higher education. The fact that they are more disadvantaged than non-GED holders is not surprising, but the differences are striking. Their paper provides important evidence regarding the problems facing this population as they make the transition to postsecondary education.

Erik Jacobson's article on Japanese Adult Basic Education provides a thick description of ABE within an international context that Americans rarely study. This qualitative study richly documents the differing forms of adult basic education observed by Jacobson. His call to reconsider the spatial elements of education is timely and important.

Jennifer Ouellette-Schramm's practitioner article closely examines the particular cognitive and linguistic challenges that learners face when summarizing text. This is a fascinating glimpse of a challenging task.

Finally, our three columns present interesting and timely information. Gary Dean has written an excellent summary of PIAAC research conducted by Stephen Reder. David Rosen presents an interesting review of science instruction videos that would be appropriate for adult learners. Finally, Chris Dunagin Miller has reviewed Willard and Wiemerslage's book, Last Reader Standing: The Story of a Man Who Learned to Read at 54, which is a fascinating look at the experiences of an adult learner struggling to learn to read.

> Amy D. Rose Co-Editor

Alisa Belzer Co-Editor

Heather Brown Co-Editor



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RESEARCH

The Politics of Time and Space in **Japanese Adult Basic Education**

Erik Jacobson Montclair State University

Abstract

This qualitative study examines critical pedagogy in Japanese adult basic education. The research focuses on what teachers and others think the current conditions are for education that deals with social justice. As part of this, the research looks at how critical pedagogy is conceptualized in this context. Participants in the study (literacy activists, teachers, students) expressed a concern that political shifts in Japan have made it more difficult to engage in social justice education. They also believe that structural changes in adult basic education (e.g., student demographics) have redefined what is possible. However, the study suggests that those involved in adult basic education are still working to create different types of educational spaces and that these spaces have particular political meanings. The suggestion is that spatial analysis may be a helpful way to investigate social justice work in different contexts.

Introduction

lthough Japan is commonly believed to be nearly universally literate, the reality is that there is still a need for adult basic education instruction in the country. As in other contexts, literacy issues are typically associated with some form of sociopolitical or socioeconomic discrimination. In the past, many members of the buraku community, a native caste-like population that has faced discrimination for several centuries (Asano, 1990), were not able to complete junior high school (the level of compulsory education in Japan). The same was true for older members of the resident Korean community (Hicks, 1997). Over time, both communities became politically active and between the 1960s and late 1990s, they achieved significant victories. In addition to the establishment of adult literacy classes, these included the creation of specific stream of funding aimed at combating anti-buraku prejudice, money being spent for renovating public housing in buraku communities, and eliminating state-mandated fingerprinting and identification cards for Koreans born in the country. While the specifics of the Japanese context gave these struggles a unique character, they were similar to numerous other initiatives around the globe that grounded adult literacy instruction in a quest for social justice (Iwatsuki, 1998; Mori, 1995).

In the same way that the existence of adult literacy programs contradict assumptions about Japan's literacy rate, the existence of Japanese language programs calls attention to nature of immigration to Japan. Foreign-born residents working in white-collar jobs often attend private language schools, but those working in blue-collar jobs cannot afford to do so. Instead, workingclass immigrants study in a network of public and volunteer programs and their access varies to a great degree by their location in the country. Many of these programs were created in early 1990s, when Japan's bubble economy created a shortage of workers and immigration laws were modified to accept more people into the country. A limited number of governmental initiatives addressed the needs of refugees and people of Japanese descent emigrating from China, but the bulk of Japanese classes were provided by volunteer organizations.

The turn of this century has seen significant changes in Japanese education and society. The buraku-focused Dowa Education program was eliminated, and the funds were moved to a budget line with a more expansive mandate (i.e., multicultural education and the general promotion of tolerance). Japan's long recession was made worse by the global banking crisis, which drastically raised unemployment in the immigrant community and reduced the amount of money that local governments have to spend on social services. Given these factors, adult educators committed to social justice work are being forced to rethink strategies that brought them success in the past. To understand these changes, this study focused on two research questions: 1) How do students, teachers and activists describe the current conditions for critical pedagogy in Japanese adult basic education? 2) How is the concept of critical pedagogy operationalized by the students, teachers,

and activists involved in this kind of work? The hope is that understanding what is happening Japan will inform social justice oriented adult educators who face crises in other settings.

The Study

Theoretical Framework

This qualitative study was grounded in the understanding of literacy as a social practice that reflects sociocultural patterns and purposes as well as power relationships and political forces (Purcell-Gates, Jacobson, & Degener, 2004). Although this approach does not discount necessary psycholinguistic aspects of literacy development, a priority is placed on understanding how literacy is understood within a particular community or context (Barton & Hamilton, 1998; Heath, 1983). Studying local literacy practices can help shed light on the behavior of students and teachers in other contexts by identifying the way key analytical categories are instantiated (e.g., gender, age, religious affiliation).

Along these lines, within the study the term "critical pedagogy" is used to refer to initiatives and pedagogical practices that attempt to address social justice issues by explicitly incorporating them into the process of learning and teaching (Brookfield & Holst, 2011). This study was undertaken with the assumption that critical pedagogy, like other social practices, can be conceptualized and operationalized in a variety of ways, each responsive to context. This is the case not only across communities but also across eras within the same community. Of interest to those committed to critical pedagogy are what successes and struggles in one time and location might suggest about the direction of their own work.

Additionally, this study begins with the recognition that the very idea of "Japan" is a contested notion (Lincicome, 2009; Morris-Suzuki,

1998). It also begins with an assumption that there is not a core set of "Japanese values" that all Japanese uniformly share. As in any society, education and social practice are shaped by competition between a multiplicity of ideologies and discourses (Foucault, 1972). In this way, tensions around adult basic education and critical pedagogy are part of larger struggles over what is meant by the concept of "Japan" and what it means to be "Japanese."

Finally, the study also considers the construction of space at a more local level to be a key element of analysis. This is in keeping with scholarship in a variety of fields (e.g., education, political science, environmental psychology) that conceptualizes "space as produced by, rather than as a container for, social life" (Martin & Miller, 2003, pg. 146). In this framework, rather than being a fixed ground, space is a fluid project of ideological struggles and contested meanings. For example, the buraku liberation halls established in the 1960s have been flashpoints for both those with anti-buraku viewpoints ("This space shouldn't even exist") and for those working to counter systemic discrimination ("This space concretizes our dreams and is worth fighting for"). For this reason, accounts of critical pedagogy practice should look to include spatial elements. Although the spaces under consideration in the study are by definition local, an analysis of how these spaces are created and recreated may help raise productive questions about the fluid and contested nature of space in other adult education programs.

Method

This study was conducted as part of an ongoing, multi-case study of adult literacy in Japan. The initial phase of the study (1998–2004) focused on sites representing three main forms of adult basic education classes: a volunteer organization, a *buraku*

community-based program, and a publicly-funded, nighttime junior high school. Data consisted of field notes from participant observation (33 site visits), reflective research journal entries, and relevant documents. I conducted two focus groups interviews with students, five with teachers, and one with administrators. Across the three focal schools, individual interviews took place with 20 teachers, six administrators, 10 students working on their Japanese language skills, and 13 native-born adults working on their literacy skills. In addition to the three focal sites, single visit observations, interviews and document collection took place at 14 other programs and with 12 adult literacy activists.

The second phase of the study consisted of five data collection trips (in 2007, 2010, 2011, 2012, and 2013). During this time, 36 additional visits were made to the focal schools, and I conducted 26 individual interviews across the schools (students = 10; teachers = 16). In addition to revisiting the focal sites, an additional 16 programs were observed, and I conducted 20 more interviews (students = 8; teachers = 6; activists = 6). I also participated in eight education-related networking events in Nara, Osaka, and Tokyo.

Prior to each trip, previously collected and coded data was reviewed to inform the nature of subsequent observations and interviews. The topic of critical pedagogy has long been part of ongoing discussions with participants, but their conception of critical pedagogy and their evaluation of the current conditions for practicing it became one of the key research questions by 2010. When it became clear that many of the students, teachers, and activists placed a great deal of emphasis on the nature of the spaces they were creating, this aspect of their practice was prioritized during observations and interviews taking place in 2012 and 2013.

As with previous trips, in 2012 and 2013 ongoing analysis was done in the field in the form of research journal entries written up after each observation and interview. Data was then coded in a three-step process. At the beginning stage, I reviewed the notes and documents and wrote down my initial impressions. Next, I entered all my field notes, interview transcripts, and researcher journals into a qualitative research software application (the open source TAMS Analyzer) to engage in axial coding (Strauss & Corbin, 1998), developing categories and identifying their properties. Prior to the trip in 2013, I reviewed the data and current codes. When that trip was finished, I repeated the process noted above for data collected in 2012. After that was completed, I reviewed the contents of each code to see if they needed refinement or revision, and I recoded data accordingly. At this point my focus was on "integrating concepts around a core category" (Strauss & Corbin, 1998, p. 236) and looking for key distinctions across program type and geographic region.

Findings

Current Conditions for Critical Pedagogy

In the four prefectures I collected data in (Tokyo, Kanagawa, Osaka, and Nara), multiple participants noted that they believed the situation is difficult for those who want to practice adult basic education from a critical pedagogy perspective. During the interviews and discussions, two separate strands of thinking were apparent. Participants suggested that teachers' and students' ability to engage in critical practice was hampered by current sociopolitical conditions in Japan and by structural issues within Japanese adult basic education itself.

The current sociopolitical situation.

One veteran literacy activist began an interview with me by stating, "Nationalism in Japan is the strongest it has been in my lifetime." This analysis is consistent with other reports of Japan's shift to the right (Lincicome, 2009; Shipper, 2008). This can be seen at the national level, where the Liberal Democratic Party is attempting to rewrite parts of the post-war Constitution to strengthen the military and reduce legal support for human rights. In schools, teachers have been forced to stand at attention for the national flag and to lead students singing the national anthem, both long contentious issues in Japanese education (Lincicome, 2009; Okada, 2002). This rightward shift can also be seen at the regional level, as cities like Tokyo and Osaka have been aggressively cutting social safety nets. Osaka has zero funded adult literacy education for 2014, and programs around the country are being forced to close. Symptomatic of this, the long-running adult literacy journal Kaiho Kyoiku (Liberatory Education) ceased publication. Networks and organizations associated with activist pedagogy are working in smaller spaces and with fewer resources. The vitality that was associated with earlier mobilizations for adult literacy is not as visible. Although they believe the pressing issues Japan is dealing with (e.g., environmental, economic and political crises) call for the types of problemposing activities associated with critical pedagogy, many of my interview subjects suggested that it has become more difficult to take on sensitive topics. Although I witnessed individual students and teachers engaging in political discussions of topics like the Fukushima nuclear disaster and the U.S. military bases in Okinawa, these kinds of discussions were less common than a decade ago.

Another complication that study participants identified was the anti-Korean sentiment that is

increasingly visible around the country. This prejudice takes on different forms. For example, one nighttime junior high school in Nara that consists mainly of older Korean women sent out a press release promoting an event at which these women would share their personal history. A teacher at the school in reported getting phone calls that ranged from merely angry ("Why are we spending tax money for schools for these Koreans?") to openly hostile ("Why are these Koreans here?"). For the last few years, members of Zaitokukai (an anti-Korean group) have made headlines by marching through the streets of Okubo (a section of Tokyo with a large Koreatown). Their signs include calls for Koreans to be rounded up for deportation or extermination. A local immigration support network has an office in Okubo, and while I was attending one of their meetings, an anti-Korean protest march went down the street, the participants holding signs and shouting invective through megaphones. Each of their meetings for the first half of 2013 was disrupted by the commotion outside.

Estimates of the size and number of anti-Korean groups vary, with some analysts suggesting they are only a vocal minority. However, their presence and activities certainly are having an impact on the way some teachers and activists present themselves in public. One activist noted, "For example, if we write something about the large Tokyo earthquake in the 1920s and we talk about the number of Koreans that were killed by militia we will get criticized. They will change the numbers in order to promote a revisionist history." He went on to suggest that while he still will speak publicly on sensitive issues, he finds himself really watching his language because he knows those politically opposed to his stances will be looking to "take my words out of context." Members of the immigrant support network explained that they are very careful about their online presence because they are worried about negative pushback. This does not prevent them from doing their work, but they share with their colleagues in other parts of the country a feeling of being watched or scrutinized; perspectives that run counter to commonly held beliefs are deemed suspect.

Structural issues within adult basic education. Study participants also noted that important shifts within adult basic education programs have impacted their ability to connect education to social justice. The most commonly noted development was the change in student demographics. The number of traditional adult literacy students, typically drawn from buraku or older Korean communities with histories of activism, has been dwindling. In some prefectures, these students have been forced to leave programs because of the limits cities place on the number of years a student can study in a publicly-funded school. Additionally, some of these students are become too old or infirm to attend the programs. Others are simply dying. This means that immigrants who are studying Japanese now make up the majority of students in many programs. Across the country, teachers and activists that I spoke with suggested that these immigrant students do not have the same orientation towards education as many adult literacy students did. Many Japanese language students come from newly-arrived communities (e.g., Filipinos, Peruvians, Nepalese), and they have not yet experienced any political mobilizations or communal advocacy efforts within Japan (Tsuneyoshi, 2004). Very few of the dozens of Japanese language students I have spoken to noted any interest in explicitly connecting their education to social justice issues. However, this does not mean there is no interest in this style of education. A number of teachers who feel that they have been able to include elements of critical pedagogy when teaching Japanese to immigrants noted that it is because they now do a better job of speaking with students, rather than for them. Some of these teachers are self-critical about past failures to fully respect student agency, and they believe that their colleagues continue to make this mistake with immigrant students. Indeed, one teacher noted that until immigrant students really come to trust their teachers, they will feel too vulnerable to take part in sensitive discussions about social issues.

Some veteran teachers and activists also suggested that the commitment to critical pedagogy associated with adult basic education is at risk because the newer generation of teachers is not taking up the charge. In some cases, teachers expressed a frustration with their own inability to communicate a vision for critical pedagogy that resonates with younger colleagues (and students). However, many teachers suggested that it is part of a larger demographic shift that is beyond their control. Surveys of K-12 education in Japan find that the current generation of teachers have less social justice orientation (Gordon & LeTendre, 2010), so it is not surprising to see similar attitudes in adult basic education. As with newer students, younger teachers did not come of age in a period marked by social justice movements, so they may find it hard to move beyond functional approaches to education.

Another structural issue is that local educational authorities have the ability to assign teachers to any school within a prefecture. In theory, this means that teachers can be sent to teach in schools that would benefit from their particular skill set. In practice, this means that K-12 teachers with no background in adult education have been assigned to the nighttime junior high schools that provide adult literacy and Japanese language classes. In some cases, these teachers have

expressed an interest in the student population and commit themselves to developing appropriate teaching skills. In other cases, the schools are used as what some teachers referred to as "dumping grounds" for those who are no longer effective K-12 teachers or who might be playing out the string until retirement. Not surprisingly, teachers committed to working for social justice report that teachers being bureaucratically housed in adult basic education programs show indifference or outright resentment towards their efforts at connecting education to social movements. Teachers oriented towards critical pedagogy report seeing more colleagues using lectures and drill-based instruction and they suggest open-ended conversations between students and teachers are becoming rare. I have no data to support that assertion, but I heard many complaints about how changes in the teacher population have had a negative impact on adult basic education.

Overall, teachers and activists expressed a sense of having to live through a difficult era. Although they are not passive, they consider themselves somewhat at the mercy of their time. Accordingly, they speak more of trying to survive the zeitgeist rather than their ability to shape it. However, the hope is that the actions they take, regardless of the size, will contribute to the changes they sense are on the way. In fact, despite the difficulties they described, there is still activity that promotes the connection between adult basic education and social justice, and the nature of the activity will be discussed in the next section.

The Spatial Dimensions of Critical Pedagogy

Although many activists, teachers, and some students think that the connection of adult basic education to social justice has dramatically waned since the time of the overtly political *buraku* liberation

effort, I believe that an examination of contemporary practice from a spatial practice perspective reveals the continuing commitment of teachers and students to key goals of critical pedagogy. I will review activity that produces three distinct types of spaces: public spaces, volunteer spaces, and smuggled spaces within official contexts.

Claiming public spaces as a right. As noted above, one of the key victories for adult educators who wanted to connect adult literacy to social justice issues was obtaining funding for adult literacy classes to serve the buraku community. These classes were often held at community centers that were built with public money within the buraku areas. The fact that these halls were often referred to as Kaiho Kaikan (Liberation Halls) made manifest the political nature of the space. Parallel to this development, others worked to have the government allow adults who had not completed compulsory education to attend the nighttime junior high schools that had been set up for younger students after World War Two. The economic turnaround of the 1960s meant that children no longer had to work during the day, so the evening schools were in the process of being abandoned. The work of local activists and organizing committees paid off, and by the middle of the 1970s, dozens of these nighttime junior high schools were offering adult basic education.

Teachers and students have repeatedly told me that the government "owes" adults who did not complete compulsory education a chance to finish. The fact that these schools are only operating in eight of Japan's 47 prefectures is seen as both a human rights issue and a violation of the Japanese Constitution. For this reason, there is a nationwide effort to create at least one nighttime junior high school in each prefecture, and advocates network and visit national

and local representatives to make their case. For example, Moriguchi Nighttime Junior High School in Osaka has produced a multilingual brochure as an advocacy resource that explains the history and philosophy behind the school. They suggest the school serves the following purposes (among others):

- (1) A place where the right to education and learning is fully guaranteed as a basic human right.
- (2) A place where, as part of postwar reparations, educational support is provided for people who suffered under Japan's military and economic policies in neighboring countries.
- (3) A learning place for people of different ages and nationalities, who speak different languages, have different customs and culture, and a forefront that promotes multi-cultural coexistence and international solidarity.

This call for school as a public *place* (which they foreground in each of these purposes and two others they present) unites a focus on the human rights of native-born Japanese with a call for justice for those affected by Japan's past aggressions in Asia. It is envisioned to provide services to multiple populations and to also bring those populations together with a sense of co-existence. This vision of the school as a diverse public space is echoed in other efforts around the country. For example, the Kobe Declaration, a document circulated by the Nihongo (Japanese) Forum National Network, also calls for publicly funded spaces for adult literacy and Japanese language classes as part of a movement towards "multicultural co-existence."

However, the ideals presented here run into the realities of educational policy. One issue is that the national law governing education does not technically

recognize the existence of nighttime junior high schools as being adult basic education programs. Officially, they remain places for students to receive the standard junior high school curriculum and thus could be closed at any time (since daytime schools already provide those services). Some activists are focused on getting the law revised, so that evening schools' status as "adult" education programs is secured. Additionally, because they are junior high schools, students are technically expected to complete their studies in three or four years (and then matriculate to a daytime or nighttime high school if they so wish). Currently, Tokyo limits attendance to four years, Osaka to six, and Nara to 11. In Osaka and Nara, the attempt by prefectural governments to implement a time limit spurred organized protest and the current limits are the result of compromise on both sides. It remains a sensitive topic, and some students and activists believe that since it is a public space students should be able to stay as long as they desire. Some critics within the field suggest these activists care less about actual educational outcomes and more about securing the right to the space itself as a matter of principle.

Volunteer space as a promise. During the 1980s and 1990s, many volunteer programs were set up around the country to provide either adult literacy or Japanese language support. In some cases programs handled both types of education. These programs often described themselves as trying to create comfortable locations for cross-cultural exchanges or for students to "be themselves." The director of a volunteer nighttime junior high school explained the goals she set for the program this way: "It is a safe space for the marginal. People in the margins have a hard life in Japan, and I understand in my heart what they are thinking and feeling. We

make a safe space for them, so that they can come and really express themselves as who they are." This language is in keeping with the way other programs presented themselves in a sample Japanese Language Class Directory (International Friendship Network of Japan, 2000). For example, programs described themselves as having "a very homey atmosphere" (pg. 163) or being "like a shelter for Japanese returnees from China" (pg. 237). Currently active programs still make their intentions clear in their names (e.g., Yokohama International Friendship and Cultural Exchange Volunteer Society, Friends Kanazawa, etc.)

One of the most influential volunteer programs was operated in Kotobukicho, a day-laborers neighborhood in Yokohama. Every Friday night for over 20 years, the volunteer teacher opened up a small classroom in community center for the local population. He wrote that the class "exists as an anchor for those who resist the disruption of human relationships brought about by the rapid development of a great megalopolis" (Osawa, 1990, pg. 20). On some nights he might have a dozen people drop in, other nights he might not have any. Even when there were no students, he would stay for the full two hours. Prior to his death, he explained to me that he understood the space to be "a promise." He wanted students to understand that he would always be there when the schedule called for it. Teachers in other programs I visited expressed similar commitments to always being present within the volunteer spaces they have helped establish.

In the last several years, new programs have been established to cater to those elderly students who have been forced to graduate from the public nighttime junior high schools. I observed examples in Osaka, Nara, and Tokyo. In some cases, these programs are staffed by teachers from the students' former school and occasionally the teachers themselves have retired.

In Nara, volunteers set up a volunteer Saturday school that uses the public nighttime junior high school building. One veteran teacher explained that, "as long as the students have an interest in coming to study, we have a responsibility to be here." Other volunteer programs for graduated students have not had as easy a time establishing their space. For example, one program in northern Tokyo operates in an elementary school building that had been abandoned for several years. Activists convinced the city to let them use the space, but the city did not put any money into the facilities. This means that the grounds are not maintained and there is no potable water. Staff must boil water for tea to provide students with something safe to drink. Because the program only takes up two rooms in an otherwise empty multistory building, it has the feel of a squatter community. This group has gone through the process of creating and losing locations several times over the last decade, and it will not be a surprise if they are on the move again soon. The director of the program was aware that the current location was not ideal, and that it in some ways represented the marginalization of the field. However, he said that what mattered was the "commitment they had made to the students when they were still enrolled in the night-time junior high school." He asserted that establishing this space was a way to stick to that commitment.

At the same time some activists struggle to have the state recognize the need for publicly funded programs, some in the volunteer world believe that there is a benefit to creating a strictly volunteer space. As one program leader in Tokyo explained to me, becoming a public space would mean, "following rules about who can attend, for how long, and about what the curriculum looks like." Without public funds, the spaces become more of a collaborative venture among staff and students. One volunteer

space I visited in Tokyo is called "OurSpace." The organization offers programming for immigrants of differing ages and encourages a shared sense of ownership that is enacted by participatory activities.

Many of these small programs prioritize their open door policy. For example, during one of my research visits to a volunteer literacy program in Tokyo, the students included a long-time resident of Korean heritage, a recent immigrant from China (a returnee of Japanese descent), and a college graduate whose literacy skills had been greatly diminished by the electroshock therapy and medications he was taking to treat his schizophrenia. The staff struggled with how to provide support for this student, as none of them had training in mental illness or in how to address this type of literacy problem, but they did not consider asking him to leave. They explained that the point of establishing the space was to welcome adult learners, not push them even further towards the margins. The success of the effort is not measured by increases in students' skills, but in how consistently the organizers can provide the type of space in which people feel welcomed. As with other volunteers, the staff here said that they will keep coming "as long as students want to be here."

Smuggled spaces. One key benefit of volunteer spaces is the freedom from regulation, but this comes with the downside of having fewer resources to work with. This means that a group might only be able to offer classes once or twice a week for a limited amount of hours. Immigrant students who cannot afford private language lessons and desire more intense language programs may choose to attend a public nighttime junior high school, but they can only do so if they have not already graduated from junior high school in their home country (because the nighttime programs are technically junior high schools and

not language programs). This stipulation means that many adult learners who are interested in attending cannot legally study in the public programs. There are several ways around this. The first is for a student to lie about their educational status when enrolling in school, and it is clear that many students do so. I have met students who graduated from college in their homeland who were attending nighttime junior high schools. Not all potential students avoid detection, however, and some applicants unwittingly reveal their status during intake interviews (sometimes because they are not aware of the regulations). For this reason, some teachers working at public schools consciously do not ask questions related to level of education if they suspect the student may disqualify themselves with their answers. Others teachers refuse to put the data down if they can plausibly deny having received it (e.g., they may suggest problems with interpretation made it hard for them to be sure what the student was saying). In a similar fashion, some schools in large cities are only allowed to accept students from designated neighborhoods. As a result, some students who live in regions of the city that do not have public evening schools travel to the closest one, where they hope that teachers either do not collect data about the student's actual residence or accept the false data they provide.

The presence of students who are not legally allowed to be in the schools they attend creates complex social spaces. For example, while a building may be formally and legally a junior high school, it can also be surreptitiously acting as a language school and/or *de facto* ethnic community center when the population of a given immigrant community is large enough. The teachers who openly told me that they aid students in the creation of these informal, smuggled spaces within the walls of public schools understand their actions to be consistent with a vision

of education that promotes social justice. While they may struggle to establish more public learning spaces for all students, in the meantime they create opportunities where they can. In this way a public school can both be a point of exclusion and a site of resistance (see Cushman's (1998) use of the term *smuggled literacies* to describe the hidden literacy practices of students in school).

Teachers at several schools also reported tensions within their schools about students coming to school early. Most nighttime junior high schools start their classes around 5:00. Teachers typically report to work between 1:00 and 2:00 PM. Time before classes is devoted to preparing for lessons and having staff meetings. However, it is not uncommon in some schools for elderly students to arrive as early as 3:30, asking to talk to their teachers about a personal issue. If they are not in a meeting, teachers will sit down and provide whatever assistance they can (e.g., placing phone calls to doctors). Students may also arrive early with nothing on their mind other than wanting to chat and be in school. Technically the students are not guaranteed access to the space until the school day officially starts for them at 5:00, and some principals have asked teachers to discourage their students from coming early. Teachers in these schools explained that they nod their heads and feign agreement but then do nothing about it. From their perspective, the students have a right to be at the school when they want to be, and thus implicitly support students carving out their own space and time in the building prior to the start of classes. In this way an elderly student enjoying a cup of afternoon tea in an otherwise empty classroom can be read as an act of resistance and a demonstration of the multiple ways a location can be experienced.

Whereas participants expressed a somewhat pessimistic assessment of their ability to engage

in public critique or to explicitly link adult basic education with social justice, their activity tells a slightly different story. Though perhaps in smaller numbers than in the past, they still are engaged in trying to secure public space for adult learners, create and maintain volunteer spaces, and aid in the creation of smuggled spaces within public schools. There is no guarantee that the nature of instruction in these spaces will resemble the problem-posing or critique-based education that many people associate with critical pedagogy in adult basic education (Freire & Macedo, 1987), but that is not the only goal here. Teachers and activists working at these programs are taking the side of Japan's marginalized and vulnerable populations and the spaces they help create are acts of solidarity.

Conclusion

Bright, Manchester, and Allendyke (2013) suggest that critical pedagogy is a bit late to the spatial turn social sciences have made and that "work that hinges spatial theorization directly to matters of social justice remains fairly rare" (pg. 749). This conclusion depends in large part on how we conceptualize critical pedagogy and work. The history of adult basic education in Japan and other locations is notable for the numbers of students, teachers and activists who understood how space is constituted by political struggles. They have struggled to create programs and schools around the globe, often times in the face of brutal oppression. This work of critical pedagogy is lived political praxis, rather than abstract theory. In many cases, politically oriented educational activity preceded a familiarity with the language commonly used in theorizing about education and social justice.

However, a re-emphasis on the spatial aspects of critical pedagogy may prove to be helpful. It might make it easier to analyze the activities of those who are in fact not using the language of critical pedagogy to describe their work. Identifying different types of spaces may add to a shared vocabulary. Analysis that is attuned to the production of space may also help capture the kind of surreptitious activity that goes into creating alternate spaces inside existing programs. From a different perspective, this spatial emphasis can be extended to analyses of adult learners' use of online resources. Social justice work in this area has often focused on securing access for learners and closing digital divides. However, understanding online sites as spaces constituted by social practice, rather than as simply repositories of information, shifts the conversation. As with brickand-mortar schools, we need to investigate what opportunities we have to create collaborative and participatory spaces online (Jacobson, 2012).

Reconsidering the spatial elements of education may also be useful as a way to analyze the complexity of local practice. For example, an earlier study of Japanese adult basic education (Jacobson, 2009) suggested that at times there was a discrepancy between the rhetoric self-professed radical adult educators used and the realities of their instructional choices. Some teachers who espoused theories about how adult literacy can play a role in fighting oppressive social structures relied upon traditional lecture or drill-like activities in the classroom. Their colleagues suggested that their understanding of critical pedagogy was limited. These teachers and their critics, loosely affiliated under a banner of education for social justice, used some shared language (e.g., human rights, student voice), but at a fundamental level may have different conceptions of their projects. One group sees the public battle for the establishment and maintenance of the school to be the key political activity, while the other sees that as the beginning of the process. The work of different types

of teachers creates very different spaces that share the same physical building as a locus. This suggests that not only are cross-context conversations about critical pedagogy difficult, but that teachers working in the same context, or even in the same political associations, may have very different understandings of the concept.

Finally, many participants' perspectives on the current conditions for critical pedagogy in Japan were pessimistic. They saw their ability to argue for public spaces for adult education or to engage in critique limited by shifts in sociocultural forces and generational changes in the demographics of students and teachers. This should resonate with educators in other countries who are struggling with the difficulty of sustaining programs that incorporate social justice into adult basic education (Ramdeholl, 2011).

However, the stakes in Japan might be considerably higher, as the political changes are drastic. Proposed revisions of the Constitution include limitations on free speech, protests, and human rights (Repeta, 2013). These changes would significantly impact the ability of teachers and students to publicly connect education to social justice activity. Navigating these difficult times will likely depend in large part on how well activists and others can create networks that unite the various groups of adult learners whose education

is increasingly vulnerable. Such networks already exist in Osaka and Tokyo, and members are actively looking for ways to address shared goals. However, these organizations and coalitions also need to find themes that resonate with a larger audience who recognize common concerns. Indeed, this is a hallmark of social justice work in adult education—the notion that when we are speaking on behalf of particular groups of students, we are also making a broader argument for human rights, equality, and dignity. ••

Erik Jacobson, Associate Professor at Montclair State University, worked in Japan (Nara prefecture) as an assistant English teacher in a public high school. This was part of the Japan Exchange and Teaching Program, sponsored by the Japanese government. After he began working in adult basic education in the United States, he returned to Japan to conduct research. He has continued to examine ABE in Japan and has also led professional development workshops in different parts of the country. He is also interested in technology, and is the author of *Adult Basic Education in the Age of New Literacies*.

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RESEARCH

GED Recipients in Postsecondary Education: A Rural-Urban Analysis of Pennsylvania FAFSA Applicants' Educational, Demographic, and Financial Characteristics

Esther Prins
Pennsylvania State University
Cathy Kassab
By The Numbers

Abstract

Transitions to postsecondary education for GED graduates are a growing concern for educators and policy makers. This article analyzes the educational, demographic, and financial characteristics of Pennsylvania postsecondary students with a GED credential compared with traditional high school graduates, and identifies rural-urban differences within these groups. Data from the 2010-11 Free Application for Federal Student Aid (n = 610,925) were analyzed. Compared to non-GED applicants, GED graduates had significantly different background characteristics (e.g., age) and educational plans (e.g., degree type), and they were more socially and economically disadvantaged, with about threefourths living in poverty or near-poverty. Salient rural-urban differences included institutional type, parental education, marital status, dependent children, and family income. Implications for research, policy, and practice are discussed.

Introduction

upporting the transition of General Educational Development (GED) students and graduates to higher education is a growing concern for practitioners and policy makers in adult basic education and higher education (Bailey & Mingle, 2003; Duke & Ganzglass, 2007; Office of Career, Technical, and Adult Education, 2010; Reder, 2007). This concern stems from stark disparities in college enrollment and completion between GED and traditional high school graduates and widening socio-economic inequality between adults with a secondary versus college credential. In 2009, there were 17 million GED graduates in the United States, but only 38% had completed some college and 5% had at least a bachelor's degree, compared to 70% and 33% of traditional high school graduates, respectively (Ewert, 2012). Similarly, high school diploma holders (aged 18-29) attend college at twice the rate of GED recipients (34% vs. 17%; Sum, Khatiwada, Trubskyy, Palma, & McHugh, 2012). These disparities exclude GED graduates from the myriad social and economic benefits of higher education. Historically, college recruitment has concentrated on high school seniors,

while ignoring GED graduates (Patterson, Zhang, Song, & Guison-Dowdy, 2010). However, GED holders are an untapped audience for increasing state and national educational attainment (Patterson et al., 2010).

Prior research on the GED diploma has chiefly focused on the (marginal) economic returns of the GED credential (Tyler, 2003) and on GED graduates' demographic characteristics and postsecondary education enrollment and persistence patterns (Guison-Dowdy & Patterson, 2011; Maralani, 2011; Patterson et al., 2010; Reder, 2007; Zhang, Guison-Dowdy, Patterson, & Song, 2011). Our study addresses three key gaps in the literature on GED holders in higher education. First, we examine the characteristics of GED graduates in college who apply for financial aid and how these students compare to their high school diploma peers. Second, our study offers a current analysis of the economic needs of college students with a GED credential; the limited prior research on this topic predated the 2008 recession. Finally, we analyze rural-urban differences among GED holders who attend college, which no previous study has done. Such analyses are vital because rural college enrollment and attainment lag behind those of non-rural areas (Byun, Meece, & Irvin, 2012). For instance, among U.S. adults (25 or older), only 18% of nonmetropolitan residents in 2010 had a bachelor's degree or higher, compared to more than 30% of urban residents—and this gap is widening (USDA ERS, 2014).

The purpose of this article is to paint a comprehensive portrait of the demographic, financial, and educational characteristics of Pennsylvania postsecondary students who are GED holders, to identify rural-urban differences within this group, and to compare GED versus non-GED graduates. The study analyzed data from the 2010-11 Free Application for Federal Student Aid (FAFSA, n = 610,925). We selected Pennsylvania because our

funder, the Center for Rural Pennsylvania, had an agreement with the Pennsylvania Higher Education Assistance Agency (PHEAA) to share the state FAFSA data. Since confidential FAFSA forms are rarely available to researchers, the grant provided a prime opportunity to conduct a statewide analysis. FAFSA data were not available for other states. Pennsylvania's position as the sixth most populous state, along with similarities between our findings and previous research, suggest that our study can provide broader insights into GED graduates in higher education and rural-urban disparities.

The results show that on all measures GED holders were more disadvantaged than their traditional high school peers, with significant rural-urban differences in institutional type, full-time status, and demographic and financial characteristics. This geographically nuanced analysis of GED recipients can help adult basic and higher education professionals and policy makers enhance postsecondary access and persistence for GED graduates. To contextualize the data, we describe prior research on GED holders in postsecondary education and on higher education in Pennsylvania.

GED Graduates in Higher Education

The GED credential offers a second chance for youth and adults—predominantly from low-income families—who have been "pushed out" of high school (Tuck, 2012). In terms of secondary education, approximately 7% of U.S. adults have a GED credential, 80% have a high school diploma, and 14% have no secondary degree (Zhang, 2010). GED graduates have high educational aspirations, with two-thirds of GED Tests passers citing postsecondary study or training as their impetus for testing (Zhang et al., 2011; see also Patterson et al., 2010). Among the 2004 GED graduate cohort, 60% of those who took the tests to enter a 4-year college enrolled by 2010; this compares to 54% of those who wished to

enter a 2-year college and 39% of those who cited interest in employment or trade/technical programs as their testing motivation (Zhang et al., 2011; see also Patterson et al., 2010). Overall, fewer than half of all GED graduates ultimately enroll in college, and only a fraction of those obtain a degree, a pattern rooted in limited economic resources, racial/ethnic inequities, differential socialization toward higher education, and institutional support systems, among other factors (Almeida, Johnson, & Steinberg, 2006; Tuck, 2012; Zhang, 2010).

In a given year, 10% of GED graduates (age 16 to 64) enroll in postsecondary study, compared to 16% of high school diploma holders (Zhang, 2010). GED graduates comprise less than one in 10 U.S. beginning undergraduate students (Zhang et al., 2011). About two-fifths of GED graduates enter college within approximately six years of passing the tests (Patterson et al., 2010). However, college enrollment increases markedly when measured across the lifespan. At age 25, less than one-third of GED holders in a national sample had enrolled in college versus 65% of high school graduates (Maralani, 2011). At age 35, the participation rate climbed to 43% for GED recipients and 70% for high school graduates.

GED holders, however, struggle with low persistence in college. Only one-half of the 2003 GED cohort who enrolled in college returned for the second consecutive semester (Patterson et al., 2010). Among the 2004 GED cohort, less than 29% progressed directly from their first to second year; in addition, about 62% "were no longer enrolled by 2010, and 26[%] were still enrolled" (Zhang et al., 2011, p. vii). Less than 12% of the 2003 and 2004 GED passers completed any kind of postsecondary credential within seven years of enrollment (Patterson et al., 2010; Zhang et al., 2011). These low college persistence and graduation rates help explain the limited economic benefit of the GED diploma (Murnane & Hoffman, 2013).

GED and high school graduates follow distinct educational trajectories: The former are older upon obtaining a secondary credential and wait longer to enter college. GED graduates who enroll in college delay 15-18 months on average, compared to eight months for high school graduates (Bozick & Deluca, 2005; Zhang et al., 2011). This is consistent with GED holders' older age at college entry (Ou, 2008; Zhang et al., 2011). For instance, the median age of GED graduates who first attended college in 2003-04 was 24, compared to 18 for high school graduates (Zhang et al., 2011). Age is a significant predictor of GED holders' likelihood of college enrollment participation rates decline with age (Zhang, 2010) and of the enrollment gap between GED and high school graduates (Maralani, 2011). However, the college participation gap between GED and high school graduates also narrows with age: Among first-time college enrollees aged 21 or older, GED recipients have higher participation rates than high school diploma holders (Maralani, 2011; Zhang, 2010), although their absolute numbers are lower.

Gender and parental educational attainment are also important demographic attributes of GED graduates. Overall, female GED holders are significantly more likely than their male peers to enroll in higher education (12 vs. 7%, Zhang, 2010; see also Patterson et al., 2009; Zhang et al., 2011). For the 2004 GED cohort, the enrollment rates were 50% for women and 38% for men (Zhang et al., 2011, p. 10). Parental educational attainment is lower for GED recipients than traditional high school graduates. Among GED tests passers who entered college in 2003-04, 42% had college-educated parents, compared to 62% of high school graduates (Zhang et al., 2011). By contrast, more than twice as many GED holders as high school graduates in this cohort had parents without a high school education (18 vs. 7%).

GED recipients also differ from traditional high school graduates in their educational status and plans. Fifty-eight percent of GED holders who first entered college in 2003-04 attended full-time, compared to 69% of high school graduates (Zhang et al., 2011). GED recipients are also more likely to enroll in 2-year institutions (Patterson et al., 2010; Reder, 2007; Zhang et al., 2011). GED recipients are also more likely to enroll in 2-year institutions (Patterson et al., 2010; Reder, 2007; Zhang et al., 2011). For example, 78% of the 2003 GED graduate cohort enrolled in such institutions, versus 44% of high school diploma holders (Patterson et al., 2010). Similarly, the degree that most GED graduates obtain falls short of their educational expectations. Although 34% of the 2003-04 GED cohort expected to receive a bachelor's degree, most of those who graduated five years later received a postsecondary certificate or associate degree (Zhang et al., 2011). In all, 40% of that cohort's degrees were associate's, 32% were certificates, and 26% were bachelor's. By contrast, "about two-thirds of traditional high school graduates tended to follow the bachelor's degree path they predicted" (p. viii).

Despite voluminous research on GED graduates' earnings—with and without a postsecondary degree (e.g., Heckman & LaFontaine, 2006; Song & Hsu, 2008; Tyler, 2003)—these studies have not investigated their financial characteristics during college. The only data we could locate showed that in 2002, 44% of first-year college students with a GED credential were in poverty, compared to 17% of high school graduates (Guison-Dowdy & Patterson, 2011). These outdated figures highlight the need for the present study. Zhang and colleagues (2011) expressed concern that "GED Tests passers received about 20 percent less in financial aid for their first year studies than traditional high school graduates did" (p. xiv); furthermore, financial problems were one of the top reasons that GED graduates left college. Together, these findings indicate high levels of financial need among GED holders.

The Pennsylvania Higher Education Context

To contextualize the study and help readers assess how the findings may relate to other states, this section describes the landscape of Pennsylvania GED graduates and higher education. Of the 1.6 million Pennsylvania adults who lacked a high school credential in 2013, only 1.1% (17,654) took and passed the GED Tests (GED Testing Service [GEDTS], 2014). Since 2002, 150,539 Pennsylvanians have obtained a GED credential. In Pennsylvania and nationally nearly one in five adults (25 to 64) has some college credits but no credential; this group, which includes many GED holders, is an untapped audience for creating an educated citizenry (Merisotis, 2013). Accordingly, the Pennsylvania Division of Adult Education's (n.d.) programming emphasizes transitioning adults and GED graduates to postsecondary education and training.

In fall 2010, nearly 756,000 Pennsylvanians were enrolled in college (PDE, 2013), but only 22% of undergraduates attend community colleges, one-half of the national figure (NCPPHE, 2008). This pattern stems from higher tuition and the concentration of community colleges in cities (EPLC, 2006; Pathways PA, 2009). The expense and scarcity of community colleges limits access to higher education for GED graduates and adult learners—especially in rural communities—because these institutions offer the lowest price and risk (EPLC, 2006).

The scarcity of postsecondary institutions in rural Pennsylvania contributes to lower educational attainment and college enrollment (EPLC, 2006). Only one in five (19%) rural Pennsylvanians aged 25 or older has at least a bachelor's degree, compared with nearly one in three (30%) of their urban peers (Center for Rural Pennsylvania [CRP], 2014a). Among rural residents, GED graduates, men, and people with low incomes are less likely to enroll in college (Yan, 2002). These findings highlight the need to delineate the demographic, educational, and

financial characteristics of rural and urban students.

Finally, we need to understand GED graduates' financial needs because of the high cost of college in Pennsylvania, coupled with limited state investment. Nationally, Pennsylvania is 48th in state support for higher education (CSEP, 2015). The net price of college (after subtracting financial aid) requires a high percentage of family income—on average, 29% for community colleges and 41% for public 4-year institutions (NCPPHE, 2008, p. 7; see also Pathways PA, 2009). For many low-income Pennsylvanians, college is out of reach. In fact, six of the nation's 12 most expensive public institutions, based on the net price of college for low-income students, are located in the state (Burd, 2013). These trends underscore the need to understand the attributes of GED graduates who apply for federal financial aid.

Research Methods

FAFSA Data

This article analyzes the sub-set of data on GED recipients from our larger study, which identified the financial, educational, and demographic attributes of postsecondary students in Pennsylvania who applied for federal aid (Prins, Campbell, & Kassab, 2014). Data from applicants who completed the FAFSA between June 1, 2010 and June 30, 2011 were used to analyze the characteristics of rural and urban applicants who are GED graduates and to compare them with non-GED applicants. FAFSA applicants who were U.S. citizens or nationals, were Pennsylvania residents, planned to be undergraduate students in 2010-11, and were pursuing an undergraduate degree in 2010-11 were included. This article answers two research questions: (1) How do the educational status and demographic and financial characteristics of FAFSA applicants who are GED graduates compare to those of other applicants? (2) How do GED graduates from rural versus urban communities differ?

Measures

Urban or rural residence was calculated by matching student ZIP codes with corresponding counties, defined as rural if their population density was at or below the state median of 284. Thus, 48 of Pennsylvania's 67 counties are considered rural (CRP, 2014b).

Socio-demographic characteristics included gender, age, marital status, and parents' educational attainment. The 2010-11 FAFSA did not ask about race/ethnicity or employment. Adult learners are defined as age 24 years or older (born before January 1, 1987), one of the federal aid criteria for financial independence (Wei, Nevill, & Berkner, 2005).

Educational status variables included (1) the degree or certificate student would pursue in 2010-11 (bachelor's degree; associate degree—occupational or technical program; associate degree—general education or transfer program; certificate or diploma program of less than 2 years; certificate or diploma program of 2 or more years; teaching credential [non-degree] or other/undecided); (2) grade level when entering postsecondary school (never attended college and 1st year undergraduate, attended college before and 1st year undergraduate, 2nd year undergraduate/sophomore, 3rd year undergraduate/ junior, 4th year undergraduate/senior, 5th year/other undergraduate); (3) enrollment status (full-time, half-time, less than half-time); and (4) the type of institution receiving the FAFSA report (4-year private, 4-year public, community college, technical school, or other).2

Financial variables included (1) Expected Family Contribution (EFC), or the amount a student or family is expected to contribute to the student's college education for one year, based on family size, number of family members in college, family savings, and current earnings; (2) total adjusted gross income (AGI); (3) total earnings from work, assets, and other taxable and untaxed income during the prior year;

(4) poverty status based on total earnings, adjusted for family size (less than or equal to the poverty level [i.e., poverty]; greater than poverty level but less than or equal to 150% of poverty level [i.e., near-poverty]; or greater than 150% of the poverty level); (5) financial independence;³ and (6) whether either parent (if a dependent student) or the student or spouse (if an independent student) is a dislocated worker. All data on EFC, AGI, earnings, and poverty status refer to the applicant's family.

Data Analysis

PHEAA houses all Pennsylvania FAFSA data. Because FAFSA records are confidential, PHEAA could not release individual-level data. Instead, PHEAA conducted all data analyses on individuallevel data, as specified by the project team, and sent us the results. Data fields with a small number of FAFSA records were collapsed with other fields to protect confidentiality. Per instructions from the research team, PHEAA conducted contingency table analysis and analysis of variance (AOV) using Statistical Analysis System (SAS) to determine whether rural and urban GED and non-GED students differed significantly from each other (Ott, 1984). The research team also constructed a limited number of contingency tables, based on the aggregated data that PHEAA provided, and used PASW Statistics (SPSS) to calculate significance tests. The cell chisquare (SAS) and adjusted standardized residual (SPSS) were examined in contingency tables greater than 2x2. The Bonferroni adjustment was used when making multiple comparisons of the four groups included in the AOV. Due to the large number of records, only differences with a p-value less than 0.0001 were considered statistically significant. This article emphasizes results with meaningful differences between GED and non-GED students and between rural and urban students within both of these student groups.

Limitations

One of the limitations is that we do not know whether applicants enrolled in 2010-11 or how much financial aid they received. Second, the FAFSA did not ask applicants' race/ethnicity or employment status (see Guison-Dowdy & Patterson, 2011). Third, we do not know how the characteristics of FAFSA applicants compare to non-applicants, who may differ in income, enrollment patterns, and other ways (e.g., part-time and non-degree students are likely under-represented since they are ineligible for most financial aid). Nevertheless, the findings provide a comprehensive analysis of all FAFSA applicants with a GED credential in one state.

Results Overview of FAFSA Applicants

Four-fifths (79.7%, n = 487,035) of the 2010-11 Pennsylvania FAFSA applicants were from urban counties and one-fifth (20.3%, n = 123,890) from rural counties. (Rural residents comprise 27.5% of the state population aged 18 or older with at least a high school diploma [data from 2007-2011 American Community Survey].) The mean age was 24,59% of applicants were women, and more than 40% were in poverty or near-poverty. Rural and urban applicants were studying for similar degree types: about 60% bachelor's (BA/BS), 27-28% associate degree, and 12-14% certificate, diploma, teaching credential, or other degree of less than 2 years.

Profiles of GED Graduates

GED graduates comprised 8% of FAFSA applicants (n=44,448), or 6.7% of rural and 7.8% of urban applicants, respectively. Table 1 presents educational, demographic, and financial characteristics of rural and urban GED graduates, compared with those of students who obtained a high school diploma or other secondary credential

(hereafter, "non-GED students"). Every difference in Table 1 was statistically significant (p<0.0001).

Educational status. GED and non-GED FAFSA applicants had significantly different educational plans. Non-GED applicants were about 2.5 times more likely to pursue a BA/BS than both rural and urban GED recipients (62.5% vs. 26.5% and 24%, respectively). In contrast, GED graduates were more likely to pursue an associate degree. Specifically, GED holders (40% rural, 33% urban) were more than twice as likely as non-GED students (19% rural, 15% urban) to pursue an occupational/technical associate degree.

About two-fifths of rural and urban GED recipients (43% and 41%, respectively) were beginning students—considerably more than non-GED students (28-29%). About twice as many GED holders had previously attended college, but were still in their first year (30-32% rural and urban GED vs. 15-17% for rural and urban non-GED students), indicating an intermittent or "stopout" enrollment pattern. Over one-half (55-56%) of non-GED students would be in their second year of postsecondary school or higher in 2010-11, compared to 28% of rural GED and 27% of urban GED graduates.

GED holders were significantly less likely to submit the FAFSA to 4-year institutions: 21% and 15% of rural and urban GED graduates, compared to 57% and 48% of rural and urban non-GED students, respectively. (Nationally, 17% of GED and 47% of high school diploma holders enroll in 4-year colleges [Guison-Dowdy & Patterson, 2011], and GED holders are 77% less likely to do so than traditional high school graduates [Maralani, 2011].) Our data also show that GED holders (21% rural, 24% urban) were more likely than non-GED students (9-10%) to submit the FAFSA to technical schools.

Rural and urban students sent the FAFSA report to different types of postsecondary institutions (GED: χ^2 =2017.040; df=4; p<0.0001; non-GED:

χ²=10300.169; df=4; p<0.0001). Overall, urban students were more likely than rural ones to submit the FAFSA to community colleges. Among rural students, 20% of GED graduates and 12.5% of non-GED students submitted the FAFSA to community colleges, compared to 38% of urban GED holders and 23% of urban non-GED students. Rural GED recipients were nearly twice as likely to submit the FAFSA to some other type of postsecondary institution (38.5%) than other FAFSA applicants. About one-fifth of urban GED holders (23%), and rural and urban non-GED students (21% and 19%, respectively) sent the FASA report to some other type of institution.

Although the vast majority of FAFSA applicants planned on full-time study in 2010-11, GED graduates were less likely to do so than non-GED students. Moreover, urban GED students were less likely to plan on being full-time than rural GED students (81% vs. 86%; χ^2 =111.449; df=2; p<0.0001). On the other hand, 88% of urban and 91% of rural non-GED students planned on full-time study. Finally, GED holders were more likely to plan on enrolling half-time (rural: 13.5%; urban: 17%) than non-GED students (8-11%).

Demographic characteristics. Overall, most GED and non-GED students were female (61% and 59%, respectively). Among *rural* students, GED holders were more likely to be female than non-GED students (64% vs. 59%). Gender differences between *urban* GED and non-GED students were statistically significant but minor (61% and 59%, respectively, were female). Rural GED graduates were significantly more likely to be female than their urban counterparts (χ^2 =36.100; df=1; p<0.0001).

Among rural students, GED holders were considerably less likely to be single (54%) than non-GED students (82%). The difference among urban students was smaller (71% for GED vs. 86% for non-

GED applicants), although statistically significant. Moreover, rural GED recipients were significantly less likely to be single than their urban peers (χ^2 =925.199; df=1; p<0.0001).

Rural and urban GED holders had similar age distributions, with a mean age of 31 years, compared to 23 years for non-GED students. Thus, more than three-fourths of GED graduates were adult learners (78% and 77% of rural and urban GED applicants, respectively). By contrast, 29% of rural and 32% of urban non-GED students were adult learners.

GED and non-GED rural and urban students differed significantly in both their father's and mother's educational attainment. As Table 1 shows, the parents of GED graduates completed significantly less schooling than those of non-GED applicants. About one-fourth (25-27.5%) of GED graduates had a college-educated mother, compared to 39-43% of non-GED applicants. Non-GED applicants were also twice as likely as GED graduates to have a college-educated father (rural non-GED: 31%; rural GED: 18%; urban non-GED: 40%; urban GED: 21%).

In addition, parents' educational attainment was lower for rural GED and non-GED students than for their urban counterparts (father's educational attainment for GED applicants: χ^2 =47.630; df=2; p<0.0001; r=0.04; p<0.001; father's educational attainment for non-GED applicants: χ^2 =2421.172; df=2; p<0.0001; r=0.06; p<0.001; mother's educational attainment for GED applicants: χ^2 =20.308; df=2; p<0.0001; r=0.02; p<0.001; mother's educational attainment for non-GED applicants: χ^2 =814.209; df=2; p<0.0001; r=0.02; p<0.001). FAFSA applicants who indicated "other or unknown" for their parent's educational attainment were excluded from these analyses. When these students were included in the calculations, a substantial percentage of rural and urban GED holders (22% and 29%, respectively) indicated this category for their father.

Financial characteristics. On every financial measure, rural and urban GED holders had more need than their non-GED peers. The mean EFC of rural GED holders did not differ significantly from that of urban GED students (\$2,565 and \$2,201, respectively; p=0.372). In contrast, the mean EFC for rural non-GED applicants was significantly lower than that of their urban peers (\$8,517 and \$9,880, respectively).

On average, non-GED students' mean family income was about 2.4 times that of GED students. The mean AGI and earnings for rural GED holders were \$23,388 and \$22,033, respectively, compared to \$55,793 and \$53,420 for rural non-GED students. The mean AGI of urban GED holders was significantly less than that of their rural peers (\$19,817 vs. \$23,388). For urban non-GED students these figures were \$57,374 and \$55,552, respectively.

The poverty rate for GED recipients was about twice that of non-GED applicants. Approximately 60% of GED holders (59% rural, 63% urban) were below the poverty level, compared to 26% of rural non-GED and 32% of urban non-GED students (see Guison-Dowdy and Patterson, 2011). Among rural students, another 14% of GED and 12% of non-GED students were in near-poverty. For urban students, these figures were 13% and 11%, respectively. Non-GED students were more likely to have total earnings above 150% of the poverty level (62.5% and 57% for rural and urban non-GED students, respectively) than GED graduates. Only one-quarter of GED holders (27% rural, 23% urban) had total earnings above 150% of the poverty level.

In addition, GED graduates, their parents, or their spouse (if married) were almost twice as likely to be a dislocated worker as non-GED students. About one-fifth of rural (22%) and urban (20%) GED recipients were in this group, compared to 12% of non-GED students, reflecting the high rates of unemployment

in Pennsylvania and nationally (about 8.1-8.7% and 9.4-9.9%, respectively, in 2010).

Only 16% of GED graduates were financially dependent on their parents, compared to 68% and 63% of rural and urban non-GED students, respectively. (Financial independence does not mean being independently wealthy, but rather that students meet criteria such as being age 24 or older, having dependents, or being married.) Among GED holders, rural students were more likely than urban ones to be financially independent with *at least one child dependent* (55% and 51%, respectively), whereas urban applicants were more likely than rural ones to be financially independent with *no child dependent* (33% and 28%, respectively; χ^2 =63.914; df=2; p<0.0001).

Discussion

This study provides the first analysis of GED graduates who applied for federal financial aid, and the first rural-urban analysis of postsecondary students with a GED credential. By comparing GED versus non-GED students and rural versus urban students within both of these groups, the study offers a fine-grained understanding of distinct student subgroups. These data can be used as a benchmark to compare with other states and to identify national trends in attributes of postsecondary students and FAFSA applicants who are GED graduates.

Although many postsecondary institutions collect data on marginalized groups such as adult learners, first-generation and low-income students, underrepresented minorities, and veterans, GED graduates are seldom included. Our findings reveal that these FAFSA applicants face intertwined forms of social and economic exclusion, especially compared with traditional high school graduates. For example, poverty is one of the conditions that contributes to school "pushout" in the first place (Tuck, 2012) and hinders college enrollment and completion.

Regarding the first research question the characteristics of GED versus non-GED graduates—we found that GED holders were older, disproportionately women, and were more likely to attend 2-year institutions or technical schools, to pursue a vocationally-oriented associate degree, to study less than full-time, to have parents without a college degree, to have child dependents, and not to be single. Thus, GED FAFSA applicants had family responsibilities that are likely to hinder college persistence. Despite their older age, GED holders were more likely than non-GED students to be *starting* postsecondary study, mirroring prior research on GED graduates' older age upon college enrollment (Zhang et al., 2011). GED graduates' precarious economic situation was especially concerning: one in five was in a dislocated worker household, about three-fourths lived in poverty or near-poverty, and their average AGI was 58-65% less than that of their non-GED peers. However, with 84% of GED holders meeting federal criteria for financial independence, most could not rely on parents for financial support. Many of these characteristics echo prior research on GED graduates in higher education (Guison-Dowdy & Patterson, 2011; Patterson et al., 2010; Reder, 2007; Sum et al., 2012; Zhang et al., 2011).

Second, our findings elucidate salient rural-urban differences among FAFSA applicants with a GED credential. In general, rural GED graduates faced challenges rooted in family responsibilities, limited social and cultural capital (i.e., parental education), and geographic isolation from higher education institutions, whereas their urban peers had greater financial hardship. Specifically, rural GED recipients were more likely than their urban peers to study full-time and less likely to (1) send the FAFSA to community colleges, reflecting the paucity of these institutions in rural Pennsylvania; (2) have a college-educated father or mother; and (3) be single. Similarly, rural GED recipients were more likely to

be financially independent with at least one child dependent (versus none). These findings suggest that rural GED graduates would especially benefit from more community colleges, support services such as subsidized child care, and GED program counseling on navigating college—information that college-educated parents typically provide for their children.

Consistent with national data (Provasnik et al., 2007), the gender gap in enrollment among GED holders was larger in rural areas, signaling rural men's struggle to access higher education. This finding underscores the need to understand how economic vulnerability, labor markets, educational aspirations and expectations, and notions of masculinity suppress educational attainment among rural men (see Morris, 2012), and then to devise strategies for increasing college enrollment for male GED graduates in rural communities.

Finally, although rural GED graduates' mean AGI was less than \$24,000, it was nearly \$4,000 higher than that of their urban peers. This suggests that urban GED graduates were the most economically vulnerable student sub-group and may need greater financial support.

The study has several other implications for research, policy, and practice. First, nearly one-third of GED graduates in our study had some college credits but were still in their first year. This "stopout" pattern is typical among GED holders:

The 2003 cohort of GED passers may proceed unevenly through postsecondary programs; sizable percentages of students who stop out indicate that GED credential recipients may continue postsecondary work, perhaps at a less consistent pace than a traditional postsecondary student or other adult learners, and for a longer period of time. (Patterson et al., 2010, p. x)

In addition, GED graduates' characteristics overlap with those of the "risk index for non-persistence" in

college, including financial independence, dependent children, older age, and part-time enrollment (Reder, 2007, p. 19). As such, GED graduates—and other non-traditional students—need tailored financial, academic, and social support to continue beyond the first semester and year and then to complete their degree (see Sandman, 2010). For instance, Milheim and Bischel (2007) recommend "allowing for repeated entry and exits" because the "ability to obtain education discontinuously provides both general non-traditional and LIA [low-income adult] students with the means to acquire education credits on a more flexible timetable" (p. 41). Higher education administrators should consider implementing these kinds of policies to accommodate GED graduates' protracted, non-linear educational trajectory.

Second, our findings can inform efforts to increase and support transitions to postsecondary education for current GED students and GED Tests passers. With high levels of poverty, unemployment, and economic hardship, GED recipients need financial aid that matches their life circumstances, including family responsibilities, older age, and financial independence from parents. Our study and prior research reveal that GED graduates, as well as adults, financially independent students, and dislocated workers, are more likely to study parttime and pursue short-term, vocational degrees. Thus, federal, state, and institutional aid should be expanded to include more part-time students, shortterm degree programs, and certificates or credentials (Bailey & Mingle, 2003; Baum et al., 2013; Dougherty & Woodland, 2009; Pathways PA, 2009). This type of financial support is crucial because every year of postsecondary study yields economic benefits, even without obtaining a degree (Kane & Rouse, 1995). GED teachers should also provide information and counseling about financial aid, college application and enrollment, and related matters, and integrate these topics into authentic instructional activities

across GED subjects (e.g., calculating loan repayment, comparing college costs, analyzing average earnings with and without a college degree, completing the FAFSA, writing application essays).

Future research can build on this study by analyzing FAFSA applicants' characteristics in other states and by examining financial aid for GED holders, the practices and policies that enhance GED graduates' persistence, and ways to increase

postsecondary access and completion for male GED recipients, especially in rural communities. Given the growing concern about transitioning GED graduates to higher education, this study provides timely information about the characteristics of these students in one state. If we wish to create an educated citizenry, policy makers, researchers, and educators can no longer afford to overlook GED graduates. ❖

Esther Prins is an Associate Professor of Adult Education at Penn State and Co-Director of the Goodling Institute for Research in Family Literacy and Institute for the Study of Adult Literacy. Her work examines the social and cultural aspects of adult and family literacy, especially the ways that programs can challenge gender, racial, economic, and cultural inequalities. Her research has been published in journals such as the American Educational Research Journal, Teachers College Record, and Adult Education *Quarterly.* She is the recipient of the 2010 Imogene Okes Award for Outstanding Research in Adult Education from the American Association for Adult and Continuing Education.

Cathy Kassab is Principal and co-owner of By The Numbers, a statistical consulting and data analysis firm located in West Decatur, PA. Dr. Kassab earned a Ph.D. in Rural Sociology, an M.A. in Statistics, and an M.S. in Community Systems Planning and Development from Penn State University. She cofounded By The Numbers in 1997. By The Numbers provides evaluation and needs assessments, statistical consulting, and data analysis services to clients in education and other sectors. Dr. Kassab currently oversees several projects evaluating educational initiatives, including Pennsylvania's Keystones to Opportunity initiative aimed at promoting literacy from birth to grade 12.

¹In the larger study (i.e., full report for the Center for Rural Pennsylvania), we developed socio-demographic, financial, and educational profiles of rural and urban students and compared their characteristics by educational status (beginning vs. continuing students) and the type of degree being pursued (bachelor's vs. associate vs. certificate/diploma). We also developed profiles of two non-traditional student groups—GED recipients and adult learners. Finally, we determined the relationship between educational financial need of the county and county factors (e.g., poverty, educational attainment). A main goal of the study was to identify rural-urban differences within each student group (e.g., rural vs. urban beginning students). This article analyzes only the data on GED versus non-GED graduates. An article using the data on adult versus traditional-age students is forthcoming (Prins, Kassab, and Campbell, in press).

²⁴Other" institutions include 2-year private institutions and Pennsylvania Hospital Schools of Nursing, which offer a 3-year program of study that leads to a registered nurse certification, but no academic degree.

³According to the federal government, students are considered financially independent if they are: 24 or older; "an orphan..., ward of the court, in foster care or was a ward of the court when 13 years or older;...a veteran of the Armed Forces...or serving on active duty for other than training purposes;...a graduate or professional student;...married...; have legal dependents other than a spouse;...an emancipated minor or in legal guardianship;...a homeless youth; [or]...a student for whom a financial aid administrator makes a documented determination of independence by reason of other unusual circumstances" (Fastweb, 2015, para. 5).

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Table 1—Characteristics of Rural and Urban GED and Non-GED FAFSA Applicants

			Rural	<u></u>				Urban	u	
	GED	D	Non-GED	GED	Significance	GED	D	Non-GED	GED	
	z	% or Mean	z	% or Mean	Test (GED vs. Non- GED) ^a	Z	% or Mean	z	% or Mean	Significance Test (GED vs. Non-GED)ª
Educational Plans										
Year in Postsecondary School—Total	8,085		113,399		$(\chi^2=2700; df=5;$ p<0.0001	36,359		427,603		$(\chi^2=11928; df=5;$ p<0.0001)
Never Attended College & 1st Year Undergrad.	3,442	42.6%	32,858	29.0%		14,914	41.0%	118,045	27.6%	
Attended College Before & 1st Year Undergrad.	2,340	29.9%	16,810	14.8%		11,609	31.9%	73,871	17.3%	
2 nd Year Undergrad./Sophomore	1,410	17.4%	26,478	23.4%		5,916	16.3%	94,469	22.1%	
3rd Year Undergrad./Junior	578	7.2%	19,428	17.1%		2,556	7.0%	73,708	17.2%	
4 th Year Undergrad./Senior	224	2.8%	13,401	11.8%		1,007	2.8%	49,669	11.6%	
5 th Year Undergrad.	91	1.1%	4,424	3.9%		357	1.0%	17,841	4.2%	
Degree or Certificate Being Pursued in 2010-11—Total	8,085		113,405		$(\chi^2=4250; df=5; p<0.0001)$	36,363		427,616		$(\chi^2=21438; df=5; p<0.0001)$
BA/BS	2,141	26.5%	70,895	62.5%		8,791	24.2%	267,319	62.5%	
Associate Degree (Occupational/ Technical)	3,201	39.6%	21,830	19.2%		12,042	33.1%	63,251	14.8%	
Associate Degree (General Education/Transfer)	1,091	13.5%	8,269	7.3%		6,422	17.7%	42,534	10.0%	
Certificate or Diploma (Program of < 2 Years)	961	11.9%	5,751	5.1%		6,056	16.6%	30,461	7.1%	
Certificate or Diploma (Program of 2+ Years)	215	2.7%	1,885	1.7%		1,064	2.9%	7,417	1.7%	
Teaching Credential (Non-degree Program) or Other	476	5.9%	4,775	4.2%		1,988	5.5%	16,634	3.9%	

Table 1—Characteristics of Rural and Urban GED and Non-GED FAFSA Applicants (continued)

			Rural	<u> </u>				Urban	UK	
	GED	D	Non-GED	GED	Significance	GED	D	Non-GED	GED	
	z	% or Mean	z	% or Mean	Test (GED vs. Non- GED)ª	z	% or Mean	z	% or Mean	Significance Test (GED vs. Non-GED)ª
Type of Institution Receiving 2010-11 FAFSA—Total	8,085		115,805		$(\chi^2=4250;df=2;$ p<0.0001)	36,363		450,672		$(\chi^2=18342;df=2;$ p<0.0001)
4-Year Private	550	%8.9	19,312	16.7%		3,672	10.1%	92,723	20.6%	
4-Year Public	1,113	13.8%	46,885	40.5%		1,921	5.3%	125,924	27.9%	
Community College	1,633	20.2%	14,483	12.5%		13,777	37.9%	102,101	22.7%	
Other	3,115	38.5%	24,689	21.3%		8,353	23.0%	86,802	19.3%	
Technical School	1,674	20.7%	10,436	%0.6		8,640	23.8%	43,122	%9.6	
Enrollment Status (2010-11) —Total	8,074		115,271		$(\chi^2=332;df=2;$ p<0.0001)	36,279		447,939		$(\chi^2=1612;df=2;$ p<0.0001)
Full-time	6,910	85.6%	105,370	91.4%		29,337	80.9%	394,613	88.1%	
Half-time	1,092	13.5%	8,984	7.8%		6,259	17.3%	47,815	10.7%	
< Half-Time	72	%6.0	917	0.8%		899	1.9%	5,511	1.2%	
Socio-demographic Characteristics										
Gender —Total	7,908		113,125		$(\chi^2=88; df=1; p<0.0001)$	35,304		438,900		$(\chi^2=30; df=1; p<0.0001)$
Female	5,085	64.3%	699'99	58.9%		21,416	60.7%	259,720	59.2%	
Male	2,823	35.7%	46,456	41.1%		13,888	39.3%	179,180	40.8%	
Marital Status—Total	8085		115,805		$(\chi^2=3963; df=1; p<0.0001)$	36,363		450,672		$(\chi^2=6081; df=1; p<0.0001)$
Single	4,337	53.6%	95,362	82.4%		25,854	71.1%	388,640	86.2%	
Other	3,748	46.4%	20,443	17.6%		10,509	28.9%	62,032	13.8%	
Age (mean) ^b	8,085	31.2	115,805	23.5	(p<0.0001)	36,363	31.1	450,672	23.9	(p<0.0001)
Born Before 1/1/87 (Adult Learner)	8,085		113,405		$(\chi^2=8195; df=1; p<0.0001)$	36,363		427,615		$(\chi^2=29360;$ df=1; p<0.0001)
Yes	6,279	77.7%	32,851	29.0%		28,116	77.3%	138,597	32.4%	
No	1,806	22.3%	80,554	71.0%		8,247	22.7%	289,018	%9.79	

Table 1—Characteristics of Rural and Urban GED and Non-GED FAFSA Applicants (continued)

			Rural	<u> </u>				Urban	an	
	GED	D	Non-GED	GED	Significance	GED	:D	Non-GED	GED	
	z	% or Mean	z	% or Mean	Test (GED vs. Non- GED)³	Z	% or Mean	z	% or Mean	Significance Test (GED vs. Non-GED)ª
Father's Educational Attainment—Total	6,199		103,774		$(\chi^2=1414; df=2;$ p<0.0001); r=0.10; p<0.0001	25,207		369,155		$(\chi^2=5343; df=2; p<0.0001);$ r=0.11; p<0.0001
Middle School/Junior High	1,148	18.5%	7,172	%6.9		4,184	16.6%	25,442	%6.9	
High School	3,963	63.9%	63,985	61.7%		15,652	62.1%	197,410	53.5%	
College or Beyond	1,088	17.6%	32,617	31.4%		5,371	21.3%	146,303	39.6%	
Mother's Educational Attainment — Total	6,901		105,984		$(\chi^2=1766; df=2;$ p<0.0001); r=0.10; p<0.0001	29,488		391,332		(χ^2 =5321; df=2; p<0.0001); r=0.10; p<0.0001
Middle School/Junior High	1,063	15.4%	4,926	4.6%		4,219	14.3%	21,516	5.5%	
High School	4,115	29.6%	59,575	56.2%		17,150	58.2%	200,857	51.3%	
College or Beyond	1,723	25.0%	41,483	39.1%		8,119	27.5%	168,959	43.2%	
Financial Characteristics										
EFC (mean) ^c	7,015	\$2,565	103,860	\$8,517	(p<0.0001)	30,228	\$2,201	388,155	\$9,880	(p<0.0001)
Total AGI (mean) ^d	8,085	\$23,388	115,805	\$55,793	(p<0.0001)	36,363	\$19,817	450,672	\$57,374	(p<0.0001)
Total Earnings (mean)°	8,085	\$22,033	115,805	\$53,420	(p<0.0001)	36,363	\$18,695	450,672	\$55,552	(p<0.0001)
Poverty Level Based on Total Earnings—Total	8,085		115,805		$(\chi^2=4594; df=2; p<0.0001)$	36,363		450,672		$(\chi^2=17076;$ df=2; p<0.0001)
≤ Poverty Level	4,785	59.2%	29,993	25.9%		23,071	63.4%	143,931	31.9%	
> Poverty Level but ≤ 150% of Poverty Level	1,115	13.8%	13,428	11.6%		4,824	13.3%	48,194	10.7%	
> 150% of Poverty Level	2,185	27.0%	72,384	62.5%		8,468	23.3%	258,547	57.4%	

Table 1—Characteristics of Rural and Urban GED and Non-GED FAFSA Applicants (continued)

% or Mean 12.5% 87.5% 14.4%	Rural				Urban	Ę	
Applicant/Spouse Is Dislocated 7,110 106,647 Mean Applicant/Spouse Is Dislocated 7,110 106,647 12.5% 13,384 12.5% 15,522 77.7% 93,263 87.5% 115 Financially Independent of 8,085 115,805 17.8% With Child Dependents 2,297 28,4% 16,651 14,4%		Significance	GED	D	Non-GED	GED	
Applicant/Spouse Is Dislocated 7,110 106,647 1,588 22.3% 13,384 12.5% 1,588 22.3% 13,384 12.5% 1,580 77.7% 93,263 87.5% 115,805 115,805 115,805 11,653 17.8% With Child Dependents 2,297 28.4% 16,651 14.4%	z	Test (GED vs. Non- GED) ^a	z	% or Mean	z	% or Mean	Signiπcance Test (GED vs. Non-GED) ^a
1,588 22.3% 13,384 12.5% 5,522 77.7% 93,263 87.5% 8,085 115,805 115,805 17.8% 4,472 55.3% 20,653 17.8% 2,297 28.4% 16,651 14.4%		$(\chi^2=558; df=1;$ p<0.0001)	31,350		396,094		$(\chi^2=1455; df=1; p<0.0001)$
5,522 77.7% 93,263 87.5% 8,085 115,805 4,472 55.3% 20,653 17.8% 2,297 28.4% 16,651 14.4%	13,384		6,256	20.0%	49,247	12.4%	
8,085 115,805 17.8% 4,472 55.3% 20,653 17.8% 2,297 28.4% 16,651 14.4%	93,263		25,094	80.08	346,847	82.6%	
4,472 55.3% 20,653 and the second sec		$(\chi^2=9320; df=2; p<0.0001)$	36,363		450,672		$(\chi^2=31842;$ df=2; p<0.0001)
2,297 28.4% 16,651	20,653		18,546	51.0%	87,371	19.4%	
	% 16,651 14.4%		11,934	32.8%	80,087	17.8%	
No 1,316 16.3% 78,501 67.8%	78,501		5,883	16.2%	283,214	62.8%	

^a For categorical characteristics such as gender the Pearson Chi-Square statistic is used to test the difference between GED and non-GED rural and urban applicants, respectively. For characteristis that have a numerical value, such as age and income, ANOVA is used.

Result from two-way AOV (GED/non-GED; rural/urban) with interaction term for age: F=10825.5; df=3,610921; p<0.0001. P-values in table are associated with Bonferroni adjustment for multiple comparisons (rural GED vs. non-GED and urban GED vs. non-GED, respectively). Remaining comparisons are GED rural vs. GED urban: p=0.9037 and non-GED rural vs. non-GED urban: p<0.0001.

Result from two-way AOV (GED/non-GED; rural/urban) with interaction term for EFC: F=3084.66; df=3,529254; p<0.0001. P-values in table are associated with Bonferroni adjustment for multiple comparisons (rural GED vs. non-GED and urban GED vs. non-GED, respectively). Remaining comparisons are GED rural vs. GED urban: p=0.3724 and non-GED rural vs. non-GED urban: p<0.0001.

Result from two-way AOV (GED/non-GED; rural/urban) with interaction term for total AGI: F=4431.23; df=3,610921; p<0.0001. P-values in table are associated with Bonferroni adjustment for multiple comparisons (rural GED vs. non-GED and urban GED vs. non-GED, respectively). Remaining comparisons are GED rural GED urban: p<0.0001 and non-GED rural vs. non-GED urban: p<0.0001.

with Bonferroni adjustment for multiple comparisons (rural GED vs. non-GED and urban GED vs. non-GED, respectively). Remaining comparisons are GED rural vs. Result from two-way AOV (GED/non-GED; rural/urban) with interaction term for total earnings: F=3841.09; df=3,610921; p<0.0001. P-values in table are associated GED urban: p=0.0004 and non-GED rural vs. non-GED urban: p<0.0001

FORUM

House of Cards: Analyzing "Making Skills Everyone's Business"

Ralf St. Clair University of Victoria, Canada

ne of the classic questions in policy analysis is "what is to be done?" (Lenin 1902/1961). As Philp (2010) argues, ". . . politicians, bureaucrats and citizens often face challenges that call for action, but where it is not clear, for various reasons, what the right action, response or policy would be . . . and what . . . makes [a] choice the right one" (p. 467-468). When we make policy in a particular area, we not only have to decide what to do but why we are doing it. Any plan for action is like a house of cards. At the bottom, there are assumptions. They hold up the next layer, which is the definition of the problem. At the top is the response, what is to be done. If any of the lower cards is not stable, the whole thing comes tumbling down.

In this short discussion, I look at a position paper that sets out to answer the question of what is to be done. "Making Skills Everyone's Business: A Call to Transform Adult Learning in the United States" (MSEB)(United States Department of Education [USDoE], 2015) is a statement from the Federal government office that administers funding for adult education and adult literacy programs throughout the United States. Many of the suggestions in the paper are exciting and innovative, creating real opportunities to develop adult literacy and learning in the United States. But, as will be shown, not all the cards are as stable as they could be.

What Is to Be Done? An Overview of the Document

MSEB (USDoE, 2015) is a publication from the Office of Career, Technical, and Adult Education (OCTAE) laying out a vision for the Office's approach to adult education and literacy services across the nation. This vision has significant policy repercussions as programs in every state are supported by OCTAE, to the tune of around half a billion dollars a year. Any change of definition, process of allocation, or expectations matters to many hundreds of programs, and millions of educators and learners.

MSEB starts by making the argument that the United States has a problem regarding low skills among the adult population. This perspective is primarily based on Programme for the International Assessment of Adult Competencies (PIAAC) (Organisation for Economic Cooperation and Development [OECD], 2013), and the first few pages have lots of data and diagrams expanding on the challenges faced by people who did not score strongly on the test. Significant points include that one in six adults have low literacy skills, one third are young, one third are immigrants, and more than half are Black or Hispanic. More than 60% of those with low skills have completed high school, and two thirds are employed. Forty per cent of "lowskilled Americans" have earnings in the bottom

fifth of the wage spectrum, and all people with low skill scores are more likely to experience health problems than people with lower scores in other countries. The PIAAC data also suggest that there is a strong intergenerational component, with the U.S. demonstrating the highest likelihood that people with little formal education who come from families with little education are going to have lower literacy scores. In other countries, it is harder to predict an individual's outcome from their family background. This suggests that in the U.S. it is more difficult to gain strong skills if one begins life in a context where strong skills are not the norm. Other data sources, such as the PISA (OECD, 2014), are used to make arguments, for example, that young people's skills are only slightly higher than those of the older generations. Overall, this section paints a somewhat bleak portrait of the lives and prospects of those who would not score well on the skills tests.

The second section asks "who would benefit from higher skills?" and suggests that communities, families, and individuals would be better off with stronger adult skills. The balance of the document, and really the part that educators, administrators, and learners may be most concerned about, lays out strategies to address the issues identified in the first part. There are seven of these strategies, listed below. These strategies, as will be discussed later, build on the legal provisions of the Workforce Innovation and Opportunity Act (WIOA)(United States Congress [US Congress], 2014). The title of each strategy is in bold, and the summaries are mine.

1. Act collectively to raise awareness and take joint ownership of solutions. Addressing the issue requires "community involvement and commitment; structure; funding to create, staff, and maintain partnerships; a sharp focus on how a partnership's actions will change opportunities and outcomes for low-

- skilled individuals; shared measurement; and a clear sense of shared responsibilities and benefits among partners" (USDoE, 2015, p.9). The Department of Education is prepared to offer some support to help build these collaborative approaches.
- 2. Transform opportunities for youth and adults to assess, improve, and use foundation skills. The emphasis here is on finding new ways for adults to access the support they need, including online services. There is recognition of the varied level of internet access across the country, and discussion of the potential of libraries to provide free, reliable internet access.
- 3. Make career pathways available and accessible in every community. Career pathways that join up education, training, and support are seen as a particularly effective way to support labor market success. These pathways need to be multi-faceted (and hence multi-agency) and targeted to the needs of local labor and employment patterns.
- 4. Ensure that all students have access to highly effective teachers, leaders, and programs. This strategy has many elements, including evaluation of programs, professional development for educators, blended delivery models, and use of evidence-based approaches. When implemented, this strategy will have far-reaching implications for programs and the educators working within them.
- **5.** Create a "no wrong door" approach for youth and adult services. This strategy builds on the WIOA requirement for states to submit a unified service plan for adult education services developed by a state workforce development board that includes partners such as businesses, elected

officials, and union, education, and training representatives. The aim is that all partners will be able to ensure that people can get access to the services they need.

- 6. Increase the return on investment in skills training for business, industry, and labor. Because two-thirds of adults with low literacy skills as measured by PIAAC are working, there is a ready-made way to support their learning. This strategy calls for increased on-the-job training, including apprenticeships and schemes to use slow periods as opportunities for learning.
- 7. Commit to closing the equity gap for vulnerable sub-populations. This strategy is concerned with deliberately using the adult education and literacy system to address "shockingly stubborn achievement gaps that persist in America across ethnic, racial, and income groups" (USDoE, 2015, p. 23). WIOA lists 14 groups of individuals with a barrier to employment, including individuals who are English language learners.

Implementation of the strategies is to be coordinated at the state level, and the role of the unified state plans and workforce boards is strongly emphasized.

One important aspects of the position paper is how programs are to be evaluated, since this will inevitably shape their actions. MSEB follows the regulations in WIOA, which, while similar to the current National Reporting System (NRS), contain important differences. The six categories of evaluation data mentioned in WIOA (Title 1, section 116, (b) (2) (a)) are highly focused on employment outcomes. The sixth, for example, is "indicators of effectiveness in serving employers," where the process for determining what exactly counts as serving employers is left to the state workforce board. The

current NRS catch-all category of "educational gains" (Division of Adult Education and Literacy, 2015, p.5) is no longer included, and passing the GED exam or secondary school diploma only counts in certain circumstances. The law states:

program participants who obtain a secondary school diploma or its recognized equivalent shall be included in the percentage counted as meeting the criterion under such clause only if such participants . . . have obtained or retained employment or are in an education or training program leading to a recognized postsecondary credential within 1 year after exit from the program. (US Congress, 2014, Section 116 (b) (2)(A)(3).

MSEB sets out a broad vision of a cooperative and integrated approach to supporting adult learning, with links between different sectors and interest groups. There are some interesting innovations, such as a much stronger explicit inclusion of English language learners in the services offered. There are also some aspects that are very much more restrictive than has been the case in the past, such as the approach to program evaluation. The implications for educators seem, at this point, to be relatively limited; the changes for administrators in programs and state agencies considerably more challenging.

What Shapes This Vision?

It is helpful to think about how MSEB ended up the way that it is or, to continue the metaphor, what the supporting levels of cards look like. MSEB specifically responds to the context created by a number of recent documents. The first, and probably the most important, is the WIOA (US Congress, 2014), an update, and effectively, a re-authorization, of the 1998 Workforce Investment Act. There are different interpretations of the WIOA, and it will

likely be some time before we really understand what the legislation will produce in practice. As mentioned above, the grounds for program evaluation have shifted somewhat under WIOA, focusing more on employment. However, the Act promises more continuity than change overall.

MSEB draws heavily on PIAAC (OECD, 2013). The reporting of the findings of this international survey of adult literacy, numeracy, and problemsolving in a technology-rich environment skills pushes towards framing literacy in economic and employment terms. PIAAC provides data showing that a surprising number of people in the United States do not fare well on tests of basic skills. As has been the case throughout the history of adult literacy education, this is presented not only as a problem, but as a reason for alarm. Specifically, the alarm concerns the loss of productivity associated with lower skills in the population, and the MSEB strategies are presented as direct responses to the PIAAC findings.

Other important influences on MSEB are a position paper on workforce development released by the White House (2014) and a joint report from the Departments of Labor, Commerce, Education, and Health and Human Services (2014). Both of these papers are very concrete, recommending competency-based systems, seamless transitions between services, and overall a "more job-driven, integrated and effective" (Departments of Labor, Commerce, Education, and Health and Human Services, 2014, p. 1) system of education for adults. Many of the recommendations, and indeed the whole philosophy of services bound together very tightly around the aim of employment, travels from these position papers directly into MSEB.

MSEB is a product of these contextual factors, along with the structure of federal/state relations. Workforce education is a federal responsibility, so the Department of Education benefits by linking the two;

it would be far harder for the federal government to mandate a nation-wide adult educational program given the states' responsibility for education. Against this background, it was inevitable that MSEB would demonstrate a strong commitment to education for employment.

Alongside this commitment, however, runs a thread of what might be considered as social justice. The document acknowledges and responds to business imperatives but then expands beyond this. Strategy 7, with its emphasis on equity for sub-populations, represents a particularly strong commitment to addressing historical differences in skills and associated well-being. For example, there is a strong focus on English language learners. Beyond this, there are a range of discussions derived from PIAAC regarding health outcomes and democratic inclusion. MSEB opens the door for considerations and approaches that go far beyond employability skills.

How Shaky Is This House of Cards?

In considering the whole house of cards, one place to start is the set of claims regarding adult education and productivity that hold the entire structure up. I have written previously about the need for caution when interpreting the results of PIAAC and other surveys (St.Clair, 2012); the OECD have been known to make claims that low skills cause poverty, or that changing skills will directly help with poverty, without evidence that this is the case. Interestingly, MSEB shows no caution whatsoever about accepting the OECD argument.

One very clear example of this is the claim in MSEB that "what adults know and can do—not just how many years of education they complete—strongly affects economic growth" (USDoE, 2015, p.5). This is referenced to Hanushek and Woessman's (2010) work on educational outcomes in OECD countries. Before we accept the claim, we should reflect on the fact

that this work is not peer-reviewed, that it uses data from school-age children to make claims about an entire population's cognitive skills, and that the case for investment in skills development is based upon highly speculative modeling that assumes infinite demand for skills. While what people know and can do matters a great deal, we should be slower to accept the argument that their educational background does not, and even slower to accept the idea that changing literacy scores alone can "solve" poverty.

On a practical level, I think that MSEB could have been less supportive of the idea that employment outcomes are always the most valuable, and could present the case for a diverse range of outcomes more clearly. This is especially true for the earliest stages of skills development, where the connection to employment and further study are distant. We know that it takes quite a while for low skilled adults to improve their skills to a point that has a significant labor market impact, and that there have to be jobs and opportunities for them when they have completed that process (St. Clair, 2010). While linking adult literacy education so strongly to employment prospects and economic outcomes is politically astute, it is not without risks. It is easy to imagine that programs will be unable to justify serving individuals who cannot be considered to be realistically working towards employment, raising the question of who will serve beginning learners currently captured under the "educational progress" provision. In my view there is always room for a humanist view of literacy that emphasizes the opportunity for literacy learning to enrich people's lives well beyond the economic sphere.

A collaborative approach to adult skills is central in MSEB, and is, to a degree, a carry-over from the Workforce Investment Act. The "One Stop" approach, with the idea that there is no wrong door for entry access to the support people need, is a great idea, but there is little information regarding

how this coordination is going to work and who might take responsibility for ensuring that it works. "No wrong door" would require the commitment and cooperation of multiple state agencies, many of whom are not answerable to the State Workforce Board, nor necessarily interested in being involved in a collaborative approach.

It is also important to realize that many aspects of the MSEB vision rely on resources. The increased follow-up of learners after they leave the program is expensive, and there is no indication of where the support for the efforts to create strong state-wide collaborations will come from. In my experience, increased administrative requirements are sometimes resourced at the cost of instruction and instructional staff. MSEB also calls for more stable, better educated and supported instructional staff (and follows the latest version of the National Reporting System in collecting data on the teachers) (Division of Adult Education and Literacy, 2015). Developing capacity both in administration and in instructional staff would require more resources, and there is little indication in MSEB of where they might come from.

MSEB is a well-placed and well-designed vision paper, leading logically from an understanding of a problem and suggesting a way to act. In summary, basic skills have economic value, and the lack of them in the population causes economic value to be lost, therefore there is a need for a robust and consistent approach to raising and maintaining these competencies. However, from this simple assertion it is a small step to the view that people who do not demonstrate high levels of foundational skills are letting the side down, and even undermining the success of the United States. Deficit perspectives, implying that lower performance is the fault of the learners, are not credible when there is a consistent pattern of older people, women, Black or Hispanic Americans, or the unemployed tending to demonstrate lower performance. It is time to ask

why some groups of people have a much harder time getting access to knowledge that most of us take for granted.

Last Thoughts

Writing this analysis has been difficult, and not only because MSEB connects to so many data sources and ideas. What has made it challenging is that MSEB is a really progressive statement on many levels, with great potential to broaden and challenge our thinking about adult literacy education. The people who have written it are clearly very thoughtful and politically astute. But it is a rather delicate house of cards, a broad prescription perched precariously on a

premise about the way foundational skills work, and their economic significance. These assertions may make the MSEB strategies acceptable to business and political interests, but they may also lock programs into a world view that sees foundational skills as a silver bullet for poverty and does not reflect our experience as educators and administrators. One shake of the table and the cards may tumble. Let us hope that we can avoid the tremors while benefitting from the best parts of this vision. •

Ralf St. Clair is Dean of the Faculty of Education at the University of Victoria.

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House of Cards – or – Trojan Horse?: A Response to Ralf St. Clair's House of Cards: Analyzing "Making Skills Everyone's Business"

Ellen Scully-Russ

The George Washington University

esponding to St. Clair's analysis of the recent policy report from the Office of Career, Technical and Adult Education, "Making Skills Everyone's Business: A Call to Transform Adult *Learning in the United States*" (MSEB) (United States Department of Education [USDoE], 2015), is quite challenging, principally because I agree with his house of cards thesis. We depart however, on his response to the "potentially perilous prescription" that is contained in the report. Rather than hope we can "avoid the tremors" that may shake the table and tumble the cards, I call on educators to be strategic in playing the relatively good hand we are dealt in this report. I ask, "can we turn the faulty set of assumptions about the link between skill and the economy (St. Clair's house of cards) into a Trojan horse that allows us to drive a new literacy and adult education agenda that is more aligned with the needs of people and society today?"

I first summarize my understanding of St. Clair's house of cards thesis. Next, I review the relatively good hand we are dealt in this report, specifically the progressive elements that, as St. Clair says, can broaden and challenge our thinking about literacy and adult education. Finally, I offer three action imperatives that will help educators take advantage of the opportunities embedded in this report.

St. Clair's House of Cards

St. Clair's thesis is that even though MSEB represents a progressive policy statement, it is based upon the faulty deficit perspective that pervades U.S. adult education and workforce development policy. Underlying this perspective is the belief that effective performance in the new global economy requires foundational and specialized skills that are largely lacking in the U.S. workforce. Thus, people who are deficient in requisite skills undermine the economic success of the nation. It is this faulty logic that concerns St. Clair the most, arguing it will lead to potentially perilous policy prescriptions that emphasize employment and links literacy and adult education instruction to workforce development. He raises thoughtful questions about whether the employment agenda is in the best interest of learners, especially those who cannot be counted on to work towards employment outcomes. He is also concerned over the recommendation for new outcome measures, fearing they may cause providers to narrow instruction to job related skills and divert limited funds to support new data collection and evaluation activities.

St. Clair reasons the deficit perspective—which locates the problem in individual skill—overlooks the link between structural position

and skill performance. PIAAC data confirm that disadvantaged people are more likely to perform at the lower end of the skills continuum, whereas advantaged people score higher. Further, St. Clair and others (Appelbaum, Bernhardt, & Murnane, 2003) challenge the evidence base of the claim that there is a direct connection between skills and the economy. For example, data show that many of the fastest growing jobs are at the lower end of the skills continuum (Kalleberg, 2011), and that the overall skill requirements for jobs have not changed as drastically or as rapidly as suggested in much of the labor market literature (Cappelli & Keller, 2013).

Playing the Relatively Good Hand in MSEB

My point of departure with St. Clair is his supposition that these faulty premises are a political move designed to sanitize the MSEB and make its recommendations more acceptable to business. Further he describes the underlying policy aim to integrate literacy and adult education with workforce development as a language game used by the Department of Education to justify its meddling into the affairs of states. I believe his evaluation overlooks the new progressive policy agenda contained in the report. Specifically, St. Clair fails to recognize that the basic intent of the report is not to mobilize a new direction in the Career, Technical and Adult Education per se, rather it is a call for new opportunity structures in the U.S. labor market that can provide low-waged and undereducated workers and their families with new pathways to the middle class.

Central to my analysis is the report's call for place-based education and industrial strategies to address quality of life issues in communities through improved education and increased access to middle-class jobs. This view is truly revolutionary in U.S. policy for it acknowledges and attempts to remedy longstanding structural inequalities based on

education, while also seeking to indirectly meddle into the affairs of business. My analysis pivots on my understanding of the structural reforms required to implement career pathways, the model of career and technical education called for in the report.

Elsewhere I have described career pathways as a series of credentials to connect education and work in ways that allow people to work and learn as they move across firms to advance in their career (Scully-Russ, 2013). It is an attempt to respond to the significant industrial restructuring that has dismantled traditional career ladders - and to counter detrimental employer practices like pushing the burden of skills formation onto the individuals and educational institutions. In other words, career pathways are not just strategies to pressure educators to fix workers' deficiencies and align their skills to the needs of business; it is also a structural intervention. one intended to improve equity in education while provoking employers to create new career ladders that improve opportunity for all people.

Key to achieving these outcomes is a strong multi-stakeholder partnership referred to in the report. Giloth (2004) describes these partnerships as workforce intermediaries or "...brokers, integrators, and learners who entrepreneurially enact workforce development rather then simply meeting the market or conforming to a publically mandated set of roles and responsibilities" (p 7). I believe that these partnerships represent a new public space where disconnected labor market institutions and social actors come together to craft a new opportunity structure that is more aligned with the emerging economy and also considers the education and development needs of people and communities. These partnerships often help to cultivate new relationships between community groups and employers helping to connect disadvantaged people to jobs along the emerging career pathways in the industry (Schrock, 2014). These relationships are central because they enable powerful social actors to hold each other accountable for the development of people, the vitality of communities, and the local economy.

First, let us look at the education side of the model. Career pathways require an integration and alignment of career and academic education across all levels of schooling. Educators learn more about the world that students must navigate to become productive members of society. Career and academic content becomes more integrated and the levels of education become more connected and aligned. Education is more relevant to learners for it helps them to learn, develop and build new skills as they move between school and work while crafting a career in a turbulent labor market. As St. Clair noticed, the model calls on educators to broaden their thinking about the role of education in learners' lives. Students no longer learn in preparation for a career - they learn throughout their career and education must align its content as well as its structures and procedures to support these new patterns.

Likewise, employers learn that they must invest in the broader community, of which they are a part, in order to remain economically viable. For example, these models engage employers in the development, and often times, the funding of education and training within the community. In addition, employers learn that to benefit from the new career pathways they must align their internal job structures with the hierarchical structure of the pathway, creating new career ladders in the workplace. Since these pathways involve a number of firms, employers learn more about the human resources practices across the industry, which may lead to improvements in working conditions and wages in order to attract skilled workers.

I therefore argue that in addition to ascribing to the deficit perspective, the MSEB also acknowledges the structural dimensions of the skills problem – and it incorporates this analysis into it prescription. For example, MSEB clearly states:

These findings (related to diminished intergenerational mobility in the US) shared here shake the belief that it is possible to achieve the American dream of upward mobility and that the US education system is fair and offers second chances. These stubborn achievement gaps and areas of stagnate achievement are warnings that the *ladder of opportunity is broken* [emphasis mine]. (p 23)

St. Clair is right that career pathways and workforce intermediaries may lead to a narrowing of education and a new performance agenda but these outcomes are not an inevitable. There is much in the MSEB that educators can use to expand the debate and programs – if we first broaden our thinking and challenge our assumptions about the role of education in the lives of learners and society today.

Action Imperatives

To realize the progressive potential of the MSEB, and to turn the house of cards into a Trojan horse that can change the opportunity structures in society, literacy and adult educators should consider at least three action imperatives.

First, we must understand the deep structural shifts in the labor market and its implication on the links between work, education, and opportunity in society. As St. Clair mentioned, much of our workforce and education policy is based on an assumed, and not fully proven link, between skill and the economy. Yet there is evidence to suggest that education is related to the increased equity gap in today's society (Carnevale, Smith, & Strohl, 2010). Rather than simply reject the skills deficit reasoning, that places the problem in a lack of individual skill, educators must help policy makers and others explore St. Clair's

important question regarding access. Specifically, why some groups seem to have a more difficult time accessing the knowledge required for labor market success than others. Through this line of inquiry, educators can help to provide new and needed insight into the structural dimensions of the problem.

Second, we must become knowledgeable about the policies and community structures, like workforce intermediaries that drive our programs and affect our work. We cannot engage in reforms and broaden the education agenda if we are unaware of the broader political processes and dynamics that frame problems and shape education policy and programs.

Finally, literacy and adult educators need to adopt a new spirit of labor market activism in order to bring about the structural reforms in education and the labor market required to realize the progressive potential of the MSEB. This is perhaps the most challenging action imperative, because as the MSEB report noted, the literacy and adult education workforce consists largely of contingent workers who themselves face difficult labor market conditions that may obstruct their voice in the broader education system. For example, the report makes clear that only 17% of adult education teachers work full-time and that developmental education faculty in colleges is likely to be adjunct. The report concedes that in order to

achieve its reform vision a great deal of change in the working conditions and the professional development of the educators and administrators of literacy and adult education programs will be required. We cannot afford to leave this task to the policy makers—rather we must make this cause our own if we are to have a significant effect on the debates surfaced in MSEB.

MSEB stresses the need for a deeper understanding of the role of education in the political economy of the so-called knowledge society. It illustrates how some in the policy world have come to understand that education is a scarce yet vital resource in today's society. As such, the key to social and economic equity is not just improving access to education, but also providing all people with access to quality, broad and continuous education, linked to new opportunity structures in the labor market. If we reform education but fail to improve jobs in ways that ensure all with a pathway to the middle class, then yes, we have nothing but a house of cards. I hope by recognizing this, educators will play our hand in MSEB more strategically. ❖

Ellen Scully-Russ is an Associate Professor of Human and Organizational Learning at The George Washington University.

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Knowledge, Action, Involvement

JoAnn Weinberger Center for Literacy

t. Clair provides a summary and lays out some of the important issues inherent in the broad strategies articulated in "Making Skills Everyone's Business: A Call to Transform Adult *Learning in the United States*" (MSEB)(United States Department of Education [USDoE], 2015). In this commentary, I will expand on and provide additional evidence of those issues and provide adult educators with examples of steps they could take to ensure that implementation strategies support adult students based on their knowledge of adult learners' needs and expectations and are workable. In particular, this commentary will focus on Strategy 1 in MSEB, "Act collectively to raise awareness and take joint ownership of solutions," as it creates the underpinning for all the other strategies.

The current climate in the field reminds me of the Greek word *kairos*, which describes a moment in time ripe with possibility. An opening for substantial change has occurred with both the publication of MSEB and the passage of the Workforce Innovation and Opportunity Act (WIOA), which will be the major implementation statute in the field for some years to come. Now, adult educators need to take advantage of this opening.

MSEB, building on WIOA, has increased the expectations around collaboration and coplanning across agencies, and the importance of adult educators putting themselves knowledgeably and confidently at the co-planning table has also increased. The collective action of Strategy 1 emphasizes partnerships—partnerships that begin with planning. Partnerships and collaboration have been a mainstay of adult education programs, but now is the time to focus on the joint, mutual, and common interests of Title II providers, and other Titles and even to other federal and state programs not included in WIOA, by going beyond one-stop participation. States have a choice as to whether they have a "unified" state plan that only includes the WIOA programs or a "combined" state plan that adds other federal programs. Regardless of which option is chosen, the shared programs require all stakeholders be at the table and participate actively in discussions about how best to serve adults and out-of-school youth requesting services in the education and job preparation sector. Indeed, this is in the best interest of learners. Systems are, in general, not in place to develop the necessary strategic planning, however. As these are developed, adult educators can provide leadership, not just play supporting roles in this effort.

In particular, adult educators need to press forward in this role for the following reasons:

1. Adult educators bring important and unique perspectives to the planning table. Throughout WIOA, there is an emphasis on serving those with barriers to employment, including low level basic skills; this is a new requirement. We know about these learners' needs, strengths, and challenges as we work with learners whose educational needs span a

broad spectrum from low-level basic skills, to English language acquisition to high school equivalency and transitions to college. Adult educators also bring knowledge of the population in terms of persistence and motivation and workforce preparation services including necessary digital and soft skills. We have experience in bridge programs and contextualized workplace curricula and instruction. This knowledge can enable us to advocate effectively for learners and we can serve as a valuable resource by representing this knowledge in the planning process.

Adult educators can make a case for the value they add to the planning process by pointing to data demonstrating the effectiveness of adult basic skills (ABS) program participation. While St. Clair summarizes the Survey of Adult Skills data on the need for services, and he references the National Reporting System used for annual performance accountability purposes, neither documents the long-term impacts of ABS program participation. However, the U.S. Department of Education's Office of Career, Technical and Adult Education commissioned Dr. Stephen Reder, professor in the Department of Applied Linguistics at Portland State University, to create five research briefs using data from his Longitudinal Study of Adult Learning (LSAL) data to examine the long-term impacts of participation (Reder, 2014a; Reder, 2014b; Reder, 2014c; Reder, 2014d).

Reder reported that between 1998 and 2007, the Longitudinal Study of Adult Learning (LSAL) randomly sampled and tracked nearly 1,000 high school dropouts' participation in ABS programs. The study assessed their changes in literacy skills and literacy practices over time, along with changes in their social, educational, and economic status, to provide a more comprehensive representation of adult literacy development as a result of participating in ABS programs. This study provides a better assessment of program impacts than the annual

performance accountability system as designed through the National Reporting System.

Highlights from this study of the long-term impact of participation in ABS include:

- Participants in ABS programs experience significant, and, in some cases, substantial increases in long-term educational and economic outcomes. The enhanced outcomes require an average of 100 or more cumulative hours of program attendance. The enhanced outcomes do not typically appear until several years following program participation.
- The income premiums of ABS program participation average \$10,000 per year, in 2013 dollars.
- The overall GED attainment rate is estimated to have risen from 16% to 36% because of adult basic skills (ABS) program participation.
- ABS programs appeared to be effective "onramps" into postsecondary education, but additional supports are likely needed for completion.

These findings provide important evidence of the long-term effectiveness of Title II programs. Adult educators can bring this information to the planning table to make a strong case for the importance of adult education and the expertise of adult educators. Return on investment is a constant question raised by policy makers, and the findings on income premiums and its concomitant relationship to taxes paid are important. Additionally adult educators can use these data that more aptly demonstrate the impact of participation to argue that the MSEB strategies should be evaluated by outcome data that go beyond the NRS measures.

If adult educators do not come to the table and find ways to make their voices heard and their expertise respected and utilized, the services offered in response to WIOA and MSEB may not be in the best interests of adults in need of basic skills development. State plans and their requirements for regional/local plans will provide the structure for these implementing strategies.

- 2. Adult educators know how to teach and should bring that knowledge of best practices to the table. This includes the push toward greater use of technology to increase the numbers of adults served. Distance learning, whether "pure" or blended, is currently widely used. This is an opportunity to share and move forward with an important innovation with partners.
- 3. Collaboration can strengthen opportunities to implement integrated education and training (IET) across Titles. One discussion that will have to occur as part of state and local planning will be co-enrollment for IET using "braided" funding. This will now be possible because Title II services will no longer be considered "school," and out of school youth services specifically allow for youth ages 18-24 to access Title I and II services simultaneously. The Title I Youth allocation formula now includes an out-of-school youth (OSY) allocation that has been increased from 30% in WIA to 75% in WIOA. Title II providers have experience and know how to work with this population and provide opportunities to accelerate and support youth participants to enter work-based training. Thus, the Title I OSY allocation can be used for training with Title II providers involved in co-planning and co-instruction with the supports needed to offer education services, workforce preparation activities, and training simultaneously and effectively. This collaboration can greatly strengthen IET provision.

"Accelerating Opportunity," the report on a national study conducted by Anderson, Eyster, Lerman, O'Brien, Conway, Jain, and Montes (2015), provided data regarding need as well as examples of co-enrollment programs. Need is expressed as:

Over 26 million adults lack a high school degree;

- 93 million lack the basic literacy skills necessary to succeed and advance in college and the workplace; and,
- 1.3 million young people drop out of high school every year.

To address this need, Jobs for the Future (JFF) conducted a study which yielded a detailed set of implementation recommendations for IET, including braided funding, team teaching, comprehensive supports and options for career pathways. Building upon JFF's Breaking Through report and Washington State's Integrating Basic Education and Skills Training (iBest), JFF has worked with seven states in a multiyear study to implement model programs. However, with its emphasis on community colleges, this effort has not demonstrated the success of other providers for the training component in supporting the attainment of postsecondary credentials. Additional research is needed to do so. Meanwhile, this important national study provides helpful strategies for co-enrollment efforts and provides examples of how some MSEB strategies can be enacted.

The development of the local plan is the beginning of the co-planning process. Local plans must be developed and approved by March 2016. This is the first way in which adult educators should become involved. However, planning efforts will not stop there. The imperative to develop career pathways and industry sector specific initiatives will create a need to continue the co-planning conversations. In order not to leave these tasks to the workforce development boards (WDBs), formerly known as workforce investment boards (WIBs), one-stops and training providers, adult educators need to become informed about the labor market data and understand employment trends and employer needs. In order to do so, adult educators must inform themselves about the employment part of the IET equation so that they can participate as equals with their labor partners in discussions about career pathways and integrated education and training (IET). They must also be able to present students with relevant information which enables them to understand their economic opportunities. For many learners, career awareness is the first step towards a career pathway. Therefore, adult educators need to have an understanding of sector strategies and industry partnerships at the local, regional and state levels that build on employee needs to develop tailored programs which establish career pathways.

St. Clair affirmed that not all "lower skilled" adults as defined by PIACC research and described in MSEB have the same needs. Therefore, training and job opportunities cannot be designed as one size fits all. Career pathways will be different for those re-entering the education and training sector after incarceration, for example, than for those who have not been incarcerated. For those with the lowest basic skills, IET or job training may need to be a next step only after their skills have been upgraded. St. Clair alludes to the potential for "creaming", but did not directly address it as an issue. Adult educators can play an important role in working to avoid this by getting involved at both the state and local levels to ensure that one-stop services are inclusive of all the students they serve, career pathways recognize that not all adult students can be quickly ready to obtain their high school credential, and industry sector partnerships include upskilling for current employees who are basic skills deficient for the jobs of tomorrow.

It is clear that adult educators can bring new ideas and share important knowledge and experience of adult learners because they are well versed in the realities of serving this population of program participants. Whether the partnerships envisioned actually do break down the traditional silos that have separated service providers in the employment sector from those in adult education and one funding source from another remains to be seen. The local

WDBs should play an important role in this. They can concurrently support the strategies articulated in MSEB and WIOA Title II requirements in several ways. First, they can align local resources to ensure that those with low literacy continue to be served. Second, they need to identify which career pathways can be a good match for low skilled participants. So, for example, although hospitality is not a high demand occupation, it is often important to the local economy and represents an area in which the low skilled can start up the employment ladder. Third, they should insure that not all Title II funds are spent on IET because not all adult education students are ready for it in terms of skills, nor are they all in need of it. Consideration in the plan should be given to using some Title II resources along with Title I resources for IET, because the provision of services does not have to be from the same entity. Collaboration between Title I providers and Title II providers can produce positive outcomes for both in terms of service to participants and professional development. By enabling a Title II provider to offer the education and workforce preparation components and the Title I provider to offer the training and support the workforce preparation, it would be a win-win in terms of use of resources and expertise; Title I Youth Services is certainly included in this equation because 18-24 year olds can be served by both Title I Youth and Title II.

One goal of MSEB is to encourage collective action to achieve impact. A key element of meeting this goal is leveraging resources. Co-planning, referred to in WIOA as "unified planning" is required to accomplish this. One way that WIOA requires that this be implemented is to require that local WDBs review and make recommendations, but not approve, grant proposals for WIOA Title II funding from adult education providers. This new requirement serves as a check on alignment and use of labor market information to develop the providers' plans.

Therefore, adult education must be at the table in the planning phase for input on the needs of adult learners related to the WDB priorities, not just meet the requirement to submit their proposals for review.

St. Clair's use of the house of cards metaphor is apropos. MSEB makes the case for funding that goes beyond the federal government to include private, faith-based, and philanthropic efforts. This is of critical importance because one of the key issues, as stated in MSEB, is the need for resources, whether they are to create partnerships, implement programs, secure needed technology, or provide professional development. Just the planning necessary to begin requires resources. Despite the additional partnerships and collective action underpinning of all seven strategies, however, these resources have yet to be realized. Adult educators have been doing "more for less" for many years, but now even more is being required. WIOA requirements for alignment and integration across programs are critical to the successful implementation of all the MSEB strategies; however, the resources are not yet in place. When 92% of the adult educators are parttime, the need for full-time staff and the requisite professional development will not be eliminated.

Capacity building of administrators is also needed if collective impact will be realized. Without these, the MSEB strategies are indeed a house of cards, lacking a strong foundation on which to build.

MSEB recommends seven strategies and provides exemplars of their implementation in programs throughout the United States. Yet neither are they evident in many programs, nor are all seven strategies occurring simultaneously in any one program. Across the United States, systems and resources are not in place for the necessary partnerships to be formed and implementation to be successful. While this reality also puts the house of cards on shaky ground, it should not fall for lack of adult educator involvement. It is extremely important for the field to be informed about the changes and to come to the table proactively offering insights and innovations based on experience and knowledge of adult learners. In this way the field can contribute to the potential success of a vision articulated by MSEB and structured by WIOA. ❖

JoAnn Weinberger is President/Executive Director (retired) of the Center for Literacy.

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PRACTITIONER PERSPECTIVE

More than
a "Basic Skill":
Breaking Down
the Complexities of
Summarizing for
ABE/ESL Learners



Abstract

This article describes the complex cognitive and linguistic challenges of summarizing expository text at vocabulary, syntactic, and rhetorical levels. It then outlines activities to help ABE/ESL learners develop corresponding skills.

Introduction

ummary writing is often considered a "basic skill" learned early in the educational journey (Kissner, 2006; Van Duzer & Florez, 2003). As a result, many Adult Basic Education (ABE) and English as Second Language (ESL) educators may assume that summary writing is already or easily attained by their learners. Many common ABE/ESL summarizing tasks and texts could support this perception. Summarizing the narrative texts typical of many ABE/ESL classrooms (Johnson & Parrish, 2010) may only require recalling events in the sequence they occurred. Likewise, essays appearing in many ESL and developmental

By Jennifer Ouellette-Schramm Hamline University writing textbooks are written with explicit main ideas, supporting ideas, and details that learners can, with practice, learn to summarize by searching for the main idea within the first sentences of the introduction and for the supporting ideas at the beginning of the following paragraphs. However, summarizing more linguistically complex expository texts, where main ideas may be implicit and supporting ideas can be interwoven, poses linguistic and cognitive complexities that can challenge ABE and adult ESL learners alike (Cummins, 1979; Zwiers, 2008).

While challenging, being able to summarize expository texts is increasingly important for ABE/ESL learners to succeed in their educational goals. Proficiency with summarizing underlies the evidence-based writing demands of the Graduate Education Development (GED) test (GED Testing Service, 2013). Summarizing academic texts is a common requirement in post-secondary education (Horowitz, 1986; Johnson & Parrish, 2010) and is foundational to essay writing, which requires condensing and synthesizing academic texts to support claims (Swales & Feak, 2012). Accordingly, summarizing informational texts appears prominently in the national College and Career Readiness Standards (Pimentel, 2013).

Just as developing competence with summarizing expository texts can challenge adult learners, teaching this skill can challenge adult educators. Educators can help learners by understanding the linguistic and cognitive demands of expository summarizing, and by scaffolding those challenges, or providing activity structures that support complex cognitive and language skills as learners develop them (Taylor, 2006).

The Linguistic and Cognitive Demands of Summarizing

Cummins (1979) describes skills such as summary-writing as Cognitive Academic Language Proficiencies (CALP), distinct from Basic Interpersonal Communication Skills (BICS). He describes BICS, which include day-to-day communication tasks such as reading signs in a supermarket or writing an informal note, as social, informal competencies that are easier to acquire than CALP, which he describes as "strongly related to overall cognitive and academic skills" (p.198). Zwiers (2008) likewise describes the academic language needed for many CALP skills as "a set of words, grammar, and organizational strategies used to describe complex ideas, higher-order thinking processes, and abstract concepts" (p. 20).

Cummins (1979) argues that ESL learners proficient in CALP in their first language can more quickly and successfully acquire CALP in a second language. Cumming's (1989) research supports this theory, finding that inexperienced English Language Learner (ELL) writers face challenges closer to inexperienced native English speakers than those of more experienced ELL writers. Inexperienced writers, whether writing in English as a first or second language, demonstrate difficulty conceptualizing their writing, and struggle to keep larger segments of meaning in mind during the writing process.

To write a successful summary, a learner must first understand the text being summarized (Swales & Feak, 2012). This requires unpacking the text at vocabulary, sentence, and text structure, or rhetorical, levels (Schleppegrell, 2004; Zwiers, 2008). On the vocabulary level, learners need to understand what Zwiers (2008) describes as *brick* words, or content-specific vocabulary, such as "enrollment" or "coverage." Brick words also include terms that take on a new or more specific meaning in a certain

context, such as "marketplace" in the context of healthcare. Learners also need to understand what Zwiers (2008) calls mortar words and phrases, which hold ideas together and show relationships between them such as "although" or "on the other hand." On the sentence level, learners need to unpack the long and dense structures frequently found in expository texts, such as compound and complex sentences with multiple clauses (Schleppegrell, 2004); dense noun phrases; and nominalizations or verb or adjective phrases utilized as single abstract nouns (Swierzbin, 2014). On the rhetorical level, comprehending a text requires understanding how that text is structured (Schleppegrell, 2004; Zwiers, 2008). In order to begin identifying the main ideas and key supporting information that comprise the essence of summary writing, learners must also distinguish key ideas from supporting ideas and construct logical connections among them (Jitendra & Gajria, 2011). This in turn requires recognizing how primary and subordinate ideas are organized within a text (Leki, 1998; Zwiers, 2008). Reading on a rhetorical level and identifying relationships between ideas is exactly what inexperienced readers of expository texts struggle with, as they tend to focus on concrete and surface-level details rather than how a work is constructed as a whole (Kintsch, 1989).

To write a summary of a text once it has been comprehended, learners need to be able to use academic language to articulate main ideas and relevant supporting information. On the individual word level, paraphrasing to avoid plagiarism demands carefully using synonyms (Swales & Feak, 2012). For example, if paraphrasing the sentence, "Mr. Obama also lashed out at repeated conservative efforts to repeal or defund the law," from the BBC news article, *Obama touts high healthcare enrolment* [sic] after deadline (April 1, 2014), learners may need

to identify synonyms to express the meaning of "lashed out," "repeated conservative efforts," "repeal," or "defund." Summarizing also requires being able to accurately use appropriate "reporting" verbs (Hinkel, 2004), such as "explains," "describes" or "argues," e.g., "The article explains/describes/argues that....". Syntactically, completing the sentence "The article explains that..." requires the ability to construct a complex sentence with one or more subordinate clauses, e.g., "This article explains that President Obama believes (subordinate clause 1) [that] his healthcare law has been successful and is not going anywhere (subordinate clause 2).

In writing a summary, learners need to apply the academic writing convention of using simple present tense verbs (Hinkel, 2004; Leki, 1998), rather than what to some learners appears to be the more intuitive strategy of using simple past verbs to describe an article written about a past event. To paraphrase, learners also need to be able to recast sentences with original grammatical structures (Kissner, 2006). On the rhetorical level, learners need to relate main ideas and supporting ideas in a logical way, which involves attending to cohesion (Flower & Hayes, 1981). Conceptualizing one's own writing on a rhetorical level and attending to how ideas are organized are among the most significant challenges for struggling ABE and ESL writers alike (Cumming, 1989; Flower & Hayes, 1981).

Summarizing Challenges and Activities

The following activities can help learners unpack complex language in expository text and begin using academic language to summarize it.

Vocabulary

To become familiar with new vocabulary in an expository text, Zwiers (2008) recommends "right

away" activities that offer immediate practice and repetition. He describes two activities from Beck, McKeown, and Kucan (2002), the Have you ever? and the Idea completion activity. In the prior, the instructor inserts the target word or phrase in a question beginning with "Have you ever?" and learners ask and respond to the question. In the latter, the instructor provides sentence stems using the target word or phrase, prompting learners to finish the sentences. For example, to practice the brick verb "tout" in the title of the BBC news article, Obama touts high healthcare enrolment [sic] after deadline (April 1, 2014), learners could ask and answer, "Have you ever touted something you were proud of?" Later in that article, the sentence appears, "Though the reform had at times been 'contentious and confusing, he said, 'that's part of what change looks like in a democracy." To practice the brick adjectives "contentious" and "confusing," learners might ask and respond to a question such as "Have you ever experienced a contentious or confusing issue in your community?" To practice the mortar word "though," learners might complete a sentence stems such as, "Though I went to bed early last night, I..." Learners can complete questions and sentence stems orally in learner-pairs, and instructors can elicit examples that provide clarification or learning opportunities for whole class review.

Sentences

One challenge with understanding long compound and complex sentences is recognizing distinct meaning units and the relationships among them. Relatedly, it can be cognitively challenging for learners to hold several ideas in mind at once (Cumming, 1989). The following complex sentence appears in the previously mentioned article: "An estimated 7.1 million Americans signed up for

coverage to avoid penalties prior to Monday's deadline for doing so, exceeding initial projections." To understand this sentence, learners need to understand that the *adverbial subordinate purpose clause* (Cowan, 2008), "to avoid penalties prior to Monday's deadline for doing so" modifies and provides a reason for the main verb phrase, "signed up for coverage." A learner also needs to know that the *free adjunct* or *supplementive clause* (Cowan, 2008) "exceeding initial projections," loosely modifies the main clause, "An estimated 7.1 million Americans signed up for coverage." Finally, because the nominalization "projections" makes it unnecessary to state who did the initial projecting, a learner needs to deduce who might have made the projections that were exceeded.

One exercise for unpacking sentences such as the one above is for learners to reconstruct sentences that have been broken down into distinct meaning units on index cards. For lower level learners, or as a first step, the index cards might contain larger meaning units such as the subject phrase, "An estimated 7.1 million Americans;" the main verb phrase, "signed up for health care;" the clause with implied subordinator, "[in order] to avoid penalties prior to Monday's deadline for doing so;" and the final supplementive clause, "exceeding initial projections." For more advanced learners, or in a review activity, the subordinate clause could be broken down into further components, e.g., "to avoid / penalties / prior to/ Monday's deadline / for doing so."

After working with component parts of the sentence, learners might practice identifying an agent for the nominalized verb "projection" in the modifying clause, "exceeding initial projections." For example, they might choose appropriate nouns to place in the subject position of a sentence such as, ______ initially projected that fewer people would sign up.

Text Structure

Understanding how a text is constructed can help learners better summarize it (Kissner, 2006). To identify the components of a text, such as main ideas, and to distinguish relevant supporting ideas, learners can work in pairs to analyze sentences or sentence groups in an article, labeling them with phrases such as *background information*, *big idea* or *main idea*, and *supporting detail*. To further scaffold and limit the amount of text learners have to focus on, it can be helpful for the instructor to pre-identify text that serves those functions and place them in a graphic organizer. Using a graphic organizer, learners might also contrast important versus less important, or relevant versus irrelevant details.

Summary Composing

Once learners have identified key main ideas and supporting details in a text, they may be ready to draft a summary using a paragraph frame, which consists of pre-written sentence starters (Zwiers, 2008). On the vocabulary level, using a paragraph frame offers learners the opportunity to choose between reporting verbs rather than think of them on their own. On a syntactic level, a paragraph frame can provide partial complex sentences, which learners can complete rather than write from scratch. On a rhetorical level, a paragraph frame provides a skeletal structure that introduces text elements such as an introduction, main idea statement, and supporting details. A summary paragraph frame for the BBC Obamacare article mentioned above might look like:

"In the article,[author's name] explains/
describes/argues that _______. To illustrate
this point, the author quotes ______ as
saying ______.

As learners become more practiced with summary writing, they can gradually move away from using paragraph frames, and begin constructing their own summaries from outlines. Completing paragraph frames like the one above can be done individually or collaboratively.

As more ABE and adult ESL learners aspire to pass the GED test and transition into post-secondary education, and as more academic language skills, including summarizing, appear in ABE national standards (Pimentel, 2013), adult educators increasingly need to understand and address CALP including summarizing expository text. Thus, the use of scaffolding strategies can help ABE/ESL learners develop the complex linguistic and cognitive skills they will need to accomplish increasingly ambitious academic goals. ��

Jennifer Ouellette-Schramm holds an MA ESL and Ed.D. from Hamline University in St. Paul, Minnesota. She has worked with ABE and adult ESOL learners for eight years at the Minnesota Literacy Council, and also teaches college ESOL and developmental writing college writing courses along with MA ESL reading and writing pedagogy. Her research interests include the intersection of adult epistemological development and academic literacy learning.

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RESEARCH DIGEST



Digital Inclusion and Digital Literacy in the United States: A Portrait from PIAAC's Survey of Adult Skills

By Stephen Reder

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Background

he report by Stephen Reder, Digital Inclusion and Digital Literacy in the United States: A Portrait from PIAAC's Survey of Adult Skills, is one of a series of reports based on the Program for the International Assessment of Adult Competencies (PIAAC) data. According to the National Center for Education Statistics (n.d.), PIAAC is coordinated internationally by the Organization for Economic Cooperation and Development (OECD). OECD commissioned a series of studies of adult literacy under the PIAAC Survey of Adult Skills (SAS), which was conducted in 2011-2012. These reports, including the one reviewed here, can be found at http://piaacgateway.com/researchpapers/. This review focuses on certain elements of Reder's research, the scope and depth of his data analysis being more comprehensive and complex than can be captured in a short review of this nature.

There are 24 countries participating in OECD's efforts to assess adult literacy worldwide, providing a rich base of information that allows for international comparisons. Within the United States, PIAAC is sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES). The current PIAAC study, conducted in 2011-2012, derives from the National Adult Literacy Survey (NALS) conducted in 1992 of 13,600 adults residing in households and prisons. This study was followed by the National Assessment of Adult Literacy (NAAL) in 2003 in which more than 19,000 adults were surveyed. The International

Reviewed by Gary Dean

Indiana University of Pennsylvania Adult Literacy Survey (IALS), developed by Statistics Canada and ETS (in collaboration with participating national governments), was conducted in 22 countries in three waves between 1994 and 1998. In addition, Statistics Canada sponsored work on the Adult Literacy and Lifeskills Survey (ALL) conducted between 2003 and 2008. This rich historical background illustrates the ongoing efforts to better understand adult literacy in the United States and globally.

The PIAAC assessments included adults aged 16-65 and addressed three broad areas: reading, numeracy, and problem-solving in technology-rich environments. PIAAC is the first large-scale assessment of adults in their homes made available in two modes of administration: computer and paper-and-pencil. Because PIAAC was computer-based, participants' ability to manage information and solve problems on a computer were assessed. Additional information about PIAAC can be obtained at http://www.nces.ed.gov/surveys/PIAACindex.asp.

Reder's intent was to review the PIAAC data in terms of digital inclusion and digital embedding. He defines digital inclusion as the ability of individuals and groups to access and use information and communications technologies (ICT). Digital inclusion is an update of the idea of digital divide. Digital divide was a phrase used to describe the gap between those who had access to and made use of technology versus those who did not. Digital inclusion is a more subtle and complex concept indicating that different groups of people have varying degrees of access to and proficiencies in the use of ICT. For example, vulnerable groups such as Blacks, Hispanics, immigrants, lower social economic status individuals, the elderly, and people with disabilities have less access to ICT than other populations. This leads to characterizing digital inclusion as digital equity among the various subpopulations.

Digital inclusion can be described as a pathway consisting of four stages. The first stage, access, is characterized as having access to information and communications technology. The primary barrier in this stage is the lack of access to computers. The second stage is taste, that is, people having interest in using technology. The primary barriers at this stage are dispositional, that is, not seeing the relevance of ICT and lack of confidence in using computers resulting in a lack of need or desire to use computers. The third stage is readiness, in which basic computer skills (such as keyboarding and mouse skills) are developed. The corresponding barrier is lack of basic computer skills. The last stage is digital literacy, in which people develop ICT uses and proficiencies.

Digital embedding is a more complex concept involving the interaction of

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Digital embedding is a more complex concept involving the interaction of digital equity with economic and social outcomes.

Respondents were identified in terms of their location in the four pathway stages: access, taste, readiness, and digital literacy.

digital equity with economic and social outcomes. The outcomes identified for inclusion in Reder's study are earnings, employment, social trust, volunteerism, political efficacy, and health. The basic question posed by the author regarding digital embedding is to what extent is digital literacy associated with these economic and social variables.

Method

Data for Reder's study were taken from the OECD data from the 2012 Survey of Adult Skills (commonly referred to as the PIAAC data). These data were based on a survey obtained from 5,010 adults in the U.S. The PIAAC data addressed three broad areas: literacy, numeracy, and problem-solving skills. The assessment of problem solving skills was addressed through two means, either through a paper-based survey or a computer-based survey. Some respondents completed the paper-based survey while others who indicated at least a basic knowledge of computer use completed the computer-based version of the survey. These individuals were assessed on problem-solving in a technology-rich environment (PSTRE). It is this element, PSTRE, that was used to determine the extent of digital embedding with the economic and social outcomes described above. PSTRE is defined as "using digital communications tools and networks to acquire and evaluate information, communicate with others, and perform practical tasks" (Reder, 2015). This involves solving personal, work, and civic problems by developing plans, setting goals, and accessing and using information through computers and networks. PSTRE was assessed through 14 computer-based problem solving tasks which varied in complexity.

Digital inclusion was measured by ascertaining the stage at which people were located along the digital inclusion pathway. Respondents were identified in terms of their location in the four pathway stages: access, taste, readiness, and digital literacy. These stages were then compared to respondents' affiliation with the various subpopulations to acquire measures of digital equity.

Major Findings

Measures of digital inclusion indicate that 83.7% of U.S. adults have attained digital literacy as defined in the digital inclusion pathway. The remaining adults are divided among the digital readiness stage (6.6%), the digital taste stage (4.2%), and the digital access stage (5.5%).

Digital equity was measured using a series of complex regression analyses. A nontechnical approach is taken here to highlight some of the major findings from these analyses. The basic issue is whether inclusion at a stage along the digital inclusion pathway was a predictor of membership in one of the demographic groups studied. It has long been understood that age, level of education, and employment status (working or not) are related to digital literacy. Reder's analysis demonstrated that even when these three variables are controlled, it is evident that there is inequity in the digital inclusions pathway. Women and U.S.-born citizens are shown to be further ahead while Blacks, Hispanics, men, and immigrants are shown to have less equity in terms of digital access, taste, and readiness. The author concludes that racial, gender, and immigrant status are indicators of lack of digital equity.

Digital embedding was determined through several different types of regression analysis with ICT use and PSTRE level related to the various economic and social outcomes. A brief overview of these findings is presented here for the major work related variables (earnings and employment status) and the four social outcomes (social trust, volunteerism, political efficacy, and health).

Earnings: Digital embedding is evident for earnings. ICT use at work and PSTRE are both significant positive predictors of earnings for education. Interestingly, race/ethnicity and national origins are not significant predictors of earnings in this analysis once ICT and PSTRE had been taken into account. Gender, however, was a significant negative predictor with women earning 35% less than men even after ICT and PSTRE have been taken into account. In addition, level of education, as has been noted in previous research, is a significant positive predictor of earnings.

Employment: Based on the regression analyses, there is no evidence for digital embedding of ICT and PSTRE with employment. As in earnings, race and immigrant status are also not predictors of employment. This means that ICT and PSTRE were not related. However, gender and education are significant predictors of employment status with gender being a significant negative predictor and education being a significant positive predictor.

Social Outcomes: Digital embedding is evident for all four of the social outcomes. The implication is that ICT and PSTRE proficiencies are predictors of levels of social trust, amount of volunteerism, political efficacy, and overall health.

Discussion

Interpretation and application of the findings from this research are complex. In general, Reder has shown that in regards to digital inclusion and equity, there are gender, race, and immigrant status differences at different stages of the digital inclusion pathway. One implication of these findings is

The basic issue is whether inclusion at a stage along the digital inclusion pathway was a predictor of membership in one of the demographic groups studied.

Interestingly, race/ ethnicity and national origins are not significant predictors of earnings in this analysis once ICT and PSTRE had been taken into account. Digital literacy training for those who are employed and those who are seeking work may need to take very different forms.

The report substantiates common wisdom: technology skills are related to success in the workplace and more active involvement in social outcomes.

that different strategies for enhancing ICT and PSTRE proficiencies may be appropriate for different groups in different stages of the digital inclusion pathway. Reder (2015) points out that "PSTRE proficiency, framed as a blend of ICT and problem-solving skills, develops differently and requires additional instructional support than does ICT use" (p. 23).

The findings related to digital embedding are also complex and difficult to interpret. Again, Reder (2015) notes that "the lack of digital embedding of current employment status is striking given the strong digital embedding of earnings among those who are working" (p. 23). The implications of this may be that digital literacy training for those who are employed and those who are seeking work may need to take very different forms. Digital embedding related to the social outcomes indicates that enhanced ICT and PSTRE may have positive outcomes for social trust, volunteerism, political efficacy, and general health. Reder points out that the last outcome may be particularly important as generally improved health could amount to large economic returns that could be used to fund education and training programs for adults.

Overall, this report offers a first analysis of these important and complex issues. As such, the findings from the report should be interpreted with caution. Further research is needed to identify the subtle relationships among digital equity and digital embedding in the economic and social variables studied. In some ways, the report substantiates common wisdom: that marginalized groups are less likely to experience digital inclusion and that technology skills are related to success in the workplace and more active involvement in social outcomes.

Gary Dean is Professor and Chair in the Department of Adult and Community Education at Indiana University of Pennsylvania.

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BOOK REVIEW



Last Reader Standing: The Story of a Man Who Learned to Read at 54 By Archie Willard and Colleen Wiemerslage

2013; Bettie Youngs Book Publishers, San Diego, CA 137 pages, softcover, \$15.95

espite not being able to read above the 5th grade level, Archie Willard managed to graduate from high school, attend college for a couple of years, work in manufacturing for 31 years, serve on his city council, and hide his limited literacy from everybody. It was not until Willard was laid off from his job at the age of 54 that he shared with his wife his limited literacy proficiency when he needed help completing applications and obtaining a commercial driver's license. When his wife read Bruce Jenner's account of his struggle with dyslexia and shared this with Willard, he began seeking answers about his own struggles. *Last Reader Standing* is Willard's account of his journey from a painful and frustrating schooling career as a child to his midlife transformation into a successful new reader and national advocate for other struggling adult readers. This book is written for other struggling adult readers, researchers, policy makers, and educators.

The book is organized in three distinct parts: Willard's childhood, his early and middle adulthood, and his later experiences as an advocate for other struggling adult readers. Part 1 includes four chapters where he recounts that his struggles with reading as a child were misunderstood by teachers, his family, and himself. Willard was treated cruelly by some teachers and fellow students who labeled him "stupid" or "lazy." He learned to hide his difficulties by compensating in other ways such as memorization, seeking help from peers on homework, and developing his athletic ability. During high school, Willard became a leader in student government, a member of the marching band, and an accomplished football player. Willard earned a football scholarship to a junior college

Reviewed by Chris Dunagin Miller

> Georgia State University

He recounts that his struggles with reading as a child were misunderstood by teachers, his family, and himself.

Willard shared his story, which allowed him to envision himself as an advocate for other people.

and managed to finish two years despite his struggles with literacy. Once Willard transferred to a four-year college, however, it became too difficult to get by using his strategies of memorizing and diligent work. Willard was ashamed to reveal his struggles and did not know of any resources for helping him at the school, so he dropped out.

Part 2 includes seven chapters that begin with Willard's young adulthood where his hopes and dreams are curtailed by his limited literacy then transition to his becoming a new reader and advocate for others. Willard found a job in a manufacturing plant working on the assembly line where he stayed for 31 years. Just as he did in his childhood, Willard managed to deflect attention from his literacy difficulties while becoming successful in other ways. Willard managed to get elected to city council and serve successfully. However, he also continued to struggle with literacy tasks, such as when his daughter was born and the hospital personnel needed him to complete various forms.

Years later, Willard's wife read an article about another struggling adult reader who was participating in reading classes. Willard sought an adult reading program at Iowa Central Community College, driving outside of his small town so that he could hide his struggles from his friends and neighbors. After two years of tutoring with a compassionate and able teacher, Willard was asked to address a group of elementary school children who were struggling readers. Fighting his own feelings of shame but remembering the pain of being a child who cannot read like the other children, Willard shared his story, which allowed him to envision himself as an advocate for other people. Willard began addressing a variety of groups including children with dyslexia, education students and faculty, and adults with disabilities.

Part 3 includes eight chapters and begins with Willard's growing awareness that struggling adult readers were often absent from the membership and meetings of the organizations formed to help them. Having served on the State Board of the Orton Society and on the Board of the Learning Disabilities Association of America, Willard was invited to attend the State of Iowa literacy meeting in 1990 and tell his story along with other adult new readers. This was an exciting time for Willard and marked the first time that he met with other struggling adult readers to share experiences while advocating together for a political voice. After this, Willard became a professional adult educator in Iowa. Willard's advocacy interests include social justice and health literacy. Willard has worked from the local to the national and international levels laboring on behalf of struggling adult readers. Willard formed VALUE USA (http://www.valueusa.org/), a national organization of new adult readers

working to improve educational systems and support the development of struggling adult readers.

This book is an articulate memoir. Willard vividly describes the challenges that struggling learners must endure, and many struggling adult readers will recognize themselves in Willard's difficulties as a child and as an adult. Willard points out several of the practices that particularly helped him, such as his teacher's use of stories about other learners who have had to struggle with challenges, completing authentic activities such as the forms he needed to fill out for his job, and attending lectures to help fill in cultural gaps left by not being well read. In his work as an advocate, Willard recounts his struggles and successes in finding a place at the table with professional researchers, educators, and policy makers. This book serves as a reminder that struggling adult learners should be encouraged to share their voices and ideas by being invited to join in on policy discussions and decision making. I recommend this book for adult basic education practitioners, researchers, and policy makers. It will broaden their understanding of the experiences of adult learners. It is important to see this population becoming agents in their own learning and advocacy. I also recommend this book for struggling readers who will relate to and be inspired by Willard's memoir.

s uec s. s. d e

Christine Dunagin Miller is a doctoral student in Educational Psychology at Georgia State University. Her primary research interests include the literacy development of adolescents and adults who struggle with reading and writing. She is interested in motivational constructs, educational history, and perseverance.

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This book serves

WEB



Science Videos for Adults

group of adult education science teachers and I have been reviewing science instruction videos for adult learners in a LINCS Science Community of Practice Micro-group. We have found several science video websites and many specific instructional videos that, although not specifically made for adult learners, are engaging and suitable for adults who need to learn science, for example, in preparing for a high school equivalency test. Equally important, we have learned about how to use science videos.

Just watching videos, regardless of their quality and engagement, does not necessarily increase knowledge. Even when students say they have learned a lot from watching a video, some research shows they have not. They watch passively, looking for confirmation of what they think they already know. A better way to make use of videos is to begin by asking students what they know, and then recording that on a flipchart or chalkboard, or, for the technology-inclined, using Coggle on an Electronic whiteboard.² Then, after showing the video, return to the flipchart, chalkboard or electronic whiteboard, and ask students what they would like to change, what they have learned or are not as sure about.

Here are some recommended science video collections, and for some of these, some recommended science categories or specific videos:

Reviewed by David J. Rosen

> Newsome **Associates**

Annenberg Science Videos

http://www.learner.org/resources/browse.html?d=6

- The Brain: Teaching Modules http://www.learner.org/resources/series142.html
- Earth Revealed http://www.learner.org/resources/series78.html
- The Mechanical Universe...and Beyond (Physics) http://www.learner.org/resources/series42.html
- Planet Earth http://www.learner.org/resources/series49.html
- The World of Chemistry http://www.learner.org/resources/series61.html

CK-12 Science

http://www.ck12.org

CK-12 Foundation is a non-profit that creates and aggregates high quality curated STEM content. The web site has sections for teachers and for students. It offers videos, audio files, images, text, quizzes and interactive learning objects

- Earth Science http://www.ck12.org/earth-science/
- Life Science http://www.ck12.org/life-science/
- Physical Science http://www.ck12.org/physical-science/
- Biology http://www.ck12.org/biology/
- **Chemistry** http://www.ck12.org/chemistry/
- Physics http://www.ck12.org/physics/

Curriki http://www.curriki.org

Davidson University Science Videos Collection

http://www.bio.davidson.edu/courses/movies.html

Education on Demand

http://edexcellence.net/wordpress/education-on-demand

Science Video categories

- Dinosaurs and other prehistoric animals
- Fish and other aquatic animals
- Insects
- Frogs and other amphibians
- Reptiles
- Birds
- Mammals
- Human evolution
- Earthquakes and volcanoes
- Outer space
- Systems of the human body

Gooru Learning http://www.goorulearning.org

Hewitt Drew-it! Physics series channel on YouTube

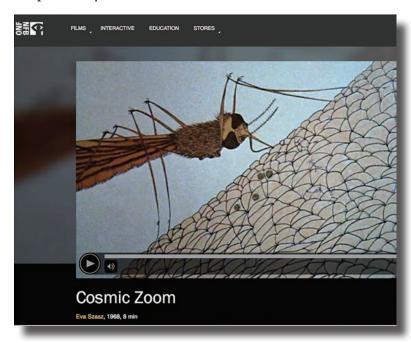
https://www.youtube.com/results?search_query=hewitt+drew+it+channel

How Stuff Works http://www.howstuffworks.com/ (Choose Health and/or Science)

Jefferson Lab Science Series http://education.jlab.org/scienceseries/archive.html Science Series Video Archives—79 science videos

Khan Academy Science Videos https://www.khanacademy.org/#library-section

National Film Board of Canada Sciences Films https://www.nfb.ca/ Search for "Science" and specifically for "Cosmic Zoom"



Nature (PBS Video) http://video.pbs.org/program/nature/

NEOK-12 http://www.neok12.com/

Good videos on enzymes, proteins, carbohydrates and digestion

Nova (PBS Video) http://video.pbs.org/program/nova/

OER Commons Video Resources in OER STEM Science User Group

https://www.oercommons.org/groups/oer-stem-science-user-group/47/

(Search for these videos and others)

- 1964 Alaska Earthquake
- Monarch Butterfly Migration
- Botany of Desire—Monoculture
- Physics—Introduction to Waves
- Health—How do cancer cells behave differently from healthy ones?
- Reactions in Chemistry
- Biology: Taxonomy and the tree of life
- Sex determination: more complicated than you thought
- How simple Ideas lead to Scientific Discoveries

Healthcare and Medicine (from OER Commons)

- Khan Academy Science Videos. Over 200 to choose from
- Viruses https://www.oercommons.org/courses/biology-viruses

Smithsonian Channel http://www.smithsonianchannel.com/sc/web/home

TV411 http://www.tv411.org/science

A collection of free, professional quality online "video magazine" articles on science for adult basic skills learners with the theme of cooking.



Untamed Science http://www.untamedscience.com/ Biodiversity and biology topics

Veritasium

http://www.youtube.com/user/1veritasium

http://www.pinterest.com/carlosportela/veritasium/

Nearly 175 videos, apparently uncategorized. Described in Wikipedia as follows: "Veritasium is an educational science channel on YouTube created by Derek Muller.... The videos range in style from interviews with experts such as Physics Nobel Laureate, 2011, Brian Schmidt,[1] to science experiments, dramatizations, songs, and interviews with the public to uncover misconceptions about science, a hallmark of the channel."

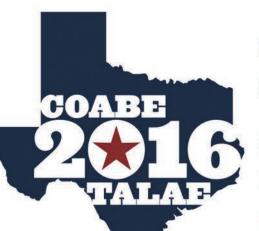
WatchKnowLearn.org http://www.watchknowlearn.org/Category.aspx?CategoryID=86 Science videos in these categories: Astronomy and Space, Earth Science, Chemistry, Environmental science, Life sciences, Physics, Scientific inquiry, Scientists and inventions, Underwater volcanoes, Science-Current events science documentaries

We Are New York http://www.nyc.gov/html/weareny/html/home/home.shtml Adult English language learning videos, some of which have health-related themes.

David J. Rosen is an education consultant in the areas of adult education, distance education, and technology.

¹LINCS is the U.S. Department of Education/OCTAE-sponsored Literacy Information and Communications System. Among its services are free public adult education discussion forums in sixteen topic areas. For more information, see http://www.lincs.ed.gov Also, a complete list of the science videos is available at http://tinyurl.com/pe5hb4a

²For more information about Coggle, a free mind-mapping app, see my Tech Tips for Teachers blog article at http://techtipsforteachers. weebly.com/blog/watch-a-video-and-make-a-mind-map-with-coggle



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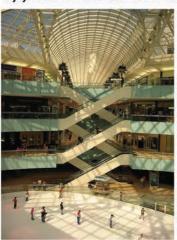




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