Abstract. Rural Louisiana has many of the same problems as other rural states: population decline, unemployment, poverty. At the same time, Louisiana has an extensive array of community colleges, universities and technical schools through which workers can get an education. Workforce development – employee training, linking schools and employers, curriculum to match desired skills – has emerged as a popular tool for rural economic growth. Critics say that the Workforce Investment Act (WIA) and welfare reform have made training for the unemployed and economically disadvantaged more difficult to acquire and more difficult to provide. Enrollment data at community and technical colleges shows that may not be true for Louisiana. This study examines the impact of WIA legislation on enrollment at technical and community colleges in Louisiana.

1. Introduction

Rural Louisiana has many of the same symptoms as other rural states: population decline, unemployment, poverty. At the same time, Louisiana has an extensive array of community colleges, universities and technical schools through which workers can get an education. Workforce development – employee training, linking schools and employers, curriculum to match desired skills – has emerged as a popular tool for rural economic growth. Critics say that the Workforce Investment Act (WIA) and welfare reform have made training for the unemployed and economically disadvantaged more difficult to acquire and more difficult to provide, and they have failed to improve incomes (Shaw and Rab, 2003; Muhlhausen, 2005; Zhan and Schreiner, 2005; Shaw and Goldrick-Rab, 2006). What has happened in Louisiana since the passage of the 1998 Workforce Investment Act?

2. Background

If employee training is part of workforce development, the question becomes: who will provide the training? There are several options available: community colleges and technical schools, universities, proprietary schools (University of Phoenix, ITT, etc.), equipment vendors, consultants, and industry associations (Dougherty, 2003; Shaw and Rab, 2003). Employers may not offer job training because they may lose those investments to other companies if employees leave (Green, 2003). If that is the case, then job training and skills enhancement will fall to the educational providers within a community.

Concern about the skills of US workers relative to international competition began in the 1980s, and interest in publicly-sponsored training increased into the 1990s (LaLonde, 1995). Community colleges began responding to business demands in the 1990s (Dowd, 2003; Shaw and Rab, 2003), and as much as 30 percent of businesses used community colleges as training providers (Dougherty, 2003). Most workforce development has fallen to community colleges because primary and secondary education do not address it (Stevens, 2005). Shaw and Rab (2003) said that the business community is the strongest market force impacting community colleges, maybe more than students. Indeed, the education customer can be one of three different entities: student, business, or legislator (Shaw and Rab, 2003).
Grubb, Badway and Bell (2003) say that community colleges do not reach the neediest students: those without work experience, immigrants, welfare recipients, former prisoners and the physically disabled. Nevertheless, Shaw and Rab (2003) predict that entrepreneurial relationships between state and local governments and industry to develop short-term certification-type programs will grow, particularly as community colleges face increased competition from proprietary schools, in-house employer training and electronic campuses.

3. Workforce Development Legislation

Table 1 illustrates the succession of legislative acts with ties to the training of workers and workforce development. The Area Redevelopment Act was born out of a recession. The Manpower Development and Training Act began as a way to help workers who were displaced by increasing automation at factories, but, after the Economic Opportunity Act of 1964, MDTA started serving low-income people and welfare recipients (LaLonde, 1995; Muhlhausen, 2005). MDTA included JobCorps, which provided disadvantaged youth with counseling, education, training, work experience and health care. The Comprehensive Employment and Training Act (CETA) replaced MDTA, and in turn was replaced by the Job Training Partnership Act (JTPA) of the Reagan era. JTPA provided services to 900,000 economically disadvantaged people each year, with training for 200,000 dislocated (or displaced) workers each year (LaLonde, 1995).

Table 1. Public sector-sponsored worker training programs.

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Redevelopment Act, 1958</td>
<td>Provided loans to businesses in depressed areas; funds for training the unemployed</td>
</tr>
<tr>
<td>Manpower Development and Training Act, 1962</td>
<td>Provided single occupation classroom training; referrals to vocational and technical schools; subsidized on-the-job training; JobCorps for youth</td>
</tr>
<tr>
<td>Comprehensive Employment and Training Act, 1973</td>
<td>Moved administration of most employment, training programs to the states; provided grants to state/local governments for training of low income unemployed and economically disadvantaged people; temporary public employment</td>
</tr>
<tr>
<td>Job Training Partnership Act, 1982</td>
<td>Eliminated public service employment; reduced expenditures on services for economically disadvantaged; authorized funding of services for displaced workers; provided job search assistance, classroom training, on-the-job training, work experience</td>
</tr>
<tr>
<td>Workforce Investment Act, 1998</td>
<td>Computer help with filing for unemployment insurance and assistance with job search; skill level assessment, counseling, development of employment plan; subsidized training</td>
</tr>
</tbody>
</table>

Sources: LaLonde (1995); Shaw and Rab (2003); Zhan and Schreiner (2005); Muhlhausen (2005); Jacobson, LaLonde, & Sullivan (2005).

JTPA began the tying of welfare benefits to work search and training and also introduced the idea of program accountability. Under JTPA, the government’s policy required welfare recipients to participate in training in order to receive their welfare checks. In addition, program administrators had performance criteria to meet. Perhaps as a consequence, caseworkers made personal judgments about who would benefit most and be most likely to find a job after training in deciding who would participate in training programs (LaLonde, 1995). This proves to be an issue with WIA as well.

The Workforce Investment Act (WIA) of 1998 proposed to make education and training of workers and the economically disadvantaged more market-driven (Shaw and Rab, 2003). Under the WIA in Louisiana, local workforce investment boards (LWIBs) administer services such as occupational training, on-the-job
training (OTJ), job readiness, adult education and literacy, cooperative education, private sector-operated training, skill upgrade/retraining, entrepreneurial training, and customized employer training (Smith, 2004). WIA mandates that states create one-stop career centers as an entry point for WIA services (Shaw and Rab, 2003; Eberts, 2005; Muhlhausen, 2005; Cohen Hall et al., 2006), and in Louisiana these are called Career Solutions Centers (Louisiana Department of Labor, 2007a).

Table 2. Service tiers at WIA-mandated One-Stop Service Centers.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Name</th>
<th>Services</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Core Services</td>
<td>Self-service skills assessment, job search</td>
<td>Any client</td>
</tr>
<tr>
<td></td>
<td></td>
<td>management, staff referral through</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intensive</td>
<td>Detailed skills assessment, case management,</td>
<td>Only through</td>
</tr>
<tr>
<td></td>
<td>Services</td>
<td>job counseling</td>
<td>staff referral</td>
</tr>
<tr>
<td>3</td>
<td>Training</td>
<td>Occupational skills, remedial education, job</td>
<td>Only through</td>
</tr>
<tr>
<td></td>
<td></td>
<td>readiness</td>
<td>staff referral</td>
</tr>
</tbody>
</table>

Sources: Shaw and Rab (2003); Grubb, Badway and Bell (2003); Eberts (2005); Muhlhausen (2005).

Clients at the one-stop career centers must progress through a series of steps to get the subsidized training: core services, intensive services and training (Shaw and Rab, 2003; Grubb, Badway and Bell, 2003; Eberts, 2005; Muhlhausen, 2005). Table 2 shows the services available in each step of the WIA process. If the first tier does not lead to employment, then clients, after staff referral, can move to the second service level. If clients still have not found employment, then they may receive an Individual Training Account (ITA), which works like a voucher for education and training (Shaw and Rab, 2003). With an individual training account, WIA clients can get training from a list of approved providers (Grubb, Badway and Bell, 2003).

WIA requires that training vendors (community colleges, technical schools, etc.) be certified by state or federal authorities (Shaw and Rab, 2003). In Louisiana, these Eligible Training Providers (ETPs) must submit one application for each program they wish to provide, including cost information for each. Local WIBs review applications for acceptance (Smith, 2004). For example, the Louisiana Technical College, which has 40 campuses throughout the state, could not submit one application and get approval for all campuses. Instead, if the Ruston, LA, campus wanted to offer a course in welding for WIA clients, it would submit an application for that welding program, which would be reviewed by the appropriate LWIB. The welding program, upon approval, would appear on the list of providers available for the client’s ITA. In addition to the application, providers must submit student data in accordance with the Louisiana Department of Labor’s (LDOL) Student Record Layout (Smith, 2004). Such record keeping is part of the vendor requirements of the WIA (Grubb, Badway and Bell, 2003; Shaw and Rab, 2003). The program must reapply each year (Smith, 2004).

Training vendors must meet minimum performance standards to keep their eligibility status (Shaw and Rab, 2003). For Louisiana, that means that programs must have at least 30 percent of all program exiters complete the program. In addition, 50 percent of program exiters must find unsubsidized employment within the first quarter of leaving the program. Finally, for all program participants who found unsubsidized employment, the average hourly minimum wage of $5.60 is necessary for a successful outcome (Smith, 2004).

Job readiness, basic skills, career exploration and literacy are not considered job specific and therefore are not ITA eligible. However, in Louisiana these are considered WIA-intensive services because the knowledge can be used in many different jobs. Providers can offer these programs to WIA clients without certification but must meet procedures defined by WIBs and provide enrollment information (Smith, 2004).

A last requirement for ITA use is that not only must clients pick from a list of approved providers, but they can only receive training that meets needs for occupations in local demand (Shaw and Rab, 2003; Smith, 2004). Training must apply to jobs available in the local area, as determined by the local WIB, or training must apply to in-demand jobs in an area to which the WIA client is willing to move (Shaw and Rab, 2003). In Louisiana, WIBs provide lists of local demand jobs to clients (Smith, 2004). Demand occupations are determined in Louisiana at two levels, both locally and at the Regional Labor Market Area level (Bowman, 2007). Occupations are defined as top demand (determined by the Occupational Forecasting Conference), demand (occupations that appear in LDOL projections with at least 20 annual openings), and then three possibilities for locally-determined demand: job orders (job announcements listed with LDOL, the local study or reputable websites like Monster.com), employer surveys (by WIBs, academic institutions, LDOL, etc.) to determine current or projected occupational shortages, and targeted industries (determined by WIBs and identified in economic
development plans to attract or expand specific industry sectors within the region) (Bowman, 2007).

4. Issues with the Workforce Investment Act

Shaw and Rab (2003) and Grubb, Badway and Bell (2003) say that the WIA has been ineffective and poorly linked to mainstream education. Indeed, welfare-to-work programs in general have had small, if any, positive impact on employment, wages and moving people out of poverty, and in some cases enrollments in education and training programs have declined (Shaw and Goldrick-Rab, 2006; Zhan and Schreiner, 2005; Grubb, Badway and Bell, 2003; Shaw and Rab, 2003; Mazzeo, Rab and Eachus, 2003; Kane and Rouse, 1999). Grubb, Badway and Bell (2003) found that many adult education programs from welfare programs only led to low wage jobs, while Shaw and Rab (2003) determined that WIA restrictions actually reduced access to training and education.

By making ITAs available only after exhausting the job search and counseling services, WIA prevents many clients from reaching that option. Furthermore, the ITAs restrict choices for training to those providers who get approval from WIBs. The eligibility requirements are so daunting that many community colleges have opted out of participation: too much study-work, benchmarks that are too narrow, and too few participants to enhance enrollment (Grubb, Badway and Bell, 2003; Shaw and Rab, 2003).

In addition, the one-stop centers have their own performance measures to meet. In their study of caseworkers at several centers, Shaw and Rab (2003) found that the job placement and wage measures encouraged caseworkers to give services only to those clients who were likely to have a positive outcome (i.e., find a job at the required wage level). The WIA performance measures do not account for clients who may be hard to place because of extenuating circumstances such as gender, family problems or disability. This led to selection based on likelihood of success, or creaming (Shaw and Rab, 2003). In this way access to training was limited, counter to the market-driven purpose of WIA.

5. Analysis of WIA in Louisiana

Louisiana has four higher education systems. The University of Louisiana System has eight universities, including Grambling State University, Louisiana Tech University, and the University of Louisiana at Lafayette. The Louisiana State University System consists of the main campus of Louisiana State University at Baton Rouge, three branch campuses and the University of New Orleans. Southern University, a historically African-American college, has its own system with a branch campus in New Orleans and one in Shreveport in northwestern Louisiana. The fourth system, created in 1998, combines the state’s community colleges and the Louisiana Technical College and is called the Louisiana Community And Technical College System, or LCTCS (NCHEMS, 2005).

The LCTCS has the 40 campuses of the Louisiana Technical College plus seven community colleges and two technical community colleges. As created in 1998, the LCTCS had two divisions, the vocational/technical division and the community college division, each with a parallel governing system. This combination of systems came from a recommendation by the Louisiana Governor’s Taskforce on Technical and Community Colleges and Adult Education, and goals for this new system included making workforce development a top priority, supporting economic development and responding to business and industry needs, and providing a seamless system of education from kindergarten through higher education (NCHEMS, 2005). The major issues, common to all parts of the state, cited by the NCHEMS study included:

- remedial education in basic workplace skills like math and reading;
- general education in transferable skills such as teamwork, applied math and reasoning, business writing, etc.;
- transfer preparation (going from two-year schools to four-year schools);
- career preparation in specific occupations, ending in certificates or associate’s degrees;
- customized training for workforce development; and
- community service in the form of non-credit programs.

In Louisiana, both the Louisiana Technical College (LTC) campuses and the community colleges share the responsibility for these services, whereas in many other states community colleges provide these services in a regional approach (NCHEMS, 2005). Provision of these services overlaps between the community colleges and the LTC, especially in career preparation and the customized contract training for workforce development.

As previously indicated, many community colleges avoid the WIA certification process because of the amounts of data collection required and the narrow performance evaluation measures. However, a quick perusal of the LDOL training providers website indicates that all but one of Louisiana’s community colleges provides at least one ITA-eligible program, and most of the LTC campuses provide at least one ITA-eligible program. Even the major universities,
Louisiana State University and Louisiana Tech, offer some programs that are ITA eligible (Louisiana Department of Labor, 2007c). The reporting and performance requirements do not seem to have scared off public institutions in Louisiana.

Critics of WIA asserted that the legislation, as written, would limit access to education for unemployed and economically disadvantaged people. This would manifest itself in reduced enrollment at community colleges and technical schools. Figure 1 shows that enrollment in Louisiana’s community colleges and technical schools increased after WIA was enacted in 1998, though enrollment dropped severely in 2005 in the aftermath of hurricanes Katrina and Rita (several campuses were too damaged to operate).

A final criticism of WIA concludes that the training that is accessible to participants who make it that far will only be short-term and not the kind that will allow participants to take high-wage jobs. Another look through the LDOL training providers’ website shows that most of the ITA-eligible programs offered through the LCTCS system are programs of two years or less.

6. Model

In order to assess the affect of WIA, the study employs an eclectic model, estimated by OLS, as follows:

\[
\text{enrollment} = \beta_0 + \beta_1 WIAdum + \beta_2 \text{reorgdum} + \beta_3 \text{laguemp} + \beta_4 \text{lagincome} + \epsilon
\]  

(1)

where enrollment is the either the total enrollment in Louisiana technical colleges and community colleges per person aged 23 to 65, enrollment per person aged 23 to 65 in technical schools or enrollment per person aged 23 to 65 at community colleges. The WIAdum variable is zero for years prior to the Workforce Investment Act and one after the WIA took effect. Similarly, the reorgdum variable is a zero for the years before Louisiana reorganized the technical and community college system and one for the years after the reorganization. For the remaining regressors, laguemp is lagged unemployment rate, and lagincome is lagged real personal income per capita for the state of Louisiana. With two dummy variables the overall constant term is dropped to avoid the dummy variable trap (Greene, 2003).

7. Data

Data for the model includes enrollment in the community colleges and technical colleges in the Louisiana Community and Technical College System. Buerhaus, Auerbach and Staiger (2007) found that population aged 23-65 represented the labor market for nurses, an occupation that is educated in the type of two-year programs commonly found at community colleges and vocational-technical colleges, so the enrollment data are scaled to per capita levels using US Census estimates of population aged 23 to 65 as representative of the education market for potential WIA clients. Pennington, McGinty and Williams (2002) found that lagged unemployment rate and lagged GDP had significant impact on community college enrollment. Here, lagged unemployment rate is the unemployment rate for Louisiana from 1990 through 2006. Unfortunately, the U.S. Bureau of Economic Analysis changed methodology for Gross State Product estimates, going from SIC to NAICS codification, so a 1990-2006 time series is not available for that variable. Instead, this study uses per capita personal income as a proxy measure for output. Figures 2, 3, and 4 show the trends for these variables.
8. Results

Ordinary least squares regression results for the entire LCTCS enrollment per capita, the technical college system enrollment per capita and the community colleges enrollment per capita appear in Table 3. Specification tests show the data to be normally distributed, homoskedastic and without autocorrelation (a first run with data not converted to per capita and with population as a regressor showed evidence of heteroskedasticity; results are available from the author).

Looking at the coefficients and t-statistics, the Workforce Investment Act did not have a statistically significant effect on enrollment for any of the dependent variables. While the literature projected a negative impact on enrollment, community college and total enrollment had positive signs for the WIA dummy, though technical college enrollment did have the expected negative sign. Perhaps this indicates a selective choice of WIA users to enroll at community colleges rather than technical schools, particularly if there is a difference in perception of education quality or options at a community college above that at a technical school. The reorganization dummy shows positive but insignificant effects on enrollment in the LCTCS system. Unemployment rate shows an unexpected negative (though not statistically significant) relationship with technical college enrollment but positive, not statistically significant, relationships with community college and total enrollment. Per capita personal income shows positive, significant impact on enrollment in technical schools and total enrollment, but it is not significant for community college enrollment; the coefficients for technical colleges and LCTCS indicates that personal income has very little impact on enrollment (coefficients are 0.0000003 and 0.0000005, respectively). This probably reflects the weakness of personal income as a substitute for gross state product’s impact on enrollment; without a complete time series for gross state product, such an assessment is not possible.

A second set of regressions was run with an adjustment to unemployment rate. As enrollment was scaled by population aged 23 to 65, the author calculated an ad hoc unemployment rate based on that same population group: lagunemp becomes number unemployed divided by population aged 23 to 65 and lagged as before. Table 4 shows the OLS results for the second regression analysis, using enrollment per population aged 23 to 65 and unemployment rate for population aged 23 to 65. The results are similar to the results from Table 3.

9. Conclusions

It seems that increases in enrollment at Louisiana community colleges and technical colleges were not particularly influenced by the implementation of the Workforce Investment Act, despite increasing numbers of people in Louisiana receiving training vouchers. The reorganization of administrative structure for the Louisiana Community and Technical College System did not have an impact on enrollment. While the study does not indicate a significant negative impact on enrollment as projected in the literature, neither does WIA seem to have a significant positive impact on Louisiana residents’ access to education when faced with unemployment. This includes controls for the hurricanes of 2005. More definitive analysis may be possible with additional data on WIA users, particularly percentagles of ITA receivers as an explanatory variable for WIA to more directly measure access to WIA training services. A long enough time series to use gross state product as a regressor may also provide more helpful results. Future research should target WIA’s impact on socially disadvantaged users (ethnic minorities and women). These are the more difficult to place constituents of workforce assistance.
Table 3. OLS results for Louisiana Technical College and Community College Systems.

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Technical College Enrollment Per Capita</th>
<th>Community College Enrollment Per Capita</th>
<th>Total Enrollment Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIA Dummy</td>
<td>-0.0006 (-0.67)</td>
<td>0.0006 (0.32)</td>
<td>0.00004 (0.01)</td>
</tr>
<tr>
<td>Reorganization Dummy</td>
<td>0.0007 (0.63)</td>
<td>0.0003 (0.15)</td>
<td>0.001 (0.35)</td>
</tr>
<tr>
<td>Unemployment Rate (lagged)</td>
<td>-0.0001 (-0.25)</td>
<td>0.0007 (1.23)</td>
<td>0.0006 (0.95)</td>
</tr>
<tr>
<td>Personal Income (lagged)</td>
<td>0.0000* (3.52)</td>
<td>0.0000 (1.306)</td>
<td>0.0000* (2.35)</td>
</tr>
<tr>
<td>R²</td>
<td>0.37</td>
<td>0.12</td>
<td>0.18</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.23</td>
<td>-0.08</td>
<td>-0.01</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>227.29</td>
<td>123.2</td>
<td>210.98</td>
</tr>
</tbody>
</table>

Notes: Dependent variables are per person aged 23 to 65. *Indicates statistical significance at the α=0.05 level. T-statistic values appear in parentheses.

Table 4. OLS results for Louisiana Technical College and Community College Systems.

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Technical College Enrollment Per Capita</th>
<th>Community College Enrollment Per Capita</th>
<th>Total Enrollment Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIA Dummy</td>
<td>-0.0006 (-0.67)</td>
<td>0.0008 (0.41)</td>
<td>0.0002 (0.09)</td>
</tr>
<tr>
<td>Reorganization Dummy</td>
<td>0.0008 (0.73)</td>
<td>0.0002 (0.10)</td>
<td>0.001 (0.35)</td>
</tr>
<tr>
<td>Unemployment Rate (lagged)</td>
<td>-0.00003 (-0.10)</td>
<td>0.0008 (1.23)</td>
<td>0.0008 (0.98)</td>
</tr>
<tr>
<td>Personal Income (lagged)</td>
<td>0.0000* (3.31)</td>
<td>0.0000 (1.29)</td>
<td>0.0000* (2.27)</td>
</tr>
<tr>
<td>R²</td>
<td>0.37</td>
<td>0.12</td>
<td>0.18</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.22</td>
<td>-0.09</td>
<td>-0.01</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>226.32</td>
<td>122.58</td>
<td>212.15</td>
</tr>
</tbody>
</table>

Notes: Dependent variables and lagged unemployment level are per person aged 23 to 65. *Indicates statistical significance at the α=0.05 level. T-statistic values appear in parentheses.
References


Impact of WIA on Technical School and Community College Enrollment

