Research indicates that adolescents with disabilities need high-quality transitional programs to make the transition to work and independent living, and that barriers inherent in rural areas and schools make service delivery for transition extremely difficult. Current employment patterns suggest that small rural businesses and rural entrepreneurs could provide important and appropriate training sites for rural students with mild disabilities. To explore this possibility, 50 small business owners in rural northwest Ohio were interviewed about the factors that led them to start their business; resources required to start the business; math, reading, and social skills important in the business; and the role that entrepreneurs should assume in training students to operate a small business. Results suggest that: (1) the academic skills required for job performance fall within the range of abilities of students with mild disabilities; (2) the training sites offered by rural small business owners reduce rural geographic barriers; (3) start-up costs of the small businesses were minimal; (4) selection of small businesses as training sites is more cost effective for the school system than in-school training; (5) small businesses add economic and social value to rural communities; and (6) small business ownership is a growing trend with potential to enhance the economic, personal, and social fulfillment of adolescents with mild disabilities as they transition to adult life. (Contains 12 references.)
WHAT RURAL ENTREPRENEURS TELL US ABOUT ENTREPRENEURIAL TRAINING NEEDS

Introduction

The U.S. Department of Education (1998) provided the following information on the participation of working-age adults with disabilities in the workforce based on data provided by the U.S. Census Bureau in 1996.

Table 1

The Percentage of Persons with Disabilities Employed or in the Labor Force

<table>
<thead>
<tr>
<th>Working-Age Americans</th>
<th>In Labor Force</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All working-age persons</td>
<td>81.3 percent</td>
<td>76.7 percent</td>
</tr>
<tr>
<td>Working-age persons with disabilities</td>
<td>31.8 percent</td>
<td>27.8 percent</td>
</tr>
</tbody>
</table>

According to the U.S. Department of Education, working-age Americans are those individuals between the ages of 16 and 64 years. The government defines labor as either employment or training for employment. It is obvious that the percentage of unemployed among persons with disabilities is significant and severe. Further, statistics released by the same agency indicate a substantial earnings gap between nondisabled and disabled working adults as shown in the next table.

Table 2

The Average Salary of Persons with and Without Disability by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>No Disability</th>
<th>Nonsevere Disability</th>
<th>Severe Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>$2,190/mo</td>
<td>$1,857/mo</td>
<td>$1,262/mo</td>
</tr>
<tr>
<td>Female</td>
<td>$1,470/mo</td>
<td>$1,200/mo</td>
<td>$1,000/mo</td>
</tr>
</tbody>
</table>

This aggregate data masks the variation among persons with disabilities by age or region of residence. Yet other researchers suggest that adolescents with disabilities do not adapt well in the transition to work and independent living. Consider that:

- approximately 43% of students with disabilities drop out of school as compared to a dropout rate of 24.4% among students without disabilities (U.S. Department of Education, 1992);
- for adolescents who stay in school, whether in vocational, general or academic tracks, the education provided does not lead to marketable skill development (O'Neil, 1995);
- about 50% of high school seniors pursue any postsecondary training and only 25% will complete a bachelors degree in their lifetimes (Kazis, 1993);
- Fairweather and Shaver (1991) report that about 17% of students with mild disabilities pursue any form of postsecondary training; and
- any high school student who does not complete postsecondary training has significant difficulty in sustaining economic independence (Kazis).
The education of adolescents with disabilities living in rural regions of the United States is also hindered by problems inherent to the rural landscape. Since the aggregate data presented above masks variation in transition policy or student outcomes on a regional, state and local level, it is likely that the outcome measures used to determine transition success in rural areas are more likely to reveal more serious problems and potentially, a more dismal transition outlook for rural adolescents with disabilities. Rojewski (1990) reported that rural schools serve larger percentages of students with disabilities or who are at-risk of educational failure. Further, Helge (1992) cites geographic and distance barriers as a hindrance to any special education service delivery. She notes that the cost of service delivery in rural and remote schools sharply escalates due to higher transportation costs and longer time commitments for staff and students to cover distances related to service delivery. Carlson (1993) reports significant poverty in rural areas due to long-term economic decline and an exodus of jobs. These factors result in outdated and low quality programs, limited relevancy to local economic needs, and lack of authentic job experience (Rojewski, 1990).

Compounding these rural barriers are professional recruitment and retention issues faced by rural schools (Gold, Russell, and Williams, 1993). In general, administrators of rural schools report difficulty in recruiting and retaining licensed special education personnel and many of these individuals employed are unprepared to implement a transitional curriculum. Gold, Russell and Williams note that school administrators report the need to employ individuals with temporary teaching licenses whose training in special education is limited to nonexistent.

In summary, research suggests that adolescents with disabilities are less likely to establish independence without high quality transitional programs and that the problems inherent in rural schools makes the implementation of service delivery for transition extremely difficult.

Super (1990) defines transition as a lifelong process involving not only the individual, but also her or his family and the community. To prepare youth with disabilities for this "lifelong process," congress, in 1990 approved the Individuals with Disabilities Education Act, PL 101-476 in which it mandated that needed transition services be included in students' individualized educational plans. Congress defined transition as

"A coordinated set of activities that promotes movement from school to post-school activities, including postsecondary education, vocational training, integrated employment, continuing and adult education, adult services, independent living, or community participation." Congress also called for a "coordinated set of activities based on the individual student's needs including instruction, community experiences, the development of employment and other post-school adult living objectives; and acquisition of daily living skills and functional vocational evaluation" (Department of Education, 1992, p. 44804).

For adolescents with disabilities, career education is a critical variable in the transition process. The Council for Exceptional Children (Brolin and D'Alonzo, 1979) defined career education as "all experiences by which one learns to live a meaningful, satisfying work life with opportunity to learn the academic, daily living, personal-social and occupational knowledge and skills to attain the highest levels of economic, personal and social fulfillment."

Related to the career education goal of "the highest levels of economic fulfillment," the U.S. Department of Education (Federal Register, 1998) predicts two major trends regarding the worklife for individuals with disabilities; participation in the self-employment and small business economic sectors or continued disproportionate representation of persons with disabilities in low-skilled, low-paying jobs. It may be that the former trend presents an important training opportunity for rural schools serving students with disabilities since small rural businesses and rural entrepreneurs could provide important and appropriate training sites for these rural students.
The Study

If special educators serving rural students with disabilities are to utilize the small business as one of a continuum of vocational training options, it is important to understand what rural entrepreneurs believe are critical academic and social skills as well as their perceptions of the role they might play in a vocational training program. Accordingly, in the fall of 1999, 50 small business owners whose businesses were located in rural northwest Ohio were interviewed in an attempt to answer these questions:

- What factors led you to begin this business?
- What resources were required to begin your business?
- What math skills are required in operating your business?
- What reading skills are required in operating your business?
- What social skills are important in serving your customers?
- Which of the following roles do you believe entrepreneurs like yourself should assume in training students to operate a small business?

The small business owners interviewed represented a wide range of businesses from the service and manufacturing sectors and were selected by undergraduate students enrolled in a special education teacher training program. These students were given a set of criteria to use when making the selection as well as a set of questions to be used during the interview with the selected entrepreneur. The criteria for selection included the location of the business, exclusion of employees for interview, exclusion of franchise businesses, and the percent of time spent by the entrepreneur in operating the business.

Specifically, business owners selected had to devote 100% of their worktime in operating the business and the business had to be located in one of twelve rural counties of northwest Ohio. Small business owners selected included backhoe operators, coffee and sandwich shop owners, window and mirror repair, small jewelry repair, children's used clothing, catering service, carpentry and woodworking, crafts and hobby shop, landscaping, carpet installation, asphalt treatment, story telling/entertaining, furniture movers, nail care, ice cream shop, tax service, apartment rental, dry cleaners, clothing alteration and repair, automotive repair, and others.

When these small business owners were asked about the factors that led them to starting their business, fully 58% indicated that the business grew out of a personal interest or hobby. Approximately 32% of these entrepreneurs stated that they had purchased an existing business in the belief that prior job experiences had prepared them for the work. Finally, about 10% of these individuals indicated that they had "inherited" the business from other family members.

Interestingly, 82% of the small business owners stated that they used private capital like personal savings or personal loans exclusively to start their business. The remainder obtained secured credit from banks based on business inventory. These individuals were not asked the very personal question about the total amount of money required to start their business in the belief that start-up costs would vary by region and change over time.

With the exception of landscapers and the backhoe operator, none of these entrepreneurs used any advanced math skills. Those operating the landscaping and backhoe businesses reported using some geometric algorithms such as calculating cubic yardage. All indicated using the following arithmetic skills: adding and subtracting dollars and cents; making change; calculating state tax, multiplying unit price by unit number; linear, liquid, weight and dry measurements, calculating salary, taxes and benefits, calculating perimeter, area and volume, maintaining a checking and savings account, and data entry for computerized business applications.

The rural entrepreneurs interviewed in this project reported the necessity of reading highly technical documents yet, on a daily basis, reading requirements for most were very simple. The more technical documents such as contracts or tax laws ranged between 9th and college level based on the Fry Readability Scale (1968).
Readability of documents used on a daily basis such as menus or trade journals, ranged from fourth through sixth grade. In general, these small business owners reported reading schematics such as building plans or survey reports, letters including email, maps, trade journals, product information, reference material, and government regulations such as tax regulations or health codes.

The written expression skills reported by small business owners were surprisingly simple ranging from emails and written receipts or food orders to advertising documents. Collectively, written documents included standard contracts describing work or services to be provided, inventory and order forms, customer receipts, phone messages, advertisements, and form letters. Technical writing such as contracts were prepared for these individuals by attorneys or purchased in stationery supply shops.

Entrepreneurs participating in this project emphasized the importance of social skills. The skills most frequently mentioned by these individuals were greeting customers, answering the phone professionally, having a pleasant demeanor, handling customer complaints, responding to customer requests, and interacting appropriately with co-workers. Some of the participants in this project commented that employees were capable of and did use appropriate social skills, but that these were negated when the same employees were rude to the occasional customer, laughed at or ridiculed peers or avoided conversing with customers. It appeared that these individuals were saying that the presence of good social skills was an insufficient condition to characterize an employee as skillful in this domain. The absence of inappropriate social behaviors was also a requirement.

Finally, the small business owners were given several roles, which they might assume to contribute to the vocational training of adolescents with disabilities. They were asked which, if any, of these roles they would be willing to assume in training students to operate a small business. Approximately 96% indicated they would be willing to function as a mentor, 87% indicated they would permit short-term (1 day) shadow experiences, 84% stated they would support long-term shadow experiences (1 week), about 80% stated they would support unpaid internships, and 72% said they would accept student apprentices if there were no costs incurred for their businesses. The percentage of small business owners responding positively to these options is both optimistic and puzzling. In fact, these small business owners were not asked specifically to make a commitment to training students with disabilities. The caveat that must be stressed regarding the responses to this question is that a negative response is unnecessary while the positive response enhanced the image of the respondent. Yet, it is logical to conclude that there appears to be a significant number of small business owners willing to participate at some level in the vocational training of adolescents with disabilities.

Based on the responses of rural entrepreneurs participating in this project, it appears that employment training for small business operation is a viable service delivery option for rural students with mild disabilities for several reasons:

- The academic skills required for job performance fall within the range of academic achievement among students with mild disabilities.
- The training sites offered by rural small business owners reduce or mitigate the distance and geographic barriers inherent within rural communities.
- The start-up costs involved in small business operation are minimal as reported by participants in this project.
- Selection of the small business as a training site for internships or apprenticeships is more cost effective for the school system than in-school training since schools using this option can forego equipment and many personnel costs.
- The small business in a rural community adds economic and social value to the community.
- Perhaps most importantly, according to the federal government, small business ownership is a future trend that has high potential to enhance the economic, personal and social fulfillment of adolescents with mild disabilities as they transition from school to adult life.
References


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<td>Judy Weyrauch</td>
<td>Judy Weyrauch / Headquarters Manager</td>
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<th>Fax:</th>
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<td>American Council on Rural Special Education</td>
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