Family Literacy and HRD: A Preliminary Program Evaluation of Next Step

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This study evaluated an innovative family literacy program in Bullitt County, KY, USA. Data sources included attendance sign-in sheets, pre- and post TABE test scores, GED success, gender, age, and ethnicity, and grant applications. The evidence suggested that since 1998, the program increasingly attracted proportionally more males, GED completion increased 10 times, computer placement in homes quadrupled, and roughly two-thirds met their goals. Additional features included extensive community involvement from businesses and local government.

Keywords: Evaluation, Human Capital, Learning

With over 90 million low literacy adults in the United States (NCES, 2004) and nearly 51 Americans without a high school diploma or GED (OVAE, 2002), basic education and literacy courses have an increasingly important role in our communities. Many state, federal, and nonprofit organizations have established adult, child, and family literacy programs to address the literacy need. Over the past decade, policy makers, educators, and business people at the national, state, and local levels have explored ways to make adult education programs more meaningful and useful to adults and their children (De-Bruin, 1997). Unfortunately, the topic of family literacy is not receiving much attention or research in the basic education or literacy fields (Cassidy, 2004). Additionally, the role of literacy in the workplace is often ignored. According to a study conducted by the American Management Association (1999) nearly 43% of businesses test their employees in basic literacy functions like reading, writing, and math. Of those that conduct testing the AMA (1999) reported that nearly one-third of employees lack necessary basic skills, but only 13% of businesses offer any remedial or literacy training to their employees. This large skills gap has increasing implications for supervisors and human resource managers alike. Despite the growing awareness and support for literacy programs, there is very little research on the behaviors, skills, and processes of adult literacy learners (Campbell, 2002).

As the field of family literacy develops, a growing number of family literacy educators and researchers are calling for more responsive family literacy programs that acknowledge, value, and incorporate the strengths, needs, and goals of participating families into the programs (Elish-Piper, 2000). One such program may very well be the Next Step® family literacy program in Bullitt County, KY. The Bullitt County Adult Education Center in Bullitt County, KY has developed an innovative family literacy program that not only addresses family literacy in the traditional context, but also incorporates life, work, and parenting skills. This study is the first in a series to evaluate the effectiveness of the Next Step® program. Researchers evaluated existing demographic and participative data, GED success, TABE scores, male attendance, student goal achievement, and in home computer placement.

Review of the Related Literature

The most important elements in the quest for a competitive advantage in commerce are the skills and initiative of its workforce (Gray & Herr, 1998; Porter, 1985). Lawler (1995) reports that there are three major sources that when combined can produce organizations that are likely to be winners. Each of the three is centered in the human side of business and includes human capital, organizational capabilities, and core competencies. When discussing our nation's wealth, Hunt (1995) stated that all wealth from value-added operations depends on the skills of the people adding the value. We can then conclude that the wealth of a nation can be directly linked to the skills of its respective workforce.

According to Gray and Herr (1998), the nineteenth century was the age of industry and the twentieth century was the age of service. Yet, as we enter the 21st century, it is becoming an age where information and knowledge increasingly serve rapidly evolving economies built on the foundation of information and communications technology. The recent fall of communist and totalitarian regimes has pushed more of the world's economies toward free trade and spirited competition.

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This transition has affected the world economic order by increasing market competitiveness and by opening new markets to existing organizations. In doing so, these organizations are now challenged to deal concurrently with global and local markets and global and local consumers (Lawler, 1995).

In the United States, as in many other places (e.g., Germany and the Netherlands), the new workplace likely will continue to look different into the next century. Changing demographics, an aging population, large influxes of immigrants, growing ethnic and cultural diversity, and an ever more complex workplace have made the long-term investment in the education and training of all its workers a critical necessity for enhancing competitive advantage (Eisen, 1993; Hunt, 1995). The rapidly changing nature of work and the workplace may have created a world in which what used to be "good enough" often is no longer so when it comes to organizational performance (Lawler, 1995)

Desjardins (2001) asserts that learning has a positive impact on both economic and social well-being. Employees who possess both strong basic work skills and the appropriate educational credentials may be capable of greater performance and thus career advantage than those that do not. For instance, a high school diploma alone may not lead necessarily to a career with a good future (Seaman, Lynham, Ruona, & Chermack, 2004). Consequently, we must ask ourselves if we will remain competitive in what is now a knowledge-based economy. Further, how might we boost our competitive advantage in light of the changing, but necessary requirements that business and industry have placed on our workforce? According to Porter's (1985) meta-theory of competitive advantage, organizations can enhance their competitive advantage through successfully acknowledging the four generic building blocks in their business activities: efficiency, quality, innovativeness, and customer responsiveness. Thus, we must continuously find new ways to increase worker efficiency to lower costs; improve the reliability and quality of our products for the purposes of increasing value (differentiation) and reducing replacement costs; embrace innovation and uniqueness seeking for the purposes of being able to charge more and thereby increase profits; and, offer second-to-none customer responsiveness to increase value in the eyes of the customer. One key approach to addressing each of the generic building blocks for competitive advantage might be through the education and training of a highly skilled workforce (Eisen, 1993). Nonetheless, we must ask, "Is our workforce really prepared to contribute to the economic growth of our businesses, local economies, and the growing global markets?"

Legislative action (e.g., Welfare-to-Work, School-to-Work, Job Training and Partnership, Workforce Investment), major demographic shifts in the labor market, and the continual expansion of the U.S. economy, among others, have led to major changes in American business. If the trends of the last decade continue, The Office of Vocational and Adult Education has predicted that 23 million new jobs will be created in the next 10 years. Approximately 78 percent or 18 million of these jobs may require a baccalaureate degree. At current university graduation rates, the requirement for new college degree holders will fall 33 percent short. Rapidly advancing technology has contributed also to this constant state of change; change that is requiring businesses to find new strategies to fill an increasingly broadening skills gap in our nation's workforce (Hunt, 1995). The skilled workers (needed for increasingly sophisticated jobs) that many businesses currently seek would staff high-performance workplaces run by advanced technologies. These workers must possess a variety of workplace skills such as: reading, writing, math, computer and software knowledge, problem solving, critical thinking, ability to participate in meetings, and report writing (Askov, 1999; Seamon et al., 2004).

In a survey of 2,500 firms with over 100 employees, however, the National Association of Manufacturers (Eisen, 1993) found that the respondents rejected five of every six job applicants because they lacked the adequate basic skills (e.g., literacy), appropriate occupational skills, or an appropriate work ethic. The notion of basic skills may be described at least in part by defining adult literacy. The Workforce Investment Act of 1998 describes literacy as, "an individual's ability to read, write, speak in English, compute, and solve problems at levels of proficiency necessary to function on the job, in the family, and in society." Fisher (1999) reports that dramatic shifts in the nature and delivery of public assistance programs has affected the nature and delivery of the Adult Basic Education (ABE) programs designed to address the aforementioned basic skills gaps. Traditionally, ABE programs sought to improve learners' literacy, broaden their overall functioning in society, and move them toward achieving an educational credential or other goal (Smith, 1998). These goals have been deemphasized in favor of finding the learners employment that is not subsidized by the government. Many official Federal and State documents, including legislation and official policy statements, fail to acknowledge that ABE is an important element in the successful transition from welfare to employment. Askov (1999) reported that to overcome the problems encountered in this difficult transition, welfare-to-work programs need to take a holistic service approach that sequentially or concurrently provides employment, training, and support services, while emphasizing longer-term education, intensive personal coaching, and job training that promotes long-term job retention.

The National Center for Education Statistics (NCES) conducted a nation wide adult literacy survey in 2003. NCES defines literacy as, "using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential." The National Adult Literacy Survey measured literacy along three dimensions: prose, document, and quantitative. Each dimension was designed to capture an ordered set of information-processing skills and strategies that adults use to accomplish a diverse range of literacy tasks. Every scale was divided into five ascending levels that reflected a progression of information-processing skills and strategies. Individuals found to be performing at level one, for example, were unable to locate requested information, integrate information, write new information, or perform single, relatively simple arithmetic operations, such as addition. Participants who performed at the fifth level of literacy, conversely, were able to locate information in text, integrate information, write new information, and perform multiple arithmetic operations sequentially and effectively problem solve. Overall, the NCES survey demonstrated alarmingly that approximately 90 million adults (16 years or older and not enrolled in school) in the United States perform at the two lowest levels of literacy.

Moreover, at least 51 million people in the United States have not completed a high school diploma or GED (OVAE, 2002). The Office of Vocational and Adult Education reported in the 2002 census that nearly 58 percent of those not having a diploma or GED are not in the nation's labor force. Clearly, recruiting, retaining, and developing workers with the suitable skills (both basic and advanced) to develop competitive advantage has become more and more a significant problem for organizations, particularly impacting those of us in the HR profession whose job it is to directly address these issues. It is likely that the escalating numbers of adults that function at the lowest levels of literacy and the growing trend of high school dropouts will continue to add to the frustrating task of recruiting and retaining qualified workers. At the national level, the losses derived this disquieting state of illiteracy include a loss of school system revenue, potential talent, and the productive future for millions of the nation's youth (Seaman et al., 2004). In a strict financial sense, studies have shown also that low literacy skills cost business and taxpayers \$20 billion in lost wages, profits, and productivity annually (Meeder, 2002).

Human Capital Theory, HRD, and Family Literacy

Literacy may be thought of as a type of currency in American society. Adults with little money have difficulty meeting their day-to-day needs; similarly, those with limited literacy skills are more likely to find it challenging to pursue their job advancement, consumer decision making, and citizenship goals (NCES, 2004). Similar to literacy, the capabilities of our workforce can be viewed as a facet of human capital. The current growth rate in scientific and technological knowledge may be one key driver that has contributed to the growing importance of human capital (Lawler, 1995). Human capital is defined by the Organization for Economic Cooperation and Development as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being. One of the many ways which we currently invest in our nation's human capital is through the educational or human resource development efforts of our business organizations. Organizations have invested in the skills of its workers since the apprenticeship training programs of the eighteenth century and have continued to do so through the use of the early factory schools, the human relations movement of the 1940s, and emergence of Human Resources as a profession (DeSimone et al., 2002). The pressures that HRD faces in today's business world demands for the inclusion of economics as one of the foundational disciplines (Swanson, 2001). According to Hayes, Alagaraja, & Dooley (2004), human capital theory is the economic theory most relevant to the field of HRD as it provides a more business-like "bottom-line" orientation to HRD. With the emergence of the knowledge based economy, Hayes et al. believe it is clear that employee knowledge, skills and attitudes are the key factors that must be addressed if organizations are to become economically productive. Interestingly, human capital theory seems to fit nicely into Porter's (1985) economic meta-theory of competitive advantage, as it might be effectively argued that the development of human capital would be a cornerstone of sustaining and developing competitive advantage (see Eisen, 1993). Notwithstanding, Porter's work has not been linked directly to HRD research and practice, but we strongly believe that it might be a productive framework for guiding future HRD research and practice.

McLagan (1989) and many others (e.g., DeSimone et al., 2002; Kuchinke, 2002; Weinberger, 1998) view human resource development as a set of systematic and planned activities designed by an organization to provide its members with the necessary skills to meet current and future job demands. Workplace education programs, for example, focus on the literacy and basic skill training that workers need to gain new employment, retain present jobs, advance in their careers, or increase productivity. Workplace learning may take place in a business or organizational context, formally and informally, but is not limited to the training and education that an individual receives at work (Reio & Wiswell, 2000). Workplace learning also includes those actions and learning activities that

take place in alternate settings to prepare individuals for the world of work. These alternate settings may include, but are not limited to, career and technical colleges, adult learning and literacy programs, welfare-to-work initiatives, and career development in secondary and post-secondary education.

Workplace education programs may be developed by educators working with employers and employee groups that determine what reading, computation, speaking, and reasoning skills are required to perform one's job tasks more effectively. Strong partnerships between educators, employers, and employees are needed to aide in the successful implementation of such workplace education programs (Askov, 1999). Unfortunately, for these workplace programs to reach individuals with basic skill needs, that individual must already possess a job. Seaman et al. (2004) argue that adult literacy continues to emerge as a major challenge for organizations and that it is very important for HRD professionals to become attuned to the emerging literacy trends. Indubitably, HRD can no longer ignore the challenge of adult literacy or its role in becoming more proactive in the development of and contribution to the supply of an educated workforce to the broader workforce system. An educated and skilled workforce, comprised of literate adults, can provide the skilled workers needed to meet market contingencies.

One important workforce education innovation might be the advent of family literacy programs (Askov, 1999). For example, The National Institute for Family Literacy provides a comprehensive approach to literacy that provides the foundation for intergenerational learning that leads to long-term literacy success for individuals and families. In family literacy programs, children develop language and literacy skills with the support of their parents or primary caregivers, who also have the opportunity to improve their own skills. A positive parental attitude toward education and aspirations for the child, compounded with conversation and reading materials in the home, contribute to early reading success and improved literacy for both families and their children (Karther, 2002). Family literacy can be divided into four main categories. These categories include: 1) children's education, 2) parent time, 3) Parent and Child Together (PACT) Time®, and 4) adult education. It is imperative that we understand that these categories are not mutually exclusive and thus must be developed systematically in order for family literacy initiatives to be successful.

According to the National Institute for Family Literacy (NIFL, 2004), family literacy may bring about academic gains for children and adult learners, increase parent-child literacy interaction, and lead families on a path to economic self-sufficiency. NIFL encourages family literacy programs that incorporate child and adult education individually and as a family unit. First, children's education is designed to promote the literacy development and learning of children, and also works to bring about lasting, meaningful involvement by engaging parents in their child's educational environment. Second, parent time offers parents instruction about their children's literacy development and provides opportunities to explore strategies to support that development, while simultaneously building on their own strengths and discovering new resources. Third, Parent and Child Together (PACT) Time® is a regularly scheduled time for parents and their children to participate in interactive literacy experiences in a supportive environment. As parents become more comfortable in their role as their child's first teacher, PACT Time® helps foster skills to support education in the home. Finally, the fourth category, i.e., adult education extends the learning experience for parents as they pursue their educational and career goals, gaining the skills they need to be effective employees, active community members, and leaders and supporters of their families. These four components work together as a system of influence to increase the likelihood a brighter future (NIFL). Family Literacy in Kentucky, USA

In Kentucky, USA, nearly 340,000 adults, ranging in age from 16 to 64, lack the minimal skills to function effectively in the marketplace, workplace, community, or home. Additionally, 656,000 Kentucky adults have low literacy levels that are likely to impede their personal advancement and the development of the state's economy (Jennings, 1997). Adult and family educators in Bullitt County, Kentucky have implemented a new creative approach to adult basic education and family literacy. In 1998, the Next Step® program originated with an innovative grant from the Cabinet for Workforce Development through the Department of Adult Education and Literacy. The original Next Step program goal was to target the 46.7% of households in Bullitt County without a high school diploma or GED, focus on low income families that were being left behind by increases in technology, provide a family education support system, recruit and retain greater percentages of males in the program than other family literacy programs, provide family skills, and build pathways to better career opportunities.

The Next Step® program is offered to any Bullitt County family without a high school diploma or GED. Following the application process, educational assessment, and an interview session with an instructional assistant, families are accepted into the program. The families sign an educational learning contract and agree to accomplish the 50 prescribed steps to meet their family goals. The families develop both individual and family oriented goals. Individual goals may include earning a GED, increasing time management skills, or improving employability. Family goals, developed and agreed upon by the entire family, may include developing a family budget, attending parent teacher conferences, increasing computer skills, or decreasing the family's debt. A computer is placed in the

family's home after the family demonstrates computer competency. Upon accomplishment of the family goals including, GED and improved job skills for adults, the computer is granted to the family as a reward for their hard work. A unique aspect of the Next Step program is that in addition to reaching a population of learners not served by traditional means, the program directors have been able to foster partnerships with local businesses and the community at large. The partnership established with the United Parcel Service has proved to be irreplaceable to the Adult Education Center and to the Next Step® families. Coordinated by their HR department, UPS has donated and helped to repair each of the computers awarded to the families in the Next Step® program. Local churches supply volunteer tutors, the Health Department meet with families and offers classes on health and immunizations, the Cooperative Extension Service offers classes on nutrition, driving safety, auto upkeep, budgeting, and meal planning, and the local police and fire department visit on family night to provide classes on safety and other community issues. In addition, directors have formed a partnership with the University of Louisville to foster better research and practice into family literacy in general and Next Step® in particular. Arguably, the system of partnerships has enhanced appreciably this family literacy program by sharing and developing community resources that local citizens can employ to meet their individual and family needs.

Statement of the Problem

Despite the considerable promise of Family Literacy programs like Next Step® to help alleviate societal and consequently business needs for an educated and skilled workforce, little systematic research has been conducted to evaluate the effectiveness of such programs (Seaman, 2000). Clearly, educational programs in general are being scrutinized increasingly by both Federal and State policy-makers, yet more information is needed to answer important questions about the respective programs' effectiveness. In other words, is there evidence that said programs are meeting their short- and long-term educational goals, such as basic skill enhancement and increased employability? Further, innovative program models are needed to guide future educational research and practice, but again little research has examined such models.

Method

Archival data were examined at the Bullitt County, KY, Adult Education Center for evidence of meeting published program goals. The data sources included attendance sign-in sheets, pre- and post TABE test scores, GED success, initial interview data that ascertained gender, age, and ethnicity, grant applications, retention, hours of study, and step achievement evidence (primarily outside educational activities).

The participants in this study included 105 adults (83 female and 22 male) enrolled in the Next Step® program in 2003-2004. Participants ranged in age from 19 to 63 with the mean age being 32 years. Most (102) were Caucasian, two were Hispanic, and one was African-American. The participants had an average of 2 children per family; nine families had children that qualified for free lunch in the Bullitt County Public School system. Of the 105 participants 50 were unemployed, but only 5 families qualified for public assistance. Nearly half (47) of the participants were married, 23 were divorced, 30 were single, and 5 were separated.

Results and Discussion

There is evidence that the Next Step® program is reaching a number of the 14,838 individuals performing at or below literacy levels I and II within Bullitt County. Since its initiation in 1998, the Next Step® program has seen an increase in family and male participation, retention, and the number of individuals earning their GED. An analysis of early data collection efforts revealed that in the 1998-1999 year the program had 48 active families, nine of which had family members that earned their GED, 15 percent male participation, and 29 computers put in the homes of the enrolled families. In the 1999-2000 year, the program continued to grow, reflected by the enrollment of 98 active families, 40 earned GEDs, 23 percent male participation, and 126 computers placed in the homes of the participating families.

The program has continued this positive trend in each evaluation area. In the 2003-2004 year, initial TABE testing resulted in a mean language level of 6.9, math level of 5.9, and reading level of 7.6. Of those participants who have been retested, the average grade level improvement is 1.6 in language and math and 1.0 in reading. Additionally, 99 individuals have received their GED, nearly 66% of participants that listed job attainment or job skill improvement have reported reaching their goal and male participation has continued to grow. The evidence of growth in male participation in the Next Step® program has gained the attention of researchers and educators alike, as males traditionally fail to participate in family literacy programs (Askov, 1999). This finding is significant, as

Karther (2002) reported that fathers can have remarkable effects on children's literacy and concomitant school achievement. In an effort to reach a larger population on Bullitt County, the adult learning center has set a goal for 2005 to enroll an additional 74 families in its Next Step program.

The evidence of early success experienced by the Next Step program and the community it serves has drawn interest by adult literacy programs and educational researchers throughout the nation. Our goal in the on-going research of the Next Step® program is to identify further through qualitative and quantitative means the degree of the program's success in participant GED attainment, job skill improvement, male recruitment and retention, and basic skill improvement for the entire family. Additional research goals include identifying the impact of business (and HRD), church, and governmental partnerships on program effectiveness, the motivating factors (e.g., job promotion or the satisfaction of curiosity) for program participation and completion, the role of a sense of community in the program's operation and initial success, indicators of increased self-efficacy and psychological well-being in basic and job related skills, and the replicability of the Next Step® family literacy model.

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