New Skills for a New Economy:

Adult Education's Key Role in Sustaining Economic Growth and Expanding Opportunity

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EXECUTIVE SUMMARY

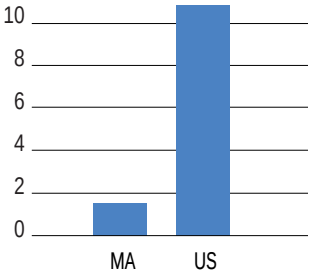
Workers today need a much broader and stronger set of skills than they did ten or twenty years ago. They must also learn new ones continually if they are to adapt and contribute to companies competing in the fierce global marketplace. The Commonwealth thus far has done exceedingly well in the new knowledge-based economy. As a state that has long built its livelihood on the brains and skills of its workers, it has been well-positioned to exploit the new opportunities.

Future Economic Growth At-Risk

There are some worrisome signs, however, that our state will not be able to sustain its current prosperity. Our workers are what fuel the state's economic engine. They are our competitive advantage. But we are experiencing shortfalls in human capital unlike anything we have seen before. According to a recent study in Massachusetts, in some fields, including information technology, one in twelve positions for skilled workers are unfilled. Increasingly, employers have had to look outside the country to find workers who can do these skilled jobs, and still critical positions are left vacant.

As MassINC's 1998 study *The Road Ahead: Emerging Threats to Workers, Families and the Massachusetts Economy* documented, the slow growth in the size of the state's labor force is a leading factor in high job-vacancy rates and poses a serious threat to sustaining a healthy economy. Labor shortages in critical occupations are likely to stifle future growth and erode the state's competitive edge. The growth of the labor force in the New England region has lagged far behind the rest of the nation. Over the last decade, the national labor force grew by nearly 11 percent. During that same time period, the labor force in Massachusetts grew by only 1½ percent, the fourth-lowest rate in the nation and a far cry from the state's double-digit growth rates of the 1970s and 1980s. The consequence of this trend is clear: the state's current economic boom simply cannot be sustained without more workers, and especially, skilled workers.

Rate of Labor Force Growth in the 1990s



During these good economic times, the state is not doing enough to create an adult education and training pipeline that gives workers the skills that our economy requires. MassINC's most recent report, *Opportunity Knocks: Training the Commonwealth's Workers for the New Economy,* argued that "Massachusetts's weak suit —compared to other states and to our own needs— is providing skill-building opportunities for adults, especially lower-middle-class and working-class adults." Every day we become more aware of just how true this is. In our state, there are no workers to waste. A workforce with insufficient skills is as big a threat as the persistent outmigration of workers to other states.

Those with Limited Skills Falling Further Behind

At the same time that jobs are going unfilled, a substantial number of workers remain an untapped resource because of their limited ability to participate in the New Economy. People who don't speak English, adults without a high school diploma, and those who may have a high school diploma or even some college education but have limited skills all have few options in today's labor market. They are often working harder and harder just to keep pace financially. Increasingly, they are stuck in low-wage jobs, falling further behind with little chance to share in the state's prosperity.

Leads to Continued Growth of the Gap between the "Haves" and "Have-nots"

To sum up, this phenomenon hurts all of us. What used to be viewed as an individual's problem is better understood as a public problem, with major economic and social consequences. Having a large number of workers with weak skills threatens the state's economic prosperity; a workforce with strong skills is the cornerstone of a healthy economy. The widening gap between the haves and have-nots also erodes the state's middle class. A healthy and growing middle class is the foundation of a healthy Commonwealth. Yet, inequality has been growing in the Commonwealth. If Massachusetts continues this course, we can expect a host of social, political, and economic problems.

This report puts forward a long-term vision to help sustain our state's economic prosperity by focusing on those workers with the weakest skills. *New Skills for a New Economy: Adult Education's Key Role in Sustaining Economic Growth and Expanding Opportunity* builds on previous MassINC research in which we have argued for an integrated adult education and training system. In *Closing the Gap: Raising Skills to Raise Wages* (1997), we offered a vision of "lifelong learning" that stretches from pre-K education all the way through higher education and includes adult education and job training. *Closing the Gap* raised as many questions

as it answered, and this report continues to examine the nature of the state's current skills problem. For instance, in *Closing the Gap*, we relied on the Massachusetts Department of Education's estimate of the population in need of ABE instruction, which was the best estimate available at the time. This report offers a fresh analysis of the size of the adult population not sufficiently educated or trained for the New Economy.[1] *New Skills for a New Economy* continues the task of understanding the twenty-first century skills problem by asking the following four questions:

1) How many adult residents of Massachusetts lack the new basic skills?
2) How well does the ABE system work?
3) How do we best serve those who are not candidates for traditional ABE instruction but who need their skills upgraded in order to succeed in the New Economy?
4) How well integrated is ABE with other efforts to upgrade workers' skills?

This report emphasizes the specific role of adult education in expanding the skilled workforce and raising the incomes of workers, but the need for strong basic skills goes beyond the workplace. By building the skills and knowledge base of its students, adult education contributes to society in other ways. It helps adults in their roles as parents, citizens, and members of communities who must negotiate an ever-more-complicated world. Some students gain skills that allow them to help their children with their school work or to become more effective advocates for their communities. The benefits that come from this investment will be both social and economic. Research suggests that children will do better in school, communities will have more active members, and the Commonwealth will have a more informed electorate.

1 Several years ago the Mass. Department of Education estimated that 877,000 adults were in need of adult basic education instruction. This figure was publicized by MassINC in *Closing the Gap*. The DOE estimate and the estimate presented in this report are calculated in different ways. Readers are cautioned against comparing the two estimates and making an "apples to oranges" comparison. The DOE estimate includes all adults in Massachusetts who have skills in the lowest literacy level of the National Adult Literacy Survey (NALS Level 1). In this report, we only consider working-age adults (16-64 years old), and we include people who have skills in the lowest two levels of the National Adult Literacy Survey (NALS Level 1 and Level 2). In addition, the DOE estimate of 877,000 was based solely on the NALS survey. In this report, we include members of two other categories, because research on labor-market outcomes suggests they too are not sufficiently prepared for the New Economy. These categories include immigrants who have limited English speaking skills and people who lack a high school diploma or GED. In sum, this new estimate provides a much more detailed, reliable, and thorough representation of the size and nature of the twenty-first century skills problem.

What do we mean when we say…?

Adult Education refers to a range of classes that build the skills of adults. It includes ABE (see below), developmental education, and other training courses that focus on building basic skills. (**Job training** refers to a narrower set of job-specific or technical skills.)

Adult Basic Education (ABE) or **ABE system** refers specifically to classes in basic literacy, GED (high school credential), and English for Speakers of Other Languages (ESOL) that are administered by the Massachusetts Department of Education.

Developmental Education refers to classes offered by community colleges in collaboration with companies to upgrade workers' skills. Although developmental education can also be used to describe college preparatory courses, that is not the focus of this report. The developmental education to which we refer is focused on skill-building, and the intention is to help workers gain skills, not to help students gain the skills necessary to enroll at community colleges.

New Basic Skills is a term coined by Professors Richard Murnane and Frank Levy and refers to the set of skills needed in today's economy. Today, to secure a middle-class job, workers must be able to solve complex problems, think critically, communicate effectively, and use computers and other technology. Drawing on their research and other labor market research, this report finds that adults today need to speak English, have a high school credential, and have a set of literacy skills equivalent to NALS Level 3 or higher. Each of the challenges listed below addresses one of these three specific requirements.

NALS refers to the 1992 National Adult Literacy Survey. Respondents were placed into one of five levels, with Level 1 representing the weakest skills and Level 5 the strongest skills. A wide range of experts, including the National Governors' Association, agree that today's economy and society require skills at Level 3 or higher. This concept of literacy measures adults' skills across a wide array of tasks that reflect the reality of the demands of today's workplace and society.

NALS Level 3 In concrete terms, adults who do not perform at Level 3 are unlikely to be able to consistently handle tasks such as planning travel arrangements for a meeting using a flight schedule. They are unlikely to be able to be able to read a news article and identify a sentence that provides the interpretation of the topic addressed. They are unlikely to be able to identify multiple pieces of information from a bar graph.

The Language Challenge refers to immigrants with limited English speaking skills.

The Education Credential Challenge refers to adults who lack a high school diploma or GED.

The New Literacy Challenge refers to low-skilled workers who have a high school credential. These workers have skills equivalent to NALS Level 1 or Level 2—the lowest two levels. These people may not be illiterate in the traditional sense, but they have limited reading, math, and analytical skills that restrict their ability to participate in the New Economy.

The Three Challenges

195,000
Immigrants with Limited English Speaking Skills

280,000
High School Dropouts

667,000
Workers who have a high school credential but have limited skills

How Many Adult Residents of Massachusetts Lack the Basic Skills Needed in the New Economy?

The New Basic Skills

What does being literate for the New Economy mean? At one time, mastering a set of mechanical skills could ensure a lifetime of good employment. That possibility is increasingly unrealistic in a world defined by complexity, competitiveness, and market change. In the twenty-first century, strong basic skills are essential to be able to participate in a world governed by complex information and communication technology. A single set of technical skills is no longer sufficient.

In their book *Teaching the New Basic Skills*, Richard Murnane and Frank Levy (professors at Harvard University and MIT, respectively) compile a list of what are now considered "basic skills" based on their research into highly productive businesses. Though literacy and math are still the core basic skills, they are no longer sufficient. Today, to secure a middle-class job, workers must be able to solve complex problems, think critically, communicate effectively, and use computers and other technology. Workers now need solid literacy and math skills just to get their foot in the door of today's workplace, and over the next few decades, the expectations will only increase.

The Scope of the Problem: Three Challenges

Guided by research on the demands of today's labor market, we identify three distinct challenges to building workers' skills:

- a Language Challenge
- an Education Credential Challenge
- a New Literacy Challenge

While many people face more than one of these challenges, we focus on each separately in the order that they are logically approached.

Challenge #1
A Language Challenge: Immigrants with Limited English Speaking Skills

Immigrants have accounted for all of the net growth in the state's labor force over the last ten years and are a rapidly growing segment of the population. More than a quarter of a million new immigrants have arrived in Massachusetts since 1990. These new residents offer a great opportunity to expand our labor force, and in fact, other states are waging active campaigns to attract new immigrants to their states for precisely this reason. However, many immigrants do not speak English well, and this is a minimum requirement for many of today's fast-growing professional, managerial, and sales positions. Consequently, some immigrants are faring poorly in the labor market. Immigrants with limited English speaking skills earn 24 percent less than their employed counterparts who are fluent in English. In Massachusetts, 195,000 working-age immigrants—six percent of the state's workforce—have limited English speaking skills, and this estimate, based on the 1990 Census, is almost certainly higher today.

Worse yet, many immigrants face the dual problems of weak English speaking skills and limited formal schooling. More than half of the 195,000 immigrants with limited English speaking skills also lack a high school credential. In fact, immigrants in Massachusetts are nearly four times as likely as native-born workers to lack a high school diploma. Both of these challenges are important to address. In order to meet the educational challenge, however, we must first help these immigrants learn to speak English.

Challenge #2
An Education Credential Challenge: High School Dropouts

High school dropouts pay a steep economic price for not obtaining a high school credential. No other demographic group has been more heavily penalized in the New Economy for a lack of a credential. Their rate of employment has declined, and when they are employed, the real value of their wages has also declined. In fact, in the 1990s, families headed by someone with a high school diploma earned almost fifty percent more than families headed by a high school dropout. Moreover, high school dropouts are extremely vulnerable to future changes in the labor market. As noted above, immigrants are much more likely than native-born adults to lack a high school credential. To avoid duplication in our overall count, we exclude those immigrants with limited English speaking skills who also lack a high school credential. After excluding the overlap, we find there are 280,000 working-age high school dropouts in Massachusetts. That almost nine percent of the workforce lacks a high school credential is cause for grave concern, especially in a state that prides itself on a highly educated population and labor force.

Challenge #3

A New Literacy Challenge: Low-Skilled Workers Who Have a High School Diploma

In 1992, the National Adult Literacy Survey (NALS) measured the literacy skills of the adult population in the country. People who scored in the lowest two levels (Level 1 and Level 2) may not be illiterate in the traditional sense but, rather, have limited reading, math, and analytical skills that restrict their ability to participate in the New Economy. Experts across the board, including the National Governors' Association, agree that today's economy and society require skills at Level 3 or higher. This new definition of "literacy" measures adults' skills across a wide array of tasks that reflect the reality of the demands of the twenty-first century.

In concrete terms, adults who do not perform at Level 3 are unlikely to be able to consistently handle tasks such as planning travel arrangements for a meeting using a flight schedule. They are unlikely to be able to read a news article and identify a sentence that provides the interpretation of the topic addressed. They are unlikely to be able to identify multiple pieces of information from a bar graph.

A major finding of this report is that a surprisingly high number of people active in the state's labor force have a high school credential but still have skills in the lowest two levels of NALS, meaning they are not fully literate according to the new definition of literacy. Separate and distinct from the two groups cited previously (immigrants with limited English speaking skills and high school dropouts), we identified another 667,000 workers who despite having a high school credential are still not adequately trained or educated for the twenty-first century economy. These workers account for almost twenty-one percent of the workforce.

Two phenomena explain how so many workers with a high school credential have weak literacy skills. First, some of these workers never achieved the desired proficiency of a high school graduate, although they have a credential. The state's K-12 Education Reform efforts are poised to end this practice for future generations, but this should not distract from the bigger issue. Today's skill requirements are substantially different from those of the past. Today's economy demands a higher level of skills, more complex than the sort high school graduates were taught in previous years. While the future workforce should be adequately prepared, we have more than half a million workers in the workforce today who need their skills upgraded for the twenty-first century.

1 in 3 Workers Not Adequately Prepared for the New Economy

In different ways, members of each of these three groups are not prepared for today's economy. When we calculate an unduplicated count of workers who are not adequately trained or educated for the New Economy, we arrive at 1.1 million adults.[2] They constitute 35 percent of the state's labor force of 3.2 million workers. In other words, we believe that about 1 in 3 workers in Massachusetts are not adequately prepared for the New Economy.

Despite the enormity of the problem, we must resist the temptation to say that it is too big to address in a meaningful way. Instead, we must focus on what we can do to make a difference—and there are things we can do. Really, we don't have a choice. The families who are working harder and harder just to keep pace financially need help upgrading their skills. And the future economic health of our state depends on our ability to improve the skills of our workers.

Thousands of Workers Willing to Take Responsibility for Improving their Skills

There is some good news that comes with these three challenges. Thousands of workers in the state want to improve their skills. Each year, tens of thousands of adults who want to improve their basic skills and who want to learn how to speak English come to the doors

2 Our estimate is based on three sources of data. The estimate of the Language Challenge is based on the 1990 U.S. Census; the Education Credential Challenge estimate is based on the Current Population Surveys; and the New Literacy Challenge estimate is based on the National Adult Literacy Survey combined with the Current Population Surveys to get a state estimate.

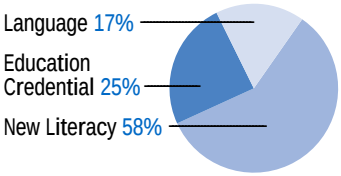
Estimated Universe of Need[1] for Adult Education, 1998-99

Group in Need	Number
Language Challenge	
Immigrants with limited English-speaking skills	195,000
Education Credential Challenge	
Adults lacking a high school diploma or GED	280,000
New Literacy Challenge	
Full-time employed[2] with a Level 1 or 2 proficiency	509,000
Part-time employed[2] with a Level 1 or 2 proficiency	126,000
Unemployed[2] with Level 1 or 2 proficiency	32,000
Subtotal	667,000
Total	1,142,000

Note: (1) Counts exclude 16-24 year old students in high school and college and all persons 65 and older.
(2) Counts exclude persons lacking a high school diploma or a GED certificate.

1.1 Million Workers Not Prepared For the New Economy

What is the Breakdown of the Problem?



of ABE and other adult education programs for help. The actions of such workers demonstrate their willingness to take responsibility for improving their skills. Their commitment to helping themselves will help the state as well as their own families, and the state must do more to respond. In the report that follows, we identify priorities and points of entry that offer the biggest potential payoffs.

Need for Lifelong Learning

As we focus our efforts to tackle the twenty-first-century skills challenge, it is important that we think in terms of the need for lifelong learning. Lifelong learning is the expectation of continuous revising and upgrading of skills throughout a person's life to keep pace with a changing economy. Lifelong learning is particularly important for workers with weaker skills, who traditionally have not had access to professional development and training.

There is clearly a wide literacy gap between the highest skilled workers and those with the most limited skills. We cannot kid ourselves by believing that the workers who lack basic skills are one class away from solving the labor shortage. The reality is it may take many classes to get them well-positioned for the New Economy. There are no easy answers. The solution we advocate—a serious, integrated adult education and training system—presents the best opportunity for sustaining our state's economic prosperity and making certain the prosperity is broadly shared.

Meeting the Three Challenges

How to Meet the Language Challenge and the Education Credential Challenge: The Demand for and Role of Adult Basic Education

We have identified three distinct challenges in building people's skills. We first discuss how to meet the Language and Education Credential Challenges and then turn our attention to the New Literacy Challenge. The adult basic education system, operated under the state's Department of Education, is one of the principal places where adults with limited skills begin to build their skills. Currently, ABE is geared toward helping immigrants learn to speak English and helping students gain basic literacy skills. The most advanced classes in the literacy sequence are GED classes, and these classes prepare students to earn high school credentials. Thus, the ABE system has limited opportunities for students who have a high school credential but still need their basic skills upgraded—this is the New Literacy Challenge. Rather than create a new sequence of classes within the ABE system, which is what would be necessary to systematically address the New Literacy Challenge through the ABE system, we believe ABE should focus on meeting the Language and Education Credential Challenges.

The Massachusetts Legislature has demonstrated a serious commitment to building an adult basic education system by substantially increasing funding every year for the last six years. Since 1994, the amount of money the Commonwealth has allocated to adult basic education has increased more than sevenfold from $4.1 to $30.2 million. In Fiscal Year 2000, the total cost of ABE was $40.9 million, and the state provided three-quarters of this money. Great benefits have come from this investment. Indeed, the number

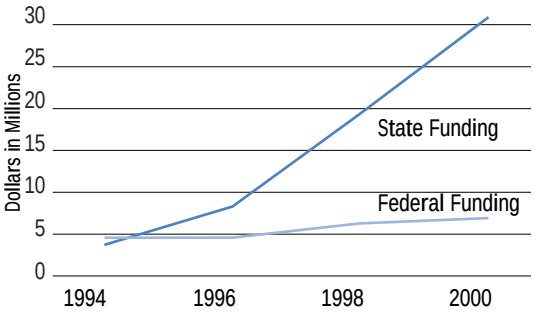
Meeting the Three Challenges

Challenge	Population in Need	Current Situation	Recommendation
Language Challenge	195,000	Currently served by DOE ABE classes (25,000 students served)	Expand, improve, hold accountable (see chapter 8)
Education Credential Challenge	280,000		
New Literacy Challenge	667,000	Not being served by a coherent system. Addressed through community colleges, ABE, workplace education, job training. (No idea how many people served)	Expand developmental education through community college—employer partnerships. (see chapter 8)

of students taught by the ABE system has increased from 14,557 to 24,581, and the quality of instruction has also improved significantly.[3]

Through its ESOL and literacy classes, the ABE system is prepared to meet the Language and Education Credential Challenges. It is important not to diminish the size of the challenge facing the ABE system or the vital importance of the basic literacy, GED, and ESOL classes being provided. The combined total of 195,000 immigrant workers who have limited English speaking abilities and the 280,000 workers lacking a high school diploma adds up to almost half a million workers (475,000). There is, of course, room for improvement in the delivery of ABE instruction, and our research provides some guidance about how to accomplish this.

State and Federal Funding for ABE



Only a Tiny Fraction of the Population in Need Attend ABE Classes

Despite all of these efforts, a tremendous amount of work remains. First, only a tiny fraction of the workers who need to upgrade their basic skills receive instruction. In the year 2000, approximately 25,000 students will attend ABE classes.[4] Thus, the ABE system currently reaches less than six percent of the 475,000 adults whose skills deficits could be addressed through ABE classes. At the same time, thousands of adults are on waiting lists for ABE classes.

Waiting Lists for ABE Classes Have Not Disappeared Despite Substantial Increases in the Number of Seats

Second, because of limited capacity, the adult basic education system does virtually no outreach to potential students. Even without outreach, students show up for a chance to improve their basic skills. Not everyone can be offered that chance, though, because there are not enough slots. Many students are placed on waiting lists. For instance, 224 students are waiting for classes at the Framingham Adult ESOL program. In fact, sometimes more students are waiting than are learning in a program. At the Boston Chinatown Neighborhood Center, the waiting list is almost twice as long as the enrollment list. The number of students on waiting lists statewide varies throughout the year. In recent years, the numbers have ranged from 8,000 to 16,000. The greatest demand is for ESOL classes, and more than half of those who wait seek these classes. The wait is longest in large urban areas, and students can wait more than a year for ESOL classes. The stumbling block here is clearly the lack of available classes, not the lack of interest.

Sadly, we do not really know how many adults want to upgrade their skills and would participate in classes if given the opportunity. In the 1990s, the state's landmark Education Reform Act (ERA), best known for setting new guidelines for the state's K-12 system, also established the Adult Education Committee, chaired by Jerome Grossman, to look at the state of adult basic education. Its final report, which has come to be known as the *Grossman Report*, offered a plan to eliminate the waiting lists. The Legislature was quite responsive to its recommendations. Each year, the state has devoted more resources to adult basic education specifically so that people who want to learn basic skills do not have to wait. Yet seven years later, despite substantial increases in the number of classroom seats, waiting lists have not disappeared. Rather, they have remained at roughly the same length. More people keep coming for a chance to learn, and this is happening without advertising or active outreach efforts.

As people learn about opportunities, they want to improve their skills. Tens of thousands of people in the state are not looking for a handout; they are looking for a hand up. Despite the economy's need for more skilled workers, despite people's desire to help themselves, the state is not fully able to respond. This is especially a problem for immigrants who want to learn to speak English.

We believe that the Legislature should expand funding for adult basic education until everyone who wants help improving his or her basic skills, learning to speak English, or studying for the GED test can get it within a few weeks. The explicit objective of future appropriations increases should be the elimination of all waiting lists by the Fiscal Year 2003 (June 30, 2002). If a person is willing to come to class and put in the work necessary to upgrade his or her skills, then Massachusetts should become a state that makes cer-

3 In addition to ABE funding, there are other sources of public funds that support building workers' basic skills. For instance, some of the training programs under the federal Workforce Investment Act (formerly "JTPA") support basic skills education. In addition, this year the Legislature provided $2.1 million to expand the "developmental education" provided by community colleges. Moreover, a modest fraction of the $18 million contributed annually by employers to the state's Workforce Training Fund is spent on basic skills education.

4 Basic skills are also taught through programs outside the ABE system. However, there is currently no way to identify the total number of participants in all the different programs that provide some form of basic skills instruction. The overall number is higher than 25,000, and it still falls significantly short of the need. For instance, in 1998, of the approximately 13,000 adults who enrolled in JTPA job training programs, 61 percent lacked ninth grade math skills, yet fewer than 15 percent received basic skills instruction.

tain there is a seat available for that person and that the classes deliver effective instruction.

What Does the State Buy with Its Investment in ABE? How to Improve the Effectiveness of Adult Basic Education

The Department of Education's ABE system educates a tiny fraction of the total number of workers whose skills need to be upgraded. Before increasing the system's capacity, we should assess what return the state gets from its investment in ABE by asking: Does participation in adult basic education programs lead to positive outcomes?

For the first time in the history of ABE in Massachusetts, we are able to conduct a comprehensive quantitative analysis of student outcomes. We are able to do this because of recent improvements in data collection and the willingness of the leadership of the Department of Education to share its data with interested parties for objective analyses. Our analysis allows us to determine whether the money the state spends makes a difference in our ability to teach adults basic skills and help them acquire educational credentials. It also offers guidance about how to improve the delivery of ABE.

Students Learn in ABE Classes

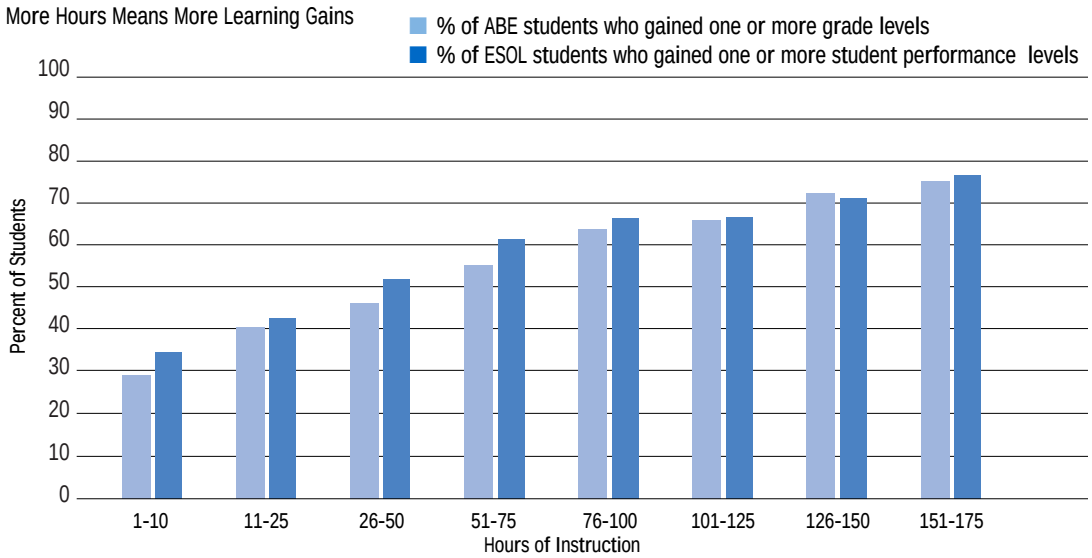
We find adult basic education to be effective in improving students' literacy skills, but there is also room for considerable improvement. Although student motivation and the efforts that they put forth are the key to success, there are specific steps the Department of Education can take to improve the delivery of ABE instruction. We find that more than half the students achieve learning gains, and almost one-third gain more than two grade levels (or student performance levels in the case of ESOL students). As students receive more hours of instruction, more of them achieve learning gains. The longer students stay, the better they do. Thus, we need to focus on getting students to class and getting them to stay longer. Our research suggests that we should aim to keep students in class for 150 hours per year.

Too Many Students Leave ABE Classes Too Soon

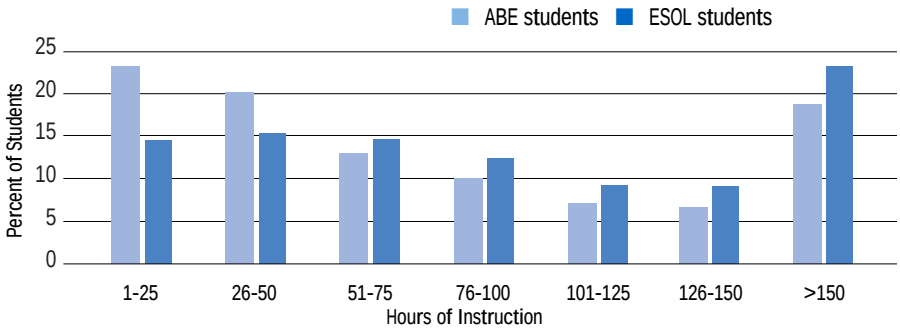
As students spend more hours in class, they are likely to learn more. Many students, however, only attend classes for a short time. Almost one in five students drop out after a month—approximately 25 hours of instruction. At a few hours per week, a month is not long enough for most students to achieve any substantive learning gains. On this score, ESOL students do better because they tend to stay in class for a longer period of time. We should redouble our efforts on finding ways to retain students, especially in literacy classes. Currently, only 21 percent of students receive at least 150 hours of instruction. The Department should set a goal that 33 percent of all students receive a minimum of 150 hours of instruction.

Intensity of Instruction Matters for Students Trying to Earn a High School Credential

For those students trying to earn a high school credential, we also find that how we teach students matters. We examined intensity of instruction, defined as the number of planned class hours per week, in GED and pre-GED classes. For this specific group of students,

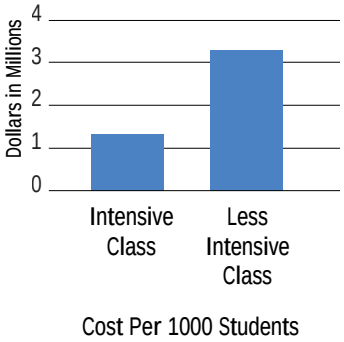


Too Many Students Drop Out Before 150 Hours



we find that fewer overall hours, if offered intensively, can actually be more effective than more hours spread over a longer period of time. We also find that for the same number of hours, a student is always better off if the class is taught intensively. Intensity might also be an effective recruiting tool. The class might be thought of like a SAT review course that helps prepare students to take an exam. The intensive class period will be difficult for students balancing many responsibilities, and ABE funders and programs will need to be creative about finding ways that help students attend such classes. Nonetheless, intensive classes with a specific endpoint are likely to appeal to many students.

Intensive Classes Will Cost Less



Our research suggests that the effort to offer intensive classes and recruit students for them would be worthwhile. Consider that a student who receives a total of 100 hours of instruction at 12 hours per week has the same probability of earning a high school credential as a student who receives a total of 225 hours of instruction at 6 hours per week. (In both these cases, about one in three students are expected to earn a credential). The intensive class will take about two months of instruction—the length of a summer school semester—compared to the less-intensive class that will take about nine months—the length of an entire academic year. Furthermore, given that the average student receives about 100 hours of instruction, it isn't likely that the student in the less-intensive class will stay in class for the full 225 hours in order to get the same benefit as the first student.

Potential Cost Savings

For this subset of students who are likely to benefit from intensive classes, intensive instruction will also cost the state less money, because intensive classes require fewer overall hours for the student. In 1999, the average cost in state money per student-hour was $14.69. An intensive 100-hour class would cost $1,469 per student. In contrast, the less intensive way, which is more similar to how we currently teach GED classes, would cost $3,300 per student. While there are certain fixed costs that would not be affected by fewer overall hours, it nonetheless appears that intensive classes for this subset of students appear to be both a very smart investment and a better way to address the Education Credential Challenge.

It is important to note that MassINC research only looks at the probability of earning a high school credential. It does not consider what learning gains students achieve in these classes or what test scores students earn on the GED exam. We agree with others who claim that there are no quick, painless shortcuts to genuine skill-building. But we also know that having a high school credential has important implications in the labor market. Thus, helping high school dropouts earn this critical credential through intensive GED classes has the potential to boost incomes for thousands of working families—a distinct benefit in its own right.

Expand Weekend Classes

Classes should be more convenient for students. In 1999, a total of 6,959 students indicated that Saturday classes would be convenient for them. Yet out of the approximately 1,500 classes, only 25 are offered on Saturday. Across the state, 3,832 ESOL students indicated a preference for Saturday classes. Those ESOL students who live in southeastern Massachusetts are out of luck, since at the time of this research there is not a single ESOL class in that region on Saturday - all the more disturbing for the large immigrant communities in New Bedford and Fall River. The number of classes offered on Saturday should be increased, and students across all regions of the state should be able to take ABE classes on Saturday. In addition, some programs should offer classes on Sunday to see if Sunday would also be convenient for students.

Track Students' Outcomes in the Labor Market after They Leave the Classroom

Finally, it is critical to acknowledge that one of the best ways to assess the value of our investment is not currently used in Massachusetts. Precious little information is collected by providers and state agencies about what happens to students once they leave the classroom. We know that of the participants in ABE programs who were looking for work, 18.2 percent, or

893 people, found a job during Fiscal Year 1998, but we don't know anything about the quality or wages of the jobs. We also do not know how these students will fare in the labor market over the next five years.

We cannot answer these critical questions in part because the state currently does not require different state agencies to share relevant information. This problem is more the result of a lack of political will than any true technical barriers to gathering such information. It would require collecting the social security numbers of participants and then requiring the Department of Revenue and other agencies that track labor market participation to share their data on the employment and earnings of these students. This raises some privacy issues, but we believe that these issues can be addressed with proper safeguards.

Meeting the New Literacy Challenge: Expand Developmental Education through a Community College-Employer Partnership

We have suggested that the ABE system focus on meeting the Language and Education Credential Challenges by expanding and improving existing programs. What, then, should be done for the 667,000 workers who have a high school credential but still lack the necessary basic skills—the New Literacy Challenge? While these workers might benefit from a GED class, it is not practical on a large scale to direct workers with a high school credential to such classes, because they already have a high school equivalency. Currently, there is no coherent system in place to address the New Literacy Challenge, and this group of workers is estimated to represent 21 percent of the total labor force.

On their own initiative, workers may seek out help from existing job training programs, community colleges, ABE programs, churches, or other community groups. Through workplace education programs, employers sometimes offer basic skills instruction to their employees. Unfortunately, we have no way of knowing how many workers with high school credentials (or even without credentials) receive help in upgrading their basic skills. National research indicates that only a very small fraction of firms provide such training to their front-line workers. We do know that meeting the New Literacy Challenge requires a systematic strategy and coherent policy.

To address this challenge through the current ABE system would require the creation of a new sequence of classes. But we don't believe this is necessary or wise because a set of institutions already exists that is well-positioned to undertake this challenge: the state's public community college system. We believe that a new system of partnerships between our fifteen community colleges and local employers offers the best opportunity to meet the New Literacy Challenge for the 667,000 workers in question.

Currently, community colleges offer what is called "developmental education" instruction. Although developmental education is primarily understood as college preparatory education, it is more than that. Community colleges offer developmental education instruction in collaboration with companies to upgrade workers' skills at no cost to the worker. (See the workplace-education section below.) These classes are typically located at the workplace and are privately funded by businesses. In addition to paying for the courses, employers are critically important in identifying workers who are unlikely to perceive themselves as needing help or who are not likely to know how or where to get the right type of help. The employers provide a vitally important bridge between the workers and the adult education classes.

The geographical distribution of community colleges enables them to reach companies and individuals across the state, and they have existing physical infrastructures and personnel resources that eliminate the need to start from scratch. Because they are doing this type of work already (although on a smaller scale) and are also often ABE providers, they already have some expertise in this area and have existing relationships with employers. The community colleges are not doing enough, though, and their willingness to engage in this type of work is uneven across campuses. Stronger leadership is required. Rather than being tangential to the mission of community colleges, we believe that developmental education for workers who need to upgrade their skills (and not necessarily with the goal of attaining a higher education degree) should be explicitly incorporated into the mission of community colleges.

Expand Community College Developmental Education

Developmental education should be expanded. Expanding developmental education through aggressive outreach and marketing offers the most promising way to meet the New Literacy Challenge. We believe this should be done through public-private partnerships that builds on two recent improvements. Over

the long run, it should also be considered whether it is appropriate for the workers who benefit from these programs to bear some of the costs. In July, 2000, the Legislature established two new programs. It appropriated $2.9 million to establish and implement a new Community College Developmental Educational Program, and it appropriated another $2.1 million for a new Community College Workforce Training Incentive Program. These programs provide a strong incentive for community colleges to expand their developmental education programs.

Create Tax Incentives for the Private Sector

To encourage companies to participate in these efforts and help share the cost, the state should also establish a Basic Skills Training Tax Credit. Adopting this legislation would encourage companies to invest in their workforces and ultimately enhance the competitiveness of the Massachusetts economy.

How Companies Gain from Investing in Upgrading Workers' Skills

Employers have long recognized that many of their workers need better skills. Because of this, there has been a growing interest in workplace education. The idea of workplace education is simple: basic skills classes offered through the workplace within the workplace context. This simple idea has caught on. It suits employers by helping improve the basic skills of their workers, and research suggests that there is a substantial productivity payoff to workplace literacy programs. Labor unions enthusiastically support the efforts. Workplace education also helps workers by teaching them basic skills that often translate into concrete opportunities to advance in their jobs.

Workplace Education Programs Help Workers

Classes at the workplace are more convenient for working participants. They put less pressure on a worker's schedule. Moreover, employers that receive state funding must offer at least half of the class time as an in-kind benefit to employees, which means workers can spend more time learning. A recent evaluation found that almost all participants in workplace programs are satisfied with their programs, and many are interested in taking more courses. Moreover, many participants reported benefits such as increased responsibility or a pay raise as a consequence of their participation.

Employers See the Value of Workplace Education Programs

Employers who have invested in strengthening their workers' skills recognize the benefits. In addition to increased productivity and profits, they credit the programs with improving the quality of work, increasing morale, and leading to better team performance. Often for the first time, workers speak a common language and can work better as a team. Perhaps not surprisingly, the employers with whom we spoke were enthusiastic proponents. In fact, one local employer credits the company's survival and prosperity to the investment in upgrading its workers' skills.

We see workplace education as particularly important in meeting the New Literacy Challenge. Because almost all of 667,000 adults we identified as low-skilled are already working, we believe they would be most effectively identified and instructed through encouragement from their employers. Outreach to these workers is necessary, because many of those who might benefit are unlikely to realize their skills are not up to par, and even if they do, they are not likely to know how or where to get the right type of help to upgrade their skills. Developmental education taught through community colleges in a partnership with companies offers a great opportunity to address the New Literacy Challenge.

Toward an Integrated System of Adult Basic Education and Job Training

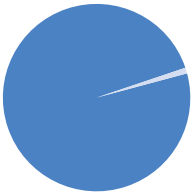
This report emphasizes that adult basic education should not be seen as an end in itself but as part of a lifelong learning process. ABE is effective for many students, but it should be seen as the first step toward other training and educational opportunities. The community colleges, Workforce Investment Boards, Corporation for Business, Work, and Learning, Department of Employment and Training, Department of Transitional Assistance, Department of Labor and Workforce Development, and the Board of Higher Education should all be more closely integrated with the adult basic education system. Currently, however, job training and adult basic education are run separately and are governed by different agencies with little institutional linkage between them, even though these agencies serve essentially the same population.

Workers with Most Limited Skills the Least Likely to Receive Job Training

Not all eligible people who come for job training actually receive training and education services. This occurs primarily because of limited funding. However, when we look at who receives help and what type of help they receive, a troubling pattern emerges. Workers who have the weakest skills are the most likely to be screened out and not receive actual training or education services. At this time, we do not have enough information to know why this is the case, but it is cause for concern. Although 61 percent of workers who enrolled in programs through the Job Training Partnership Act in 1998 had skills below the ninth-grade level, fewer than 15 percent of them received basic skills instruction, and they are rarely referred to a system that could help them—the adult basic education system.

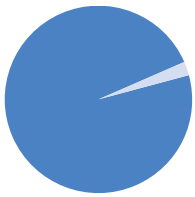
Even if they do receive services, participants who do not have ninth- or tenth- grade proficiencies are less likely than workers with stronger skills to receive occupational training or on-the-job training. These two types of training are the most desirable in that they lead to better outcomes in terms of higher wages and higher rates of employment than other types of training services. The training system works the best for those workers with the strongest skills and makes fewer provisions to help those workers with the weakest skills.

One-Stop Career Centers Refer Few Students to ABE System



1% of students refered to ABE system by one-stop Career Centers

Few ABE Students Plan to Take Further Education or Training



2% of students who complete ABE classes plan to go on to further education or training

Workers with Weak Skills Rarely Referred to ABE System by One-Stop Career Centers

People who come for job training with weak reading and math skills should automatically be offered or referred to basic skills classes. According to the Department of Education, in 1999 only 314 out of 25,000 students (1 percent) were referred to the ABE system by the state's one-stop Career Centers. This number likely underestimates the number of referrals because it is based only on the information provided by students at the time of their intake, but it should not distract from the genuine problem of a lack of coordination between the agencies.

ABE Students Rarely Directed toward Other Education and Training Opportunities

At the same time, the adult basic education system must also be better integrated with existing job training programs. Upon completion of basic skills classes, participants should be pointed toward job development, job placement activities, and other forms of training that are likely to lead to higher wages. And yet, upon completing their ABE classes, only 557 of ABE students (2.38 percent) cited that they planned to take further education or training courses. Basic skills classes are effective in improving basic literacy and numeracy skills, but they are only the first step in upgrading adults' skills. Basic skills instruction, job training, and increased educational opportunities are the key to providing the skilled workers that the state's economy demands, while at the same time improving the wage and earning prospects for less-skilled workers.

Concluding Thoughts

We have identified 1.1 million workers in the Commonwealth who are not adequately prepared for the New Economy. That is 1 in 3 of our workers. These workers face one of three distinct challenges to upgrading their skills: a Language Challenge, an Education Credential Challenge, and a New Literacy Challenge. Through its ESOL, literacy, and GED classes, the ABE system is prepared to meet the Language and Education Credential Challenges. It does, however, need to be expanded and improved. More significantly, there is currently no coherent system to meet the New Literacy Challenge for 667,000 of the 1.1 million adults. These workers have a high school credential but do not have the skills needed for today's economy. To address this need, we suggest expanding developmental education through community college-employer partnerships. By allowing the ABE system and the community colleges each to do what they do best, hundreds of thousands of workers who want to take responsibility for upgrading their skills will have that opportunity.

If workers are willing to put in the necessary work, they will not only help themselves and their families, they will also contribute to the Commonwealth's economic prosperity. The Commonwealth does not have the luxury of deciding whether to accept the challenge of preparing its workers for the twenty-first century. The long-term economic health of our state depends on our willingness to invest wisely in a stronger and more fully integrated adult education initiative. At the same time, we need to hold the ABE system and the community colleges accountable for the outcomes of the students they teach. We must track what happens to the students who participate in these programs. Finally, as a state that lives by its wits, we must also continually encourage innovative thinking about how best to upgrade the skills of our workforce.

KEY FINDINGS AND RECOMMENDATIONS

✓Over 1 Million Massachusetts Citizens Lack the Skills Needed for the New Economy.

- The skills requirement has changed over the last two decades. What is considered "basic" has also changed. Today, to secure a middle-class job, workers must be able to solve complex problems, think critically, communicate effectively, and use computers. . . .page 2

- We have identified three groups of working-age adults in Massachusetts that each face different challenges in upgrading their skills. . . . . .page 8

- 1,142,000 workers in Massachusetts lack the skills and education needed in the New Economy. (This is an unduplicated count, created by combining the three groups below.) Thus, about 1 in 3 workers in Massachusetts are not adequately prepared for the New Economy. . . . . page 27

195,000 Immigrants Have Limited English Speaking Skills (A Language Challenge)

- Immigrants play a vital economic role in Massachusetts. Since 1990, all of the state's net labor force growth has been the result of new immigration. Over the last decade, the labor force in the Commonwealth grew at a rate of 1½ percent. If not for the inflow of immigrants, the state's labor force would have actually shrunk in the 1990s. . . . . .page 8

- Many new jobs in Massachusetts are professional, managerial, and sales positions. Immigrants who do not speak English well are not able to fill these jobs. These jobs have high vacancy rates, and immigrants seeking to fill them have limited options. . . . . .page 11

- The best data available suggest 195,000 immigrants in the Commonwealth have limited English speaking skills, and that number, which is based on the 1990 Census, is almost certainly higher today. . .page 11

- The ability of immigrants to speak English well is a major concern for employers, but it is also a concern for the immigrants themselves. An immigrant with a bachelor's degree who is fluent in English earns 2.5 times as much as an immigrant with a bachelor's degree who does not speak English. . .page 12 (Table 2.5)

280,000 Adults Lack a High School Credential (An Education Credential Challenge)

- High school dropouts pay a steep economic price for not having a credential. They are the group most adversely affected by changes in the labor market over the last two decades. . . . . .page 12

- There are 280,000 working-age high school dropouts in the Commonwealth. . . . . .page 13

- In addition, another 110,000 immigrants (already counted as part of the "Language Challenge" above) face the dual problems of weak English speaking skills and the lack of a high school credential. . .page 13

- In fact, immigrants account for nearly four out of every ten high school dropouts in the state. The incidence of school dropout problems among immigrants in Massachusetts is nearly four times higher than that among native-born adults. . . . . .page 14

667,000 High School Graduates Lack the Skills Needed for the New Economy (A New Literacy Challenge)

- In 1992, the National Adult Literacy Survey (NALS) measured the literacy skills of the adult population in the country. People who scored in the lowest two levels (Level 1 and Level 2) are not illiterate in the traditional sense but, rather, have limited skills that restrict their ability to participate in the New Economy. Experts across the board, including the National Governors' Association, agree that today's economy and society require skills at Level 3 or higher. This new definition of "literacy" measures adults' skills across a wide array of tasks that reflect the reality of the demands of the 21st century. . . . . .page 16

- There are 667,000 workers who have a high school credential and who have literacy skills in the lowest two NALS levels in Massachusetts. . .page 26 (Table 2.23)

- Stronger skills translate into higher incomes. The average annual pay of workers at the highest literacy level (Level 5) is $45,650 compared to $16,500 for workers at the lowest literacy level (Level 1). page 21 (Table 2.14)

✓The ABE System is Well-Positioned to Meet the Language and Education Credential Challenges

The adult basic education system, operated under the state's Department of Education, is one of the principal places that adults with limited skills begin to build their skills. By adult basic education, we mean basic literacy classes, GED classes that prepare students to earn a high school credential, and classes in English for Speakers of Other Languages (ESOL). We have argued that the ABE system is best-suited for and, therefore, should focus on meeting the Language and Education Credential Challenges.

ABE Funding and Capacity

- Over the last six years, the state has demonstrated a serious commitment to adult basic education by substantially increasing its funding. In 1994, the state spent about $4 million on ABE. In 2000, that number had increased more than sevenfold to about $30 million. . . . . page 36

- In those same 6 years, federal funding for ABE in Massachusetts increased by less than $3 million. .page 36

- The number of ABE students has increased dramatically, and the quality of instruction has improved. In 1994, 14,557 students participated in classes. In 2000, 24,581 students are expected to participate. . . . . page 36

- With virtually no outreach or marketing, there is already a huge demand for instruction that far exceeds the supply of ABE class seats. The number of students on waiting lists, one yardstick of the demand, has ranged from 8,000 to 16,000 people during recent years. . . . . page 31

- The greatest demand is for ESOL classes. More than half of those who wait seek these classes. The waiting period ranges from five months to enroll in basic literacy classes to more than a year for ESOL classes. page 31

- The state has tried to eliminate the waiting lists through increased funding, but waiting lists have not disappeared. Despite the substantial increases in the number of slots available, the waiting lists have remained at roughly the same length. . . . . page 31

- The number of phone calls to the state's literacy hotline is another way to assess the demand for services. On a shoestring budget, the hotline conducts limited outreach and advertising. Nonetheless, in the first five months of 2000, the hotline received approximately 750 calls from people seeking services for themselves, family members, or friends. . . . . page 31

RECOMMENDATION: Eliminate waiting lists by Fiscal Year 2003. The Legislature should expand state funding to the Department of Education for adult basic education so that everyone who wants to improve their basic skills, learn to speak English, or study for the GED test can obtain help within a reasonable amount of time. As it stands now, waiting lists are excessive, and it is unreasonable to demand that potential students wait months for an opportunity to enroll. The Department should develop a comprehensive waiting list remediation strategy with the explicit goal of reducing the current waiting list size and duration to nominal levels by Fiscal Year 2003.

RECOMMENDATION: While funding is only one measure of commitment to an issue, it is clear that increased federal leadership—both at a fiscal and a policy level—is urgently needed. The federal government needs to encourage companies to invest in basic skill training. The Progressive Policy Institute is calling for a 30 percent federal tax credit for company investments in remedial education, literacy training, and English as a Second Language. We agree, and call on the Massachusetts Congressional delegation to work to enact this important proposal.

✓Adult Basic Education is Effective: Summary of Key Research Findings

To assess the return on the state's investment, we used 1998 Department of Education data to do the first comprehensive quantitative analysis of student outcomes in the history of ABE in Massachusetts. We asked a simple but crucial question: Does participation in adult basic education programs lead to positive outcomes? The conclusion we reached was a definitive yes.

- More than half of the participants achieved learning gains, and almost one-third gained more than two grade levels (or student performance levels in the case of ESOL students). . . . . page 60 (Table 6.4)

- Students who entered at beginning levels tended to achieve greater learning gains than those who entered at more advanced levels. The average gain for beginning adult literacy classes was 1.53 grade levels, compared to .61 in the most advanced classes. In beginning ESOL classes, the average gain was 1.38 SPL (student performance levels), compared to .48 SPL in advanced ESOL classes. . . . . page 59

- On average, in 1998, students received 97 hours of instruction. That number appears to be increasing each year. . . . . page 60

- As students received more hours of instruction, they were more likely to achieve learning gains. Of the ABE students who received between 151 and 175 hours of instruction, 75 percent achieved a learning gain of one grade level or more. Only 29 percent of the students who received between 1 and 10 hours of instruction achieved the same. . . . . page 61

- The same pattern held true for ESOL students. Of the ESOL students who received between 151 and 175 hours of instruction, 77 percent achieved a learning gain of one SPL or more compared to only 35 percent of the students who received between 1 and 10 hours of instruction. . . . . .page 61

- Many students attended classes for only a short time. 3,780 (19 percent) of the students dropped out before receiving 25 hours of instruction, approximately a month's time. This suggests at least 1 in 5 students are not attending class long enough to achieve substantive learning gains. . . . . page 61

- Retention was less of an issue for ESOL students than for ABE students. 14.9 percent of ESOL students left before receiving 25 hours of instruction, compared to 23.6 percent of ABE students. . . .page 61

- ESOL students also tended to receive more hours of instruction. 23.6 percent received at least 150 hours of instruction, compared to 18.6 percent of ABE students. . . . . page 61

- As pre-GED and GED students receive more hours of instruction, the probability of earning a high school credential increases. . . . . page 62

- The probability of earning a high school diploma depends on the number of hours of instruction, the background characteristics of the students, and the location of the instructional site. . . . . page 62

- Of the participants who were looking for work, 18.2 percent found a job during the fiscal year, but we know nothing about the quality or wages of those jobs. . . . . page 67

- The experience of finding a job is different for ESOL and ABE students. For unemployed ABE students, the greater the learning gains of the participants, the greater the probability that the participants will find a job. As ABE students receive more hours of instruction, the probability that they find a job increases. If an ABE student receives public assistance, there is a lesser chance that student will find a job. . page 67

- In contrast, for unemployed ESOL students, the number of hours of instruction they receive does not affect the probability that they will find a job. Factors other than hours of instruction explain who will find a job. One possible explanation is the availability of job placement services. Another is the extent to which the participant is connected to community resources that may assist her in finding a job. . . . . page 67

RECOMMENDATION: As students stay in class longer, they are likely to learn more. Yet, we know that 1 in 5 students drop out of class before 25 hours. The situation is not acceptable. The Department should set two goals. First, 1 in 3 students ought to receive a minimum of 150 hours of instruction. ABE programs and the Department of Education must make a greater effort to help students remain in class and to determine why students leave classes. Second, the Department should set an explicit policy goal to reduce the percentage of students unenrolling before 25 hours of instruction (currently 19 percent).

RECOMMENDATION: Whether a student is likely to earn a high school credential is influenced by the number of hours of instruction, the student's background characteristics, and the program through which that student attends classes. While we know the site is important, we don't know exactly what matters about a given site, and we recommend this as a topic of future study. As funders of ABE programs, local

and regional foundations should fund evaluation and qualitative research to help understand what makes a site effective.

RECOMMENDATION: In order to know what happens to participants after they leave the classroom, we strongly believe the adult basic education system should collect students' social security numbers in order to integrate ABE data with information from the different state agencies. This would allow us to know what happens to participants over time in the labor market. In the absence of hard data about the future earnings of ABE participants, it is impossible to say definitely whether state monies are being targeted toward the most effective ABE providers. To be sure, economic gains are only one benefit of ABE instruction. But we will never know to what extent ABE results in meaningful gains for workers until we examine the future income growth of those workers.

✓Six Smart Ways to Improve ABE

(1) Weekend Classes

- Our research confirms that more hours of instruction help participants achieve better outcomes. Yet, class offerings are extremely limited on the weekends, which not only limits the number of hours students can attend class but also excludes two days that would potentially be very convenient for students. Less than two percent of the total classes are offered on Saturday. Excluding classes in correctional institutions, only 25 classes—19 ESOL classes and 6 ABE classes—are offered on Saturdays. . . page 42

- When students register for classes, they indicate their preferred times for classes. A total of 6,959 students indicated that Saturday would be convenient for them. 3,832 ESOL students across the state said that Saturday would be convenient for them. There are no ESOL classes in southeastern Massachusetts offered on Saturday, despite the large number of immigrants in that region. . . . . page 42

- There are no classes offered on Sundays. Students are not even asked whether Sunday would be a convenient time for them. . . . . .page 42

(2) Teachers

- Experienced, seasoned teachers are crucial for learning. Unfortunately, there is a high turnover rate for teachers. 73 percent of ABE teachers have been with their programs for less than three years. . . . . page 54

- According to research studies, full-time teachers are an important factor in program quality. Only 36 percent of Massachusetts ABE teachers are full-time. page 54

(3) Technology and Distance Learning

- Technology and distance learning offer opportunities to allow students to spend more time learning each week. The Department of Education has begun to experiment with this method of instruction. page 33

(4) Funding

- Adult basic education is funded differently from the other educational systems in the Commonwealth. Rather than state funding going directly to long-standing institutions with largely permanent staffs and established physical infrastructures (buildings, campuses, etc.), funds are distributed largely to community-based private providers. These providers are responsible for hiring instructors on a class-by-class basis and for arranging the physical space where the class is held (renting community centers, securing donated office space, etc.). . . . . page 38

- This creates a fragile system characterized by an environment of uncertainty. It also decreases the incentives for long-term investments and even long-term planning. . . . . page 38

(5) Intensity of Instruction

- Increasing the intensity of instruction, which is the number of planned class hours per week, increases the probability that high school dropouts will earn a high school credential before the end of the (fiscal) year. . . . . page 65

- A short, intensive GED class appears to be more effective than a class that meets for a few hours a week spread out over a long period of time. A student who receives 100 hours of instruction at 12 hours per week has the same probability of getting a high school credential as a student who receives 225 hours of instruction at 6 hours per week. It will take the second student more than twice as many hours of instruction to have the same likelihood of earning a high school diploma. . . . . page 66

(6) Link ABE to the workplace

- By putting less pressure on a worker's schedule, classes at the workplace are more convenient for participants and their employers. One innovative approach already being used—but worthy of further expansion—would have employers offer at least half of the class time as an in-kind benefit to employees. . . page 49

- Research suggests there are substantial productivity payoffs to workplace literacy programs. For example, workplace programs bring workers closer together. Often for the first time, they speak a common language. They also work better as a team because of their shared experience in the classroom. . . . . page 49

- The employers we interviewed in Massachusetts were satisfied with workplace education programs. One employer notes that employees are more self-sufficient and that customer service improved as a result of classes. Another employer credits the company's ability to survive and thrive on its investment in upgrading the skills of its workers. . . . page 48, 55

- Small employers in close geographic proximity can pool resources and jointly offer classes. The Harvard Square Consortium in Cambridge offers a positive model. . . . . page 46

- Labor unions have a vital role in workplace learning. They help to identify workers who might benefit from instruction, and by offering classes at a union training facility or headquarters, they provide a meeting place for workers who do not share a common workplace. . . . . page 51

- For those who receive basic skills instruction outside the workplace, more systematic links to the workplace are needed to maximize the benefits of instruction for the worker. . . . . page 49

RECOMMENDATION: The Department of Education should immediately launch an effort to increase the number of weekend classes and make sure weekend classes are available across the different regions of the state. Sunday classes also deserve experimentation.

RECOMMENDATION: Increased teacher salaries with benefits are necessary to create a highly skilled teaching staff and encourage a long-term commitment to the profession. We recommend that the Department of Education set a goal that 50 percent of all teachers will be full-time by Fiscal Year 2004. While adult basic education should increase the number of full-time teachers, there is still an important role within the ABE system for part-time teachers because of the required flexibility. The large number of K-12 public school teachers who may be retiring in the next few years due to an early retirement incentive package recently enacted by the Legislature could help the ABE system. These retiring teachers should be identified and aggressively recruited by the Department of Education.

RECOMMENDATION: Philanthropic foundations concerned with adult literacy should consider funding an evaluation in order to learn the most from the current Distance Learning Project in Massachusetts as well as distance learning efforts in other states and help bring these efforts to scale.

RECOMMENDATION: A gradual introduction of "hard funding" is an extremely worthwhile goal for the Department of Education to pursue. However, the move from a "soft funding" approach to a "hard funded" system may take several years, and it is unclear what form it should take.

RECOMMENDATION: The Department of Education should add intensive GED classes to its curriculum. Intensive courses are cost-effective and a better way of teaching students. At an investment of $1,469 per student plus certain fixed costs compared to the current cost of $3,300 per student, the state could greatly increase the number of adults in the state with a high school credential. The state should target 100,000 high school dropouts whose skills are at about the tenth-grade level. For their part, employers can play a leading role by offering intensive GED classes on-site.

RECOMMENDATION: The Board of Education should explore the viability of using intensive GED classes as a safety net for students unable to pass MCAS exams. For the large number of students—perhaps as many as 25,000—who are likely to fail the MCAS exam, intensive GED classes may offer an effective, albeit not ideal, short-term alternative to a high school diploma.

RECOMMENDATION: The monies that employers contribute annually to the state's Workforce Training

Fund (WTF) could be allocated more effectively by devoting a larger portion explicitly toward basic skills instruction. Currently, the fund only allocates about ten percent of its funds to basic skills instruction. This amounts to a marginal amount of funding for what is a major labor force challenge. For this reason, we recommend that the WTF dedicate one-third of its grants to basic skills instruction.

RECOMMENDATION: To encourage companies and help share the cost of enrolling their employees in developmental education classes, the state should establish a Basic Skills Training Tax Credit.

RECOMMENDATION: We must build on precedents for sound policies that encourage employers to share the cost burden of providing instruction at the workplace. Currently companies that receive assistance through the Department of Education's Workplace Education initiative (part of ABE) must provide salary for at least half of the time workers spend in class as an in-kind benefit. This effectively doubles the time in class for workers. This principle should be more widely applied with more aggressive outreach to prospective employer partners.

✓ Increase Accountability of the ABE System

The state should hold the ABE system more accountable. The first step is to improve the quality and quantity of data. The Adult and Community Learning Services (ACLS) division of the Department of Education deserves credit for its commitment to provide a more accurate picture of our ABE and ESOL efforts. Much work remains, however, to improve the quality of data.

- The Commonwealth should pay for a state sample of the next National Adult Literacy Survey (NALS) in 2002. This survey will give us an even more accurate picture of the population in need in Mass. The expected cost of participation is $750,000, which is a substantial amount but is also well within the state's fiscal capacity. . . . . .page 88

- The Department of Education should be required to issue an annual report describing who participated in programs, what the turnover rate of students is, how many hours of instruction students received, what learning gains were achieved, and what happened to students after they left the classrooms. . . . page 70

- When students enter adult basic education programs, they are tested or assessed in other ways to determine their starting level; they are also tested when they leave a class or at the end of the fiscal year. The quality of program-level data should be improved. When we reviewed the 1998 data, we found that assessment dates and methods related to entry and exit levels were lacking for the majority of students. This severely limits our ability to assess learning gains. The Department of Education must work more closely with programs to ensure accurate data, including the use of rewards and sanctions for providers struggling to comply with data collection. . . . . page 70

- At the same time, the Department should do more to standardize the methods of assessment. Currently, programs can use one of more than 50 methods of assessment; this number should be reduced to the several most common forms of assessment. page 70

- Social security numbers of participants should be collected in order to track what happens to participants over time in the labor market. Privacy is a real concern and there must be allowances for people who do not want to provide this information or do not have social security numbers. We believe that these issues can be addressed with proper safeguards. In order to make this happen, the Governor's Office should exercise the leadership necessary to resolve interagency disputes as well as identify instances where agency statutory changes are required. . . . . page 68

- A longitudinal study should be conducted to track ABE student outcomes over an extended time. As a way to cut costs, the Department should consider collecting information only on a subset of ABE participants. The Department could then include qualitative data in addition to the quantitative measures. If the Department pursues this option, it is important that the participants are randomly selected and that there are a sufficient number of participants to draw general conclusions from the findings. . . . page 70

✓ Create a New System of Community College–Employer Partnerships to Meet the New Literacy Challenge

- There are 667,000 workers in Massachusetts with a high school credential who have skills less than NALS Level 3, the level cited as the minimum level of literacy for the twenty-first century by a broad range of experts. . . . . page 26

- The ABE system currently has few options for students who have a high school credential but who still need their skills upgraded. To meet these workers' needs through the ABE system would require the creation of a new sequence of classes. . . . . page 44

- Community colleges are, for several reasons, an attractive alternative resource. Community colleges through their developmental education programs already work with a number of employers to help upgrade workers' skills. In addition, the geographic distribution of the community colleges enables them to reach companies across the state, and because campuses are already doing this type of work on a modest scale, they have some expertise in the area. . . . . page 44

RECOMMENDATION: Developmental education should be expanded through aggressive outreach and marketing. We believe this should be done through a new system of public-private partnerships between community colleges and employers. The Legislature has already taken steps to move community colleges down this path by establishing two new programs. It appropriated $2.9 million to establish and implement a new Community College Developmental Educational Program and another $2.1 million for a new Community College Workforce Training Incentive Program. These programs provide a strong incentive for community colleges to expand their relationships with local employers. It is imperative to now build on these efforts.

✓ ABE and Job Training Programs Should be Much Better Integrated

- In Massachusetts, job training and adult basic education are run separately and are governed by different agencies with little institutional linkage between them. The lack of linkage limits our ability to get the most value from either job training or adult basic education. . . . . page 72

- Many workers who show up for job training have limited basic skills. Without the basic skills instruction, their job training options are severely constrained since many vocational and technical training programs have a minimum 9th or 10th grade equivalency requirement for participation. . . . . page 73

- Primarily because of limited funding, not all eligible people who come for job training help actually receive training and education services. . . . . page 75

- Those with the most limited abilities are less likely to receive training or educational classes. When they do get help, they are less likely to get occupational training or on-the-job training. Studies show that workers who participate in these two types of programs receive higher wages and have higher rates of employment than workers who do not. . . . page 77

- Workers who do not have 9th or 10th grade level proficiencies are the least likely to receive training or education services. Moreover, they are rarely referred to a system that could help them: the adult basic education system. According to the DOE's own intake forms, only 314 students were referred to ABE by one-stop Career Centers. This suggests considerable room for improvement. . . . . page 81

- Similarly, the adult basic education system is not linked well enough to the job training programs. In 1999, 557 ABE participants (2.38 percent) cited that they planned to enter an education or training program. . . . . page 81

RECOMMENDATION: The state should offer incentives to help overcome some of the obstacles to interagency coordination. For the first year, the state should consider targeting $1 million to programs or pilot projects that combine adult education, training, job placement, post-hiring services, etc. These projects would be designed and implemented jointly by different agencies, such as the Mass. Department of Education and the Corporation for Business, Work, and Learning. Over time, with interagency coordination as an explicit criterion, funding for such projects should increase.