Mass. business leaders focus on real world skills, good teachers

The MassINC Polling Group conducted three focus groups and an online survey of business executives in Massachusetts on the topic of public education and workforce readiness. The survey was distributed by more than 40 business associations to their members. The research was a follow-up to a similar project done in 2013. The project was commissioned by the Massachusetts Business Alliance for Education, with support from the Massachusetts Business Roundtable and Associated Industries of Massachusetts.

It’s time to focus on good teaching and applied skills in education policy

Business leaders report serious deficiencies in new hires, ranging from higher-order skills like teamwork, critical thinking and communications to basic reading and math. Despite giving public schools relatively strong grades overall, employers continue to give the schools lower marks for preparing students for work. Nearly a quarter (24 percent) think the schools need a major overhaul; another 48 percent think they need to make moderate changes (Figure 1). This dynamic persists from 2013 and is one of the key findings from both years. Schools are seen as doing what is asked of them, but they are not imparting the skills needed to succeed in job situations.

Many of the issues business leaders highlighted in the poll and focus groups reflect a broad concern about the basics of education. Not only are students seen as lacking in basic skills and knowledge, but the solutions favored are relatively straightforward. Making sure schools have good teachers and imparting applied skills came up over and over again as key issues throughout the research.

Businesses are still struggling to fill positions, and see a disconnect between schools and preparing students for jobs.

Three-quarters (75 percent) of business leaders report difficulty filling positions in their companies, slightly higher than in our 2013 survey. Technical and manufacturing positions featured prominently in the types of jobs going unfilled, but employers also reported trouble filling retail and customer service jobs, and jobs in finance and accounting. Larger employers reported more difficulty filling positions than smaller firms, as did companies in the Western and Central parts of the state.

Figure 1: Most business leaders think public schools need at least "moderate" changes
% who think K-12 public education system has...

- Serious problems and is in need of a major overhaul
- Some problems and needs to make some moderate changes
- Few problems and only needs minor changes
- Functioning well overall and does not require much change
- Don’t know

Some problems and needs to make some moderate changes

Serious problems and is in need of a major overhaul

Functioning well overall and does not require much change

Don’t know
Many respondents mentioned specific positions they were seeking to hire, but some spoke more generally about the type of applicant they needed. As one survey respondent wrote: “Just about all jobs from entry-level to management. Entry-level applicants are often lacking in basic math and writing skills. VERY few are prepared for management positions.” “People with the ability to work with limited supervision and people with basic skills in communications,” wrote another. Technical skills matter for some jobs, but applied skills seem to be lacking generally. The focus groups echoed these concerns. Participants decried new graduates’ lack of preparation for a professional environment.

Perhaps because of the difficulties in hiring, the gap persists between the overall assessment of the schools and the job they are doing preparing students for work. About half give the schools an A (11 percent) or a B (41 percent), well above the grades for job-preparation (30 percent A or B). This same gap was also seen among focus group participants, who were harsher in their assessments on both marks. Nearly three-quarters think the schools need either moderate changes (48 percent) or a complete overhaul (24 percent; Figure 1). Smaller firms were tougher graders on both these items than larger ones.

**Teachers and applied skills are seen as the two biggest priorities.**

The two most favored policies from our 2013 research also rose to the top this year, in both the focus groups and the survey: improving the quality of teachers, and imparting “applied skills”. Two-thirds of survey respondents thought the business community should put “a great deal” of focus on improving these two areas (Figure 2). That mirrors a similar quantitative exercise in the focus groups, where participants gave applied skills an average rating of 9.2 on a 10-point scale, in terms of its effectiveness in preparing students for jobs. Attracting and retaining good teachers, and evaluating them fairly, were just behind, at 8.9 each.

Certain issues have a way of dominating the debate in the media and on Beacon Hill, but over and over again business leaders point in other directions. As business groups formulate their strategy for the coming session, it may be worth refocusing towards these higher priorities.
The Skills Gap: Basic and Beyond

In both the focus groups and in open-ended comments in the survey, employers lamented that job applicants and new hires are lacking in skills needed in the workplace. Those range from the simplest academic skills (reading, writing, math) to higher-order applied skills like teamwork and critical thinking, to “real world” skills like interviewing for a job and behaving appropriately in the workplace.

This broad definition of the skills gap came through in the quantitative portion of the online survey as well. When presented with a battery of skills that the schools could focus on, employers said, essentially, “all of the above”. A majority of respondents wanted schools to put “a great deal” of focus on 8 of the 11 skills, and most of the rest said “a fair amount” of focus was appropriate (Figure 3). The ability to write clearly tied with critical thinking at the top of the list (79 percent). Basic math skills came in third (70 percent), just ahead of oral and presentation skills and reading comprehension.

The three R’s – reading, writing, and arithmetic – took three of the top five slots. Applied skills – following directions (62 percent), group work (60 percent), and work-appropriate behavior (59 percent) – all clustered together, followed by STEM skills (56 percent). The lower position of STEM is because of its specialized nature; employers in technical industries rated it much higher than the rest. At the same time, however, math – the “M” in STEM – is the third most desired skill.

The focus groups revealed that employers are seeing some real deficiencies in basic skills, as well as job-related skills. Participants told of job applicants who couldn’t fill out applications and new hires who couldn’t make change from cash. Employers also complained about a lack of awareness of work-appropriate behavior, and of college graduates who were unable to work independently without clear directions. Social media and cell phone usage by younger new employees in the workplace were also frequent complaints.

Figure 3: Critical thinking, writing top skills for schools to focus on

Q: How much focus should K-12 schools place on teaching each of the following skills?

- Independent and critical thinking: 79% Great Deal, 19% Fair Amount
- Ability to write clearly: 79% Great Deal, 19% Fair Amount
- Basic math skills: 70% Great Deal, 27% Fair Amount
- Oral communication and presentation skills: 69% Great Deal, 30% Fair Amount
- Reading comprehension: 69% Great Deal, 30% Fair Amount
- Ability to follow directions: 62% Great Deal, 30% Fair Amount
- Ability to work together in groups: 60% Great Deal, 33% Fair Amount
- Awareness of work-appropriate behavior: 59% Great Deal, 34% Fair Amount
- STEM skills: 56% Great Deal, 40% Fair Amount
- Setting meaningful goals: 48% Great Deal, 40% Fair Amount
- Computer literacy: 47% Great Deal, 43% Fair Amount
The message seems to be that schools are not just failing to impart social skills necessary for the workforce, but that they are also producing students who do not know the basics. Improving on both will be key to producing students ready to be productive in the work force.

**Improving Teaching: Performance over Seniority**

If employers want to see improvement in a broad range of skills, they are laser focused on how they want to improve instruction. Four-fifths (82 percent) think that “using performance, rather than seniority, for personnel decisions” would be “very effective” in improving instruction levels (Figure 4). The next most favored intervention was improving teacher training and preparation (58 percent). Other ideas – better professional development, higher compensation, and paying teachers more in hard-to-staff disciplines – were seen as very effective by less than half of respondents.

**Figure 4: Evaluating teacher performance clear favorite idea for improving instruction**

*Q: How effective do you think each of the following ideas would be at improving the level of instruction that students in the public schools receive?*

<table>
<thead>
<tr>
<th>Idea</th>
<th>Somewhat effective</th>
<th>Very effective</th>
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<tbody>
<tr>
<td>Using performance, rather than seniority, for personnel decisions.</td>
<td>13%</td>
<td>82%</td>
</tr>
<tr>
<td>Improving teacher training and preparation.</td>
<td>34%</td>
<td>58%</td>
</tr>
<tr>
<td>Providing teachers with better professional development.</td>
<td>40%</td>
<td>46%</td>
</tr>
<tr>
<td>Paying teachers incentives for hard-to-fill positions like teaching science, math, and languages.</td>
<td>43%</td>
<td>40%</td>
</tr>
<tr>
<td>Increasing teacher compensation to attract stronger candidates.</td>
<td>36%</td>
<td>41%</td>
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Again, the survey results confirm the findings from the focus groups. Not only was the idea of “evaluating teachers fairly” seen as one of the most effective interventions, but several respondents also drew contrasts between the current system of teacher evaluation and tenure, and the more performance-driven way their own employees were evaluated. Focus group participants were largely unaware of the new teacher evaluation regime, which incorporates students’ test scores.

At the same time, employers also want teachers to have more flexibility in how they are allowed to teach. The comments showed a recognition that teachers are being asked to do more with limited time and resources. “Teachers are so busy evaluating themselves and students that there is zero time during a work day to lesson plan and offer extra help,” wrote one respondent. But overall, it seems, when it comes to teachers, employers are more inclined towards the stick than the carrot.
Employers continue to think there is too much emphasis on standardized tests

Business leaders want more accountability for teachers, but they are deeply concerned about one of the main tools used to evaluate teachers and students: standardized tests. More than three-fifths (62 percent) think there is too much emphasis put on preparing students for standardized tests. This is virtually identical to the 2013 survey, and it is consistent with other surveys of voters and parents MPG has conducted since.

That sentiment comes through clearly in the ranking of goals for the next-generation assessment currently being designed to replace the MCAS (Figure 5). Only 35 percent think it “very important” that the new test help principals evaluate teachers’ performance. Concern about using testing to evaluate teachers in this way also came through in the open-ended responses, where employers were very sympathetic to the amount of time teachers spend teaching to standardized tests. Wrote one respondent: “Teachers should be held more accountable for student performance and improvement only when they are given more flexibility in the way they teach.”

On the other end, however, nearly three-quarters think it very important that the new assessment test “critical thinking more than just memorized facts” (73 percent) and “skills that students will need in real world situations” (72 percent). No other items were considered “very important” by a majority of respondents. Once again, applied or real world skills feature prominently in employers’ responses. The continued emphasis on critical thinking is promising for those seeking to incorporate elements of the PARCC assessment in the new MCAS 2.0.

Partnerships seen as key to improving STEM, vocational and technical education

Employers think there is too much emphasis on testing, and they also think there is too little emphasis on science, technology, engineering and math (STEM). But there has been a shift on this question since we last asked it. In 2013, two-thirds (66 percent) thought there was not enough emphasis on STEM in the public schools. Now that number is 45 percent, and 33 percent think there is about the right amount of emphasis on STEM. In the focus groups, STEM and vocational/technical education were rated effective by the fewest number of participants. A majority (54 percent) think the business community should place “a great deal” of focus on voc/tech; only 44 percent think that much focus should be placed on STEM. This relatively smaller percentage reflects the specialized nature of STEM and voc/tech; employers from related industries like manufacturing and technology and give these ideas higher marks in the survey.

Figure 5: Employers want next-generation assessment to test critical thinking, applied skills

Q: Massachusetts is currently designing a new standardized test to replace the MCAS exam. How important do you think it is that the new test accomplishes

<table>
<thead>
<tr>
<th>Goal</th>
<th>Very Important</th>
<th>Somewhat Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test critical thinking skills more than just memorized facts.</td>
<td>73%</td>
<td>21%</td>
</tr>
<tr>
<td>Test skills that students will need in real-world situations.</td>
<td>72%</td>
<td>18%</td>
</tr>
<tr>
<td>Help parents and state officials identify successful versus failing schools.</td>
<td>45%</td>
<td>37%</td>
</tr>
<tr>
<td>Measure students’ readiness for college.</td>
<td>36%</td>
<td>43%</td>
</tr>
<tr>
<td>Help principals evaluate teachers’ performance.</td>
<td>35%</td>
<td>38%</td>
</tr>
<tr>
<td>Passing the new exam should be a requirement for graduating high schools.</td>
<td>28%</td>
<td>35%</td>
</tr>
<tr>
<td>Allow Massachusetts students to be compared to those in other states.</td>
<td>29%</td>
<td>34%</td>
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Even though it’s less of a top priority overall, employers do think a variety of policies to improve vocational and technical education would be effective. Nearly three-quarters (72 percent) think having local companies partner with schools to create job training programs would be very effective, followed by promoting technical careers as a viable alternative to college (68 percent). Employers are more interested in mainstreaming work-based learning (63 percent) and voc/tech programs (61 percent) throughout all public schools than in increasing the number of dedicated voc/tech schools.

Partnerships were seen as the best way to improve voc/tech education, and 58 percent of employers participated in at least one type of partnership activity. More than half have offered internships to high school or college students (60 percent), participated in a career fair (55 percent) and have sent an employee to a school to talk about career opportunities (52 percent). Other activities were far less common. Just 23 percent of employers have established a job training program with a community college or university and 15 percent have hosted teachers for externships to educate them about career opportunities for their students.

But employers also reported some challenges partnering with public schools. While virtually all of those who undertook a partnership activity thought it was worthwhile, more employers thought it was difficult (42 percent) than easy (34 percent) to get a partnership started. This sentiment was echoed in the focus groups, where an HR manager for a manufacturing firm detailed the challenges she encountered establishing a pipeline with a single technical school.

**Figure 6: Promoting, partnering top voc/tech interventions.**

*Q: Please rate the following ideas for improving vocational and technical education according to how effective they would be at increasing the qualified workforce in vocational / technical fields.*

<table>
<thead>
<tr>
<th>Idea</th>
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<tr>
<td>Promoting technical careers to students and parents as a viable job alternative to college</td>
<td>29%</td>
<td>68%</td>
</tr>
<tr>
<td>Partnering with local companies to create job training programs</td>
<td>22%</td>
<td>72%</td>
</tr>
<tr>
<td>Providing work-based learning experiences to students not attending a vocational high schools</td>
<td>30%</td>
<td>63%</td>
</tr>
<tr>
<td>Increasing access to vocational and technical programs in all schools in Massachusetts</td>
<td>30%</td>
<td>61%</td>
</tr>
<tr>
<td>Increasing the number of vocational and technical schools in Massachusetts public schools</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Encouraging more females and minority students to pursue technical careers</td>
<td>34%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Beyond STEM and vocational education, employers do understand the need to be engaged on education, both with individual schools and in the policy arena. When asked an open-ended question about what the business community should do on education, one of the top ideas offered was to better communicate the needs and expectations of employers to schools, so that schools can prepare students for the rigors of the workforce. This extends to working directly on curriculum to include more work-related content. Providing mentorships, internships and work-study opportunities was also a favored strategy, as did making students more aware of job opportunities, particularly jobs that do not require a college education. While some
respondents complained that schools and educators need to do a better job of reaching out to business, overall employers felt that it was essential for the business community to remain engaged with the schools and with education as a policy issue. As one employer wrote: "Most of our employees start in the public Massachusetts school system. The better they can be prepared makes for better companies, leading to stronger commerce in Massachusetts."