

Clockwise from top left, June Atkinson, Alice Garland, Adam Garry, Sue Breckenridge, Christy Cheek, Eileen Twomey and Joydeep Ganguly

ENROLLMENT REQUIRED

North Carolina's workforce and companies benefit when business takes an active role in schools and state government.

Career day used to be the best chance companies had to ignite students' interest in a career. Today there are more opportunities for businesses to get involved in education. Schools need guidance, support and relevancy in their mission, which, in part, is preparing a workforce for a rapidly changing North Carolina economy. BUSINESS NORTH CAROLINA recently gathered a panel of educators and executives to discuss the role of business in education. Participating were N.C. Superintendent of Public Instruction June Atkinson; Sue Breckenridge, executive director of North Carolina Business Committee for Education; Christy Cheek, career and technical-education director for Buncombe County Schools; Joydeep Ganguly, general manager of Cambridge, Mass.-based Biogen Idec's manufacturing plant in Research Triangle Park; Alice Garland, executive director of N.C. Education Lottery; Adam Garry, manager of global education strategy for Round Rock, Texas-based Dell Inc.; and Eileen Twomey, director of human resources for Hopkinton, Mass.-based EMC Corp., which has six offices in the state. The discussion was hosted and sponsored by Biogen Idec with support from N.C. Education Lottery, Dell and EMC. Peter Anderson, BNC special projects editor, moderated the discussion. The following transcript has been edited for brevity and clarity.

What is business's role in education?

Atkinson: It's a partnership. Constant interaction between businesses and schools is required to prepare a workforce. I have traveled across the state over the years and have seen many changes that are a direct result of business taking part in education. If I could wave a magic wand, I would get every teacher in North Carolina at least three business buddies who would bring relevancy and support to lessons. I also would ensure that our 1.5 million children all have a business experience during high school. When I taught, students who had that were head and shoulders above the maturity level and soft skills of the students who did not. Setting that goal would go a long way toward better preparing a workforce. It takes time and people to coordinate ongoing work experience for every student.

Breckenridge: Businesses help teachers and students understand the breadth of what's out there. More businesses are sharing their challenges and asking to be part of the solutions. Our weeklong Students at Work project introduced more than 30,000 students to career opportunities in 2013. Students who participate learn what it takes to land higher-level jobs at companies. But there are students who either cannot or do not want to go to college. In Asheville, for example, the chamber of commerce pulled together 70 businesses for the project. The largest ones were Mission Healthcare, Kelly Services Inc. and The Biltmore Co., but small mom-and-pop shops also were included. Students visited potters shops, restaurants and other businesses to see firsthand the skills needed for those jobs, which don't require a college degree. That experience exposed them to what's available. There's an emphasis on workforce development and training from

the governor's office and the Commerce Department. Education is part of every economic-development discussion they have.

Garry: We need to bring business into schools, too. Companies are asked to help improve education, but many haven't been in a school lately to see the issues or the accomplishments.

Cheek: So many times the valuable learning experience comes from students discovering what they don't like. If a student wants to be a doctor, for example, but detests the sight of blood, then they need to find something else. We have strong programs at our middle and high schools that help guide students. We talk about internships with them. We believe that workforce development has to start at the grass-roots level. If you can recruit and retain your own employees, they'll stay longer. Biltmore came to us after a local newspaper called one of the high schools a dropout factory. That was

when the statewide dropout rate was high, and it wanted to help change that. Biltmore helped the school system create Educating Generations of Employees, where schools select ninth-graders and Biltmore employees help develop their soft skills — first impressions, employer expectations, interviewing, résumé writing. It's a four-year program that includes the opportunity to interview for a summer hospitality camp. At the end they can work at Biltmore, so we're growing our own.

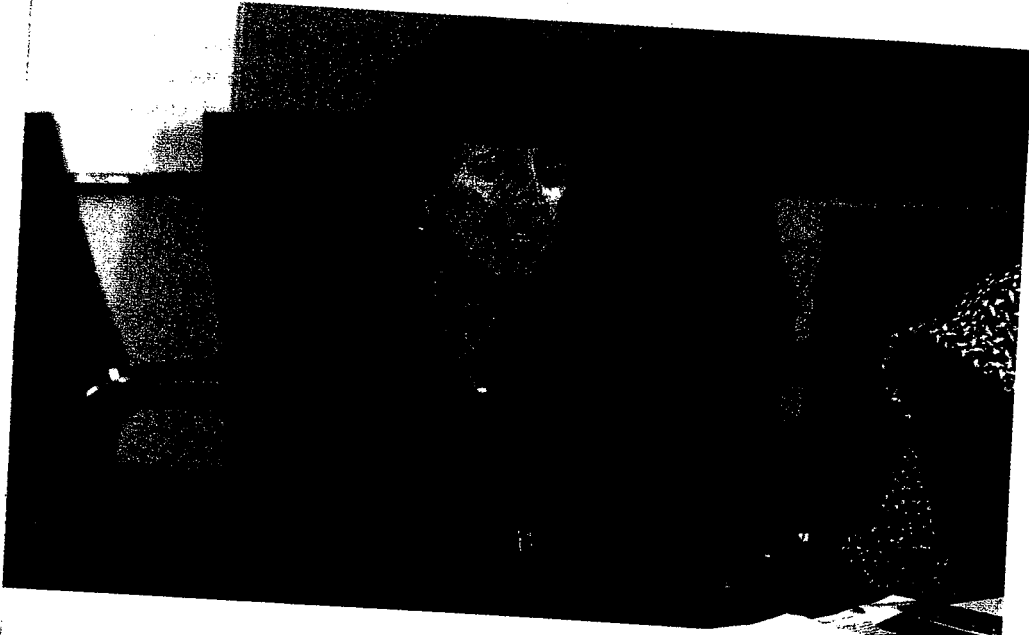
How do companies justify dedicating resources to school projects?

Ganguly: We try to construct situations that benefit our company and education. We have partnerships with universities such as N.C. State. Students spend a semester with our best and brightest, working on problems we expect to encounter in the coming years. There is a lot of fundamental thinking done and ideas

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— June Atkinson, N.C. Department of Public Instruction





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it helps its employees, too.”**

— *Eileen Twomey, EMC Inc.*

generated. One team, for example, discovered how to use analytics to predict which of our vendors will go out of business. What a competitive advantage that offers, knowing when to find backups for our key suppliers. I’m happy to say we employ the student who developed the tool, and she’s doing very well.

Garland: Look at what you’re spending on professional development and education assistance for your employees. If you put equal resources into helping schools, you’ll get employees who don’t need that assistance or development because they come to you prepared. That’s a good way to use resources.

Twomey: When a company helps schools, it helps its employees, too. They develop public-speaking skills, for example, by giving classroom presentations. That boosts confidence and makes better company representatives. It pays off in higher morale, too. They are excited to share their

volunteering experiences with co-workers. EMC partners with the after-school program Citizen Schools, for example, which invites companies to come to participating schools and teach from 3 to 6 p.m. two days a week for a semester. Lowe’s Grove Middle School in Durham is one of those schools. Its principal was having trouble managing cafeteria noise and needed a way to tell students when they were too loud. So the electrical-engineering team from our Apex plant worked with students to build something that looks like a traffic light but measures noise. If it shows yellow, students know they are OK. If it turns red, it’s time to quiet down. When there isn’t much money for parties and activities, education projects still provide benefits to companies.

When should businesses start working with students?

Atkinson: Middle school is an ideal place to begin discussing career

options. It is where students select their high-school courses. If a student, for example, is interested in health sciences, they should test those waters by taking a course in allied health sciences. It also is where students begin to ponder the relevancy of school. Unfortunately, some decide it is not for them. Conversations about career requirements can be powerful dropout prevention.

Twomey: One of our engineers shares a presentation on salaries. He explains what your job might look like, what kind of clothes you might wear and what kind of car you might drive if you graduate from high school. Then he goes through the same examples but for someone with a college degree. The kids see if they want a sports car and not a clunker they better graduate from school with the right credentials. There are choices, and they have consequences.

Garry: There is a lot of energy, collaboration, critical thinking and problem solving in kindergarten through second grade. And then compliance-based learning sets in, and that excitement seems to disappear. Students need to hold onto that passion as they move through school and beyond. How we foster that is the bigger question. Involving businesses and their real-life applications of what students study can help. During the most recent economic downturn, it was predicted that automakers wouldn’t have enough skilled people to fill the jobs available today. That seemed impossible at the time, with all the layoffs in that industry. But many of today’s jobs require skills that yesterday’s didn’t. When I travel across the country with the account executives at Dell, many of them have degrees in anything from art to economics. It’s all over the board, and many of them can sit down at a table and talk to people, but when we give a presentation for a large group, they can’t manage that situa-

tion. So it's those types of skills, which they never developed, that become pretty critical in some of the jobs they're doing. Learning should never stop.

Breckenridge: There are strong discussions inside the governor's office and the education cabinet about not putting a start or finish point on education. Research shows that the sooner you introduce technology to children the better. One teacher shared a story about his 6-month-old playing with his 2-year-old daughter. They each had an iPad, and the 2-year-old taught her baby brother how to turn it on.

Garland: That emphasizes the importance of the state's pre-K program, which the lottery helps fund. A 6-month-old with access to an iPad only happens in a small number of North Carolina families. There are many 3-year-olds who are not going to meet their potential if they don't

get help. They need a program such as pre-K that gives them access to the educational aids other children are fortunate enough to have at home.

It's important for businesses to support their unified voice in Raleigh, but how can businesses get involved with education in their regions?

Cheek: Businesses give back because it's about investing in the community. It goes back to public schools, making sure that we are producing future workers. It takes collaboration between schools and businesses to sit with political leaders, regional leaders or whoever is driving that economy. The new term for it is "educonomy." We have united with our chamber and workforce-development board to make sure what we're doing in Buncombe County aligns with the jobs that are expected there. I don't care where our kids go to college, but I want

them to return and work in the county. That's our sustainable workforce.

How can technology spread the impact of business on education?

Atkinson: Biogen Idec's Community Lab in Morrisville, which will give local students a chance to experience science hands-on starting this spring, offers a wonderful opportunity for students and teachers in the Triangle. But just two hours away, students and teachers do not have access to that experience because there aren't similar companies there. That's troubling, but there are ways to remedy it. The most western school district in the state — Cherokee County — has technology that allows students at two small high schools to take classes from a teacher at a third. Technology gives students access to more experiences. That can be a class or interacting with a business.

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Garland: The General Assembly decides how lottery net proceeds are spent. This year, for the first time, they are funding digital learning. Greene County, for example, has digital-learning capability countywide. It's incredible because a lot of that is teaching the class that's not physically there. It is a small, rural and fairly poor county, but what technology makes available to students is amazing.

Ganguly: Digital learning allows training to be personalized. Ten years from now, your iPhone will recognize your ability to consume information and adapt to it. My biggest worry is that everyone will know how to turn an iPad on, but no one will know how to calculate a tip on a restaurant check. There is an app that does that. I have friends who scan their bills instead of calculating that 15% of \$100 is \$15.



"Businesses need to help politicians develop a consensus on what's critical in education."

— Alice Garland, N.C. Education Lottery



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How would businesses describe a well-trained worker to educators?

Twomey: There was a time when we were very interested in what engineering candidates knew and how well versed they were in it. You can hire great engineers who can't think about what the next project will be, what the next wave of technology will be or work as part of a team. You can't just grill them on tests to make sure they have a technical aptitude for a specific role. You need well-rounded individuals who get along with co-workers and thirst to bring the company to the next level.

Ganguly: I can't remember the last time I asked an applicant a biotechnology question, because technology that is relevant today will be obsolete tomorrow. I ask them about handling tough situations and look for learning agility. We want workers who adapt

"We try to construct situations that benefit our company and education."

— Joydeep Ganguly, Biogen Idec



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quickly. We're going to have to adapt to remain relevant. What makes businesses successful is the people they've hired have looked at and recognized the evolutionary aspect of where they want to be.

Atkinson: We have to value math, science and the arts because they all prepare people to learn more. We must value those who learn heating and air conditioning, for example, because those detail-to-detail and problem-solving skills can be used in other jobs.

How can businesses help change the education system?

Ganguly: Businesses have to unite with one voice. Dell's problems, EMC's problems and Biogen Idec's problems are fundamentally similar. We can influence change and solutions.

Garland: Businesses need to help politicians develop a consensus on

what's critical in education. There are many voices out there. Business and industry jointly need to tell the legislative leadership that education is critical to that state's future and that this is what's important for education.

Breckenridge: Businesses are the customers of the education system. They hire the products. That's what drives the economy and what gives us the quality of life that we love. That has created a sense of responsibility but also hope. We now have an arena where voices are not only heard but they're sought. We didn't get here overnight, we're not going to solve our challenges overnight, but we will solve them. We're on the way and not turning back. We're going to make this happen.

Atkinson: We have 20th century artifacts in education that businesses must help eliminate. For example,

our laws state that the school year begins in the third week of August and ends on June 10. When you personalize learning, students master a skill and then go on to something more difficult. That can't be dictated by a standardized calendar. Why should we give a third-grade reading test at the end of the year? Why don't we measure students multiple times during the year, creating a growth chart? Grading our schools A through F is another artifact that needs to go. Typically, policymakers are thinking about the next year and what they can do to help North Carolina. Getting rid of some 20th century artifacts may cause huge pain, but that's what is needed. Some people say we're not ready for that. Well, I appreciate the concern, but sometimes you have to take a step forward.

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