Like most districts in the country, the Quabbin Regional School District is facing a critical issue. With all of the possibilities that technology holds, coupled with the tremendous frustrations that young people are experiencing, many of us are left with this idea of “Now what?” We may understand that there are difficulties with implementation, and that there are solutions that perhaps lie beyond our reach, but what can we do now? The title of this paper is a play on Thomas Friedman’s concept of Globalization 3.0 (2005). Learning 3.0 represents the transition from an industrial-based model of education to a knowledge-based model—an idea most districts are not even really thinking about, as they’re still trying to tweak everything they can out of the industrial-based model. Education reformer Horace Mann was born just 75 miles from the Quabbin Reservoir, propelling Massachusetts—the backbone of the industrial age—toward being the state that introduced the school age to the rest of the country.

It’s 2007, and there is no reason why geography continues to be the most important factor in determining what any child in this country can achieve and has access to in terms of educational equity. It’s 2007, and every student should have the opportunity to learn in a place like High Tech High. The most important question educators need to ask themselves is: Are we going to be in the school business, or are we going to be in the learning business? In 2007, those are two very different things.

The Business of School

Twenty or even forty years ago, how long did it take a student to move through fourth grade? One year. And today, how long does it take a student to get through that grade? One year. With all of the hundreds of thousands of dollars that we’ve invested over the years in technology and professional development—all that we know about brain research, all that we know about learning styles, all that we have invested in to become better at this craft—it still takes a student the same amount of time as it did before.
This scenario makes some sense if you’re in the school business because school is set up in years. But if you really want to use technology to transform your district into a learning system, you’re going to need to think about the idea of school in a completely different way. You’ve got the infrastructure there, and with that infrastructure you can go in two separate directions: you can continue to be in the school business and use it to reinforce everything that you’ve been doing, or you can use it to transition into the learning business.

If we think about the changes in industry over the last few years, the words faster, better, and cheaper come to mind. We usually tell businesspeople that they can count on two of the three. They can get it fast and cheap, but it won’t be high quality. Or they can get a high-quality item faster, but it won’t be cheap. Imagine if someone had come to your automobile manufacturing business thirty years ago and said, “We’re going to introduce millions of dollars worth of technology into your business with these guarantees: You’ll still be able to turn out the same number of cars every year, but you will have the advantage of being able to invest in a lot of professional development and training for the people using that technology. Plus, the cars that you’ll be turning out will still have the same number of defects and rejects that you had before.” It’s hard to imagine anyone thinking that this was a great deal, and yet this is exactly what we have allowed to happen in education. School districts need to ask themselves, “Can we use technology not just to reinforce what we’ve been doing but to create a learning system instead of a school system?” And if that’s going to be done, they’re going to need to design things differently.

With the rare exception, school years are about 180 days long. Where did that number come from? There’s nothing magic about 180 days being the amount of time kids need to be able to learn a certain amount of content. There is, however, something about 180 days being the magic number both for paying people to come in and teach, and for giving kids a period of time for learning and a period of time for play. There are no doubt policies in every district or state that say the school day will be anywhere from 6 to 7.5 hours long. Part of this is in response to the Committee of Ten’s Carnegie Unit—a concept originally developed to determine which college professors would qualify for full retirement benefits but which established the course of secondary education in the process.

This is a holdover from the industrial age, where we thought in terms of place—the factory. We put workers in a factory and made them use a time card—the most important tool for measuring performance in a
factory. Workers would start work at seven in the morning and quit at five in the evening. They didn’t get paid for any time before seven or after five, and as long as their supervisor thought they were doing an adequate job, they got paid for all their time in between. So the reward for these workers was the wage, and it was based on time. Put in a school context, the place becomes the school building. In the industrial age, it made perfect sense to send students to school because that’s where the knowledge was—that’s where the books were, that’s where the people who knew more things than the people at home were. Time, just like in the factory, was ordered around the bell. You weren’t to be evaluated on anything before the bell rang, or on anything after. Unless it was happening during that class time, students were not going to get credit for it. And that credit—transferring to the next grade—was the payback. And the quality didn’t matter so much as long as your immediate supervisor—your teacher—thought that you were doing okay. This is why we’ve ended up in the situation we’re in now.

**Transitioning to a Learning Business**

Today we can look at the change to the knowledge-based economy where we take the work to the workers and ask ourselves how we can apply this to a knowledge-based learning system. With all of the infrastructure there, do kids really have to go to school to learn? Take foreign languages, for example. Today there are some really amazing Web sites available for teaching languages online. Languagelab.com offers an immersion course using culturally authentic materials. Assessments are given, and learners can speak with people from the country of origin. In most schools, if a student can’t get into the 9:32 a.m. German class, he or she is out of luck. With the access that we have to technology, it doesn’t have to be that way.

**Current Policies**

Many people think that technology and the implementation of technology for learning happens at the classroom level. From a policy position, I would contend that the most important things happen at the district and state levels. When I talk about policy regarding the use of technology, most people think, “Yes, we’ve got policies in place; we have our AUP—our Acceptable Use Policy.” Several areas of policy currently exist. First are the restrictive policies, which would cover things like the AUP. These policies are absolutely necessary for keeping our students safe and making sure that they’re using technology responsibly.
The second type of policy is also restrictive but is based in fear. There are districts across the country in which students can’t do many of the things available to them because the Internet sites are blocked. These kinds of restrictive policies serve to cut us off from some amazing learning opportunities. Today we have many aspects of our presidential campaign being decided by YouTube, and yet there are history classes all over the country in which students—and even teachers—can’t access YouTube.

I remember the first time I was faced with something like this. It was the day after the 2000 presidential elections, when the winner of the race was still undecided. I was a high school principal at the time, and I thought, “This must be a great day for my AP U.S. history teacher.” Imagine my surprise when I walked into his classroom and found him talking about Reconstruction. And I said, “Eddie! What are you doing? This is one of the most important days in U.S. history!” He answered, “Well, this is what was in my lesson plans, and so this is what I’m supposed to be teaching today.”

I’m not saying that there ought to be open season on every site that there is on the Internet, but the policies have to look at how we’re determining what’s possible and what’s not. And we need to keep up with what’s available. In this time of ever-quickening technological developments, creating an ethics course for our kids is extremely important. Five years ago it was cell phones; today it’s YouTube and Facebook. What is it going to be tomorrow? Are we going to remain one step behind our kids in terms of what they are accessing, or are we going to give them the tools to begin to become responsible users of the technology that’s there? Besides which, we may be able to keep them off some of those sites while they’re in school, but unless we’ve given them the background to know about how to make wise, safe decisions as individuals, they’ll be at the mercy of the wolves when they’re away from school, because most of them have access to technology in much different ways. A really important thing to consider for a district is an ethics course in twenty-first-century technology.

The third type of policy is learner based. These policies define the standards for each class as well as the assessments that will be used to determine whether learning has actually occurred.

When I first started my principalship, every teacher in the school gave his or her own version of a final exam. Then we moved to the point where every teacher teaching the same subject gave the same final exam. Finally we moved to the point where no student could pass a course without passing the final exam for that course. Some people were outraged by this because they said that some students were in classes
without the requisite skills to be there. This was discovered first in a mathematics course, in which there were many students who didn’t have the background to succeed. Part of the reason for this was that some teachers were using extra credit in their math classes that had nothing to do with actual learning in the class—for example, if you brought in enough canned goods for the FFA Thanksgiving Food Drive, you could pass the course. And so the teachers finally came to the conclusion that it was immoral for them to set up a kid to fail when they knew the kid wasn’t going to have the tools needed to go on to the next level. And the first year they did that, only four kids failed—four out of a one thousand-student high school. As you move from a school system to a learning system, you must define what it is kids are going to be learning, and you must create assessments that will determine the quality of that product.

**Creating a Learning Business through Policy**

**Tier-One Policies**

When it comes to technology, you have to take the limits off of your school day and your school year. Learning can occur 24/7/7—twenty-four hours a day, seven days a week, across seven continents. Children can learn anytime, anywhere, and that’s what you should be encouraging them to do.

The second policy is the use of an online individualized learning plan. An outstanding example is happening in Kentucky, starting in fifth grade and continuing past high school. This plan is a tremendous tool, starting out with a student interest inventory and continuing through each year. It’s fully integrated with the postsecondary system, which is absolutely vital for student success.

The third policy, which a lot of people won’t be ready for, is a move toward performance-based credentialing. This acknowledges the absurdity of the idea that it magically takes a year to learn X amount of content. We all know that that is a random notion, but we haven’t had a system in place to accommodate it. Part of the reason was that we didn’t have the standards, we didn’t have the assessments, to know whether learning had actually occurred. In Kentucky right now, high school students are taking virtual language classes. Students get their two credits when they perform at a certain proficiency level on a recognized performance-based computer-adaptive assessment—and it doesn’t matter if it takes them six months or three years. Should it take every fourth grader exactly one year to move through the grade? Not when many of them have access to the type of technology you could make available to them through your servers.
In Kentucky, there are currently one hundred fourth and fifth graders in Algebra 1. At the end of the course, they’ll be taking the same Algebra 1 assessment that kids all over the state take, and they’ll be credited when they pass. Kids deserve to be moving faster. There are kids in every single district in this country who either can move faster and deserve that opportunity or need more time and deserve that chance. And the way to give them more time is not to say at the end of the year, “Stop. Put down your pencils. You get an ‘F.’ Go back to ‘Go.’” The way to do it is to say, “Okay—we’re performance based. We’re extending your year until you learn this material.” That’s what we’re about in Kentucky. We’re no longer a school system but a learning system.

The fourth policy involves appropriate advancement. If it doesn’t take a fourth grader a whole year to move through fourth grade, what do we do with that student in April when he or she is ready to move on? At my high school, we had teachers in four core areas loop with the students for two years, so if a kid finished Algebra 1 in April, he or she stayed with that teacher, and I didn’t have to find another class for them to move to. Technology was a real key because students understood that they could be responsible for the rate at which they were learning, and that we would open up other opportunities for them if they learned more rapidly. What started out as an experiment proved to be tremendously successful for those kids.

The fifth policy involves portfolio responsibility. Electronic portfolios should be kept so that you can track your students’ learning and authenticate that the learning has occurred. This is a very important consideration—not just a scrapbook—and it should be part of the individual learning plan that’s already online.

**Tier-Two Policies**

These policies are a little trickier, involving things such as determining what class rank means in the context of technology. If you have one student who has taken every class offered at your high school and has earned 32 credits in a four by four block, with all As, how are you going to determine his or her class rank when compared to the student who has earned 50 credits because he or she earned 18 of them online—at night or during the summer? These are the questions that’ll eat up the school board’s time with parents of the student who did everything by the book versus parents of the student who was learning on his or her own.

And then come the tertiary connections after secondary school—you want to make sure that you have appropriate relationships developed with your postsecondary institutions in the area. Part of Kentucky’s new graduation requirement is that every student not only has to complete Algebra 2 but
has to take math every year. It used to be that you could take geometry
and Algebra 2 and you were done, and if you started in eighth grade,
you were done with math by tenth grade; therefore, many kids didn’t
have math the last two years of high school. So now what in the learning
system is a teacher going to do when he has fifth graders who have
finished Algebra 1? What are you going to do in your middle school
with sixth graders who need geometry? Most middle schools are not
teaching geometry. What are you going to do about teacher certification
when you have kids ready for German 3 who are in seventh grade and
you don’t even offer German 3 in your district? These are the sort of
problems I’d love to have on a regular basis. How do we keep up with
student learning in a twenty-first-century environment?

Conclusion
One of the projects that I’m currently working on with the Council of
Chief State School Officers is the establishment of a system of national
virtual-learning magnet schools, so that any child in the country will be
able to have a magnet school education no matter where he or she lives.
The first one will be the National Virtual Learning Magnet for Space,
Science and Mathematics in cooperation with NASA, which will provide
every student with a laptop.

It is a new day. Those working in the Quabbin Regional School District
are lucky to be in a district that is looking forward—that’s thinking about
setting themselves up as a learning district rather than a school district.

Reference
Friedman, T. L. 2005. The world is flat: A brief history of the twenty-