In this issue of Perspectives we begin with an illuminating article from Charles Fadel about the newest plans from the Partnership for 21st Century Skills, a high profile organization with an expanding partnership of educators, politicians, and business people advocating for education throughout the United States. This article sets the stage for an international collage of perspectives on education from over five countries, reprinted from a special EdWeek report, “A Nation at Risk: 25 Years Later.” We can learn much of value from this international journey to inform the debate over directions for public education in our country and states for the next decade. In June, Massachusetts Governor Patrick and Secretary of Education-elect Paul Reville will unveil the Massachusetts strategic plan for education, the Readiness Project proposal. We hope this issue of Perspectives will help you look at the proposal within an international context.

Education in the United States
Charles Fadel, in “Deep Dives in 21st Century Curriculum,” argues that because of economic pressures, “for the first time since the advent of Public education,” we recognize the need to teach skills. The article begins with a presentation of the essential content areas, themes, and skills identified by the Partnership for 21st Century Skills (P21), www.21stcenturyskills.org. Fadel acknowledges it would take 22 years to teach the present-day curriculum, adding that we need to realign curriculum as a matrix of content and 21st century skills to allow for “deep dives [using project/inquiry-based activities] focused on [these] skills.” He illustrates using the example of Greek civilization and concludes the discussion with the promise that P21 will provide more guidance over the next 12-18 months.

Education in China
In the first of a series of four articles in this issue of Perspectives on educational trends in countries around the planet, Sean Cavanagh writes about the shift taking place in Chinese education away from exam-driven teaching toward applied skills, independent thinking, critical thinking, in-depth content in mathematics and other subjects, and the integration of technology in education. Ironically, while we hear the steady drum beat advocating gearing up our educational expectations so students will be globally competitive — Tough Choices or Tough Times; Two Million Minutes; Partnership for 21st Century Skills — China is more internally focused. In the article, Cavanagh quotes Jinfa Cai, a professor of mathematics and education at the University of Delaware: “There is a sense that good schools are needed for the nation ‘to be prosperous.’ Education serves society... . . . [There's] not so much talk of ‘global competitiveness.’” A sidebar,
repeated with the articles on India, Japan, and the European Union, presents educational highlights.

**Education in India**

In “Trends in India: Expanding Middle Class Drives Private Schooling,” the author explains that India’s educational success is due to the development and expansion of private schools. The middle class is larger than the United States population, poverty is endemic, and only 49 percent of adults are literate. In India, competition with other countries does not seem to be the focus of educational priorities. According to the article, “Indian students’ motivation to do well in math and science comes from an ‘intrinsic drive’ to put their country ‘on the top of the globe.’” Put another way, students in India have “. . . an intrinsic drive to achieve excellence.”

**Education in Japan**

In Japan, according to the article “Trends in Japan: Japan Continues Search for Academic Triumph,” Japanese citizens have been dissatisfied with the education system because of a weak economy and social problems among youth. This led to the Rainbow Plan in 2002 that transformed education by “. . . improv[ing] basic academic proficiency in ‘easy-to-understand classes,’ nurture students’ warmhearted tendencies toward community, and create a learning environment that is ‘enjoyable and free of worries.’” In addition, another goal was to foster 21st Century skills instruction in “critical thinking, innovation, and the ability to adapt knowledge to a variety of tasks.” Falling test scores and “complaints” that students were not reaching high standards of excellence will reverse some of the reforms with a new course of study for 2011 restoring some of the content eliminated in 2002.

**Education in the European Union**

With Finland outperforming the world on math and science exams, education has the attention of the 27 countries in the European Union. According to the article “Trends in the European Union: Education Seen Driving Prosperity,” “. . . each E.U. nation controls its own education system and sets academic standards, graduation requirements, testing measures, and teacher-credentialing rules . . . .” There have been some efforts to “ensure educational opportunity and improve student achievement.” The article goes on to explain how Germany is one example of a country within the European Union that is trying to improve education. Low test scores on the Program for International Student Assessment, or PISA, prompted state and local officials to embrace national academic standards.

**Education in the United Kingdom**

In the United Kingdom, the Qualifications and Curriculum Authority asked the National Foundation for Educational Research to review the research on young people’s views of the national curriculum. Pippa Lord summarizes findings from their work by answering five questions in her article, “What Young People Want from the Curriculum”: 1) Is the curriculum relevant? 2) Do pupils enjoy the curriculum? 3) Do young people find the curriculum manageable? 4) How do pupils want to learn and be assessed? 5) What choice do pupils want? Each of the five sections ends with discussion points for the nation’s educators to consider. The concluding paragraph is worth remembering because students in the United Kingdom want what educators advocate as best practice pedagogy.

MASCD Thanks Communications Director

Walter McKenzie, MASCD Communications Director, is leaving this position because of the demands of his full-time job as Assistant Superintendent of the Arlington, Virginia Public Schools. Walter has added much value to MASCD services through the publication of *Perspectives* and by maintaining the web site. Walter began the job postings, online payments and email communications to members. MASCD extends its sincere thanks to Walter and welcomes incoming Publications Director Su. Henry.
Deep Dives in 21st Century Curriculum

by Charles Fadel

A New Playing Field

The need to teach 21st century skills has emerged in our collective consciousness as a key paradigm in education. For the first time since the advent of public education, there is growing consensus for the need for K-12 schools to teach for skills, not merely for knowledge. This has been prompted and amplified by changing economic pressures at the macro level (globalization, thus increased competition) and the micro level (the dissolution of workforce stability).

Massachusetts, along with six other states, has joined the Partnership for 21st Century Skills (P21), an organization whose aim is to advocate and propagate the adoption of skills-centered education. Prompted by Governor’s Patrick’s vision in creating the Readiness Project, Massachusetts has embarked on a reexamination of its education system, including its Standards.

What are 21st Century Skills?

The P21 framework advocates a comprehensive approach (note: for a complete description of the framework and many supporting documents, point your browser to www.21stcenturyskills.org/route21) wherein traditional content areas still matter a great deal but are no longer sufficient. These include:

- English/Reading
- World Languages
- The Arts
- Mathematics
- Science
- Geography
- History, and
- Government/Civics

Critically, however, these are augmented by 21st century themes, such as:

- Global Awareness
- Financial, Economic, Business and Entrepreneurial literacy
- Civic Literacy, and
- Health Literacy

Other themes will be added depending on each state or country’s needs and evolution of requirements.

As for the skills themselves, those have been grouped in three categories, defined as:

Learning & Innovation skills:
- Creativity & innovation
- Critical thinking & problem solving
- Communication & collaboration

Information, Media, & Technology skills:
- Information literacy
- Media literacy
- ICT literacy

Life & Career skills:
- Flexibility & adaptability
- Initiative & self-direction
- Social & cross-cultural skills
- Productivity & accountability
- Leadership & responsibility

The question from standards designers will naturally be: “how do we reshape standards to reflect such skills?”. To answer that question, we first must critically revisit how present-day standards are shaped the world over in response to the Industrial Age, and we must openly examine its limitations before rethinking its structure.

Today’s curriculum

First, it has been clear for several decades that the curriculum has become “a mile wide and an inch deep.” In some areas it is estimated it would
take twenty-two years to teach the present-day curriculum. These content areas have been crafted by well-meaning content specialists who have responded for 200 years to the increased pressure to teach as much content as possible. And yet, a major turn-off for many students is the neglect of relevance in what they are taught. As the sophistication of students’ awareness has grown, many are openly questioning, “why do I need to learn this?” as they do not find applicability in their daily lives. For instance, statistics and probability is an area of mathematics that has perhaps the most daily-life applicability, yet it is not taught until high school, and then only if one elects to do so.

As a result, content-centered traditional curricula are mostly “horizontal.” All topics are judged to have similar importance and are thus taught for breadth of content. There are very few “deep dives” within topics, and they are often more related to the teacher’s comfort zone than to their relative importance. The deep dives also vary, often depending more on personal interests than objective assessments of relative importance. This all leads to inconsistencies from teacher to teacher, which can have its advantages in allowing a certain flexibility but does not rationally and consistently address the varying importance of topics.

**Skill-based curricula**

By contrast, skills-centered curriculum is more “vertical.” Topics are recognized to have different importance, forcing hard choices to be made, because relevance matters, and if one is to also teach for skills, there has to be room made in the instruction schedule to allow for skills to be taught — otherwise, one only exacerbates the mile-wide, inch-deep phenomenon. Content is still important, as it provides context, and there is no skill that is entirely devoid of content.

However, the curriculum is realigned as a matrix of content and skills. This allows for a different partitioning of instruction, providing for substantial deep dives focused on skills, and the iterative depth of teaching, based on grade level.

Let’s use the following example to illustrate this. *(Note: this is strictly an example. I do not wish to debate history teachers on the wisdom of my specific choices.)* I will use an often-neglected period of classical history (Greek civilization) that also highlights a lack of attachment to relevance: Greek civilization is the foundation of western culture, and some facets are of particular impact throughout history until today.

As can be construed from the chronological example below, one would:

- decide which topics have more relevance and impact on critical thinking as an example of skill-to-content correspondence. In this case, the Philosophers and Democracy were chosen as most critical, followed by Alexander the Great and Sparta. Other topics were weighted far less heavily to allow for depth of teaching of the chosen few.
- construct an iterative process for multiple grades so that particular topics can be explored in more depth/time as the students’ increasing maturity permits (Democracy) or, conversely, less depth/time but more as refreshers and side explorations (Alexander the Great: exploration of leadership in later grades versus exploration of geographic extent of empire in earlier grades).
Note that deep dives are also possible at different grade levels (Homer is the example here for fourth grade, but one could also have chosen Mythology. Both topics can capture the imagination of younger students). Also note the use of chronology as a thread so that a number of topics taught at a shallow level can provide supporting context (Peloponnesian wars; Ptolemaic Egypt; etc.).

This repartitioning allows the “broad deep dives” to use project/inquiry-based activities, both individual and group-based. In the process, a number of the skills cited above can now be taught and exercised: critical thinking, collaboration, creativity, and more.

These are only some of the many techniques to be invoked while redesigning curricula to allow the teaching of Skills. Over the next 12-18 months, in cooperation with other professional content associations, P21 will be publishing guidelines as to how to achieve this profound transformation. We will welcome your feedback and ideas.

Charles Fadel is Global Lead for Education at Cisco Systems, and the Cisco board member of the Partnership for 21st Century Skills where he co-chairs its Standards, Assessments and Professional Development committee. He can be contacted at cfadel@cisco.com.

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China's education system has undergone significant changes over the past quarter-century, some brought into classrooms directly by government policy, others swept along by the rising tide of free-market reforms.

Many of the policies pushed by national leaders in recent years have focused on increasing access to education for students in impoverished rural areas, while also improving curriculum and building broader academic skills among older students.

Teaching and learning in China have long been shaped heavily by the country's exam system, which determines admission to high schools and colleges in the nation of 1.3 billion.

The central government, which sets national education policy, has encouraged schools to emphasize applied skills and independent thinking, as opposed to simply exam-driven content—a difficult undertaking.

Many schools and colleges were closed during the Cultural Revolution. Following the death of Mao Zedong, the rise of reformist leader Deng Xiaoping sparked plans to rebuild and reorganize the education system.

Jinfa Cai, a professor of mathematics and education at the University of Delaware, said that two of the most far-reaching changes were the establishment of nine years of compulsory education and the re-establishment of a national college-entrance exam. High school courses were tailored to meet exam content, he said; teachers were evaluated on students’ test performance.

Today, Chinese students attend schools with different academic demands. “Normal” schools offer a more standard curriculum, and more-elite “key” schools generally present a more demanding one. Students’ ability to gain access to more selective schools is often limited by economic circumstance, among other factors. Vocational education greatly increased in the 1980s, though the trend has been toward a general education in recent years, according to a 2008 study by the RAND Center for Asia Pacific Policy.

Mr. Cai said that another change, emerging in the late 1990s, was the government’s attempt to implement stronger curriculum guidelines at the high school level. Those changes have placed a greater emphasis on critical thinking, applied skills, and more in-depth content in mathematics and other subjects, as well as the integration of technology into the curriculum, said the professor, who has studied math curriculum in China.

Other factors have the potential to diversify China’s curriculum further, said Jianjun Wang, a professor of education at California State University-Bakersfield. In a reflection of growing free-market influences, more independent publishers, such as universities, are developing classroom materials that were once crafted almost exclusively by the government, said Mr. Wang, a former Ministry of Education official.

Mr. Cai said that while U.S. officials have cited the need to improve schools in response to foreign competition, the motives of Chinese officials are different. There is a sense that good schools are needed for the nation “to be prosperous,” he said. “Education serves society . . . [There’s] not so much talk of ‘global competitiveness.’”

### Education Highlights

**Curriculum**: Schools follow a curriculum established by the national government. A government agency, the People’s Education Press, has responsibility for curriculum and textbook development. The number of private or independent curriculum and textbook developers has grown in recent years, however. Most private schools follow the government curriculum, though some have adopted their own model, PEP officials have said.

**Testing**: Students take exams to gain admission to high school (grades 10-12) and college. Those exams, which shape curriculum and instruction, are especially important given the limited spaces in elite secondary schools and in China’s growing postsecondary market.

**Spending**: China’s spending on public education, as a proportion of its gross domestic product, is about 2 percent, roughly half that of India’s, according to the UNESCO Institute for Statistics. In recent years, much of the burden of financing education has shifted from the national level to state and local governments, which has resulted in higher enrollment fees, a 2008 report by the RAND Center for Asia Pacific Policy says.

**Access**: Education is compulsory in grades 1-9, although school access and quality vary significantly by region. Access tends to be greater in the cities and eastern provinces, though the millions of migrant families entering urban areas struggle to find services; some have turned to low-cost, often unregulated private schools as a result.

—Sean Cavanagh
Education Highlights

Curriculum: Government and most private schools follow a curriculum set either by the state or the central government’s education department. Since the 1960s, the central government has required math and science study for the first 10 years of schooling. Other required subjects include social science and three languages, including English. Physical education is also taught at most private and some government schools, which generally also offer several extracurricular activities, including the creative arts and sports.

Testing: Students are tested rigorously several times throughout the year in each of the mandatory subjects. At the end of the 10th grade, students must take a state board exam in all the mandatory subjects and pass each before they can move on to the last two years of secondary education. At the end of those two years, they take another board exam that they have to pass to move on to college.

Spending: Government spending on all education is around 3.8 percent of the nation’s $2.74 trillion gross domestic product. Forty years ago, an education commission recommended that the proportion be increased to at least 6 percent.

Access: A government initiative is trying to increase access to schooling for poorer students. The Sarva Shiksha Abhiyan, launched earlier this decade, aims to enroll all children ages 6 to 14. It has so far succeeded in enrolling 185 million of the estimated 192 million elementary-school-age children, although it is not clear how many actually remain in school. Only 40 million of the estimated 90 million secondary-school-age youths, those 15 to 16, are actually enrolled in school. This year, the government rolled out a plan to get every secondary-school-age youth enrolled by 2015.

Trends in India: Expanding Middle Class Drives Private Schooling

by Vaishali Honawar

American politicians and business leaders often point to India as a country where students do extraordinarily well in math and science. The perception is fueled, to a large extent, by the large numbers of software engineers and doctors who immigrate to the United States and by the outsourcing of jobs to the large educated workforce in India.

But a closer look at India’s education landscape reveals that its image as a rising force in science and math fields is driven mostly by changes in the private school sector that educates a small number of students and by the mushrooming growth of higher education institutions that churn out physicians and engineers.

“The real secret to India’s success is the private school industry,” said Vivek Wadhwa, a professor at Duke University in Durham, N.C., who has studied engineering colleges in India. “As the middle class has expanded dramatically over the past few years,” he said, “more money has flowed into the private schools, allowing them to improve the quality.”

With a population of 1.12 billion, India is home to a middle class that is larger than the entire U.S. population. Yet poverty is widespread, and only 61 percent of adults are considered literate.

A high-quality education is often a privilege reserved for those who can afford it. The primary and secondary education system is made up of three largely class-based tiers.

At the top are the “international” schools—elite, expensive schools that follow a Western curriculum and cater to the upper crust. Also attracting the affluent are the private “public” schools modeled along the lines of Britain’s boarding schools such as Eton and Harrow.

At the second tier are the private schools that educate most of the country’s middle-class students.

On the bottom-most tier sit the government-run schools, where dropout rates across all grades run as high as 60 percent.

The quality of government schools, where 80 percent of students are educated, remains “abysmally low,” said Dilip Thakore, the editor and publisher of the magazine Education World.

Mr. Wadhwa said that one reason affluent and middle-class Indian students do well in math and science is the strong curriculum. Another is their interest in those subjects. “There has always been an emphasis among the people on getting into math- and science-related fields. The jobs most highly respected are engineering and medicine,” he said.

Victor Paul, the Boston-based Education Development Center’s country director for India, said Indian students’ motivation to do well in math and science comes from an “intrinsic drive” to put their country “on the top of the globe.”

It “is not in the spirit of competition with other countries,” said Mr. Paul, who is based in India, “but with an intrinsic drive to achieve excellence.”
Trends in Japan: Japan Continues Search for Academic Triumph

by Kathleen Kennedy Manzo

Japan’s education system has long been viewed as a model because of its strong performance on international-comparison tests and its celebrated mathematics curriculum.

But among its citizens, schooling in the nation is seen as inadequate, a sentiment that has led to significant changes over the past two decades. The insecurity has been driven more recently by a protracted economic downturn and increasing social problems among Japanese youths.

In 2002, the Ministry of Education, Culture, Sports, Science, and Technology rolled out the Rainbow Plan. Among its priorities are several designed to soften the harsh reputation of the exam-driven system, which had increasingly been blamed for rises in bullying, truancy, and student stress. The plan sought to improve basic academic proficiency in “easy-to-understand classes,” nurture students’ warmhearted tendencies toward community, and create a learning environment that is “enjoyable and free of worries.”

Japanese officials were also hoping to foster some qualities they admire in Americans, particularly those deemed essential in the global economy: critical thinking, innovation, and the ability to adapt knowledge to a variety of tasks.

A new course of study was introduced to direct the changes. It called for a 30 percent reduction in curriculum content, the elimination of Saturday school, and the addition of an integrated course that relied on hands-on and student-directed lessons. At the same time, more control in the country’s centralized system is shifting to local boards, school administrators, and teachers.

The reform program produced a backlash within a few years, after a drop in test scores and amid complaints that children were not achieving the high levels that had earned Japan its international reputation for educational excellence.

A new course of study, which will take effect in 2011, is expected to restore some of the content that was removed from the curriculum guidelines in 2002, particularly in math and science.

Schooling in Japan is compulsory through the 9th grade, but 97 percent of junior high school graduates continue to the upper-secondary level, according to Ryo Watanabe, the director of international research and cooperation for the National Institute for Educational Policy Research, based in Tokyo.

Japan’s math curriculum has been held up as a model for its rigor, coherence, depth, efficient coverage of topics, and effective melding of math concepts throughout the grade levels.

From 1994 to 2003, the course of study required students to complete 80 credits over three years, and many high schools required an extra five credits, according to the International Review of Curriculum and Assessment, an Internet archive service run by the National Foundation for Educational Research, a government agency in England. In 2003, the graduation requirement was reduced to 74 credits, although the new course of study for upper-secondary students, now being devised, could restore the higher number of credits.
The European Union has its share of education successes. Finland outperforms the world on international exams in math and science. The Netherlands, Germany, the United Kingdom, and the Czech Republic all score above the international average on the Program for International Student Assessment, or PISA.

But with the cooperative agreements that have strengthened the economic and political ties among the 27 countries in the European Union, education has been gaining new attention as a way to ensure the region’s competitiveness.

Some observers have suggested that a unified Europe will prove stiff competition to the United States as a result of its growing “global economic and political clout,” writes T.R. Reid in his 2004 book The United States of Europe: The New Superpower and the End of American Supremacy.

The European Union “has more people, more wealth, and more trade than the United States,” he notes. “The leaders and the people of the E.U. are determined to change a world that had been dominated by Americans.”

Although each E.U. nation controls its own education system and sets academic standards, graduation requirements, testing measures, and teacher-credentialing rules, efforts are under way to ensure educational opportunities and improve student achievement across the continent.

In 2001, the ministers of education for the E.U. nations set objectives that include the improvement of education and training systems, a reduction in dropout rates, and an expansion of academic opportunities for all E.U. citizens.

Many E.U. efforts are focused on higher education, however. A plan, announced this month, would set up a common credit system for vocational education and training, making it easier for citizens to transfer their credentials across national lines.

Individual countries have taken different directions in trying to improve education. German officials, for instance, have made significant changes in recent years, in response to concerns about the future workforce—as well as to low test scores on PISA.

Unimpressive PISA marks have been a “watershed” moment for the country, possibly having “a more far-reaching impact on German education than A Nation at Risk had on education in the U.S.A.,” Hubert Ertl of Oxford University wrote in a 2006 article in the Oxford Review of Education.

Germany has a decentralized education system guided largely by state and local entities. The German system sorts students by ability at the secondary level, dividing them into more academically oriented or vocationally focused schedules—a system that has been criticized as promoting inequity. But recently, state and national officials have cooperated to promote general, national academic standards, which amount to “overarching frameworks,” said Andreas Schleicher, the head of education indicators for the organization that runs PISA. More schools are also moving toward longer school days, Mr. Schleicher said.

Germany is seeking to refashion schools to “more quickly respond to a rapidly changing economy,” said Cynthia Miller-Idriss, an assistant professor of international education at NYU, who has studied German education.
What Young People Want from the Curriculum

by Pippa Lord

As part of their monitoring of the UK curriculum, the Qualifications and Curriculum Authority (QCA) takes into account the views of learners. But what are those views and how can they be incorporated into the curriculum to make it more relevant and interesting for young people?

There has already been a lot of research into pupils’ experiences and observations of the National Curriculum — over 300 studies between 1989 and 2005. The QCA asked the National Foundation for Educational Research (NFER) to review this research for common themes and to suggest how those themes could be interwoven into the curriculum.

This short paper gives a summary of some of the findings from the review by Pippa Lord and colleagues at the NFER. The full report is available for download from the QCA website at http://www.qca.org.uk/254_1956.html and highlights some key questions and discussion points for schools, teachers and curriculum developers. Readers will also know of other specific activities and innovations they have tried that have answered some of the issues raised by young people over the past years.

What pupils think

- Is the curriculum relevant?
- Do pupils enjoy the curriculum?
- Do young people find the curriculum manageable?
- How do pupils want to learn and be assessed?
- What choice do pupils want?

Is the curriculum relevant?

Young people tend to think about the curriculum in terms of something they have to get through in order to get to the next stage. It’s about passing exams and getting grades. The closer they get to assessment, the more relevant they think it is. So, year 6, year 9 and year 11 pupils in particular think about the curriculum in terms of assessments and getting through to the next stage.

In comparison, for young people the curriculum is not something that particularly touches the rest of their lives. However, pupils do feel the curriculum is relevant when it connects to daily living tasks, things going on in the media, and to future work opportunities. They would like the curriculum to have even more relevance to current issues, and to what they will go on to do when they leave education.

Discussion points

So how might we ensure that young people’s experiences of the curriculum are not dominated by their views of passing exams and simply ‘getting to the next stage’?

- Young people need to see the point of it all. They especially want practical application (not just practical work). This might be learning about a job, developing personal skills, experiencing team work, or having a subject explained in terms of its contemporary context.
- Young people also want the curriculum to be a stepping stone to a decent job and career. They think all pupils should be entitled to vocational learning.

They would like more and earlier career advice for all.

Do pupils enjoy the curriculum?

Young people’s enthusiasm for the curriculum gets less and less the older they get. This process begins in the last years of primary school. The repetition that occurs in the curriculum for pupils in transition between key stages 2 and 3 adds to their feelings of dissatisfaction. This culminates in a dip in motivation in year 8.

Motivation shows a rise in year 9, linked to national assessment and the beginning of being able to make their own choices. During key stage 4 there are some improvements in pupils’ enjoyment, especially in subjects they have chosen to study, but overall, enjoyment continues to decrease throughout key stages 3 and 4.
Discussion points
How might pupils’ enjoyment of the curriculum be increased? Are there particular years to target?
- As key stage 2 progresses, children perceive many subjects are getting easier and less interesting. More intellectual rigour may be needed to keep their attention. Keeping the curriculum broad and interesting as statutory end-of-key-stage tests approach is important to pupils’ sense of enjoyment and engagement with the curriculum.
- Likewise, enjoyment in key stage 3 needs improving. Here, a greater emphasis on practical application (for example, vocational learning or financial skills), with opportunities for personal development, taking responsibility and making choices, might encourage them to be more involved.

Do young people find the curriculum manageable?
Manageability is about the level and the amount of learning that pupils do. The right level of challenge is important to pupils’ engagement, enjoyment, progression and achievement. If the curriculum is too easy, pupils become bored. If it is too difficult, they can become disengaged. Pupils in year 7 in particular want more challenge and a reduction in the level of repetition from year 6. This would also enhance their enjoyment and sense of progress.

The amount of work is also important to pupils. They often say there is ‘too much writing’ and there are ‘too many facts’. Young people suggest that subject curriculums should be slimmed down to look at a smaller number of topics in more depth.

Discussion points
What is the right level of challenge for pupils? What might less ‘content’ mean for the breadth of the curriculum?
- The right level of challenge is a fine balance. It is likely that the balance is different for each young person. Personalised learning, teacher support and individual differentiation are all important here.
- Breadth and depth within curriculum areas is also a fine balance. Breadth offers a range of topics whilst depth offers the chance for learners to really get to grips with an area. However, too much of the same thing is ‘too much’ for young people.

How do pupils want to learn and be assessed?
Pupils like variety. They want to learn through a variety of approaches. They like active, participatory, and collaborative learning. They want a mixture of teacher-supported and self-directed learning. Older pupils in particular like some individual responsibility in their learning.

They also like a variety of assessment methods (for example, formal and informal, teacher-, self-, and peer-led assessment, and ongoing and ‘final’ markers). However, pupils experience anxiety prior to, during, and after tests. Primary pupils recommend continuous assessment rather than relying on the results of a test taken on one particular day. Pupils do like clear-cut grades, though, to gauge their progress.

Discussion points
What else might give pupils the mixture of teacher-supported and self-directed learning that they want? How else might they gauge their progress?
- Making progress is about recognising connections within and across the curriculum as pupils make their school journey. Young people want to see more connections between subjects, and they need more help in recognising continuity and progression in their learning. Awareness of these connections might help both personal progress and learning.
- Developments in Assessment for Learning need a balance between ongoing assessment and ‘final’ grades. Pupils want more explicit measures or markers in the curriculum, so they can judge their progress for themselves. More systematic feedback, using open comments as well as more concrete markers, would help pupils to become familiar with what those markers mean.
- Can more use be made of young people’s enthusiasm for and motivation by ICT? Through e-learning, e-assessment, the Internet, interactive whiteboards, and media technologies, there are opportunities for self-directed learning, collaborative learning and monitoring your own progress.

What choice do pupils want?
Young people want a curriculum that offers them choice across a wide range of subjects and courses. But they also believe everyone should be entitled to vocational learning, basic skills and careers education. In key stages 2 and 3, pupils want variety and breadth across the curriculum, but by key stage 4 they want choice.

Discussion points
What might choice and entitlement mean in the curriculum?
- For personalised learning, choice might mean breadth or keeping options open for some, but specialisation for others.
Opportunities for personal choice and the range of courses on offer are important for 14–19 year olds. But how will personalisation affect learners’ experience as they move from key stage 3 to key stages 4 and 5?

Where next?

Our review of the research into pupils’ experiences of the curriculum shows the patterns and trends in pupils’ views. They want to see connections with their daily lives, they enjoy active and collaborative learning, and appropriate challenge is important to them. They want vocational learning for all, as well as some choice. However, they need more help in accurately gauging how well they are doing. The study also shows how pupils’ views are individual and that there is a right balance for each learner. This links with aspects of personalised learning, assessment for learning, personal and social development, ICT to support and enrich learning, and other areas of the curriculum being developed and promoted at national, regional, and local levels. In their classrooms and schools, young people and their teachers are involved in consultations, action research and innovations to act upon these and other themes and issues raised by pupils. It is at this local level that national curriculum strategies and activities can be adapted and suited to the learner. Young people’s continued involvement in evaluating these innovations will be important.

Notes

1 For example, the ‘Big Picture’ of the curriculum developed by QCA looking at the entire planned learning experience of a young person. [Available online at http://www.qca.org.uk/17180.html].
2 Vocational and personalised learning, for example, are common in local authorities’ Children and Young People’s Plans.

Pippa Lord is a Senior Research Officer for the National Foundation for Educational Research, the UK’s leading independent research organization in the field of education and training. She can be reached at p.lord@nfer.ac.uk.

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MASCD and ASCD Launch Whole Child Resolution Campaign

Education, health and policy leaders in the Commonwealth gathered on May 7 to identify strategies for a grassroots resolution campaign to raise awareness and support for Whole Child education. ASCD’s Judy Seltz, Associate Executive Director, and Dan Fuller, Director of Policy, facilitated the conversation.

Attendees

• discussed ways in which their current priorities meshed with the goals of the Whole Child Compact: all children healthy, safe, engaged, supported and challenged
• learned about the resources available at www.wholechildeducation.org
• noted that whole child education is not anti-accountability; it requires broad accountability by requiring that all of children’s needs are met
• suggested changes in the resolution, which can be found at www.wholechildeducation.org/blackboard/resolutiontoolkit
• identified next steps to get local school committees, local government entities and the organizations they represent to pass a resolution supporting the education of the Whole Child

With Governor Patrick’s strong commitment to Whole Child education and the hard work of educators and policy makers to improve children’s education outcomes and life prospects, there is great potential in Massachusetts to increase support for public education and insure that all students are successful in school and in life. If you would like to get involved in the resolution campaign, which will also include a student component, contact mfbayes@mascd.org.
A Conversation with Paul Reville

Dr. Paul Reville

The Commonwealth’s Secretary of Education-elect and Chair of the Board of Elementary and Secondary Education spoke with the Working Group for Educator Excellence last month about the status of education reform, the challenges facing educators in our state, and some areas that the Readiness Project recommendations are likely to address.

Dr. Reville stressed that policymakers and educators need to work collaboratively to identify constructive solutions to pressing problems and to build public confidence.

- American society is about to be left behind in the global arena. Middle class life as we know it is at risk. To move the education agenda forward, we need transformative change. This will require broad civic engagement to build a shared vision for education in the Commonwealth.

- We must address with a great sense of urgency the educational underperformance of low income students. A sensible approach would be to look at the injuries of poverty that prevent students from taking advantage of optimized learning opportunities.

- We need to break out of the “batch processing” approach in schools, a relic from the early 20th century when the goal of schooling was to socialize large numbers of immigrants. Today, we need to meet each child where he is. We need to provide individualized and differentiated wrap-around services to prepare all students for success as learners, workers, parents, and citizens.

- There are many achievement gaps that require our immediate attention, including gaps in performance between our top students and their international peers and gaps in hope, motivation, and opportunity to learn between our poor students and their advantaged peers.

- All students need to be globally aware, solve complex problems, work effectively in groups, present oral arguments, use technology tools, and demonstrate creativity. The Board of Elementary and Secondary Education is convening a Task Force on 21st Century Skills to recommend how 21st century skills should be infused into the curriculum.

- The only way to improve achievement is to improve the quality of teaching.

- Teaching needs to become a profession that recognizes and rewards excellence, that creates genuine communities of reflective practice.

Of particular interest to the assembled group was the critical issue of having a highly skilled teacher in every classroom as outlined in H451/S284. Providing funding for pilot districts to develop plans to improve educator quality is a first step toward this end.

There’s real promise in the next chapter of education reform in the Commonwealth. Governor Patrick believes that government must make success possible for all children. Education and policy leaders are deeply committed toward this end. Commissioner Mitchell Chester and the Department of Elementary and Secondary Education will work to become more service-oriented and to build a more robust support system to help schools turn around student performance.

Make Your Voice Heard

- Educator Quality: MA House Bill 451/Senate 284
- Educating the Whole Child
- High School Redesign

Your voice makes a difference. Go to www.mascd.org to become an Educator Advocate!

Join ASCD
Educators Taking Action for Kids

We know what works. — Go to www.mascd.org to join.
Building a Professional Learning Community — Peg Mongiello, Teachers21
October 7, 2008

If you would like to host this workshop, contact mfhayes@mascd.org

All of the literature and research agree that PLCs are the structure educators need to establish to bring about real change in schools today. According to Eastwood and Lewis “Creating a collaborative culture is the single most important factor for successful school improvement initiatives and the first order of business for those seeking to enhance the effectiveness of their schools.” But schools are asking where do we begin or what next steps can we take? Answers to these two questions will be the focus of this PLC 101 workshop. Participants will examine the basic tenants of a sustainable professional learning community and explore various points of entry and further routes to take to develop collaborative practices that monitor and support increased student success. If you have read the literature and/or heard the speakers- now is the time to define some action. This workshop will provide a comprehensive review of the essential levers for PLCs to begin or progress and then examine numerous ways the work can begin.

Response to Intervention — George Johnson, Teachers21
October 16, 2008

Dennis-Yarmouth Public Schools

All of the literature and research agree that PLCs are the structure educators need to establish to bring about real change in schools today. According to Eastwood and Lewis “Creating a collaborative culture is the single most important factor for successful school improvement initiatives and the first order of business for those seeking to enhance the effectiveness of their schools.” But schools are asking where do we begin or what next steps can we take? Answers to these two questions will be the focus of this PLC 101 workshop. Participants will examine the basic tenants of a sustainable professional learning community and explore various points of entry and further routes to take to develop collaborative practices that monitor and support increased student success. If you have read the literature and/or heard the speakers- now is the time to define some action. This workshop will provide a comprehensive review of the essential levers for PLCs to begin or progress and then examine numerous ways the work can begin.

Improving Science Literacy for Secondary Students — Rob Traver, Teachers21
February 6, 2009

If you would like to host this workshop, contact mfhayes@mascd.org

It is an unfortunate reality that not all students are adequately prepared to comprehend the demanding textbooks used in high school science classes. Students who enter high school reading below grade level rapidly fall farther and farther behind in all subjects because high school texts assume that students are able to learn through reading and express what they understand through writing. In this workshop, participants will focus on developing students’ science literacy in order to build secondary students’ content knowledge and their reading, writing and thinking skills at the same time.

February 26, 2009

If you would like to host this workshop, contact mfhayes@mascd.org

Providing students with multiple opportunities to think and act like scientists and make high school science curriculum come alive is the focus of this 36-hour course. Teachers will help students view science as a “way of thinking” rather than an accumulation of facts. Participants will deepen their understanding of the theory and implementation of inquiry-based science.
We are now accepting submissions for prospective publication in the Winter 2009 issue of Perspectives, Science, Technology, Engineering, & Mathematics: STEM Education to Shape the Future. Deadline for proposal submissions is July 15, 2008.

Guiding questions for this issue include:

- Should STEM education receive top priority in K-16 education in Massachusetts? How would this frame, complement, or compete with other educational priorities?
- Who are the stakeholders and what are their roles in improving STEM education?
- What investments are appropriate and productive? What role do incentives play in advancing STEM education and careers in Massachusetts?
- In what ways, if any, do 21st century skills relate to STEM education?
- What exemplary practices within and across STEM disciplines are already being brought to scale in Massachusetts?

Interested authors are invited to submit a 1-2 paragraph proposal describing the intended focus of the article and how it addresses one or more of the focus questions, as well as a brief biographical statement, including the author’s related experience or expertise. Articles may range from 1000-1500 words and should: bring forth an essential question and the tensions and challenges within the topic, inform readers of new and useful ideas and/or practices, explore some of the obstacles, “forks in the road”/choice points, and questions that are raised in what you are trying to do to provoke, entice, and stimulate readers to continue the discussion beyond the article itself. Author’s Guidelines are sent upon acceptance of article proposals. Send all proposals or requests for a sample of the publication to: Susan Henry, MASCD Director of Publications at sfhenry@charter.net.
MASCD’s strength is in its membership, so please keep your membership current. (Check the date above your name on the mailing label.) You may print a form from http://www.mascd.org or pay through the ASCD joint dues program. Thank you for your continued support. Volunteers are welcome and appreciated in all committees. If you are interested in volunteering, please contact any of the persons listed at top right.

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mfhayes@mascd.org

**MASSACHUSETTS**
19C Oak Street  
Wellesley, MA 02482