

# Pearson

## Technology in Education Seminar

11th May 2006

**Marjorie Scardino**

**Chief Executive**

Afternoon everybody. Thank you for coming out. I know you'd much rather be out there on the balcony and we should have gotten this to happen out there. I don't know why we didn't think of this except we expected rain. But anyway it's really good of you to spend your sunny afternoon with us. Can you see me? I feel like I'm in a deep shadow.

You know that over the past few years we've had some of these afternoon seminars trying to get you more familiar with issues and parts of Pearson. We covered 'No Child Left Behind' in the distant past, we covered Higher Ed, our professional businesses, IDC, our strategy in our international education business.

So today what we thought we'd talk to you about for a little while is how technology is changing education and changing our own business with it. We've been looking forward to this because as you will have heard us say in other presentations and other occasions, technology really is at the heart of everything that we've been trying to do in education. It really is fundamental to us. At the end of today I hope you'll see more clearly a few things.

First of all, that technology is no longer an educational add-on. Secondly, that our technology strategy has helped us help students learn -- the number one goal, helped us build market position and competitive advantage, helped us improve our profitability, helped us improve our capital efficiency and will help us eventually make Pearson more valuable. We're pretty sure of that.

We're going to cover both school and college today so I'm very pleased to have one person that you know well, Steve Dowling who runs our School businesses. He's going to talk about School. And somebody you probably don't know as well, Jim Behnke who is the Chief Publishing Officer in Higher Ed International. He's sort of a cyber punk. And he has been responsible for the conception and the implementation of lots and lots of our groundbreaking programs in Higher Ed that are making such a difference to us. So he's going to talk to you about Higher Ed.

Before you hear from them I just want to give you a little bit of background on how we see things. Some time ago and it feels like an age ago, we first started to share with some of you who were around the strategy we had for our education businesses. It was to integrate the important ingredients of the learning process, connecting historically separate parts of learning, curriculum tied content, assessment and information about students into a program that could be customised for each subject and personalised for each and every student, what we call in our internal shorthand, our content plus strategy.

We believed that this strategy would make us more effective at educating people because we thought it would put our business at the heart of some trends that we felt were going to change the face of education. And we think that's happened.

So just a little rehearsal of those trends in case you've forgotten them. The first important one was accountability. Education institutions and their funders and their customers and all their stakeholders really just have one measure of return on investment and that's student achievement. Did the student learn what he was supposed to?

The demand for that kind of accountability has been most visible in the School business particularly with 'No Child Left Behind' and its testing and reporting requirements. But the rising cost of college both to educational institutions and the students means that accountability is becoming pretty important in the college market as well.

The second trend that we saw was personalisation. Students are our ultimate customer and they're all different. And so we felt that our aim ought to be to find a way to teach each student, whether he was six years old or 36 years old, to find a way to help him learn in his own way at his own pace.

And we knew from the beginning that only the application of technology could help us deliver that degree of personalisation. It would be only through technology that we'd be able to figure out what the learning difficulty of each student was, catch him before he fell and help turn him around by identifying the problems and the solutions.

The third trend we saw which maybe you're not so aware of is productivity which is increasingly important in education as in other industries. Our customers really place a premium on tools and on ways that simplify their work, reduce their administrative burden, increase the time that they spend learning or teaching versus the time they spend not doing either one. So improving productivity has been a huge deal in education.

And the fourth trend we saw was really the take up of technology itself. It really has been accelerating through all sectors of the education chain. In US schools Internet penetration is close to a 100% and the ratio of Internet connected screens to pupils in American classrooms between 1998 and 2003 -- sadly that's the most reliable statistic we've got, 2003, has gone from an average of 12 students per screen to 3.8 students per screen.

In addition in colleges, almost 60% of courses now use Internet resources. 40% have dedicated course websites to help the course through.

You've heard most of this from us before I think. But we returned to these themes today for a couple of important reasons. First as you know we have had great performance in education this past year. That was a result of several factors, good publishing, the improvement in share gains in our testing business and strong international growth in education for all of our businesses. We see plenty of evidence that the investments we've been making in technology are part of what has given us that growth and given us those efficiency improvements. So we wanted you to know more about that mover.

And secondly and probably more important for today, these trends are gathering pace and our strategy of content plus assessment plus connection and information about students is central to understanding our prospects for the future. And that's what we most want you to do.

So why are we confident about these trends? Why do we really think these changes are going to matter to Pearson and matter to the world?

First, our technology based services can finally prove that we can help student performance. This is the most fundamental point of all because this is the central mission of all of our customers. This is what they want. They want some way to be sure they can do better in education.

At our results presentation we showed you some dramatic information about MyMathLab which Jim is going to talk about and its student pass rates at colleges and in the same way we can show you our online school program, SuccessMaker. And Steve will talk about that and how it's having a measurable impact on student performance in US schools. It's now used by millions and millions of students. This program has the longest record of results and the widest penetration of any online program in American schools.

Secondly as you've seen in a lot of industries and as I just said, the application of technology does improve productivity. It can automate administrative tasks. Our Student Information Systems business which is a very important business for us, not only helps us understand students and personalise their learning program. But it does help schools handle regulatory demands for data and student performance and all the other measures that they have to meet.

And in Higher Ed as you see here I think our technology can improve productivity in a much more profound way by reducing student failure rates and by lowering the average cost per student that a college incurs when it has to re-teach material that a child should have entered college knowing about.

Third, our technology capability is expanding our market opportunity greatly. Now we are able to compete for funds that we have not traditionally had access to and which do remain inaccessible to some of our more traditional competitors. This gives us exposure to faster growing markets.

And as you see here, the traditional instruction market is here. It's about \$8 billion. If you add the service related segments on the top that we're now able to compete for, to some extent that increases our market opportunity enormously.

Fourth, we're building truly scalable products. What we're doing now is something that we can scale enormously not only in America but around the world. So far we've released the technology platforms and the services that Steve and Jim will talk about in only some subject areas. But their success means we'll soon be deploying them rapidly all over the United States. And beyond that we've already begun to export them to other countries and we've done with that very limited additional cost. And so we'll continue to do that. That really supports and underpins our predictions for our international business as well.

Fifth, you don't really need an advanced degree to see that if you have the kind of products that give customers the results they want you are going to have products that pay off commercially. In School we're now achieving good growth. We're now achieving margin gains as you know in our Discrete Software business. But in addition as we begin to embed software and technology in all of our school programs we are seeing market share gains.

In Higher Ed we've gained share for each of the past seven years partly thanks to our technology strategy. In Maths where we have pioneered the content plus strategy we gained five points in market share in the last two years alone, even though we were already the market leader in Math by some distance.

And finally, the shift to digital products and service has helped us continue to reduce our working capital and most of you who follow us know that's a very, very big initiative for us. On the investment side, a good example of this is our digital California Social Studies product. You've heard us talk about it. Steve is going to show it to you and talk a little bit more about it. It was created in half the time of a conventional digital program at a significant reduction in cost and that's that pre-publication spend that you know so well.

In addition, technology allows us to carry fewer physical products as you can figure out and gives us access to some subscription revenue streams that generate more cash and that therefore are contributors to working capital rather than users of working capital.

So those are just some of the reasons that we are pleased about what we've done in technology and excited about what it does for us in the future.

So let me just repeat, because we're hoping to give you a few drinks before you go home but I hope before you go home this evening you take with you a couple of simple realisations from this presentation.

The first is that the market really is changing. When we began investing in technology in education our customers mostly saw it as a supplemental to traditional products, something nice to go along with the textbook, maybe an online course to help a child who was really failing. Today that technology is, as we bet it would be, moving from supplemental to the central category, becoming a core part of learning, a core part of teaching and of administration.

The second realisation, our business has been leading the change. Inside Pearson technology has for some time been moving from the supplemental to the fundamental category. When we began as some additional product lines and revenue streams are today distinctive core capability crucial to what we make now and how we make it. We thought that it was going to be supplemental but it is not. In 2005 the combination of discrete software and products sold with integrated software were responsible for \$1.5 billion of our turnover in School. That's close to a third of our total educational sales worldwide.

Of course as I've said technology is increasingly integrated and so these numbers are very hard to come by. But that's just to give you a sort of order of magnitude of what we're looking at. I can't really say how fast this acceleration is going to happen. All I can say is that it is happening and that with our clear strategy and a very, very steady and very, very careful investment plan we believe we are in the very best position to continue to be in the vanguard of it.

So I hope you enjoy the presentations. I hope you'll begin to share our enthusiasm of what our education business can deliver and I hope you see the significance of that for the larger Pearson.

So first I think Steve is going to start and talk about what School technology is doing and how it's going to move ahead.

## **Steve Dowling**

### **President, Pearson School Companies**

Thanks Marjorie.

I'm going to talk about the central theme today which is how important technology is to our business and not just a sideline. And I'm going to talk about how that expertise and the capability really has become central to our business.

Now we've talked about our software businesses on the School side as a separate business. Last year sales were up 9%. We grew ahead of the market. Profitability has increased substantially in the last couple of years so that's been an improvement for us. But it's really about what it's doing to the rest of our business that's important.

I'm going to give you a little bit of context because there's a bit of crisis brewing or it's been brewing for a while in the United States, talk a little bit about our strategy and talk most importantly about how we're improving student performance and show you I think some exciting things that you've seen maybe glimpses of before, but we'll show you a little bit more.

So first some data that's shocking and you can see upon the chart here we only picked one measure. This is the National Assessment of Educational Progress, which is our national exam in the US. US students have had 30 years of showing no improvement on national performance exams. Recently there's been a lot of attention to low high school graduation rates. We lose 35% or more of the students who enter ninth grade and don't get out of twelfth grade. So we have a high drop out rate.

27% of the schools in the United States don't meet the standards in the adequate yearly progress which is the national measure that's used with the No Child Left Behind Act. At the same time, during the same 30 years, per capita spending on education has gone up 300%. So if you were an investing man, you'd say that's not a very good return on investment in terms of the performance that's happened.

And in a flat world, which we've all read about most recently this is a real problem. NCLB has brought focus on this particularly to the elementary grades, the primary grades as you would know them. There's a legislation pending that President Bush -- the last two sessions of Congress has introduced legislation to fund more high school testing, more high school instruction, special programs. Some of that funding was approved this year. And there's certainly a building sense of urgency. I go to a lot of Superintendents Conferences and meetings around the country and there's a sense of "We've got to do something about this".

NCLB which was passed in 2002 was a major shift in policy. It continued trends but it, for the first time, introduced some real sanctions and gave the government a lever because it required reporting of all student performance. You couldn't just take the averages across the school. You've got to report in separate groups, league tables, the 27% of the schools that aren't doing well. That's all published information everybody knows. Some states have as high as 86% of their schools that aren't making the standards according to NCLB standards.

And NCLB to the point about technology has driven the use of technology because of this required reporting. You really can't comply with NCLB without using the kind of reporting that we have in our student information systems. It's brought increased attention to formative assessment. You need to know how students are doing along the way so that you can take a measure of how they're doing and then remediate and help them. It's brought attention to special learners because you've got to test everybody. You can't leave everybody off and so all learners, even disabled children and learning disabled children have to be taught and have to measure up.

And then finally professional development has become more important, in other words improving teaching and focusing on improving teaching because that's really where you've got to make a difference in the first place.

In the next slide, I know we've shown you this data before but I think it's important because it shows the acceleration of the use of computers in schools. As Marjorie said it's 3.8 students to every computer now. It's dropped considerably. All the schools are virtually wired. The other statistic I heard just recently is that there's 19 students for every laptop computer now and that's dropping fast. And the good news about is laptop computers are more powerful so that they can run the more sophisticated software.

I think my view is that the technology has really reached the tipping point in schools in the United States. It's there, it's virtually ubiquitous and it's got the killer application in some sense. And you've got to have it for reporting and in order to improve every student's performance computers are the only way you can really do that.

Another indicator of this is the one-to-one initiatives which is the idea of putting a computer in every student's hands have grown as you can see here in a survey that was done recently. It's increasingly important. This is the states you may have read about, Maine, Michigan and Henrico County in Virginia and other counties essentially are buying a computer for every student, putting a computer in their hands. If you do that you want to have to something to do with those computers. You want to make them effective and raise productivity.

In addition Michigan for example, has just passed legislation that says students have to have a certain level of computer and technology confidence before they can graduate. They have to take a certain number of courses and so on. So it's certainly had an effect.

Our role in education as Marjorie said is really in improving learning, improving student achievement and in really helping teachers to be more successful. It's a two part equation that focuses on students but we have to help teachers be effective.

As Marjorie said our shorthand internal way we talk about this is content plus which as you'll also hear about from Jim in Higher Education. This means really building on the strength of our ability to develop quality content and marrying up the software applications, marrying it up to applications to deliver it in new ways that add value to the learner and to the content and ultimately add value to us I think as you'll see in some of the ways that it's affecting our business.

This particular graphic we use to capture the notion of the cycle of learning. It's a continuous cycle. Learning is an iterative process at its best which is you teach your child or you teach anybody you find out what they know, you assess on an ongoing basis. You find out that some understand this,

some understand that. You remediate in the direction that's needed in terms of helping an individual student and then you move on and you continually do this.

Every child learns differently and we do our best when we can meet those individual needs and find out how those kids are doing and take them in that direction. And in order to this again as captured here, you need to teach, you need to assess frequently, you need to help teachers know what is needed for improvement so that they can diagnose and prescribe meaningful remediation. We call this personalised learning and again the technology allows you to do it in a way that you haven't been able to do in the past. And NCLB requires it be done.

As Susan Patrick who was Deputy Education Secretary for Technology in the Department of Education said, "Personalised learning is nearly impossible without technology".

We reported our success in 2005 with sales up 16% and profits up 29%. The breadth of our business and the depth of our business drove our growth ahead of the market, ahead of industry rates. And I think it also balances our business that we've got a broader reach than our major competitors that you typically follow.

We participate in more markets and we have access to a broader base -- again the graphic that Marjorie put up about the size of our market and where we're participating. And I think it's importantly or more importantly because fundamentally this is the way we're successful. It broadens our ability, our tool set if you will to be able to help student performance.

I love to put up this next chart, anybody would. But I think really the critical thing, the important thing about this chart is that -- not only that we're number one in all of the fundamental areas in which we participate, compete but we're number one in some key areas that are increasingly important for the future. And that's curriculum software and enterprise software as well as assessment. Again if you think about what you're trying to do when you teach students you've got to assess continually. Assessment is hugely important. You've got to be able to provide adaptive software which we'll show you a little bit about in a few minutes.

And the enterprise software is at the hub of the system. The enterprise software really does a lot of things in schools including manage cafeteria schedules and bus schedules and that sort of thing.

But the part that we're in which we think is the most fundamental part is about managing student information and student data. It's the kind of data that schools have to report to the state and Federal government in order to get the funding that they get from the state and Federal government. It has the teachers' grade book in there so all the grades are in there. It has sophisticated reporting capability. And we think it's fundamental to the future because as you're in a more connected world you've got to have all of these systems working together.

In the curriculum software market we are the leader. We have programs like SuccessMaker which you'll see in a little bit, NovaNET and Waterford. And this is great and we're certainly proud of that. But again the important thing about this is that we're able to build on skills, capabilities that we've got in those businesses to use in the rest of the business. In the last two years we've been able to take and repurpose content that was developed for our software applications and use it in our basal programs so that the California Social Studies program that you'll see in a little bit is both an example of reuse of content and reuse of technology platforms.

This pretty chart shows you -- this is our data. But this shows you on the enterprise side the Student Information System market, where we sit in the marketplace. One we're the largest single player. We have the largest share in this market with about little over 20%. And this is I said, these systems keep track of student attendance and grade books and that sort of thing and as I mentioned, critically report for government funding.

But with the focus on student performance the focus on the increasing use of technology you've got to have a good database. One of the things we get requested -- now school districts say, "We're using your SIS system or we're using another SIS system. Can you come in and manage our data? Can you cleanse our data?"

You can imagine that you've got me in the records of the school as Steve Dowling, Steven Dowling, Steven A. Dowling, Tony Dowling and I show up in all those ways. If you're trying to track how I'm doing across a system it's very difficult. It may sound fairly obvious but we actually get called to come in and we charge a service. We cleanse the data, we make the data standard, agree on what the fields are and so on. And that's important if you're trying to measure how a student is doing in a learning environment, in other words, an adaptive learning that's recording how the student is doing to be able to get that information into the central system.

So our traditional capabilities of content development are now complemented by these technology businesses. We've always been strong at content. This is the content plus that we talked about. And these include instructional design and interface design, important things that -- certainly design is critical to our textbook but it's a whole new set of skills when you're doing it on a computer screen.

Technical expertise and software development, working with customers on site, doing the kinds of things I was just talking about before. If someone is going to set up one of our systems in a school we've got to go out and do network analysis and that sort of thing. That's all service that we charge for. It's all part of the engagement. And it make the product stickier. It makes a fuller engagement of your customers and less easy for them to switch.

But we also offer -- you know we've talked about this for a number of years, as the older, senior members of the crowd will remember and we're now offering our software in modular fashion. So if you want a comprehensive solution, you want an SIS and you want learning management and you want content and so on, we can do all that. But we also realise not everybody is going to buy everything from us unfortunately. So we're able to offer those in an inter-operative way so that they interoperate with other systems and our own systems interoperate with each other. And I think that's an important sort of evolution in the way that we're looking at the market and the way that markets develop, because the market has developed that way too.

We feel like we close the circle and connect all the parts in the teaching and learning cycle or the learning cycle which we showed you. And as I said in a connected world where these things have to work together this is particularly important. Learning is best when it's adaptive and when it's iterative and when it can branch to meet the needs of all the students who are challenged.

So we've added these traditional strengths to the software businesses. And I think it's a unique blend that gives us some unique advantages both in terms of the competitive marketplace and in terms of the way it's shifting our working capital requirements and our investment.



And as I said it's also software technology products that tend to be the stickiest. They tend to be the ones once you've gotten a customer engaged it's easier to keep them engaged. Our renewal rate is typically roundabout 90% on all of our software applications, all of our subscription base. So we've got a good renewal rate, some higher than that.

Alright. We're going to now do a little tour and show you first SuccessMaker. Now SuccessMaker as Marjorie mentioned is the longest lived and has the largest base of use. Millions of students have used it in the United States. It was developed in the sixties originally at Stanford University. We've maintained and developed the product over time and we're launching a new, what we're calling next generation SuccessMaker early next year with a richer, more robust learning management system. In other words, you can get better data and more extensive data about student performance out of it and new and exciting graphics that you'll see here in just a second.

It's also the kind of product that I think -- this goes to the business side of things. It's the kind of product that has a slower, longer, flatter investment cycle. It's not as lumpy as a basal cycle where you invest essentially and then you've got a tail and then you invest a little bit and then you essentially reinvest again. You invest certainly more at the beginning and you invest along the way. But you get more reuse and you get a longer life out of the product I think than you do out of the textbooks.

So Martin you want to run it? We're going to show you what happens when you get them wrong.

[Video]

This is the one, it's the new content. You may not have gotten terribly excited about the dinosaurs but we've done a lot of video. We video kids actually at the screen, we watch where their fingers go and what their hands do and whether they're slapping the kid next to them and so on. And we get very good response to this. The character set is warm, it's fuzzy. They like it, they like the characters. So we've done a lot of testing of that sort.

And what you have to think about is what you've just seen as placed in the context of a learning management system. So I sit down at the computer and I'm working away and I work these problems and I get them wrong and I continually get this series wrong. It's an adaptive program so it'll help me. It'll take me to a different place than Colin. If Colin sat down, the smarter guy and got the numbers right, it would let him advance more quickly. So it's adaptive. It takes where you need to go in a learning management system. And that's really powerful. That's why SuccessMaker has been so successful over the years.

If we look at this chart here which I think Marjorie showed also, you see in all these categories -- these are three categories on which they report on the national exams, proficient, basic, and below basic, in every category student achievement was higher with students using SuccessMaker than with a control group. So a powerful product, a huge installed base. We expect this new generation to be an opportunity to one, to get new customers and two, to roll over our existing customers into the next generation product.

The next thing I want to show you is called SuccessNet. We've kept the name simple so you could remember it started with success. And this has actually been in the market several years since about 2002. And this supports all of our basal programs. Virtually all of our textbooks that have been

developed in the last two years are available on this site. So what happens is you can see the imprints of the publishers for Prentice Hall and Scott Foresman and so on up there.

The student goes to this, signs on, goes to this site. In this case, he's a middle school science kid so he's gone to Science Explorer which is a middle school science program. And he's gotten to the book so it's a sort of familiar look and so on. He can view the contents or he's looked at the contents. He's gotten here. He's selected then to go to 'Transmitting pressure in a fluid' looks like so he's gone to the page.

So what's great about it, obviously this is familiar, instead of taking the book home I can go home and I can read online. I have two teenage daughters, they do this. But you can go -- we can't do it here because it's not a live session. But you can go and this will read to you. So it will all be read to you. It will highlight the vocabulary words. It will read in Spanish in certain markets. So if you're a student who's either a slow reader or a second language learner and so on or you're a Spanish student which is the largest minority group in the States, it'll help you that way.

But in addition you can then go and get simulations and what we call active art. So this is a simulation. This happens to be in the section we were just looking at. You've got some ability to manipulate it here on the left. You can change the surface area here as Martin is doing. You can manipulate different parts of the visual and a child can experience this in a way that they can never do in a textbook, just in a static way. They get feedback, they get interaction. So this is SuccessNet. As I say it supports all of our basal programs.

If you go to the next slide you'll see that the usage of SuccessNet has ramped up considerably in the last several years. We're up to 2.5 million users so lots of kids going on, lots of kids going on to practice their testing. Teachers, there's also a teacher component so that teachers can go online and do their planning. It's drag and drop so they can move lessons around. They can go and say they want lesson 3.2 on this day of the calendar and lesson 3.6 on this day of the calendar and they can move things around. So it has the teacher aspect to it.

And the way we're building out our platform is to be able to flexibly provision it so that premium services -- there's a part of this that's free that's offered mainly for the classroom teacher to support testing and this classroom practice sort of thing. But at the upper end of the scale in terms of premium services, Pearson Benchmark which is a premium testing service, item banking, sophisticated reporting and that sort of thing, those can all be turned off and on. So with a single sign on you can go on to a Pearson site, you can get to SuccessNet. You can go on if you're authenticated to do X, Y, Z, these aspects. You can do it, if not you're in the free component. So we figure it has great opportunity for upsale over time.

The other thing we're finding is again back to this data issue people who are using SuccessNet and want to be able to import this data into their grade book have asked us to come in and work with them on their data. So we've moved hundreds of thousands of students from one system to another to be able to align all this data and get the data out of the systems. Again, an opportunity for service. We've got a regular service schedule that our basal reps can go in and talk to a district about in terms of how we can provide these additional services they again need increasingly in this connected world.

The next one now is -- this is the California Social Science program which we've talked to you about before. And I'm going to do a little demo. A couple of things, one as Marjorie said this was developed in about half the time of our traditional programs. It was the first blended print digital program that was submitted. It was approved unanimously in California. It uses technology to maximum effect. You'll see the use of video and rich media as well as the print that's there and audio. And we were able to condense the print program because so much of the content is available online.

So what we're going to see here is -- this is the student interface. This is a Grade 5 which is US History in California. This is a Grade 5. So you get to the student screen and on the left here, this is where we'll spend most of the time. On the left you've got the main interface. We'll go back and show you what's going on there. That's really the main instruction. There are a number of things going on there.

This is a look up. So if a kid wants to look up a word, taxes or legislation or Arnold Schwarzenegger, they can go there and it'll search. It'll tell you where you can find that in the lesson, whether it's in video, whether it's in text, whether it's in a software application or an exercise. This is a student's book bag which is where all the work is saved. So every student has got a space on the server. They're working away, they're signed on as a student and that work is saved to that. And you'll see when I click on here in a second what'll happen. And this is then help so this tells the student how to use the system.

When I click on the first screen, we'll get a screen which essentially sort of says you're Steve Dowling, here's your assignment, here's what you're supposed to do. We'll click through that and go to the lesson. But the point is that the teacher can assign those lessons. So conceivably every kid could be working on a different lesson at a different pace if they needed to. You can also do this. Every child could be assigned the same thing. And this could be individually so I can sit and work on it as just an individual student or you can do it whole class. So particularly with videos, kicking off discussion, having a class discussion making some points, being able to go to this with a projector and so on which are more and more common is a style that plays to what teachers tend to traditionally do, which is stand in front of the class and interact with the students.

So we're going to go up and click on it. So this is what has been assigned say to a student and we're going to go then to the main instructional interface.

So here we have the main screen that the child is dealing with. This is the Introduction video. So what happens typically and I'll run a couple of these for you. In Introduction you get an engaging introduction that's designed to draw the student in. It's not just reading the opening paragraph in the book. It's video and it's music and so on. It could be humorous. The video then is typically a three to five minute video that dives deeper into whatever the subject of this particular unit is and really digs in more deeply in terms of the content.

Student Text, which I will show you is the entire student text. It's read to you in English; it's read to you in Spanish. The vocabulary is highlighted so again help for the second language learner or for the student who's challenged on reading.

Interactive Practice, I won't show you. But a variety of different ways, write, listen, you can record your own voice, you can do those kinds of things.

Print Partner. In addition to the text book or the text material there are print partners, worksheets and other activities that students can print out at home or at school and use to do the kinds of interactive stuff on paper that we all used to do.

Find Out More is a look up. You can again search for terms and do some searches on the content.

Content Reader is -- for a lot of our programs, we do additional readings at two or three different levels, usually above grade, on grade and below grade. And again since reading and math are so critical to success and they are also the things that are measured most heavily by NCLB, there's a lot of focus on reading and math. So in this case we're working on reading skills at the same time as working on content skills to learn social studies.

So we'll run the introduction here. We'll run just a little bit of this for you.

[Video]

So here's the Student Text. You can see the vocabulary highlighted. If I want to go to page three I can go to page three. If you go up it's as easy as this.

[Video]

And then finally I'll jump to the Content Reader just to show you. So here are three readers, they're probably above, on and below grade level. So we'll pick 'Conflict of the Colonies'.

So here we have a book, 'Conflict of the Colonies'. Again I can go to any page I want.

[Video]

And again it will read to me. And it will do it in -- since we're in California it'll do it in Spanish. So that's the California Social Science. We're really proud of it. It was a collaborative effort across a couple of our units. As I said we were able to reuse content and technology -- platform technology that allowed us to do it quickly and less expensively. Really California is one of the later adopting states in the States but we're doing well in California and we're on target to do what we said we would do. It was an experiment to start but we're, I would say, guardedly optimistic. And we're optimistic enough that we're moving ahead and looking at doing other programs in other markets in the same way, this really blended print and digital sort of an approach.

So in summary, why is this all important? Why is it more than just a story about the software divisions which are doing great, and which we've told you about before? And I think it's because it goes to the heart of our strategy about improving student learning. We think these are the right ways to do it. We know the focus is on this in the US market. We know there is a lot of pressure. There are sanctions; there is additional money to do this.

It's motivational for students. It focuses their attention. It controls the time on task which is extremely important particularly for students who are struggling. It's ongoing assessments. There are adaptations around all of this. I didn't show you on the last one but the teacher can assign tests, kids can take the tests and get results. And it improves student performance as we've seen with SuccessMaker.

For teachers it helps them in better achieving their main goal which is teaching students and improving. It gives them better information about individual students, helps in knowing what to do, gives that sort of diagnostic prescriptive aspect that they need. It eases their administrative burden. The SIS, those software systems -- one, they make it easier just to do this instead of the old grade books and the handwritten stuff. But in addition it enables them to marry up student data with performance data.

And I think ultimately and I think there's going to be tremendous pressure in the US to increase efficiency in schools. There's 300% spend and no increase in productivity. Something's got to give. We're running out of money. And I think we can help with that and I think it will be a good opportunity for us.

For Pearson it broadens our market opportunity as well as providing a larger, more stable base that I talked about in our School businesses. It gives us a competitive advantage with these capabilities that we've talked about in a market where they're becoming more important where this connectedness of the world is becoming more important.

And it improves our working capital efficiency I think with slower, steadier, planned investment with fewer requirements to tie up assets. Cost of goods is pretty low with this material and with subscription models where we collect the cash in advance of service delivery. So I think those are all favourable.

So as I said, it's a great business. We've been very pleased with our software business. But more importantly I think what's happened over the last several years has become central to our mission because it's become central to our customers as well.

Thank you. Jim.

## **Jim Behnke**

### **Chief Publishing Officer, Pearson Higher Education & International**

Good afternoon. My goal today is to illustrate how Pearson is leading a transformation in our industry, a transformation stimulated by a new generation of online programs, a transformation that is providing new value, indeed unprecedented value, to our customers, a transformation that is also driving improved return on investment capital for Pearson. This is what we call our content plus strategy.

First I'll provide a little background on the US Higher Education marketplace which should be familiar to those of you who have heard my colleague Will Ethridge speak on this topic previously.

The US Department of Education estimates that approximately 11.3 million full time students are enrolled in post secondary institutions this year. Part time students increases that total to approximately 15 million. Over the last decade the cost of higher education has increased sharply

for both institutions and students. At the same time the importance of a post secondary education has never been greater as Americans scramble to compete in this flat world we live in.

As with K-12 there is also increasing pressure on institutions to be accountable for learning outcomes and to demonstrate that the degrees they confer really mean something.

So what is this thing we call content plus and how does it address some of these market dynamics?

Science fiction author William Gibson made the point that the future is already here. It's just not evenly distributed yet. I'm here today to tell you that that uneven distribution favours Pearson. In fact it describes rather well our current competitive advantage in the growing market for online learning programs.

So I'm going to share three case studies that demonstrate how Pearson is transforming the Higher Education marketplace from a textbook centred market to an outcome centred market, from a market defined by the physical distribution of print products to a market defined by online programs, with favourable economic characteristics for both our customers and for Pearson.

The first case study is MyMathLab, a program used by over 1 million students last year. Then I'll talk about Mastering Physics, an online program for the university physics market. Finally I'll present MyEconLab which demonstrates the international potential of our content plus strategy.

These cases will illustrate how Pearson's online programs have evolved from providing supplemental value to providing central value as our customers are increasingly able to measure the efficacy of our online programs, to prove that they drive learning outcomes, something that was almost inconceivable in the world of print.

So let's begin with MyMathLab and the underlying market dynamics in college mathematics. One of the greatest challenges facing post secondary education in the US is the poor preparation of students coming out of US high schools, a challenge that will no doubt lessen as the students who benefit from the program Steve described will work their way through K-12 and matriculate into the US colleges. But until that happens, we've got to deal with this.

According to the Pew Foundation, less than half of this year's high school graduates are prepared for college level math and science. And the California Board of Education reports that of all incoming students to the California Community College System only 9% have tested into college level mathematics.

The Assistant Chancellor -- the Vice Chancellor for the Cal State University System, a system enrolling nearly 400,000 students recently reported that over half the students entering the system need remediation that's costly to both the student and the institution.

These trends translate into the burden for post secondary institutions in the US, the burden of remediation. Of the approximately 5.3 million students who took a post secondary mathematics class in 2005, over 2.2 million or 41% were enrolled in a remedial math class. In most cases these classes do not count as a credit towards a college degree. In other words, the colleges are teaching non-college classes.

The stakes of addressing this crisis could not be higher. For students demonstrating proficiency in basic mathematics means the difference between being accepted into a degree or certification program or facing a future as a member of the unskilled workforce. Institutions carry the cost burden of serving a clientele not prepared for college work and the prospect of losing future revenues if these students cannot be successfully remediated and retained.

And local communities and states are facing socioeconomic consequences of potentially staggering proportions. The Chancellor of Foothill-De Anza Community College in California speaking of this very issue recently said, "We just can't afford to lose any more underrepresented students. Our economy is going to go kaput if we don't get on track".

So what does MyMathLab have to do with all of this? MyMathLab is an online learning program offered in association with over 200 Addison-Wesley and Prentice Hall textbooks. The program features a blend of multimedia content, animations, videos and interactive text pages with a proprietary tutorial application. It was launched by Addison-Wesley in 2001 targeting online courses or hybrid courses that include a combination of traditional classroom instruction and lab work done either on campus or from home. The hybrid market is especially important because it represents a stepping stone to the full online course which has greater advantages for both customers and Pearson.

We're going to show now a short video clip to give you a feel for how students and educators are benefiting from MyMathLab at the University of Alabama.

[Video]

MyMathLab's transformational power comes from the creation of new value. Let's talk about this new value as it pertains to students, to educators and institutions and then to Pearson.

First the students. Instantaneous, personalised feedback. In the old world, by the time students saw their results on a homework assignment or a test, they'd forgotten what caused them to respond in the way that they did. The teachable moment had passed. With MyMathLab students get feedback immediately, including personalised recommendations for further review and practice. MyMathLab offers a non-judgemental, private learning environment. Traditional lecture-based instruction often compounds math anxiety, especially among developmental math students for whom that approach has already failed.

Flexibility. Online delivery is more in tune with the way today's students live and work. It can be accessed from anywhere they connect to the Internet. But the greatest value to students is the improvement in success rates attributed to MyMathLab. This slide, shown earlier by Marjorie, summarises empirical data about student performance improvements as a result of MyMathLab. Success rate is defined as the percentage of students who've received a grade of C or better. So for the University of Alabama the success rate improved from 40% with the traditional lecture-based approach to 75% with the MyMathLab approach.

Each of the four institutions on this slide saw a major performance improvement between the traditional approach and the MyMathLab approach. Data like these are unprecedented in our industry. This here is a white paper we produced recently that documents how MyMathLab has helped institutions across the country to achieve performance improvements. It's no longer what we

say about the program, but what they say that's driving our success. And that's truly transformational.

With MyMathLab students see practice, homework and exams as an interconnected whole. And they gain confidence that the more they apply themselves the better their results will be. Students know that success in basic math is a doorway to a better academic and economic future. And when they find something that helps them succeed, that good news travels fast.

But MyMathLab isn't just a hit with students. It also has many favourable consequences for instructors and institutions. We've taken the grading of homework, the most time consuming and thankless task math instructors face, and automated it. This frees them to spend more time interacting with students and focusing on other aspects of their job.

Most of the departments that adopt MyMathLab customise it to their own curriculum. In a world where many sections are taught by part-timers or adjuncts, this enables departments to ensure that students across multiple sections are getting taught the same material according to the department's standard syllabus. It also has a cumulative effect of transferring the sense of ownership for the course materials from us to them. It's no longer our product, it's their course.

But the biggest benefit of all to institutions is how the improved success rates translate into cost savings. Keep in mind here that unlike K-12, college students purchase our products. So institutional cost savings have no unfavourable impact at all. It's quite favourable.

This slide also shown by Marjorie, illustrates the difference in the cost of instruction between the traditional lecture-based approach and the MyMathLab approach at the University of Alabama. This course, Math110, college algebra, enrolled 1,480 students. The cost of the traditional approach is on the left. The 40% success rate meant that 60% of the students needed to take the course a second time. So the total cost, including the re-education effort, for the traditional course was \$275,000. On the right you see the cost of the MyMathLab approach which requires fewer instructors and achieves a more favourable success rate of 75%, and thus a lower re-education cost. Here the total cost was \$154,000. So the math department saved \$121,000 or 44% on a single cohort of 1,480 students over the course of two semesters. And that's just one course, accounting for approximately one-third of the total number of students using MyMathLab at Alabama each year.

So what about the value to Pearson? According to Monument Information Resource, the overall US higher education market for educational materials in mathematics in 2005 was \$527 million, with Pearson holding a 46.2% share, more than twice the share of the nearest competitor, Thompson. This graphic shows that Pearson gained 3.5 share points just last year and 6 share points over the last three years. These gains were driven in large measure by the unit sales growth of MyMathLab which is now in use over 1,000 institutions. In 2006 we expect approximately 1.5 million, or about one-third of all students enrolled in college level mathematics to be assigned MyMathLab.

Improving return on investment. Because full online courses, and most hybrid courses, depend heavily on MyMathLab, all students need to purchase access. We offer access codes three different ways, in a bundle with a new book, as a standalone sold through bookstores in this format and directly online via credit card and virtually with no physical delivery at all.



Currently more than 80% of our sales come from bundles. Bundling of access codes has measurably improved our ability to sell new books. There's no such thing as a used access code. And the good news is that standalone access code sales are a new and growing revenue stream with favourable margin characteristics. In fact online purchases fetches us the highest margin of the three delivery options, so that helps with ROI as well.

What does all this add up to for Pearson? Sustainable, competitive advantage. The longer customers use MyMathLab, the more it becomes a direct reflection of their own programs. We're not talking about just a technology advantage here. We're talking about an advantage created by the integration of content, both ours and theirs, with our proprietary homework and assessment platform. And, as student results improve, so too does the institution's cost structure. This is very different than the traditional model in which our role in driving student outcomes was less direct and quantifiable.

This deeper level of engagement with our customers, students, institutions and instructors creates formidable barriers to change. But for me personally I knew we had entered a whole new era when a professor first asked me a few years back, 'What books do you have to go along with that online program?' That's the moment I knew that our business model had been turned on its head, that we had an online program that could actually drive the customers' choice of textbooks. And we already offered the broadest range of choices of math textbooks. This meant that our competitors, without MyMathLab, and with a more limited range of textbooks, were going to fall further behind.

Now I'd like to move to our second case study which is Mastering Physics, which hits some of these same themes. Mastering Physics is an online tutorial and homework system that simulates the one-on-one relationship between the student and a tutor. The project was initiated in MIT in the late nineties with National Science Foundation funding and was developed for commercial release by Pearson Addison-Wesley, in collaboration with EET, an MIT spin-off company.

Mastering Physics is a triumph of the integration of content with technology. Under the NSF grant, MIT students took part in experimental sections of a university physics course. The developers analysed where these students encountered difficulties, from minor notational errors to conceptual misunderstanding, and constructed feedback and hints to address each of these difficulties. This feedback resides in a database. When students make a mistake or ask for help, the feedback they get is precisely what a tutor would tell them at that instant, the best tutor that is. All student responses are captured in a grade book and a database so instructors can monitor progress at whatever detail they'd like. As with MyMathLab, we have a growing body of efficacy data, demonstrating performance improvement on exams. And Mastering Physics, like all of our content plus offerings, requires registration. Students must buy an access code to use the product.

We're going to show a brief video clip now to give you an insight into the value that this platform provides. The clip actually features Mastering Chemistry, which is a sister product served by the same technology platform, but the basic value proposition is the same as with Mastering Physics. So we'll run the video clip now.

[Video].

I could feel the electricity in the room when she mentioned that bit about Lewis structures. I know those were exciting.

So let's take a look at the value Mastering Physics now provides to students, to instructors and to Pearson. Here's what some students had to say about Mastering Physics. 'I know where I stand immediately, unlike hand-graded homework where I don't find out until a week later where I was wrong.' Great point. Before Mastering Physics, homework had more value for instructors than it did for students. Homework with Mastering Physics is first and foremost about student learning.

'Even when I get a wrong answer, it gives me partial credit if my method was correct.' One of the most valid criticisms of many forms of academic assessment is the lack of consideration given to method. What could be more demoralising than working a complex, multi-step problem, doing everything correctly, and then getting zero credit because of a misplaced decimal point? In this sense Mastering Physics does a better job of assessing what a student actually knows than the prevailing all-or-nothing approach of standardised testing.

So what are instructors saying about Mastering Physics? I'll draw your attention to the third quote here, 'It correctly anticipated reasons for my wrong answers, I deliberately fed it, and it responded with accurate hints.' One of the major ah-ha moments for us with Mastering Physics was observing the transformation that took place when some of the most sceptical and technology averse physicists began trying to outsmart the system. Many of them assumed that online homework couldn't possibly work. In fact before 2002 fewer than 20% of physicists we polled claimed that they were even interested in online homework. Now 90% are using it, which makes the Mastering Physics story all the more compelling.

Let's take a look now at how Mastering Physics is benefiting Pearson. In the last 24 months over 120,000 students at 350 institutions in the US have registered for Mastering Physics. That rapid adoption and usage has translated into market share growth in university physics in the US from 7% to 35%, taking Addison-Wesley from fourth to first place in market share.

Mastering Physics was also instrumental in the successful introduction of the first edition of Randy Knight's university physics textbook in 2004. The book sold over 30,000 units in its first year of availability, making it the most successful new first edition published in university physics in over 20 years. Key point here, where we have strong online offerings, we sell more books. What's good for the goose is good for the gander.

Finally last month Pearson purchased EET, the company that developed Mastering Physics with us. This will enable us to extend the Mastering Physics competitive advantage to Addison-Wesley's sister company Prentice Hall and to apply EET's content development model to other content areas and curriculum areas.

In the first two cases I've emphasised the transformational impact of our content plus strategy in the US marketplace. As you know we have been working hard in recent years to take fuller advantage of the capabilities developed in the United States on a global basis. This third case, MyEconLab illustrates how an online program initially launched in the US, has been a veritable shot heard around the world in the principles of economics market. And my apologies if that's an indelicate turn of phrase to use in front of a British audience. Perhaps I should have said that the sun never sets on the MyEconLab empire.

Several years ago we launched MyEconLab, an online homework and tutorial product similar to MyMathLab to support the US textbook franchise authored by Michael Parkin, a British-born

Canadian economist. We've had significant success with MyEconLab in the United States which has helped us gain market share and improve retention of the Parkin franchise there. Last year we extended MyEconLab to all US principles of economics texts published at both Prentice Hall and Addison-Wesley.

But this story is about international impact. Building upon the investment made in the US, we launched MyEconLab in Canada last year to accompany the Canadian adaptation of the Parkin text and to good effect. The Canadian book was in its third year of availability when we launched MyEconLab and we improved the book's retention rate by 10% over the previous edition.

Meanwhile, on this side of the pond, the European adaptation of the Parkin text was launched with MyEconLab last year. And we were able to increase sales of the Parkin European edition by 50% over the first year of its previous edition.

Finally last year we launched MyEconLab to accompany the Australian adaptation of the Parkin text. And we were able to increase sales in the first year over the previous edition by 38%. So in Canada, in Europe, in Australia we were able to create competitive advantage and generate market share gains that they couldn't have afforded to do on their own.

Talking about this in financial terms, Pearson was able to leverage its investment in an online program originally developed in the US to drive these sales and share gains while incurring no additional software development expense. That's global publishing at its best.

So, I presented the impact our content plus strategy is having in three key market areas. But we're doing a whole lot more than those. The type of product models I've presented, the type of customer benefits that I've described, the type of results these programs are generating for Pearson are playing out over and over again across the higher education curriculum.

These programs we see here are already on the market and are enabling us to leverage not only our investments in technology platforms, but our branding, marketing, sales and support strategies as well. And there are plenty more of these where these came from.

The higher-ed curriculum is highly diverse so we need to be careful to tune our strategies to the unique needs of different parts of the curriculum. One size does not fit all. Yet there are common principles that we can apply broadly. First and foremost we are focused on learning outcomes. Over the years one of the things I found most rewarding about the higher education publishing business is that best products, those that are truly in tune with what students and professors need, tend to be the best sellers. This is just as true for online products as it is for print products. But unlike print products, we can measure the effectiveness of our online products and use that data to drive sales and share gains. Efficacy data is the new x-factor for us.

Share growth can come from a couple of different sources. It can come directly at the expense of our competitors, or it can come by enlarging the available market, either by improving retention over the life of the textbook edition or by creating entirely new value. The fact that our content plus offerings require access code purchase effectively enlarges the available market pie. And we're achieving a more favourable return on invested capital, because many of our online programs are shared between Prentice Hall and Addison-Wesley, because the technology programs that power these programs are extensible and because of our global orientation.

Living through the dotcom boom in Boston, some earlier periods of irrational exuberance over the potential impact of educational technology, it has always fascinated me how the world wants to believe in the silver bullet theory, the idea that a new product can change everything overnight. My own view is that silver bullets are rare. MyEconLab -- MyMathLab may look like a silver bullet to our competitors, but I know that it took over ten years of trial and error and listening to our customers and working the software development from MS-DOS to CDs to Web delivery to get to where we are today.

I know that Mastering Physics was under development for six years before it saw the commercial light of day. These success stories don't happen overnight. And that's what allows me to sleep at night because I believe we're building enduring competitive advantage here. It's enduring because of the depth of impact it's having on our customers: students, educators, institutions. Seven consecutive years of our higher education business outperforming the industry would suggest that our content plus strategy is working. And our success with these programs is working to our advantage as we roll out similar strategies across the curriculum.

We certainly can't, and won't be smug about the future. But I believe that the future will look quite a bit like these programs I've described to you today. And if what William Gibson said is true, that the future is here, it's just not evenly distributed yet, I hope I've given you reason to believe that that uneven distribution is working, and will continue to work in Pearson's favour. Thanks.

## Question and Answer Session

### **Marjorie Scardino**

Thank you Steve and Jim. If we haven't worn you out, we have time for a few questions. Okay. In the back, I can't quite see. Yes.

### **Jonathan Barrett, Williams de Broe**

Hi. I've got two questions. It's Jonathan Barrett from Williams de Broe. First of all just on the broader issue of investment in education, you've highlighted the huge increase per capita. Are you concerned in any way that that could be reined in going forward, or that the growth in spend could -

### **Marjorie Scardino**

Sorry, I can't quite hear you. [Indiscernible]. That's good. Okay. Try it again. We've highlighted what -- was the last thing I heard.

### **Jonathan Barrett, Williams de Broe**

You've highlighted the huge increase in spend in education in the marketplace which has been out of kilter with the results that have been generated. Are you concerned that the growth going

forward in that spend could be lower and we could see a pullback in terms of that investment going forward?

**Marjorie Scardino**

Growth in the marketing spend, in the market spend --

**Jonathan Barrett, Williams de Broe**

Yes, in the education spend.

**Marjorie Scardino**

On what they're buying. No I don't think so. I'll let Steve talk about the School business and Jim can talk about the Higher Ed business. As you know they're different models, because the School business is based on government spend which is led by local tax receipts. And in Higher Ed students spend the money as well as state systems. Is that what you're talking about?

**Jonathan Barrett, Williams de Broe**

Yes. Just on the School would be fine.

**Marjorie Scardino**

Okay. Want to talk about School?

**Steve Dowling**

Yes. You're asking if we're worried about the decrease in spend?

**Marjorie Scardino**

If they stop spending.

**Steve Dowling**

Stop spending? I don't think so. I think in the US there's a real sense of urgency about the need, the data showed. And I think there's frustration over the lack of productivity gains as I also pointed out, but I don't think the US is going to be happy just to sit still and not spend on education. They're going to continue to spend. They may spend in different ways. And again I think that plays to our strengths in terms of some of the kinds of things we talked about to gain efficiency and so on. But I don't see it as a -- that's not what worries me.

**Marjorie Scardino**

You know what Steve showed, that chart which said that there has been no progress in 30 years in reading and math for American school children, says it all. Now that doesn't mean that money is necessarily going to solve the problem. So one of the things that we think gives us a lead is that we can apply the money in all sorts of ways, whether it's embedded assessment or whether it's a plain old basal program. So I think we're very optimistic about that.

**Jonathan Barrett, Williams de Broe**

Okay. And my second question is on what the competition has. You've outlined before the strength of your college product. And I think we can -- I'm happy to take that on what I've seen before. In terms of the School's product, what has the competition got? How are they trying to catch up with you and is the development cycle shrinking? We've talked about ten years and six years for different products. These things tend to speed up over time. Are we now talking about the competition catching up in three years or so, or do you think you've got far enough ahead?

**Marjorie Scardino**

We're trying to rethink everything all the time so that we can stay ahead. And we're not sanguine about that. But the truth is there is a development cycle. And it's not a year. You can't start from zero right now. All our competitors realise what the needs are, so it would be stupid to think that they're not trying to do something.

But what they lack, and I think this is one of our main points too, what they lack is the breadth. Without all this breadth, without the ability to marry student data and assessment and the curriculum tied materials you really can't have an easy time of making these kinds of programs. That's what we've got that they don't have. So you saw that chart which showed us number one in basal programs in testing. That's fine. But we also have the other two ingredients. And none of our competitors have those, certainly none of our big peer competitors have those. I don't know what you'd like to add?

**Steve Dowling**

Yes. I think that's accurate. You do actually build up some advantage. As Jim said about the college stuff, it takes a while to develop these products. But you know they're not sitting around on their hands and so we're not complacent. But I think we're looking out a little further ahead than they are right now. And, as Marjorie said, the breadth I think really helps us with that capability.

**Jonathan Barrett, Williams de Broe**

Thank you.

**Marjorie Scardino**

Samantha?

**Samantha Gellins (ph), Man Securities**

Samantha Gellins from Man Securities. I'm just wondering if both of you could talk a little more about the revenue models. So you're talking about subscription revenues. So SuccessMaker, which -- I imagine that is pure subscription per student, I still don't have a feel for what kind of revenue these products -- and then also why the printed text is still there. And do you actually get separate money for that? And how do you account for all of this revenue? Is it separate in your software unit that you talk about in the results, or is the revenue spread across the basal business? I'm just trying to understand the revenue breakdown better.

**Marjorie Scardino**

To put that in context, as I said at the beginning, in total for our education business we reckon, and there is no kind of precision about this, that we generated about \$1.5 billion dollars out of either pure software products or mixed text and software products. About a third of that is pure software products.

**Samantha Gellins (ph), Man Securities**

And that is Schools plus Higher Ed?

**Marjorie Scardino**

All of education. So Steve should talk about the revenue model for SuccessMaker and our other software businesses. And you can talk about your complicated revenue models.

**Steve Dowling**

Yes. It's a mix actually. SuccessMaker is a licence with service, annual service and support revenue. So you pay -- you buy a perpetual licence which is a seed licence. So what you do is you buy a licence to put SuccessMaker on X number of computers. And those cost a certain amount of money. And you can buy a module, you can buy reading or math. You don't have to buy both if you don't want. Then you subscribe to our annual service for support, you know, 800 support for teachers, for systems administrators who want to call in and learn the intricacies of the Learning Management System.

We also have educational consultants who are more like trainers, who really go out and train. We charge for training. So they go out on a daily basis and train and so on. So that's that model.

And over that is a subscription model. It's a high school product and it's a renewal model. Every year they re-subscribe to it. And there's a service component to that also, a support component. So that goes on. Waterford is a licence or subscription model and it also has a service component. So we give people an option there as to what they want to do.

If you look at our student information system business it's more like SuccessMaker. It's a perpetual licence. You licence it but you have a support element and usually the support element is higher

and more expensive in a student information system because it's more complex. You're dealing with technical people typically in the school system.

If you look at something like Centerpoint or Benchmark which is a formative assessment product, that's a subscription. That will cost you \$6 per kid per year to use it, for example. If you look at Inform, which is a sophisticated reporting system, that's a subscription product. So that's on a subscription basis, on an annual basis.

Usually with all these products there's a one-time set-up fee. In a student information system it can be substantial, as in \$50,000, \$100,000, \$200,000 depending on the size of the system, to move all the data into the system, to cleanse all the data, do all those things, the example I gave you about the multiple names and all those kinds of things. So there's a variety of models that are being used that way.

California social studies is a pretty much straight-up adoption model because we had to play within the rules of the adoption process in California. They didn't have any provision for subscription or they say 'We've got to fund the money. We're going to give you so much per student.' And you buy it that way. So we configured it and priced it so that they could do it that way. So in that case we've done it that way.

Texas had an adoption last year where they had a subscription model, \$7, \$8, \$9 per student per year. So they actually made provision for that. I think you're going to see more of that going forward. We're actually lobbying for that in some ways because I think it gives schools flexibility and it has the favourable characteristics we talked about.

So there are a bunch of different models that have been in use.

### **Samantha Gellins (ph), Man Securities**

And why do you think the physical, printed textbook is still needed when you have such a program like this?

### **Steve Dowling**

Print does perform a service. It's easier to read longer passages and so on in a text. Specifically with the California program I think one of the real advantages there is it's a write-in text and that's actually -- there's some evidence that that's actually a better way for students.

But one of the problems with textbooks in a way is that because of the way states buy them, they buy them, they use them for five, six, seven years. Usually over the life of an adoption they'll replace maybe 20% of the books because of damage and stolen and that sort of thing. But they are typically write-in. And in some courses, write-in is actually better. So I think actually going to newer models where some of the -- more of the material is online and maybe the print becomes a much smaller component, that's what I would expect would happen.

So it's going to be more of a blend, less of a big, fat textbook, a lot more of that material that's reference material and so on. Also you think about how you find things now versus you might have when you were in school. You tend to go and get what you need because it's available. I don't use



my big reference books as much as I used to. I tell my kids to look up stuff in the encyclopaedia and they think I'm nuts.

So I think people use information differently now. So the need for that kind of big textbook is changing. I think that model will change over time.

### **Marjorie Scardino**

I think you also ought to remember that schools still don't have a very good ratio of computer screens to students. And California in particular has 6 students per screen rather than the 3.8 the rest of the country averages. So there's not enough hardware facility in order for that to be ubiquitous.

But the textbook-Web model is really more interesting in higher ed. And higher ed often has shown the way for what happens in schools.

### **Jim Behnke**

Yes. Two points. First of all we're selling more books. So these programs are leveraging textbook sales. And two there's not a substitution effect, or has not been a significant substitution effect. So unlike -- I think what's different is if you go back ten years, all of our supplements, everything was riding on the sale of the textbook. That was the only way you could monetise the value you were providing your customers. But we're now able to monetise that value in new ways, because we're selling these things through bookstores.

And we're also able, as I mentioned during my talk, able to sell access directly online which has tremendous advantages for the student, among them immediate access. And it's somewhat advantageous for us too because the margins are actually best, because we don't have any physical goods to deal with.

Also bookstores, when we sell through any of our distributors, there's a mark-up. So this may sell say for \$45, it would be marked up to \$60, \$65 by the time it gets to the student. Our online price is about \$40, \$45. And the list and net are the same price in that case.

But the bundle is -- basically it depends on the degree of customisation we do with the book, but the bundles would be sold through the bookstores. They're motivated to sell them. And those would be priced anywhere, depending on the price of the book, from maybe \$110 to \$140 per unit.

So we've got a model that has added -- there's new potential. And the biggest piece of this of course is that in the old model where you had an attrition phenomenon over the life of an edition, in this case where 100% of the students, if they're going to use this product -- it's not just some, there may be cases where it's used supplementally, but for the true hybrid or online courses, you've got to have this or you don't show up in the grade book. There's no way to finesse this and there's no way you can use anybody else's either. So this provides a very valuable --

### **Samantha Gellins (ph), Man Securities**

But could you just buy that for \$45 --

**Steve Dowling**

Yes.

**Samantha Gellins (ph), Man Securities**

And do the course without the physical book?

**Jim Behnke**

Well -- and if you did that, we would do pretty well. But that's not what people are doing, because they do see a value in the book. And also over time a lot of this stuff is customised too. So the book may be uniquely tuned to the university in some way that enhances its value further beyond what we would have provided with the standard release. So this is good for books.

And then in the case of physics I mentioned, it really was instrumental in helping us launch a whole successful new product that would have been much more difficult if we hadn't had the technology story. So we think we have a pretty good model there.

**Marjorie Scardino**

Sami?

**Sami Kassab, Exane BNP Paribas**

Thank you. Hi. It's Sami at Exane BNP Paribas. I've two questions on Higher Ed and one for Steve on School. Again on the pricing and revenue model, if we look at all your electronic products, the one you've showed us this afternoon, can you give us the breakdown on the revenues that come from institutions and the one that comes from students or users? Is it 50%, 50%? Is it 80%, 20%?

**Jim Behnke**

Thanks for asking that question because I want to clarify, zero comes from institutions. All our sales come from -- or virtually 99% of our sales come from student purchases, not institution. But, if I was unclear on that point, there's institutional decision making in higher ed. But unlike the institutional decision making in K-12 which leads to institutional purchasing, the institutional decision making in higher ed leads to student purchasing. So the institutions are increasingly making decisions that will influence what the students buy, so fundamentally different.

**Sami Kassab, Exane BNP Paribas**

Does that mean that the market share gain or the sales increase in each discipline was driven by the fact that professors would recommend the book as a required reading rather than a complementary reading? What I guess I'm trying to understand is whether the sales increase comes from students wanting to buy the books, or from professors saying, 'Well that's the required books' and that's it.

**Jim Behnke**

Well I would -- it's both. It starts with the professor and the professor's commitment to a particular approach. And if you adopt something like this you're signing up for a certain approach to teaching. You don't do this casually. They've got a lot -- in fact one of our big challenges as our model evolves here is that it's great to be more engaged and have more in-depth, but we've got an accountability issue to -- we've got to make sure this works and we have a degree of integration with the departments that's different.

The textbook model is a little bit more arm's length. The model, when that was all there was, 'Hey, we do the best we can with books. Kids read it, they don't read it. We don't have much control.' In this we've got ongoing engagement.

But one of the nice things about that, the opportunity that creates, is it's getting us more into a service business too. As they begin to adopt this, how do I train people? Is there an orientation course? Can I link this up to some kind of a tutoring capability that we might provide? So there are all kinds of other service oriented -- this is really -- where this model I think is leading us, and I didn't emphasise in my talk but I could have, is it's leading us from a goods business into a goods and services business.

**Sami Kassab, Exane BNP Paribas**

You said that 60% of your --

**Marjorie Scardino**

That's your last question.

**Sami Kassab, Exane BNP Paribas**

Then you should have said it's the last one meant for Steve.

**Marjorie Scardino**

You can have -- yes.

**Sami Kassab, Exane BNP Paribas**

Steve, regarding California, can you give us your feel on the risk of districts postponing the purchase of the social studies into 2007?

**Steve Dowling**

Yes. You know it's always a bit of a guess because California is the latest of the states in terms of -- California and New York tend to be late. We originally thought that somewhere around 60% of the districts would buy in the first year. I know McGraw-Hill had said recently they had thought about 75%. And then I think they gave a number as low as 40% were going to buy. I think right now I'd

say it's still in the 50%, 60% range that are going to purchase this year. And I don't have anything to suggest otherwise.

**Sami Kassab, Exane BNP Paribas**

Thank you.

**Marjorie Scardino**

Colin?

**Colin Tennant, Lehman Brothers**

Hi. It's Colin Tennant at Lehman. Just on the Californian social studies product, why did you choose California to launch this given that the ratio of student to computers is poor?

And what is -- as you're selling this in those schools now, what's the biggest issue for them? Is that a big issue, or is it maybe something else?

**Steve Dowling**

Yes. I think it's a great question. You know we picked California -- I thought -- my view was we had to pick a state adoption. We needed a state really to focus, to try this out. One, you've got a lot of money being spent at the same time so you have a chance to earn your money back in a state like a Florida, California, Texas.

Two, California, Texas are bellwether states. What they do often influences the rest of the country. So if it goes well in California -- we've definitely got their attention in California. We've got the attention of our competitors. We've got the attention of the marketplace. People talk to me about this program elsewhere, when I go elsewhere, 'We've heard about what you've done in California'. So it's a bit of a showplace for it there.

I think the other thing is it was actually an opportunity that we wouldn't have otherwise participated in because we were able to do this program less expensively, rather than customise a bigger print program which would have cost us more money. We actually were on the borderline of deciding do we participate in California or do we not participate in California? We were able to say, let's participate, because we were able to do this program less expensively. So it was also in some sense opportunistic in that way.

But I just think that, partly because of the way that spending works, the focus of it is you almost have to go after a big state to kick something like this off.

**Marjorie Scardino**

And social studies is a rich subject. So you can have all kinds of video. There's a lot of opportunity to make it attractive online. Math is going to be hard online.

**Steve Dowling**

Yes, we had good content assets, to Marjorie's point.

**Colin Tennant, Lehman Brothers**

And the pushback that you're hearing from the --.

**Steve Dowling**

The pushback some of it's the computers, the technology. Some of it is, and we knew this going in, our textbook -- I think I've held this up for you guys before, but our textbook, fifth grade book that I would have shown you, is about that thick. It's 172 pages or something like that. The competitors' textbooks are 544 pages or whatever. So they come in and say, you know, 'This is insane. How could you possibly?' Well we just got the -- we had 18 first place votes to 12 for Harcourt to one for Houghton Mifflin in Los Angeles for grades four and five, which is the biggest district in the state. And we had to rally a lot of support. So we got teachers to write in about the rigor of the program. And so what we have to do is we have to say, 'Yes, sure that's -- our book's that thick and their book's that thick. But what you're not seeing is all this stuff that's available that I was showing you.' We've had to overcome that battle a bit.

Some places there's some fear of technology. I would say it's also a training challenge for our sales force. We have some sales reps who are better at talking about technology, which really is a different set of skills. Some who, when people say 'server', they don't know which way to run. So you do have those kinds of issues, but nothing that we didn't anticipate I'd say.

**Marjorie Scardino**

Our competitor has done a pretty good job of trying to scare people, I'd say.

**Steve Dowling**

Yes.

**Marjorie Scardino**

Yes. Right there.

**Polo Tang, UBS**

Hi. It's Polo Tang from UBS. I've just got a question about page five, the slide at the bottom there. It just talks about your expanding market opportunity. And obviously you've highlighted enterprise software and education services as new areas of growth for you. But could you just give us an idea as to how fast enterprise software will grow going forward and how fast the education services market will grow going forward.

And also could you give us an idea as to the kind of margins that you make in those kind of businesses. So if you're expanding in these areas, are they lower margin businesses, are they higher margin businesses?

### **Marjorie Scardino**

Well because this is all really a part of our larger School business and we see it as an integrated piece, we would say to you that we are going to be increasing our School margins, not only because our testing business is growing in margin, our software business is coming into margin after years of investment, but those kinds of things will also enhance our margin.

But what kind of growth rate they're going to have, as I said, we can't really predict.

The enterprise business is growing quite fast because of the reasons Steve listed, because the 'No Child Left Behind' bill requires a huge amount of reporting on lots and lots of demographic categories. And that requires systems. And that requires schools, no matter how small they are, no matter how large they are, to have a system to do that. So that market's growing pretty fast.

But I don't think I could give you any other kinds of clues. Steve can you think of a way to help talk about it? You know those businesses will have a 10% to 15% range of margins. I'll say that. And I think we've said it before.

### **Polo Tang, UBS**

Could I ask a separate question just on bundling, in terms of college books, because obviously there's been certain stuff going through Congress and unbundling's failed there. But at individual state level you seem to have state legislatures suggesting that college books should be unbundled. So how would this impact growth in your college business, or is it just a non-event?

### **Jim Behnke**

Well first of all the bundling, that issue is about bundling stuff that people didn't find value with what was being bundled. And so right off the bat that's not a problem in the case where the content plus strategy is really working.

Now if there is some legislation pending, and if that were to happen, that's fine. That's fine. We've got a model with this three pronged, three delivery modes. And it would be silly to think it's all going to flip 100% into one of those three buckets. It's going to always be a blend. But because it's a blend we're able to position ourselves in a way that the unbundling could actually be quite favourable. So it does not represent a particular threat where our content plus strategy is strong.

### **Marjorie Scardino**

There's only one way for us to approach this. We've simply got to create things that really help students pass the course. We've got to convince the professor that's true and the student that's true. And everything else is just noise outside it.

**Jim Behnke**

It's the bad bundles that cause the --

**Marjorie Scardino**

It's the bundle of junk, of extra books and paper, pencils that kind of thing. So I think we've got the right approach to it.

Rohan?

**Rohan Engineer (ph), Citigroup**

Hi. It's Rohan Engineer at Citigroup. Just to pick up maybe slightly on that. My memory of students is they have no money at all. And that's obviously one of the issues with the second hand book market. If you can buy the computer bit as standalone, wouldn't that lead to a resurgence in the second hand book market? Because you can go and get your book, and there's your personalised product which you get your marks etc on. What failsafes do you have for that?

**Jim Behnke**

Well I can say that's not what's happening. And we're not keeping these other options secret. We've been [indiscernible]. So it's not what's happening. Again I don't think in a lot of cases -- probably 25% of our math business is custom in some ways. So you may not be able to find that book unless you find it locally.

But used books are a fact of life and we don't -- when we talk about them, I don't think anybody is silly enough to think that there's going to be a world where these other alternatives aren't available. But again what I emphasise is that we've added value that you couldn't get. So rather than looking at what's wrong -- a problem created by that particular market dynamic, if we can sell to 100% of the students, you can play with the numbers, but that is a very favourable model.

So again I would avoid extreme scenarios here though, because we're not seeing any kind of substitution effect, not any kind of significant substitution effect. And we haven't seen that behaviour. And actually in cases where we have a higher level of engagement with customers and we've done services with them like the -- this cost, if you buy the standalone in the University of Alabama bookstore, \$75. You buy the bundle, \$80.

**Marjorie Scardino**

But remember that's the access code. You can't -- it can't be used. You can't buy that.

**Jim Behnke**

[Indiscernible] the book is \$5. That's not the point I'm making. The point I'm making is that this is valuable.

**Rohan Engineer (ph), Citigroup**

I thought it was \$45 for [indiscernible].

**Marjorie Scardino**

It usually is. He was just saying that in Alabama it was a particular case. We customised MyMathLab for them and therefore we sold the access code high. Interestingly on used books though, although I think that's pretty much always going to be a factor where people buy books, we haven't seen growth -- as a proportion of total books sold, we have not seen a growth in the proportion of used books.

**Jim Behnke**

It could not be a more efficient market presently. So it -- especially with the online arbitrage [indiscernible], it's hard to imagine how it would get more efficient than it is.

**Marjorie Scardino**

Guy, last question. You've got it. And then we'll all be outside and we can chat however you'd like.

**Guy Lemming, Cazenove**

Okay. For Jim and Steve, in the spirit of testing, could you grade out of 100 how yourselves and your competitors are doing in terms of technology and education? So mark for yourself out of 100 and then -- so we can sort of understand who we should be watching out for in terms of your competitors, McGraw, Thompson --

**Marjorie Scardino**

Don't go there. Don't do this. Your mother would be embarrassed if you did it. It's a trick question.

**Guy Lemming, Cazenove**

It's not. Just so we can understand who we should watch out for and how far ahead you think you are of your main competitors.

**Marjorie Scardino**

Somebody else said it a minute ago, and I think we have to say you know we think we're a year or two ahead. But we can't --

**Guy Lemming, Cazenove**

Can't give us a ranking?



**Jim Behnke**

What I would say is, if you look at it temperately, I've watched -- my closing point was that it takes a long time to establish these things. And I will say that I've watched our competitors change their strategy a lot, some of our key competitors, in the last two or three years. And to me what that signals -- when you change your strategy, you are automatically taking a step back because it's going to -- it takes time. Even if you've got the right strategy, you've got to follow through on it and stick with it. And if you change -- and so I think one of the things that we've done well, and that does put us ahead of the competition, is we've stuck to our strategy. And we --

**Guy Lemming, Cazenove**

Who's the closest then? If you won't give a number or --

**Marjorie Scardino**

I really think --

**Guy Lemming, Cazenove**

No?

**Marjorie Scardino**

I don't think we'd be wanting to say that. I think that it's not nice to tell stories on your friends. So I think we shouldn't say that. But let's all go -- do we have any drinks out here? And we'd love to talk to you just informally. Thank you very much for giving us your afternoon.