

The coming transformation of the textbook - Part II



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Three models best describe the evolution of the textbook from a product strategy (the traditional model), to a custom strategy (the transitional model), to a 21st century-based strategy (the information model). Part I of this article described the traditional model and examined its problems and issues. Part II looks at the transitional and information models.

THE TRANSITIONAL PUBLISHING MODEL

On a mission to the future

There is a presumption in many quarters, if not built into our folk knowledge, that the textbook is a fixed item in the life of education and that this fact is unlikely to change. The forces of efficiency, markets, and policy would say quite the opposite, none of which was lost on the major publishers as they approached the touchstone that started a rebellion over price in 2004. While technology capabilities in the dot-com "era" had caused people to project the demise of the textbook industry, most professionals knew the Web frenzy was volatile in the early days and that the publishing business was solid and could weather the storm.

Industry leaders watched electronic activity invade other segments of the economy, including the back office and the learner-facing technologies on campus, with little concern. For more sanguine pros it might have appeared that the writing was on the wall for changes to come, but the current situation in 2000 was to hold the traditional business together for a considerable time.

The inventions of the Web were not lost on the publishers entirely. They used the new technologies to begin to clean their development, production and accounting practices, up to and including producing digital texts to manage the production workflow. However, those processes stopped short of making custom-designed course

packs. It was the growing used-book market, not the encroachment of technology that caused the publishers to have an economic worry.

Three reports were significant pointers to the transitional model:

1) *Cambridge, MA - December 22, 2000 – Challenging book publishers' expectations, a Report from Forrester Research forecasts slow growth for both eBooks and eBook reader devices. However, strong projected sales of custom-printed trade books and digitized textbooks will force publishers to restructure their processes and technologies dramatically.*

Taken together, custom printing, digital textbooks and eBooks will pressure publishers to offer greater consumer choice, variable presentation and delivery, and new ways to purchase – none of which authors can do themselves. The result is a new publishing model that Forrester calls multichannel publishing. Successful publishers will manage all of their content from a single, comprehensive storehouse – a repository containing modular book content and structure.

Forrester's prediction in 2000 is reality in 2005. Several things had to happen to make this so. One was technology. The development of the critical technology was already underway early in 2000. Changes in the capabilities of content technology in the last four years have made all of this possible. XML (extensible mark-up language), allowing content to be separated from layout, became the default standard which is much more flexible and versatile than HTML (hypertext markup language). An XML file containing a textbook broken into chapters can be delivered in multiple ways – to the printer to go to press, to a PDF (portable document format) reader as a locked digital document, to a Web-accessible file, or into bits that can be displayed on a PDA.

The other reason for change, the truly compelling reason, was a market push – a financial justification for change. The used-book problem was reaching into dangerous sales volume territory and a way to stop its erosion was essential. Electronic options were considered. Faculty could mandate a fresh digital edition for each semester, requiring students to have the latest book. Electronic consumption would be cheaper. Even if only a portion of students used the digital option, it would still allow the industry to say it was lowering the price of textbooks by altering their delivery.

The final push came in 2004 from student public interest groups operating in several states, most notably California. The major publishers used the January 2004 CALPIRG (California Public Interest Research Group) study as a PR opportunity to announce digital and web initiatives that would drive down the cost of textbooks, cutting in half what a typical physical book costs.

Thomson, a particular focus of the CALPIRG study, responded a month after the report was released:

2) *Belmont, CA - February 9, 2004 – In direct response to student and instructor demand for quality learning materials at lower prices, Thomson Higher Education, a part of the Thomson Corporation, announces two new initiatives: the Advantage Series, a comprehensive selection of lower-priced texts and electronic solutions from highly respected authors in the humanities, behavioral and social sciences, sciences, and mathematics; and Digital Discounts, a special limited-time offer on digital versions of selected leading Thomson Higher Education texts.*

Pearson followed that summer, through its joint venture with computer-book publisher O'Reilly.

3) *Upper Saddle River, NJ - August 16, 2004 – Financial relief is arriving for thousands of college students around the country as they begin the 2004-2005 academic year. Pearson Education, the world's leading educational publisher, and Safari(r) Books Online are introducing a comprehensive, low-priced digital textbook program called SafariX Textbooks Online. This program's "WebBooks", a new option to the print textbook, saves students 50% off the suggested list price of the print equivalent edition.*

This, for the publishing giants, is but the first step on a long journey that is transforming the industry electron by electron. While the first offer to get textbooks in PDF downloads, or as web-accessible, contained little that was not presented and tried out during the Dot-Com period through companies like Rovia, WiseUp, and MetaText, what it did was create a price for a virtual book – 50% off and a signal that digital processes were going to flow manuscripts through the publishing companies from production all the way to sales and delivery.

The initial idea was to dust off old digital versions of books and put them on the market quickly and to follow-up with more well thought-

through solutions later. McGraw had been operating a custom publishing effort called Primis for many years (see LOGOS 2/4) that provided PDF versions of textbooks, to be mixed and matched at the chapter level into custom textbooks. Thomson had been experimenting with digital texts and Pearson and O'Reilly had formed their joint venture. But the economics were not there. Today, digital textbooks are but a tiny part of the market, in stark contrast to the predictions of a few years earlier. They are the beginning of the transition to what comes next.

Surveying the experts

To unravel the transitional model, a simple seven-question survey was constructed for this article and sent to roughly fifty "experts" (editors and executives in the textbook industry, university administrators and faculty, course management system executives, education technology experts, online course developers and writers, consultants, and scholars of publishing). The intent of the survey was to construct a picture of the textbook and the industry five years from now. The questions were:

1. *What do you think the textbook, as a form, will be five years from now?*
2. *How do you think the role of the textbook, as a convention, will change over the next five years?*
3. *What do you think will happen to the content of the textbook over the next five years?*
4. *How do you think the textbook industry will change over the next five years?*
5. *How will the textbook publishers diversify from a book base to an information-based business over the next five years, or will they?*
6. *Will textbook publishers move to have closer connections to the actual users of their products and services and, if so, how?*
7. *Please provide any additional comments that you think are more appropriate to the issue of the future of textbook (form), its use (convention), or the industry (business).*

The twenty-five who responded to the survey represent a very notable cross-section of authorities most likely to read the tealeaves accurately. These are the individuals who ponder the direc-

tion of the industry, set its direction, and build the business models and commission the technology to drive the industry forward. The survey results were very consistent across the different roles and experience of the respondents. While the answers were fairly cautious and circumspect with no large surprises, they were very candid and all pointed to the same trends over the next five years.

- The textbook form will not be replaced in the next five years
- The "book" will remain, offered in both electronic and physical forms
- Web resources will become a much larger part of textbook "publishing"
- What is provided to each discipline will begin to be differentiated by subject
- The end user (student) will become much more important as a "customer"
- Custom sales models and enterprise sales (to institutions) will increase
- The "product" will be more widely defined and the "book" itself less important

The picture that emerges is one of a custom publishing or transitional model where learning materials are constructed with faculty members for their particular circumstances. This gives the publisher a more reliable order that prescribes a specified number of books in advance that possibly can be remarketed to professors teaching in similar ways across the country. It gives faculty members the ability to act like editors, choosing chapters from a textbook repository, including their own materials or a colleague's, and having their names on the volumes. The textbook can then be ordered as a physical good or as a digital book, online or downloaded. The student can buy the online good directly from the publisher's portal. In this case, the bookstore is removed from the process, the publisher gets the email address of the student, and the likelihood of a used book sale is substantially reduced.

This model is viable today. Pearson Choices, the higher education custom publishing operation at Pearson, utilizes its Safari digital textbook versions in a proprietary digital publishing engine that holds its textbooks at the chapter level and

can assemble web-accessible versions of custom-assembled books. Likewise, SafariU.com, O'Reilly Media's offering of IT and Computer Science texts, utilizes the Safari DTD (document type definition) model for not only O'Reilly's computer and programming titles but those of Pearson and some corporate presses, such as Adobe and Microsoft, all for the benefit of faculty interested in customizing content for teaching. The SafariU model carries an interesting incentive. For every \$700.00 worth of sales that a professor stimulates from his or her students, SafariU provides unlimited access to the entire digital library to the faculty member for a year.

Already, the custom digital trend is underway in the new world of textbook publishing. However, the numbers are still small relative to the industry sales volume as a whole. The feeling among the large publishers is that more customization is going to be necessary in the publishing process – for reasons of cementing sales, fighting off used books, and getting to the actual buyer.

While this species of system is in place in new form at Pearson and SafariU at O'Reilly Media, McGraw Hill is still working from its older Primis custom publishing operation, which never reached the scale of Pearson's custom efforts. Thomson, the other large higher education publisher, falls in between. For the smaller publishers, no system has emerged that would allow them to outsource this capability and they could not mount such a costly project internally.

For the small higher education publisher it is possible that this service could emerge from one of three sources:

- 1) the scholarly journal service companies (Atypon, HighWire Press, Ingenta) deciding to work with textbook publishers;
- 2) the course management system companies that now handle proprietary electronic supplements for the publishers (Angel, Blackboard, Desire2Learn, eCollege, Sakai, or WebCT) widening their offerings to electronic textbook distribution; or

- 3) an independent solution designed specifically for this purpose such as TextCentric, Meta-Text, or Documentum emerging to service faculty and students.

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THE INFORMATION PUBLISHING MODEL

Trading goods for success

What is advanced here is an educated guess at how the transitional trends in publishing, parallel information age business activity, and frustration over current business practices will combine with student desires to create a new and affordable model for learning materials.

The custom publishing model, which includes a digital repository and physical or digital products, as it expands across the textbook industry, does not answer the longer-term issue: what will the textbook become in more than five years when a collapse between classroom and book is more pronounced and the network is more the driver than any building or institution, and there are many fewer tenured faculty? From the survey, from general research and contract work with several forward-facing publishing operations and course management systems, a more complex trend in the textbook "space" emerges. It is one that addresses the necessary efficiencies at the publisher and the educational institution, the development of new markets to the end-user and the institutions, and developing a policy to meet student, instructor, and institutional performance goals.

It is here that the notion of the transitional vehicle, the custom book, like that of a horseless carriage, drops away and is replaced with a new word or term or process name. Here the learning materials, a current name, evolve toward an information-age model where success (student, instructor, institutional performance), not the book, will become the "product" and where the *discipline-specific indexing* of content that supports success, access to the right materials for the right student, will become as important as or more important than the "content" itself. This model moves from capabilities (publishing and instruction) to success factors (materials and indexing

that can increase learning performance and provide metrics for tracking and reporting).

The transitional model gives way to the information model where the transformation begins from being purely product-driven to being purely customer-driven. The traditional model did little to regard the end-user customer needs other than make sure the bookstore collected money from them. The attention was on the faculty member. The transition model, or the rise of custom publishing as a definer of the industry, is a half-way step toward the customer but still moving the action and attention through the faculty member by offering more choices and creating digital goods or Web access that students pay for directly. The motivation is to largely extinguish the used-book trade by increasing faculty choice.

The information model, by contrast, will move further toward the end-users, assisting in their success, in order to service an economic necessity for the publisher and to avoid legal and policy mandates that might create less attractive options. The question for the publisher is whether they will be proactive in advancing such initiatives and in establishing a leadership position or simply wait, as they have done in the past, until external factors force the change.

Should publishers become accountable or remain opportunistic?

The question then arises whether the publisher can create markets by producing materials that produce results, as opposed to just following the institutional lead and providing a textbook? None of this is to say that what the publisher produces today is not extraordinarily important and useful and efficient in the sense that the institution does not have to worry about materials acquisition, development or production.

The importance of what the publishers do could, and maybe should, shift from an artificial and forceful lock on the entire process delivered through a single vehicle (the book), to an incremental set of contributions to the cycle of learning in which traditional “publishing” is but one part. In other words, can the publisher decouple content from delivery? Can the publisher license libraries of content that mixes the writings of single authors and contributors? Can assessment instruments and

learning planners be sold separately from core texts? These are all questions of transformation, of policy needs to produce students who stay in college and students who succeed in college. It is a question of variable models, or testable models, or partnerships for results – all areas that are not within the traditional definition of publishing textbook products.

Can publishers move from content only to measurable learning outcomes?

Can success be viewed as a market objective? For changes to happen, the valence will have to shift from pushing a single product that everyone grudgingly accepts as necessary in its current and expensive form to a new form, or forms, that are not only about the sale, but also about the performance of the products and services in producing successful students. Just as there has been a misunderstanding about who the “customer” is in the textbook publishing relationship with the institution, the textbook has not been held accountable for its role in educating students. In the confusion surrounding the cost of textbooks, there is a fundamental question left on the table – how do the textbooks contribute to student success?

Students are not doing well in college, they are dropping out at an alarming rate.

Textbooks are a big part of education. They are a reaction to what the campus says it needs, but the publishers are not partners in discovering what will secure success for students or for assisting the institution to discover answers in this area. The National Science Foundation (NSF) used to play a critical role in critiquing textbooks and in funding faculty to create alternate learning materials, interactive media and instructional technology to assist the learning process in math, science, and engineering. Federal budget cuts have trimmed public monies available for these purposes, and publishers in recent years have seen such efforts as secondary to the primary objective of securing sales.

The innovation in teaching methods, the use of the Internet, and in getting such content from the experts in the field to the students in the classroom has historically been the domain of the National Science Foundation. For the first time in its history, the NSF, which provides around \$20

billion to higher education for research and other monies to K-12 for improvement in learning, has had its budgets cut. Colleges and universities, research institutes, and pedagogical reformers have found the Federal coffers drying up. In the past, some of this money found its way into innovative college textbooks. The vacuum left by NSF is considerable and it is an area in which the publishers could provide leadership and reap public rewards.

Perhaps the role of determining what works and leading the way to reform could be a larger part of the publisher offering and could be carried out with pilot departments or campuses. Why not get it right? After all, the more students who attend college and stay until graduation, the more learning materials and access can be sold.

Charting the information-based future

Of course, commenting on and providing conjecture about the information model is speculative at best. However, the likelihood for change is good, the need is high, and binding students to tradition when the present is accelerating widely and rapidly may not be the best course. For an industry that is celebrating its entrance into its sixth century, change does not come easily. It involves not only understanding the economics of education and the creation of a different logic for learning; it requires a cultural shift away from one of the stable icons, the textbook, that has been in place since the Enlightenment, toward the more theoretical and uncertain world of information.

By the dictates of the information age, the path to follow is the path of least resistance to the highest-quality goods to best fill a specific end-use need. Think of eBay, Amazon, eTrade, and Expedia. Success in those organizations is determined by continual information flowing up; by users commenting and approving something by the volume of its use or sales; and by the producers redefining and updating based on end-use data and reactions. In other words, communities and community intelligence flow into and affect the product sales and use cycles. In fact, they are tied together. A purchase at Amazon or eBay could easily be tied directly to another customer's opinions and their rating for giving reliable information, or a reliable sale, in the past.

The operator – Amazon or eBay – does nothing but provide the shell for their customers to act as the systems sales force. Everyone wins. It is efficient, the market operates itself like a sealed ecology, and the policy implication, if there is one, is that open markets can exist where the customer can also be the supplier. Imagine this happening in education. Unlikely? Who knows? The venerable wagon moved from horseless carriage to car or automobile.

The cost of it all

If policy does not seem to matter today, it will matter shortly for one simple reason, *money*. It is not that the textbook alone is costing too much for its consumer base; education itself, conducted the way it is conducted, is becoming too expensive as a public or private good. For all its technology, higher education is inherently inefficient compared to any other modern organization. Part of the lashing out at textbook prices could well be a contained frustration over the cost of operating institutions, which barely pay a percentage of their bills with tuition. Public institutions are heavily subsidized by state and Federal dollars. Fundraising from alumni and the interest income from sizable endowments support private institutions.

State governments already spend roughly half of their tax income on education in one form or another. This is unlikely to be sustainable in the future. The Federal government also provides large subsidies to public and private institutions, but these are being cut back, or performance demands are being made in return for Federal funds. This is all occurring in a period when the US is clearly going to be challenged globally through competition from the high-capacity intellect and low wage factors in Asia.

Whether the cost cutters, the politically radical or those fearful of global knowledge worker competition prevail, policy is going to matter. Legislators are going to ask for more bangs per buck for doing more on less. The way the markets and politics are organized, this is not likely. However, what is likely to change is the nature of the products themselves and the relationship of those products to their ultimate end-users, the students.

One publishing industry segment already changed

The scholarly journal publishers had already built a digital industry, roughly the same size as the textbook market, by the time the textbook publishers began this transition. Using XML technologies, propelled by the demand of their primary customers, the research libraries, digital service companies came into existence to service the myriad of scholarly and professional journals. Companies such as Stanford's HighWire Press, Ingenta in the UK and Atypon in the US have made a science out of not only managing the articles in XML and serving them on a subscriber or pay-per-view basis, but also serving alongside the intellectual property concerns a secondary marketing site, or sites, using the same underlying infrastructure, complete with eCommerce and use tracking.

While textbooks are far more complex in design and layout than journals, the lesson from the journal world is there to be studied. Further unexpected mechanisms and markets appeared once the digital landscape was set. There is cross-referencing across competing products, there are unexpected pay-per-view revenues, and other innovations are underway because of the common Petri dish. The textbook publishers, on the other hand, are a distance from working in a common form of XML, or in the digital world a common DTD (document type definition) that defines the exact nature of the digital output.

The technology today can do whatever is needed. Before, it was a limiting factor, allowing only certain interactions and transactions. Today it is seamless and nearly friction-free. It will promote just what Forrester predicted – multi-channel activity from the same text.

To that end, PearsonChoices, the custom division of Pearson, has built the very XML engine to do this. Independently, so has O'Reilly Media with its version of the same custom engine, called SafariU. Both of these pull from a common XML repository, but each customizes in its own way, each allows instructors to mix in their own content, and each offers a digital and a physical option. Pearson's custom business is large and lucrative, bringing life to chapters of texts assembled by professors. This allows orders to be created based on exact need.

Thomson also offers a number of digital texts and through its Advantage series even allows a wide range of printing options, including soft covers in one color and three-hole punched textbook content delivered in a binder.

These are simply the beginnings of a full XML process or workflow that starts when the manuscript arrives, tracks through design and production, and forms the digital good and marketing for the product in the end. Unlike the very sophisticated course management systems (CMS) such as Blackboard, eCollege, and WebCT, the publishing industry has a distance to travel before a common platform can be built that takes content effortlessly and effectively on to the campus. Before that can happen, the competitors hope to vanquish their nemesis, the used book, through custom and digital publishing, then they can decide whether they can cooperate on common platforms or standards for the delivery of digital content and digital services.

Until then, campuses, faculty and students will have to put up with the "100 URL Problem" (a different Web address for every book, publisher, tool) and with a world of mixed products and services to choose from. In that sense the textbook is already changing.

The point of it all

Perhaps textbook publishing veers off the road from other industries in that it services the one industry designed to bolster the economy directly – the educated and knowledgeable citizen. Car companies do not think about selling cars in order to improve the infrastructure of the roads. Presumably, publishers do think about creating a better world by developing better-educated students. While good intentions are not necessarily good business, keeping students in schools and college sells more books or digital learning materials, so the incentives are in place.

As the information age has its effects on textbook publishers the question arises, what business is the publisher in? In the past, that was easy to answer: they produced books, something that was specialized and a trade. The editorial and producing functions were bound together in a single service. In the information era, the manufacturing capability can be purchased easily and at

a high level of sophistication, but it is separated from the acquisition and editorial functions. Textbook publishers have delivered, as their primary product, a level of authority, a guarantee that the materials they are delivering are of a uniform high quality and are approved by those who assign them to students. That role is likely to continue no matter what the form or forum delivered by the publishers.

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BRIDGES TO THE FUTURE

As the future presents itself, there are three bridges to cross as the publishing industry transforms itself from a product-based business to an information business. These are the closely tied three reasons the industry will have to change: to become more efficient, to have greater market reach, and to accommodate, or help to lead, the policy changes that are needed in education.

- **FORM/Efficiency:** The inevitable merging of the book and the classroom; the collapse of the old school model into singular software, publishing, and classroom support systems.
- **BUSINESS/Markets:** The driving down of costs and the opening up of access to materials, resource, tools, and solutions to drive student success.
- **CONVENTION/Policy:** The need to improve education, student retention, and performance of faculty, students and institutions and be more competitive globally.

For the sake of illustration, the following mental experiment will pose possibilities for bridges leading to these outcomes. An indulgence of imagination is required for each. The reason for this exercise is to compel thinking outside of current realities that include the markets being locked up by the large players because the culture of use is so firmly established in cultural tradition, and because the business has been so lucrative that there has been very little incentive to innovate.

FORM/Efficiency: First-generation technologies always duplicate the preceding – the metaphors of the previous generations. Automobiles or cars,

before they had these names, were called horseless carriages. The computer “desktop” and “files” and “folders” are an active part of digital life, but they are throwbacks. The new category has not separated itself from the old in computers as it has with cars.

As technology takes off in the education space, it is following the same path. Course management systems emulate the classroom. eBooks emulate physical books. In the old world, both were needed to provide a complete education – instruction and discussion in a class, and the book for readings and learning by students on their own. The digital world has no such restrictions and ultimately the outcome is what will need to be serviced – not the sale of the book – rather the passage of the student in his or her course and the graduation of that student from an institution.

Form and efficiency are about success. It is not enough to sell something; that something must lead to success. Right now the book is a large, well-organized assemblage of content. It makes little difference in most cases whether a textbook is used or whether it is this year’s edition or last year’s. What matters is how well students perform. Where and how a publisher can make a difference in that equation is the coming question. What form provides that efficiency and how that form becomes a convention, the way the book did, is not clear.

Imagine: The first day of classes, a student logs into a “Learning Content System”, and learns what the assignment is and what pages cover it. The system, call it a LCS, lays out a project management plan, complete with calendar. The student then enters the exam dates (or the instructor already has) and the other readings from the syllabus and the system create a series of diagnostic tests before each final, specific readings, and mock exam. If need be, a tutor is assigned. This hypothetical product would manage the students’ time and focus their attention on those things that would deliver the best shot at a good grade and it would stay on them. It could email or IM the students on their cell phones to remind them with gentle or not so gentle prods. The “Digital Learning Assistant” component of the LCS would unite the classroom and the textbook content in a new form, focused on success.

The next step for the publishers will be to

become imaginative – not just take the lead from the instructors – but also look for new forms and new business models focused on causing success. Imagine if SONY or Apple owned a textbook company.

BUSINESS/Markets: In truth, higher education publishing is not about open markets, which is probably why the innovation suggested above is not more commonly pursued. Three large corporations own the majority of both higher education and K-12 textbook publishing. As mentioned earlier, like the airlines before deregulation, maintaining the status quo has been the primary business objective. If institutions, not students, purchased books and imagine further – if institutions banded together to buy in bulk, maybe even print and warehouse, could they strike a different deal with the publisher?

Imagine. For instance, let's say the University of Texas System went to auction on an annual basis for 50,000 copies of introductory political science textbooks and prior to doing this had a panel of twenty professors review each text and rate it. In the auction, the publisher will set a price for that year's purchases of that textbook. It will be variable pricing. If the 50,000 units are not reached unit prices will be slightly higher, if it is exceeded by a certain number the unit price will be reduced accordingly. The student still buys the textbook, but the university system has intervened to allow market forces to operate.

Conceivably in this scenario something can happen that cannot currently happen. An outsider, a faculty member, could create his/her own book and have it reviewed. That faculty member could make an arrangement for printing and distribution and enter the competition if his/her contribution is selected. Or if the university decides to bind and distribute, or to load up the content inside of Blackboard, the local author does not even have to bother with such physical issues.

This is what an open market would look like. It would have price competition, it would have quality reviews and ratings, and it would have Open Access no matter the size of the player. Imagine if eBay, Google, or Amazon entered this game.

CONVENTION/Policy: It may only be a short

time before state legislatures begin seriously questioning the cost of education and search for less expensive and more productive methods of educating that make use of information-age realities. It might take until China or India establishes eLearning hubs with master teachers delivering courses online for entire villages for Federal and state legislatures to ask how the US uses its technological and academic prowess to remain competitive and to turn out students who can lead a nation, not just people its service industries.

It might not be this next election, but imagine that in the next five years there is a full-scale call for a Hoover-like commission on education. Historically, education and the economy had enough extra capacity that the numbers of well-educated college graduates was not critical. It is critical now.

In the past, the US built itself up through inspired educational policy that transformed convention. After the revolutionary war, school became universal in the US, killing off, for the common good, the privilege that only the wealthy could educate their children. Just prior to the Civil War, President Lincoln signed the Land-Grant Bill that set aside acreage in every state for universities. Just after World War II, the GI Bill of Rights created the intellectual capacity that carried the nation from world war to the millennium. Again, in 1965, President Johnson, in the midst of the civil rights movement, signed into law the Higher Education Act that granted loans and guarantees for college attendance to minorities and economically disadvantaged students.

Education has been one of the most successful policy mechanisms used to achieve and maintain growth in the US. Appearing on PBS' Online News Hour (July 4, 2000), American historians Stephen Ambrose and Dorris Kearns Goodwin offered the following:

Ambrose: The GI Bill was the best piece of legislation ever passed by the US Congress, and it made modern America. The educational establishment boomed and then boomed and then boomed.

Kearns Goodwin: I think few laws have had so much effect on so many people. It meant that blue-collar workers, a whole generation of blue-collar workers were enabled to go to college, become doctors, lawyers, and engineers, and that

their children would grow up in a middle-class family.

Imagine. The publishers, through the AAP, call for a series of meetings in 2005-2006 to discuss the directions of education in the information age and the need for institutions and corporations to face the threat to global competitiveness of US college students and US workers. These sessions would involve university administrations, legislators, White House officials and state governors. The publishers would be the key organizers. Public good and private profit can and should co-exist. Neither by itself is sufficient to meet the challenges that lie ahead. Doing nothing and waiting for the political pressure cooker to blow up

does not seem prudent or good business, let alone a positive education development.

What do the three bridges have to do with the textbook publishers and the future of the textbook? The indicators suggest that the textbook industry needs to think about two things as it moves forward: one, entering the debate over what makes a difference in successfully educating a student, not just taking its cues from the status quo on campus; and two, using imagination, innovation and R&D to find out what will set education apart in the US through innovations that can be formalized in the US and then exported worldwide. □