

Mapping the Learning Content Ecosystem

Executive Summary

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In March 2015, University of California President Janet Napolitano declared in a *Washington Post* Op Ed piece that “higher education in this country is not in crisis.” Instead, she argued, “Higher education is in motion... [it] evolves as knowledge expands, societies change, and new technologies are introduced.”³ President Napolitano argued against a growing “chorus of doom” that presumably includes Harvard Business School Professor Clayton Christensen who argues, “...higher education is just on the edge of the crevasse...they don’t feel from the data that their world is going to collapse. But I think even five years from now these enterprises are going to be in real trouble.”⁴ This broad spectrum of opinion reminds us of Marshall McLuhan’s simple but powerful observation that “the past dissolves before the future resolves.”⁵ Both President Napolitano and Professor Christensen observe a changing environment for America’s colleges and universities. One is likely focused on a great and globally ranked research university system while the other likely sees Sweet Briar College as the canary in the coal mine on the predicted road to higher education’s disruption.⁶

“...the past dissolves before the future resolves.”

- Marshall McLuhan, Author

The Gutenberg Galaxy: The Making of Typographic Man, 1962

The National Association of College Stores (NACS) and the NACS Foundation invest strategically on a nearly continuous basis to help college store professionals and others sharpen their focus on the future. This white paper delivers on a January 2014 vision and funding proposal for “a comprehensive research project on course materials” that would extend the tracks left behind by NACS’ 2010 project—*Defining the College Store of 2015*.⁷ Two ideas were core to the development of this comprehensive research project:

- Digital technologies and content are disrupting and changing many content industries; and
- The college store is an integral and inter-dependent part of a much broader ecosystem. A sharp focus on the future of the college store requires an understanding of how all elements of this broader ecosystem are being disrupted and changed.

This research project—*Mapping the Learning Content Ecosystem*—was carried out over a 10-month timeframe. The effort entailed:

- A full review of the secondary literature, including the OnCampus Research® Student Watch™ reports;
- Interviews with 30 college and university executives, including provosts, librarians, business officers, CIOs, instructional technologists, auxiliary services heads, and others;
- Interviews with leading commercial and OER publishers and thought leaders from a variety of sectors;
- Quantitative surveys of faculty and college store professionals carried out in conjunction with NACS’ OnCampus Research® unit;
- Preparation, analysis, and summarization of data, key findings, scenarios, conclusions, and recommendations for consideration; and
- Publication of this white paper and a variety of collateral materials.

³ Janet Napolitano, “Higher Education Isn’t in Crisis”, in *Washington Post*, March 12, 2015.

Available at: http://www.washingtonpost.com/opinions/higher-education-isnt-in-crisis/2015/03/12/f92b777e-bba2-11e4-bdfa-b8e8f594e6ee_story.html.

⁴ Max Nisen, “Clay Christensen: Higher Education is on the Edge of the Crevasse,” in *Business Insider*, February 13, 2013.

Available at: <http://www.businessinsider.com/clay-christensen-higher-education-on-the-edge-2013-2>.

⁵ Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man*. Toronto: University of Toronto Press, 1962.

⁶ Nick Andersen and Susan Svrluga, “Sweet Briar College to Close Because of Financial Challenges,” in *Washington Post*, March 3, 2015.

Available at: <http://www.washingtonpost.com/news/grade-point/wp/2015/03/03/sweet-briar-college-to-close-because-of-financial-challenges/>.

⁷ NACS, “Defining the College Store of 2015,” May 2010. Oberlin: National Association of College Stores.

Available upon request for non-members; in [The Hub](#) for NACS members.



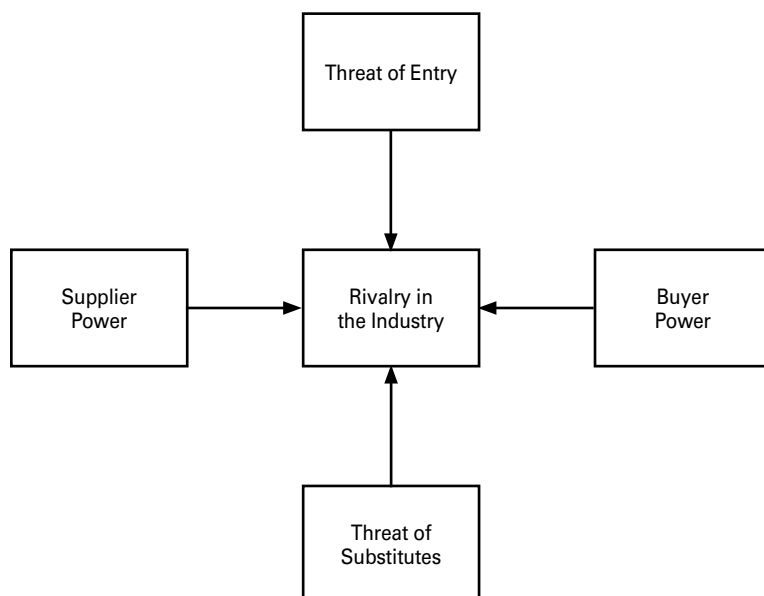
The investigators for this study defined the learning content ecosystem to include academic:

1. Content creators (authors);
2. Content manufacturers (publishers);
3. Content distributors/wholesalers;
4. Content retailers;
5. Content users (faculty adopters/assigners, student consumers);
6. Learning services providers (tutoring, coaching, testing) at a newly forming digital edge of the ecosystem; and
7. Colleges and universities themselves.

Methodologically, this study's investigators employed:

- close reading techniques of the social sciences and history;
- descriptive and analytical statistics;
- standard interviewing and qualitative analysis; and
- competitive analysis using Professor Michael Porter's Five Forces Framework to evaluate each element of the learning content ecosystem.

Figure 2 – Porter's Five Forces Framework⁸



Not surprisingly, this study's authors conclude that every element of the learning content ecosystem is in motion—albeit at differing speeds. While overlapping waves of digital innovation are likely the most influential and de-stabilizing variable affecting the ecosystem, other important forces are at work as well:

- U.S. college and university enrollments overall are flat;
- U.S. policymakers and educators are shifting the balance between student access and success;
- Enrollment in fully online courses and programs is now commonplace and online students source more of their learning content online and in digital form than do on-ground students;
- Today's students prefer print textbooks but are willing to shift depending on costs and circumstances. They spend about half the time in class and study as their predecessors in 1961.
- Faculty prefer print textbooks. They are assigning less reading, and are giving students higher grades than their predecessors did. They expect most students to go digital within five years.

⁸ Michael Porter, *Competitive Strategy*. Illinois: Free Press, 1980.



- While the prices of new textbooks rise faster than the CPI, student per capita spending on learning content is declining. Students rent new and used books; buy used, older, or foreign editions; use (legal and illegal) download sites; or borrow course materials. Some simply disregard faculty assignments; and
- Amazon—the proverbial elephant in the room—has entered the college learning content ecosystem in a formal way with their Amazon Campus program. That company's scale, brand power, and technology leadership can make their entry a game changer in the ecosystem.

The actions of college stores in the next three to five years may
define them as either part of the problem or part of the solution.

Our analysis suggests seven areas that college store professionals should monitor:

- **Higher education's professoriate is now split between full-time salaried tenure track professors and part-time contract-based adjunct instructors.** Beliefs, preferences, and responsibilities between members of these groups vary widely, including those surrounding the selection and adoption of course materials. Understanding who makes adoption decisions (campus curriculum committee? deans? college district?) and how adoption decisions are made are important priorities for college store leaders.
- **The shift to digital is likely to accelerate as we move from 2015 to 2020.** That shift and Amazon's entry create competitive conditions that will continue to favor "minnows and giants." Under such conditions: "big firms grow bigger, the small multiply, and midsize enterprises are waning."⁹ Independent stores that do not have the scale and purchasing leverage to compete on price will need to create closer ties to students via access to campus information systems, concierge services, and a shared affection for *alma mater*.
- **A variety of mounting pressures are likely to foster greater standardization in general education**—such as regulatory pressures on colleges and universities to facilitate the transfer of credit for coursework taken elsewhere or those posed by an increasingly contingent academic workforce. This growing standardization will reach into the learning content ecosystem.
- **The publishers' business model of creating new editions and offering digital supplements at ever-rising prices is running out of steam.** Many faculty do not assign importance to the availability or quality of digital supplements when adopting textbooks. Students are voting against rising prices with their feet. As mentioned, they are buying used textbooks and older or foreign editions, or they are renting, downloading, borrowing, or skipping assigned readings altogether.
- **The ailing textbook model, a maturing OER movement, the wide availability of learning content on the web, and other factors are leading publishers to reconceive textbooks as courseware.** A spending "arms race" is underway to imbue learning content with adaptive learning capabilities, games, simulations, animations, and analytics to make a compelling case for courseware.
- **The successful migration to courseware will depend on institutional licensing of courseware;** that is, replacing student-directed textbook spending with institutionally-mandated course material fees. The courseware packaging and licensing model allows publishers to pre-empt both the textbook rental and the used learning content markets. This model will be hard to socialize in higher education. One recent faculty survey concluded that "the majority of faculty users of digital courseware are actually detractors of their courseware." Faculty concerns over courseware include: (1) a steep learning curve and time investment required up front to use digital courseware effectively; (2) technical integration challenges adding to the time required from faculty to use courseware; and (3) perceptions that the time required (by courseware) isn't worth the potential—but unproven—benefit in terms of student outcomes.
- **While the evidence is striking that *per capita* student spending on learning content is declining, the reasons for the decline are not cause for celebration.** The hue and cry against rising new textbook prices is unlikely to diminish and the actions of college store operators in the next three to five years may define them as either part of the problem or part of the solution.

⁹ Daniel Pink, "The Shape of Things to Come," in *Wired*, May 2003. Available at: <http://archive.wired.com/wired/archive/11.05/start.html?pg=2>.

¹⁰ Tyson Partners, "Time for Class: Lessons for the Future of Digital Courseware in Higher Education, Part 1: Faculty Perspectives on Courseware," 2014.

Available at: http://tytonpartners.com/tyton-wp/wp-content/uploads/2015/03/EGA009_CourseWP_Upd_Rd7.pdf. The authors of this study used a "net promoter" scale to ascertain current faculty support for courseware. A score of 8-10 defines a promoter of an activity. Faculty members surveyed by Tyson Partners cumulatively had a net promoter score of -25.



We have also described the related dominant vectors of change:

- 1. There will be continued momentum in digital, social, and connected.** Adaptive or personalized learning content will likely become widespread in three to five years as will the widespread imbedding of intelligence and communication in everyday objects (Internet of Things). Digital learning content will likely dominate the academic landscape in this period.
- 2. The intensifying focus on student success will continue.** In the past decade, more than 30 states in the U.S. have adopted some version of performance-based budgeting. These resource approaches focus less on an institution's enrollment success as on its students' graduation rates. The role of learning content in student success is likely to come under scrutiny as part of a widespread adoption of so-called learning analytics.
- 3. Conditions will favor "minnows and giants."** Power has long favored the publishers and distributors in the learning content ecosystem. Today, fewer than 10 publishers dominate the selection, manufacturing, and pricing of commercial academic content, which is central to higher education's promotion and tenure process. The rise of Barnes & Noble, Follett Higher Education Group, and now Amazon represents a possible pendulum swing in power back to the bookseller. "Going digital" favors giants like Amazon who can both negotiate favorable pricing and spread their efficient operating costs over a global customer base. Giant firms will dominate learning content retailing on costs, making it possible for small, agile, and customer-focused "minnows" to dominate niche markets.
- 4. Higher education student academic services are becoming unbundled and privatized.** Large philanthropies like Gates, Lumina, and Hewlett along with prominent private equity firms have concluded that higher education is ripe for disruption. They are investing in new and digital approaches to the full spectrum of academic services—from selecting a college; to financial aid management; to advising, coaching, and tutoring; to career counseling and placement. These new and private unbundled services have the potential to enrich the student experience, but also to complicate it. These services will also interact and compete with longstanding learning content services provided by college stores, academic libraries, and others.
- 5. The use of courseware will rise, while the use of textbooks will decline.** While academic publishers deserve part of the blame for rising textbook costs, they face the same economics as college stores. Fewer students are buying new textbooks. Earnings—in the face of declining market share and rising production costs—can only be goosed up via price increases. The student trend away from new textbook purchases will likely continue or accelerate. Large publishers are betting big on courseware that integrates classroom lectures and discussion with content that would have been found in textbooks. If publishers can succeed in moving faculty toward courseware, they can get 100% adoption and thereby lower the cost of course materials for all students except those who download or eschew them altogether. This will not be easy.
- 6. General education courses and programs will become more standardized.** Pressures to demonstrate learning outcomes, along with pressures to contain costs, promote credit transfer, and address the quality assurance challenges posed by a growing contingent academic workforce, will conspire to encourage academic departments to narrow curricular options. This will be particularly true if, and as, standardized assessments of postsecondary learning are used.
- 7. The power of the consumer is rising. In a nutshell, students have options.** Today's learner can commute to a local community college, drive to a nearby state college or university, or choose among a wide variety of elite public or private universities regionally, nationally, or increasingly internationally. They can attend coding boot camps, study online, and take hybrid courses that balance on-campus and online learning experiences. Increasingly, state laws and inter-state reciprocity agreements encourage them to study at various colleges and to transfer credits to a "home" institution. Students are knowledgeable and empowered consumers. They are constructing educational programs that suit their schedules, moods, social lives, and budgets. They approach their learning content the same way. And in the face of declining enrollments in many parts of U.S. higher education, our institutions are racing to create experiences that will encourage these increasingly fickle consumers to fly in and stay awhile.



These vectors of change draw attention to a gathering storm that will very likely define the learning content ecosystem in the next three to five years. College store professionals are encouraged to use this short timeframe to plan around the following possible scenarios:

- 1. The heated frog.** Student buying patterns and the increased presence of market giants like Amazon are likely to erode learning content sales, margins, and market share in independent stores. The strategic question facing the operators of these stores is whether or when to jump out of the hot water. The likelihood that the water temperature is rising is very high ($p=.95$). That said, college store leaders are resourceful and have options. The likelihood of staying beyond the boiling point is low ($p=.3$).
- 2. The triumph of commercial courseware.** Commercial publishers need to find a digital path away from the textbook; a path that addresses competition from rentals, used book sales, download sites, and others. High quality courseware is likely to find acceptance in fully online graduate programs, which now enroll 22% of all U.S. graduate students ($p=.7$). Such courseware may also gain traction in the general education curricula of two-year colleges, which are delivered largely by adjunct faculty ($p=.6$). It is not likely that commercial courseware will find adoption any time soon among career-ladder teaching faculty ($p=.2$).
- 3. The virtual hub becomes central.** One of the defining aspects of the emergent unbundled and privatized learning services marketplace is its fragmentation. This fragmentation is both a weakness and an opportunity. Commercial enterprises including Barnes & Noble, Blackboard, Chegg, and Instructure see themselves as the hub of a student-centered universe or the mortar that holds students and their service providers together. The campus has always served as the physical hub but has not asserted itself in cyberspace. The key campus service centers—libraries, student academic services, and college stores, or their association proxies (ACRL, NACS, etc.)—could position themselves to serve this integrative role. Doing so will require significant capital, branding and marketing, and a truly student-centered operating perspective. No one yet has a brand to leverage into this role. It is not likely that anyone will dominate this role within three to five years ($p=.4$).
- 4. A giant comes knocking.** Amazon and other giants like Google want to dominate the retail landscape by becoming global same-day retail and distribution giants. The world they imagine is one in which imbedded sensors and ties to information systems continually broadcast customer needs. These needs are regularly addressed through home delivery. Both providers have much of the infrastructure they will need to support this. The Amazon Campus initiative represents both that firm's reversion to its core strengths—books—and its intentions to secure a network of physical trans-shipment points for staging and executing same-day delivery maneuvers. College stores have little to lose in this venture to the extent that Amazon or Google have both the market strength to keep publisher prices in line and the infrastructure to fully support digital delivery. They have much to lose, however, in the risk that if these giants become the shopping hub, their ambition may not stop at books. The likelihood that Amazon or others will come knocking is high ($p=.99$).
- 5. Coming from behind... OER is gaining speed.** The Open Education Resources (OER) name was coined in 2002, but a movement to make learning content freely accessible via open licensing has been around for decades. To date, this movement has been high on passion but low on execution. Even now, only 25% of faculty members admit to being aware of OER. That said, a new generation of OER movers and shakers understand the need for economically sustainable business models while retaining their idealism. They have the attention of some of the world's largest philanthropies and are aware of the likely shift from textbook to courseware. Indeed, this shift presents the OER movement with a relatively level playing field since everyone is a newcomer in the courseware arena. Moreover, OER providers have none of the historical baggage carried by commercial publishers. Still OER is a dark horse candidate ($p=.5$).



Finally, this paper implores store leaders to create action plans. At the core, these plans will need to center on one of three general visions or philosophical approaches:

- **Become a minnow and develop those capabilities—largely analytics and customer relationship management—that allow you to dominate the learning content market at your institution.**
To do so, you must know your students better and get to them faster than the giants who will beat you on price. Success as a minnow likely demands an effective set of campus partners: administration, IT, library, student academic services, and others.
- **Manage learning content as a channel for a giant.** If partnering with Amazon, Google, or another giant can assure: (1) net revenues for the institution; (2) improved affordability of learning content for students; and (3) a positive student experience and one whose halo includes the campus, such a partnership could liberate college store professionals and space to provide better service and assure store independence.
- **Become the campus' general merchandise and convenience store.** Look at the writing on the wall regarding the learning content business and retreat to and fortify a strong general retail position at your institution. For stores/campuses considering a move to outsource course materials in a hybrid model, the remaining role for the college store would include serving as a focused campus outfitter and convenience retailer.

The tactics for store action plans should include (to the extent possible) these nine specific actions to consider:

1. **Use data analytics. Know your students and your faculty adopters.** College stores that wish to remain relevant to their campuses and in the learning content business need to: (1) understand the make-up of their institution's student body; (2) understand how the segments that comprise their student body behave regarding learning materials; and (3) understand if and how faculty adopters hope to use the course materials the store supplies.
2. **Help formulate institutional policy. Engage in and align with institutional strategies.** Every college store and institution needs a multidimensional and boundary-spanning learning content strategy. Changes in learning content and services will intersect with academic policy, technology, student privacy, pedagogy, instructional costs, course materials accessibility, incentives, revenue management, and more. Developing effective policy and strategy needs to be a priority. The college store has the needed knowledge, skills, and relationships, and must be at the table.
3. **If Amazon (or another giant) comes-a-calling, consider taking that call—with caution.**
The general terms of the first Amazon Campus contracts are now public and should be reviewed closely while important decisions are considered, such as:
 - a. How far should the institution allow this "camel's nose" into the tent?
 - b. Does the institution cede communications with faculty regarding learning content adoption to Amazon or seek to control that channel?
 - c. How much student course enrollment information is appropriate or wise to share?
 - d. Will Amazon safeguard student data?
 - e. What cross-selling boundaries, if any, should be set to prevent Amazon's dis-intermediation of the college store across all merchandise categories?
4. **Delivery anyone? Concierge services from your college store.** Nearly one student in three is working 20 hours per week or more in addition to their school work. Extra-curricular and family activities also crowd busy schedules. Students, like all of us, live in a world that is driving toward same-day delivery to the doorstep. They will prefer and ultimately demand service models that save them time. College stores might consider providing store-to-door concierge type services.



- 5. Consider becoming the student outfitter.** College stores provide a great many services above and beyond delivering a faculty member's adopted learning content on time. The array of merchandise they provide can be dizzying and approximate that of special-purpose small department stores. Yet some college stores may be missing the chance to really become the student's outfitter. Study abroad? Visit the college store to see what it is you'll need in Turkey. Field archeology? Yes, you'll find it through the college store. As important, most college stores are not typically guiding and outfitting students through the thicket of digital consumer choices that face them.
- 6. Become an indispensable resource to students and the institution on the long migration path to courseware.** Courseware is coming. It is a big, new institutional expense category; a new academic productivity, quality, and student success vehicle; and a new source of risk. Partner with the CIO, librarian, and provost to pave a productive path for courseware. Large commercial publishers will want to enter into institution-wide agreements for access to courseware. This will become a huge opportunity and an even bigger challenge for colleges and universities. Among the challenges, someone will need to understand the commercial market, prevailing contract terms and conditions, and other business variables that will materially affect the cost and ultimate success of campus-wide courseware licensing efforts. College store professionals are ideally situated, and should be suited, to represent the institution's business interests in this important arena.
- 7. Become the institution's affordable learning content solutions broker.** Students are, to a great extent, bereft of financial advice of any kind throughout their collegiate experience. Cumulatively, they are \$1.3 trillion in debt. Commercial learning content is a discretionary expense and competes in students' minds with food, health insurance, gasoline, and other necessities. Students typically figure their spending budgets out alone or seek the guidance of other students, leading often to imperfect outcomes, including an increasing reliance on download sites, extensive borrowing of course materials, or outright avoidance of required learning content. A time may come when the college store leader must choose between helping students navigate learning content sourcing plans or maximizing learning content revenues and earnings. We suspect that there are pathways here to do well by "doing good."
- 8. Hitch the college store's wagon to student success.** Student success is not likely to be a passing fad. To really move the needle on student success, aligning the actions of disparate campus organizations to the institution's priorities is critical. Today, even as each stove-piped provider of instruction and services to students strives to improve, our absence of coordination betrays a core fragmentation from a student perspective. College store professionals have a unique and important vantage and perspective on essential parts of the student experience. The institution's librarian has another, as does the dean of students, the executive in charge of student academic services, residential life, and so forth. Higher education may be ready to create the student success center. Building on the success of the library's academic commons, such a center could provide a one-stop physical and virtual environment for students. Here the college store could realize a new vision as a pillar of the institution's student success commitment.
- 9. Reform is not a period of retreat.**¹¹ An orderly retreat can be strategic and is not a defeat. In a nutshell, college store professionals should be looking back five years at revenues, margins, and earnings from learning content and then projecting them forward five years. It is essential to remember that service to students and faculty—and not independence—is the primary mission. Reforming the college store's offerings—including paving an intelligent path away from direct sales of learning content—needs to always remain one of the store's most precious options.

¹¹ From Pulitzer Prize-winning historian David Remnick.