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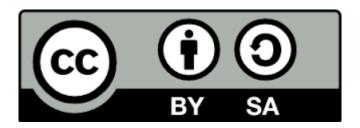
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Educational Publishing:

An Industry in Transition in the Digital Age

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The digital age has incited a plethora of research on the 'literary crisis'.[1] A divide appears to have emerged: on the one hand, there are the enthusiasts who anticipate the demise of print books and who advocate the integrity and democracy of the electronic word; and on the other, those who envisage their co-existence. No matter on which side these academics reside, the common thread of discussion is the impact of digitisation on book culture. However vital, such research is of a theoretical nature, focusing more on the nature of book culture rather than on specific participants and processes within the publishing industry itself. Furthermore, very little research has been conducted into the Australian educational publishing sector, which is a disturbing discovery since, according to the survey into book publishers by the Australian Bureau of Statistics for the year 2003–2004, the sale of printed educational books was A$526.1 million of the A$819.6 million worth of printed book sales as a whole.[2]

The neglect of data, both statistical and academic, indicates an assumption that educational publishing can be understood in light of academic and trade publishing scholarship. Such an assumption is erroneous: educational publishing operates within a separate sphere within the publishing industry; its acquisition of content, production processes, marketing, sale and methods of delivery—that is, the value and supply chains— are entirely different. Publishers commission teachers and/or academics to write content in line with current state and territory curriculum; authors generally do not approach educational publishers independently with their manuscripts. Editorial standards tend to be more rigorous: the purpose of content is to educate

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students; therefore, educational publishers allocate equal importance to the accuracy of the content as to its saleability. The backlists of educational publishers are a vital component of their profitability: any revisions to a state's or territory's curriculum necessitate the release of new editions. Educational publishers' approach to marketing their titles is not customer-facing: their sales representatives liaise with teachers and academics in the hope of securing school or university adoptions respectively.

Therefore, the objective of this paper is twofold: first, to critically map educational publishing scholarship to date, particularly for the Australian market; and second, to reflect on an industry in transition, utilising the business theory of disruptive technology as a supporting framework. The Australian educational publishing industry is highly concentrated, mostly comprised of foreign-owned multinationals, peppered with foreign-owned and Australian small to medium-sized independents. Multinationals still rely on a print–distribution business model, which is superfluous considering today's digital-first expectations. Certainly, the nature of educational content is changing in response. Its disruptive future? Bite-sized hyperlinked journeys. How soon and effectively multinationals transition to a distribution-print model will determine their success in delivering digital-first content.

Critically mapping the state of educational publishing scholarship

Published research into the educational publishing industry is generally fragmentary—that is, analyses of the sepa-

rate areas, mostly academic and higher education; not the industry as a whole, including school textbooks. Internationally, for example, Michael Overdorf and Amy Barragree's prescient article 'The Impending Disruption of the Publishing Industry' discussed disruptive technology and how it applied to the publishing industry; however, it did not adequately consider the present and future state of educational publishing.[3] John B. Thompson's *Books in the Digital Age* provided an in-depth investigation into the impacts of digitisation on educational publishing, though it concentrated only on academic and higher-education publishing in Britain and the United States.[4] Similarly but more recently, Xuemei Tian and Bill Martin published research specifically regarding educational publishing, entitled 'Value Chain Adjustments in Educational Publishing'. While a significant portion of the article appeared to market the products of John Wiley & Sons, Pearson Education, Cengage, McGraw-Gill and CourseSmart, it did discuss instructively, albeit extremely generally for the higher-education market, how the form and supply of educational content are adjusting in response to technological innovation.[5]

Much of the research into the Australian market also appears to focus primarily on academic and higher education; very little exists for school textbook publishing. For example, Colin Steele, Emeritus Fellow at the Australian National University, has conducted significant research, though focusing on digital scholarly publishing and the state of Australian libraries;[6] similar research has been published by Professor Jenny Gregory from the University of Western Australia.[7] More recently, Jeremy

Fisher published his views on the state of Australian publishing in the digital age from not only a trade, reference and scholarly perspective, but also an educational publishing one.[8] His pertinent appraisal of the latter contributes to placing the issues relevant to educational publishing to the forefront. My own research has an identical objective.[9]

Commentary from within the educational publishing industry exists, though the little uncovered certainly only begins to fill the gap in scholarship. For instance, Peter Donoughue, former managing director of John Wiley & Sons Australia, has discussed the digital challenges facing the educational publishing industry in the media and at industry conferences.[10] Former managing director of University of New South Wales Press and now Honorary Professor in the School of Humanities and Languages at the University of New South Wales, Robin Derricourt's book chapter 'Book Publishing and the University Sector in Australia' discussed 'the position of book publishing from and for Australia's universities, and recent developments in this area'.[11] Ted Gannan, former managing director of Thomson Learning Australia (now Cengage Learning Australia), has expressed the importance of maintaining copyright in response to the proliferation of custom publishing and the perceived inevitable cannibalisation of textbooks.[12] Moreover, in late June 2010 the Australian Publishers' Association (APA) presented,

Students prefer online sources for bite-sized, non-linear data gathering and print-based sources for more in-depth research

with the support of the Copyright Agency Limited (CAL), the 'International Digital Chat Series: Transforming the Landscape' that focused on the digital developments in the publishing industry, with some consideration given to educational publishing; three presentations—'Print on Demand', 'Publishing on Mobiles' and 'From Digital to Print'—by industry professionals from the United Kingdom and the United States.

The impact of digitisation on students—the end users of educational products, namely textbooks and multimedia—and their requirements and preferences should also be considered; however, limited research exists for both educational publishing generally and the Australian context specifically. For tertiary publishing, for example, Ziming Liu, from the School of Library and Information Science at San Jose State University, has analysed digitisation's impact on students' reading habits and their use of electronic resources in contrast to print, though his research pertains to the American market.[13] Their conclusion: students prefer online sources for bite-sized, non-linear data gathering and print-based sources for more in-depth research.[14] Similar research has been conducted by Mitchell Weisberg at the Sawyer Business School of Suffolk University in Boston, Massachusetts.[15] A pilot study into the reading habits of children aged 7–12 was conducted by Sally Maynard, from the Department of Information Science at Loughborough University, England; the study revealed that half of

the children preferred electronic books, while their parents remained attached to print.[16] For the Australian secondary-school market, Dean Mason and Bill Cope interviewed a group of Year 12 students as part of their research into Australian book production; however, their conclusions amounted to parenthetical comments in their chapter 'Australian Book Production in Transition', rather than a meaningful review.[17] Nonetheless, their conclusions are still pertinent more than ten years later:

> For the record, it is worth noting that a small group of Year 12 students interviewed as part of this research project, all agreed that they would prefer to pay for a book in a book shop than buy an on-line version, no matter what the cost differential might be. The underlying principle was not a cost or even a format preference issue, but simply that if something is available on the Internet, it is considered to be 'for free'. If a charge is attached to information found on the web, there is an automatic negative reaction to continuing the transaction.[18]

Looking more closely at educational publishing

Educational publishing is a sector within the publishing industry that focuses on publishing textbooks, student ancillary materials and teaching materials for the institutional education market, specifically primary, secondary and tertiary. Some educational publishers, such as Cengage Leaning (via Gale, its reference imprint) and John Wiley & Sons (through its Online Library), also undertake scholarly publishing, notably journal articles; however, monographs are traditionally published by the university presses, such as Melbourne University Publishing, or specialist publishers, such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO).[19]

Educational publishers rely on a well-used formula to produce, market, sell and distribute their products. For example, school publishers—that is, primary and secondary—work closely with teachers to ascertain how their own and their competitors' products fail (or otherwise) to provide what the teachers actually expect in their textbooks; they have intimate knowledge of the current and future curriculum of each state and territory; and they recruit experienced teachers and academics to write their textbooks and other multimedia products. With their knowledge of the market, publishers must decide on print runs with high-enough profit margins to make their projects worthwhile:

> The average school text would sell 4000 copies per year and the average tertiary text 2500 … successful texts in high-enrolment areas would usually sell 10 000 or more copies per year over a five-year period, or 20 000–30 000 over three years.[20]

Publishers work closely with the production department to fine-tune budgets for each project, taking into account the projected page extent, artwork and text permission costs, author royalties, and editorial, typesetting and printing costs. Also, publishers decide on a publication date that coincides with the time when schools and parents purchase their books, which is usually around December. Once page proofs and marketing copy are available, sales representatives approach teachers to

sell the attributes of their own products in contrast to their competitors'. If successful, government schools and parents, as part of the school booklist system, will often approach textbook suppliers, such as Landmark School Supplies, in Victoria, who will order in bulk directly from publishing companies.[21]

Tertiary publishers adhere to a similar strict formula; however, rather than obtaining bulk orders similar to school publishers, tertiary publishers rely on university adoptions. This involves the textbook being 'marketed to professors and lecturers and sold to students'.[22] The significance of this is that if a publisher decides to publish a first-year undergraduate textbook, the success or failure of that textbook is often determined by whether the publisher has successfully obtained the intended university adoption.

This well-used print-distribution formula is integral to the highly evolved processes that managers and other employees in established organisations utilise and depend on. Yet such dependence also becomes the seed of their failure, leaving themselves susceptible to disruption.

Relating disruptive technology to educational publishing

In *The Book is Dead: Long Live the Book,* Sherman Young argues that the future demise of the book can be largely attributed to book publishers:

> The constraints by having to *print books* impede the potential inherent in writing and publishing them. Modern publishing is not about shifting ideas, it's about shifting objects.[23]

Instead, Young believes that 'new technologies will save book culture'.[24] By divesting content from its present form, the original intent of book culture can continue to thrive—the proliferation of ideas: 'Rather, the immediate future of the book can be assured (long live the book) by disconnecting the ideas from the object, removing the physical constraints of dead trees and building a future without the codex.'[25] Young's assertion that content will be divested from its material form is certainly pertinent for the educational publishing industry. It is an industry in transition in response to disruptive technological innovation: in the long term, moving from linear, highly illustrative long-form reading to bite-sized hyperlinked journeys.

Multinational publishers' traditional reliance on high profit margins has meant that they continue to focus mainly on publishing big textbooks with large print runs and high recommended retail prices. These big textbooks embody what Clayton Christensen terms 'sustainable technologies':[26] they maintain a rate of improvement in a product or service that customers already value in the mainstream market—that is, they improve on earlier versions while retaining the same, albeit enhanced, attributes.[27] They are evolutionary in nature. Pursuing high profit margins means that the titles the multinationals tend to cater for are the broader subject areas, such as science, mathematics and physical education—those with high student enrolments. Competition remains intense among the multinationals—such as Cengage Learning, John Wiley & Sons, Pearson Education and McGraw-Hill—and as the years have passed, these big textbooks have become more sophisticated in their typesetting: very little white space exists on the page as the margins often feature glossary

items, snippets of non-curriculum-specific facts, extra, non-essential student activities and curriculum-specific information. Where the body text does not occupy the entire page, photographs—often not vital to the understanding of the text, but mere 'fillers' to avoid white space—are inserted. Such sophisticated output, which consumers come to expect to be the norm, does not come cheaply—some textbooks feature hundreds of full-colour illustrations and photographs, most of which the multinationals do not own—and thus entraps the multinationals further in a print–distribution environment in their endeavour to publish bigger and better titles.

One other disadvantage in this cycle is that it leads to what Christensen terms 'performance oversupply': that is, multinational publishers' efforts to remain ahead of their competitors result in supplying products that existing customers soon do not require.[28] During interviews I conducted in 2009 for my Master's with an independent Australian educational publisher, Insight Publications, two very pertinent facts became evident: users of content considered the present prices for the big textbooks to be prohibitive, and they were less interested in textbooks with all the typographical bells and whistles. In regard to the latter, users, especially teachers, have expressed their preference for one- or two-colour textbooks with less illustrative and photographic material; that is, 'downsized' textbooks that focus more on the content

rather than on sophisticated layout.

Such 'downsized' textbooks symbolise independent publishers' acknowledgement of, and movement towards, disruptive innovation: they provide new products or services with entirely different attributes that tend to appeal to customers from small or emerging markets (furthermore, their content can ideally transition to a digital-first hyperlinked environment). These technologies are referred to as disruptive because they do not 'address the next-generation needs of leading customers in existing markets'.[29] They are revolutionary in nature. The quality of disruptive technologies is initially worse than that of their established, sustaining counterparts; they therefore tend to underperform when introduced. However, they bring entirely new qualities to the products that 'fringe' customers consider valuable: they tend to be cheaper, smaller, simpler and more convenient to use.[30] For this reason, disruptive technologies are unattractive to the leading, established companies: the products are simpler and cheaper, which translates into lower profit margins; the products are developed in emerging or insignificant markets, which indicates low enrolment numbers; and most customers, from whom they derive significant sales, do not want or require them.

The ensuing problem for multinationals is that a significant disruptive niche becomes available to independent publishers: not only can the independents continue

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to successfully publish textbooks catering to the smaller subject areas, which are not high earners historically and therefore not of commercial interest to multinationals, but they now also have an opportunity to pursue the broader subject areas. The independents' diminutive size and flexible structure enables them to alter their work practices in light of current and future trends. Producing 'downsized' textbooks enables the independents to respond almost immediately to users' requirements: provide content that appears significantly less homogenised and satisfy users' preference for less expensive textbooks. In this way the independents are able to compete directly and equitably with multinational publishers and therefore potentially appropriate the latter's market share.

Print versus electronic textbooks

During the seventeen years I have been working in educational publishing, the traditional delivery of content, particularly by the multinationals that dominate Australia's concentrated market, has not changed—that is, it is print-first and then distribute to customers. When I conducted initial research for my Master's in 2008, the multinationals' adherence to the traditional print–distribute business model for the school textbook market did not appear, at face value, to be either problematic or at risk; schools and parents continued to purchase print-based textbooks and their accompanying print and/or digital ancillary material (on CD).[31] Students appeared to still prefer, and use, the physical characteristics of textbooks, such as their portability—textbooks can be accessed in a variety of settings, either indoors or outdoors, with no regard to battery life—their

ability to be easily, physically annotated and the convenience of quick referencing.[32] Now this perspective is not clear-cut, particularly for more basic one- and two-colour textbooks, such as primary-school readers, with a range of e-readers and e-reading software available in the market and the in-classroom use of interactive whiteboards connected to the Internet. For such basic textbooks, publishers are increasingly releasing their content in digital form only; however, with the full-colour textbooks that feature elaborate typesetting and myriad artwork and illustrations, releasing digital-first content is a more complicated issue.

In regard to the tertiary sector, undergraduate students not only purchase their textbooks from specialised textbook suppliers, such as university bookshops, but they also rely on the used-textbook market and course packs supplied by their own university departments. In addition, they supplement their print-based sources, either purchased or borrowed from their own university's library, with online sources. Certainly, the Internet affords a seemingly unlimited amount of information, though often online sources cannot be verified to be either academically reputable or accurate. Fortunately, students can access their university's digital library via the Internet, from which they can locate print-based books, ascertain whether they are available to borrow and even place them on hold if they are presently being borrowed by another student. They can also access, for example, innumerable journals and newspaper articles for which their library pays subscription fees.

The former Federal Labor Government's 'Education Revolution', which included the objectives of spending 'one million

dollars per high school to allow every Australian student in Years 9 to 12 to have access to their own school computer' and of creating a national curriculum from Kindergarten to Year 12, enabled changing reading methods to be translated to the school environment.[33] For example, the notebook computers being acquired by primary and secondary schools do not feature CD-ROM drives. This has affected publishers by forcing them to desist from placing their ancillary material on to CDs (affixed to the inside cover of textbooks), and to release the majority of such material on to their companion websites. This would also be the case for those schools with interactive whiteboards.

One of the main functions of CD ancillary material is that its existence necessitates the purchase of print-based products—that is, the digital content ironically forces consumers back to print because they can only obtain the digital content on CD by first purchasing the book. If CDs were no longer produced in the medium term, the reason to purchase the print-based product might no longer exist—or, at least, be significantly diminished. The customer might be able to obtain a one- or two-colour, cheaper digital version by an independent publisher, with all the ancillary material also online, which can be downloaded or printed on demand.

In the United States, with its substantial student market, multinational publishers have opportunities to successfully retain market share in the disruptive digital environment via CourseSmart, a digital clearinghouse of university textbooks. CourseSmart, began supplying electronic textbooks (or e-textbooks) in 2008. Because of its affiliation with numerous educational publishers—such as Pearson Education, McGraw-Hill Higher Education, John Wiley & Sons and Cengage Learning—CourseSmart now offers thousands of e-textbooks from its website.[34] According to its terms and conditions of service and use, students can subscribe to the service via the online or download model:

> To access complete eTextbooks, you may either rent eTextbooks online from CourseSmart or purchase access code(s) from bookstores and other physical locations which you can use to access your eTextbooks. Once you have accessed an eTextbook online, you have the ability to view it offline.[35]

During the approximately six-month subscription period, students can view or download to one computer, depending on the model selected, any or all e-textbooks to which they have subscribed, print and/ or copy and paste digital pages up to 150 per cent of the textbook's number of pages, create bookmarks and other personal notes, and receive a subscription refund if deemed eligible. On average, CourseSmart's e-textbooks cost 60 per cent less than a new printed textbook;[36] however, once the

Students appeared to still prefer, and use, the physical characteristics of textbooks

student's subscription expires, access to the e-textbook is no longer permitted—full copyright ownership therefore remains with CourseSmart and its affiliates.

Whether a student manages to save 60 per cent depends on the e-textbook product, price and the rental period. For example, the regular price for McGraw-Hill Education title *Exploring Exercise Science* is US$136.00, while the reduced CourseSmart price is US$77.44; therefore, the student saves US$62.56. The rental period for this e-textbook is 180 days, or six months.[37] This is a significant saving for students; however, if the student requires this title for the school year, the rental costs increases to US$154.88. In this case, it would be more economical to purchase the print textbook at full price and then sell it, if desired, on the used-textbook market. In contrast, the regular price for humanities title *Radio Drama*, published by Taylor & Francis, is US$46.99, while the reduced CourseSmart price is US$21.15 for a six-month rental period; the students saves US$25.84. For an entire school year, the rental cost for *Radio Drama* would be US$42.40;[38] therefore, it would be more economical to rent the e-textbook rather than purchase the printed textbook if the student requires is only for that year. Furthermore, CourseSmart provides unlimited rental periods for certain textbooks, most notably humanities titles, which is where the most significant savings for students resides. For instance, another McGraw-Hill Education title, *Read & Think English*, is available for unlimited rental for $US19.99.[39]

In the latter half of 2009, CourseSmart began 'offering e-textbooks for students on the iPhone and iPod touch. The platform consists of a free *eTextbooks for the iPhone* application that interfaces with a student's free CourseSmart account'.[40] With this application, students can not only access the entire e-textbook from their iPhone or iPod touch (which is also now the case for the iPad), together with their notes, but also conduct specific word searches.

Despite the millions of dollars that Australian publishers can generate in educational publishing, the Australian market, in comparison to those of the United Kingdom and the United States, is insignificant;[41] therefore, it is presently inconceivable, in my view, for such a service as CourseSmart to be viable. Such an insignificant market is characterised by a concentration of multinational publishers, such as Pearson Education Australia and Cengage Learning, and intermixed with small to medium Australian or international independents, such as Insight Publications and Oxford University Press respectively. Thus, the conundrum for the multinationals in Australia is how they can both retain their market share and regulate copyright ownership, such as through password-protected sites or future pay-as-you-go aggregation[42]—though neither is foolproof against misuse—while conceding that the nature of reading is changing by releasing their digital-first content online, especially in a form that embraces hypertextuality.

Looking into the educational future

The design and typesetting possibilities of digital educational content are limitless and exciting. A 300-page Year 11 physics textbook that I edited in 2008 for Pearson Education Australia featured a chapter on cosmology. Accompanying a discussion of the Sun's rotation was a four-panel series of photographs that demonstrated the

rotation in two dimensions; almost half a page was dedicated to their inclusion. In a digital-first, bite-sized hyperlinked environment, a paragraph of content could be accompanied by an image of the Sun a little more than one-eighth of a page in size. Clicking on the image could link directly to a video, providing a three-dimensional perspective; it could be accompanied by authorial commentary and hyperlinks to further resources and sites; and students could electronically annotate sections of interest, if so desired.[43]

Presently, adapting such possibilities across a multinational's publishing list in development exists in theory owing to the prohibitive upfront costs to manufacture educational textbooks. In reality, for this textbook whose print run was 3000, commissioning the illustrations and obtaining photographic permissions amounted to approximately A$25,000; the offset printing cost just over A$19,000; and the editorial, design and typesetting costs were more than A$25,000. Taking all other costs not mentioned into account, the total manufacturing cost in the first year amounted to over A$65,000. Furthermore, the estimated total production cost for this single title over the first three-year period was more than A$100,000.[44] In a digital environment, printing costs would be eliminated while the balance would remain. The profitability of such sophisticated, highly illustrative and photographic textbooks is therefore measured over the medium to long term:

> ... the pay-off for educational titles is often slow in coming because course adoptions do not immediately follow publication. Cengage [Learning] Australia estimates that across its whole portfolio, sales within the first 12 months only account for about 30%

of the total across a title's lifetime.[45] Such profitability in the digital environment is also not guaranteed. Peter Donoughue confirms this:

> ... most publishers will want to protect their revenue base. Selling a book priced at A$100 to 1000 students nets the publisher, after deducting GST and the 33.3 per cent bookseller discount, A$60,640 in sales. Selling ten of the fifteen chapters at an average net price of A$4.04 to those 1000 students will net only A$40,400.[46]

John B. Thompson argues in *Books in the Digital Age* that 'new technologies will enable publishers to reduce the size of the big textbooks and shift most of the illustrative material on to companion websites'[47]—or, by extension, release digital-first content that can be accessed via desktop computers, notebooks or e-book readers, such as Amazon's Kindle (in greyscale) or Apple's iPad (in full colour); such conclusions mirror my own results from my Master's fieldwork, as abovementioned. For 'downsized' textbooks with minimal artwork and textual permissions, such considerations are possible. For more complex textbooks such as the physics one discussed above, however, until such time that multinational educational publishers are able to significantly reduce their artwork costs, such as by easing their dependence on illustrative material or delegating the responsibility to staff for their creation so that the organisation retains copyright ownership in both print and digital formats, and structurally transition to a distribution–print business model, they are not prepared to withstand future disruption: to embrace digital-first educational content delivery in a hyperlinked environment. ■

Notes

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3. Michael Overdorf & Amy Barragree, 'The Impending Disruption of the Publishing Industry', *Publishing Research Quarterly*, vol. 17, no. 3 (2001), pp. 3–18.

4. John B. Thompson, *Books in the Digital Age: The Transformation of Academic and Higher Education Publishing in Britain and the United States* (Cambridge: Polity Press, 2005). Thompson later published *Merchants of Culture: The Publishing Business in the Twenty-first Century* (Cambridge: Polity Press, 2010); however, this title involves an historical analysis of trade publishing in Britain and the United States since the 1960s.

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8. Jeremy Fisher, 'E-books and the Australian Publishing Industry: Reading in an Age of Change,' *Meanjin,* vol. 69, no. 3 (2010) <http://meanjin.com.au/editions/volume-69-number-3-2010/article/e-books-and-the-australian-publishing-industry/> (6 April 2014); 'The neglected textbook: placing educational publishing in Australia in context,' *Script & Print*, vol. 36, no. 4 (2012), pp. 200–212.

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11. Robin Derricourt, 'Book publishing and the university sector in Australia,' in David Carter and Anne Galligan (eds), *Making Books*, pp. 221–230. See also Robin Derricourt, 'Scholarly book publishing in Australia: the impact of the last decade,' *Journal of Scholarly Publishing*, 33 (2002), pp. 189–201.

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14. Liu, 'Reading behavior in the digital environment', p. 709. See also, Ben Gibran, 'The Impact of the Internet on the Print Book Market,' *Journal of Publishing*, no. 2, Australian Special Issue, August 2007, p. 14; Steele & Graham, 'Scholarly publishing: digital dreams or

nightmares?', p. 3.

15. Mitchell Weisberg, 'Student Attitudes and Behaviors Towards Digital Textbooks,' *Publishing Research Quarterly*, vol. 27, no. 2 (2011), pp.188–196.

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17. Bill Mason & Bill Cope, 'Australian Book Production in Transition,' in Bill Cope & Dean Mason (eds), *Creator to Consumer in a Digital Age: Book Production in Transition* (Altona, Victoria: Common Ground Publishing, 2001), pp. 58–9, 63.

18. Mason & Cope, pp. 58–59. See also Gibran, pp. 13–14. This is later supported by William Douglas Woody, David B. Daniel & Crystal A. Baker, 'E-books or textbooks: Students prefer textbooks,' *Computers & Education* 55 (2010), pp. 945–8.

19. Donoughue, 'Educational Publishing,' p. 210. See also Robin Derricourt, 'Book publishing and the university sector in Australia,' pp. 221–230.

20. Donoughue, 'Educational Publishing,' p. 216.

21. Landmark School Supplies, <www.elandmark.com.au> (6 April, 2014).

22. Thompson, *Books in the Digital Age*, p. 199.

23. Young, pp. 9–10.

24. Ibid., p. 9.

25. Ibid., p. 166.

26. Clayton M. Christensen & Michael Overdorf, 'Meeting the Challenge of Disruptive Change,' *Harvard Business Review*, March–April 2000, p. 71.

27. Joseph L. Bower & Clayton M. Christensen, 'Disruptive Technologies: Catching the Wave,' *Harvard Business Review*, January–February 1995, p. 45; Christensen & Overdorf, p. 72; and Clayton M. Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail* (Boston, Massachusetts: Harvard Business School Press, 1997), p. xv.

28. Bower & Christensen, p. 47.

29. Christensen & Overdorf, p. 72.

30. Christensen, p. xv.

31. Historically, publishers have packaged student CDs with textbooks that feature, for example, the entire textbook in PDF format, extra worksheets often with examination-type questions and hot-linked to and from the PDF version, and links to further material on the organisation's companion website.

32. Overdorf & Barragree, p. 14.

33. Brett Winterford, 'Rudd promises a computer on every school desk', ZDNet (online), 14 November, 2007, <www.zdnet.com/rudd-promises-a-computer-on-every-school-desk-1339283831/> (6 April, 2014).

34. CourseSmart describes itself as a 'digital rental service that enables a paying customer to have access to and use of eTextbooks' <www.coursesmart.com/termsofservice> (2 May, 2014).

35. <www.coursesmart.com/termsofservice> (2 May, 2014).

36. <www.coursesmart.com/go/student> (2 May, 2014).

37. <www.coursesmart.com/exploring-exercise-science/wilson-gregory/dp/0077324005> (2 May, 2014).

38. <www.coursesmart.com/radio-drama/tim-crook/dp/9780415216029> (2 May, 2014).

39. <www.coursesmart.com/read-and-think-english-1st-edition/the-editors-of-think-english-magazine/dp/9780071499163> (2 May, 2014).

40. Eric Slivka, 'CourseSmart brings 7000+ textbooks to the iPhone and iPod Touch', MacRumors.com, 10 August, 2009, <www.macrumors.com/2009/08/10/coursesmart-brings-7000-textbooks-to-the-iphone-and-ipod-touch/> (6 April, 2014).

41. For a statistical comparison of the Australian and American markets, see Jenny Lee, Mark Davis & Leslyn Thompson, University of Melbourne Book Industry Study 2009 (Melbourne, Victoria: Thorpe–Bowker, 2009), pp. 20–25.

42. Various pricing models—single purchase, subscription pricing, pay-per-view and content-on-demand—are discussed in more detail by Paul Mercieca, 'Digital Publishing: The Current State of Play,' in Bill Cope & Dean Mason (eds), Creator to Consumer in a Digital Age, pp. 89–94.

43. See also A. Marion & E. Hacking, 'Educational Publishing and the World Wide Web,' Journal of Interactive Media in Education, vol. 98, no. 2 (1998), p. 3.

44. The approximate figures provided here are supported by Donoughue, 'Educational Publishing,' p. 216. See also Lee, Davis & Thompson, p. 44.

45. Lee, Davis & Thompson, p. 44.

46. Donoughue, 'Educational Publishing,' p. 219.

47. Thompson, Books in the Digital Age, p. 230. See also Simone Murray, 'Generating content: Book publishing as a component media industry,' in David Carter and Anne Galligan (eds), Making Books, p. 67.