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# *An economic analysis of education exceptions in copyright*

March 2012

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# *Executive summary*

## *Scope*

This report has been prepared by PricewaterhouseCoopers LLP (PwC) for the Copyright Licensing Agency Ltd. (CLA) under the terms of our engagement letter with CLA dated 8<sup>th</sup> February 2012. It forms part of the CLA's response to the Consultation on Copyright which was issued by the Intellectual Property Office (IPO) on behalf of HM Government<sup>1</sup>. The purpose of our report is to provide an economic analysis of the issues relevant to the proposed changes to education exceptions in existing copyright legislation. Specifically, we focus on the five questions identified in the Consultation Document (Q85 to Q89). Our analysis considers the impact of the proposed changes to the education exceptions within existing copyright legislation on innovation and economic growth in the UK.

## *Economics of educational publishing*

Educational publishing includes all works purchased by schools, higher education institutions, further education institutions (collectively 'educational establishments') as well as students, for educational purposes. The educational publishing value chain depends on authors and publishers believing that they can make an adequate economic return on their investment of time and money.

Our key findings are that:

- The economic contribution of educational publishing is significant. In 2010, we estimate that the sector:
  - Was directly responsible for value-added approaching £400m and employing around 9,400 people
  - Contributed about £120m to the Exchequer through corporation tax, income tax and national insurance payments
  - Gave rise to indirect and induced effects amounting to value-added of £1,139m and employment of 22,259 people.
- We estimate that the total investment in educational books was £205m in 2007 (the latest year for which data are available). Furthermore, we estimate that in total, UK authors who receive income from educational licences have produced almost 10,000 individual works each year, since 2009.
- Nearly 43,000 authors receive secondary licensing income from CLA's school, further education and higher education licences. The core group consists of 1,700 authors, whose works are regularly copied by educational establishments throughout the UK and who account for 65% of educational licensing income distributed by Authors Licensing and Collection Society (ALCS) to UK book authors
- Almost 6,000 enterprises publish books, journals and periodicals. In 2010, UK publishers sold books worth £3.1bn, and we estimate:
  - £489m were sold to the UK educational market and a further £330m were exported.
  - Publishers' sales of journals to higher education institutions (including printed and digital) reached £134m and export sales were around £90m.
- The education sector has seen significant innovation in digital learning resources and content for interactive whiteboards over the last decade. Digital products still take only a modest share of the educational learning resources market (less than 20%) but this is almost certainly higher in the UK, at present at least, than in any other country including the US. In 2010, sales of digital educational publishing works to schools (including further education institutions) amounted to £51m and sales to higher education establishments represented a further £36m.

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<sup>1</sup> Intellectual Property Office, 'Consultation on Copyright', 2011

## Role of copyright in educational publishing

The economic rationale for copyright is to deter free riding (consuming goods without paying), which threatens the sustainability of copyright dependent industries such as educational publishing, and to provide a framework which maintains incentives to produce creative content.

The economic rationale for collective licensing and the role of CMOs is to provide access to extracts from copyright works for the benefit of education, business and government and to substantially reduce transaction costs. Without the CMOs, the transaction costs of licensing would be prohibitive. For example, in the higher education sector, the current transaction costs for users and rights owners through CMOs are £6.7 million: with an atomised model, we estimate that the transaction costs would be between £145 million and £720 million per year.

The available evidence related to the role of collective licensing and secondary licensing income on the incentives facing authors and publishers shows that:

- Secondary licensing income has a material impact on authors' incentives to create educational works: some 54% of the ALCS members who receive the most from CLA licences suggested that it was 'essential' and 36% indicated it was 'important' in supporting the development of new works. Almost 25% of authors derived more than 60% of their income from secondary licensing income.
- Publishers' incentives to invest in new content development also depend on secondary licensing income as Elisabeth Tribe, Managing Director of Schools Division notes: *'Hodder Education is investing in digital applications for tablet PCs. This is not expected to make a return in the short term, but at present, supported by steady income streams such as CLA schools licence, we are able to invest in products such as this.'*
- Secondary licensing income represents a significant proportion of the funds publishers use to invest in content development and the development of new digital learning resources such as are needed for interactive white boards.

Whilst licensed works are a highly valued educational input, the licensing costs borne by educational establishments for copying from those works are less than 0.1% of their total costs.

## Impact of proposed copyright reform

The proposed changes to education exceptions being considered by the Government fall into two broad categories:

- Fundamental changes to the underlying rights of content creators, licence operators and users (Consultation Questions 86 and 89); and
- Changes to the scope of the exceptions (Consultation Questions 85, 87 and 88).

Restricting the scope of the CMO to license would have the largest impact on industry stakeholders. In the short-run, revenue would be redistributed from publishers and authors to educational establishments. The cost savings for educational establishments would be small; copyright licensing payments make up less than 0.1% of an educational establishment's expenditure. In comparison, the losses borne by educational authors and publishers would be significant:

- 18% of writing income is earned through CLA fees (for the core market of educational authors)
- CLA income was, on average, 12% of profit, and 18% of investment in new products from a sample of the larger educational publishers.

Over the longer-term, losing this income will reduce content creators' incentives to invest in educational works:

- A 10% decline in CLA income would result in a 20% drop in output, according to authors surveyed by the ALCS, whilst a 20% decline in secondary licensing income would result in a 29% decline in output. We estimate this would equate to a fall of around 2,870 works per year.
- *'A reduction in CLA income equates to a loss of funds available for investment in new products'* (Clare Hodder, Associate Director of Rights, Palgrave Macmillan)
- *'If Sage was forced to cut new books from its programme following a loss of CLA income the first books cut would be the more innovative or scholarly books that are riskier but are also more likely to have a scholarly impact in the longer term..... [this would also impact]..... the ability of UK based academics to get published and thus to promote UK research and scholarship in the world stage.... there would also be an impact on exports'* (Leo Walford, Sage Publications).
- *'If a significant proportion of the profit of the business disappeared, we would need to look across the board at making this up in some way, which would almost certainly have implications for jobs'* (Elisabeth Tribe, Managing Director, Schools Division, Hodder Education).

The collective licensing system provides an ordered market for protection against unauthorised copying and its role should not be underplayed. Removing CMOs from the market would remove their role in monitoring compliance with copyright. If the ordered market were weakened, Palgrave Macmillan, for one, fears for the impacts on its primary textbook sales,

*'If the licence is taken away... the useful collaborative dialogue that it enables would disappear with it.... there could be an increase in scanning which may substitute for core sales and ultimately diminish the economic viability of publishing text books'.*

Whilst growing, the market for digital educational publishing in the UK is still fragile. It needs to be supported through copyright policy, not undermined by promoting free-use. The extension of the current education exception to cover digital forms of copying could act as a severe disincentive to the development of digital-based learning resources, if broadly defined. Research shows that an exception for digital copying in libraries in Australia stunted the growth of the digital publishing industry.

In comparison, we expect the other proposed changes to the scope and the definition of the exception will likely have only a limited impact (in terms of benefits and costs) if implemented in isolation. Redefining an educational establishment or increasing the proportion of the work that can be copied under the exception will cover only 0.25% of works. Over the past ten years, the innovations that the CLA has made to its licences have positively impacted the usage rights to the 1.4million educational works covered under the scheme.

Included in the Government's rationale for considering changes to the education exception is the assumption that it would "permit wider copying of more types of copyright materials, enable use of these materials with digital technology, help students to access education more easily, remove financial burdens and support skills growth in the UK"<sup>2</sup>. We do not believe that this rationale, most of which is already enabled by the existing system of licensing, provides a sufficient economic justification for expanding the education exceptions. Furthermore, there is no economic rationale for copyright works to be provided free of payment any more than other inputs (e.g. software, broadband access). Equally, we do not believe there is any economic justification that educational establishments should be favoured over other licence users.

In conclusion, the Government's proposed changes to education exceptions trades off longer-term provision of educational materials and continued growth of an innovative exporting industry in favour of minor short-term cost savings.

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<sup>2</sup> Intellectual Property Office, 'Consultation on Copyright', 2011

# 1 Introduction

## Background

PricewaterhouseCoopers LLP (PwC) was commissioned by the Copyright Licensing Agency Ltd. (CLA) to provide an economic analysis of the impacts of proposed changes to education exceptions in copyright in the UK. The CLA is the UK's largest not-for-profit collective licensing body. It licenses organisations copying extracts from print and digital publications on behalf of authors, publishers and visual content creators.

This report has been prepared by PwC for CLA under the terms of our engagement letter with CLA dated 8 February 2012. We have also prepared our report for two other bodies that represent authors and publishers:

- The Authors' Licensing and Collecting Society Ltd. (ALCS) is the rights management organisation which represents author's interests in the UK and collects and distributes fees for writers for the collective use of their works in the UK and overseas, including the fees received from CLA and other bodies.
- The Publishers Licensing Society Ltd. (PLS) is the rights management organisation which represents publishers' interests in the UK and distributes fees from collective licensing which CLA administers.

In the remainder of our report we refer to these organisations as the Collective Management Organisations (CMOs).

## Scope

Following the recommendations of the Hargreaves Review of Intellectual Property and Economic Growth<sup>3</sup>, the Intellectual Property Office (IPO) has issued a Consultation on Copyright<sup>4</sup> on behalf of HM Government which seeks views on proposals to revise copyright policy. One of the areas covered by the consultation document is the treatment of education exceptions to copyright.

In this supplementary report we examine the key economic issues relevant to the education exception in existing copyright legislation and the proposed changes. We pay particular attention to copyright of literary works (i.e. books, journals, magazines and other periodicals) as these are the media which are of most interest to our clients. The purpose of the report is to collate and articulate the economic arguments and evidence around the proposals for change to the treatment of copyright exceptions in relation to education focusing on the five questions identified in the Consultation Document (Q85 to Q89).

In doing this, we have built on an earlier report prepared by PwC for the CLA as part of its submission to the Hargreaves Review<sup>5</sup>. We have also drawn on a range of available evidence including:

- Existing secondary information and data;
- Interviews with publishers and other organisations active in the educational publishing value chain; and
- Two surveys of authors of works are used for educational purposes.

Our analysis considers the impact of the proposed changes to the education exception within existing copyright legislation on innovation and economic growth in the UK. In particular, we consider how the proposed changes

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<sup>3</sup> Ian Hargreaves, 'Digital Opportunity: A Review of Intellectual Property and Growth', 2011. Available at <http://www.ipo.gov.uk/ipreview-finalreport.pdf>

<sup>4</sup> Intellectual Property Office, 'Consultation on Copyright', 2011. Available at <http://www.ipo.gov.uk/consult-2011-copyright>

<sup>5</sup> PricewaterhouseCoppers, 'An Economic Analysis of Copyright, Secondary Copyright and Collective Licensing', 2011

to the education exceptions would affect the economic value generated through the production of ‘creative content’<sup>6</sup>.

## Context

As we have noted, our report has been prepared to inform CLA’s response to HM Government’s Consultation on Copyright<sup>7</sup> which articulates plans for implementing the recommendations of the Hargreaves Review<sup>8</sup>. This Review focused on whether the existing system of Intellectual Property (IP) in the UK provides the appropriate support for innovation and economic growth with particular reference to the digital economy. As such, it was the latest of several detailed reviews of the UK system in recent years.

### Consultation on Copyright

The Consultation on Copyright<sup>9</sup> sets out the proposed changes the Government is considering implementing, following the recommendations of the Hargreaves Review, and seeks responses to those proposed changes. The Consultation covers a range of topics that reflect the Government’s response to the Hargreaves Review, including orphan works, extended collective licensing and codes of conduct for collecting societies and exceptions.

Alongside the consultation document, the IPO has also prepared a series of Impact Assessments which examine the potential impacts of each of the proposed changes. One of these covers the proposed changes to the education exceptions<sup>10</sup>.

### The Hargreaves Review

The Hargreaves Review was undertaken at a time when the Coalition Government was seeking to create a more dynamic economy and saw the IP framework as having a key role to play in this. In particular, the Government was concerned that it may be obstructing growth by failing to strike the right balance between delivering incentives and enabling competitive innovation.

The Hargreaves Review was expected to contribute in three main ways:

- by outlining the key elements of an IP system, nationally and internationally, that would best promote UK economic growth, as a touchstone for future policy decisions;
- by setting out some specific actions that should be taken as “first steps” towards this goal; and
- by identifying any additional areas where there appears to be real potential for improvement, but where further evidence is needed.

It came at a time when the Government was also committed to achieving strong, sustainable and balanced growth that is more evenly shared across the country and between industries. To do this, it had launched a Growth Review with the aim of identifying structural reforms with the potential to improve the business environment and examine barriers to growth which affect specific sectors<sup>11</sup>. Its focus was on finding opportunities to improve the UK’s performance. One of the sectors identified as a priority attention was the digital and creative industries.

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<sup>6</sup> We use the term creative content throughout to refer to original copyright works produced by authors, artists, entertainers and academics.

<sup>7</sup> Intellectual Property Office, *ibid.*, 2011

<sup>8</sup> Ian Hargreaves, *ibid.*, 2011

<sup>9</sup> Intellectual Property Office, *ibid.*, 2011

<sup>10</sup> Intellectual Property Office, ‘Impact Assessment BIS0317: Extending Copyright Exceptions for Education Use’, 2011. Available at <http://www.ipo.gov.uk/consult-ia-bis0317.pdf>

<sup>11</sup> Her Majesty’s Treasury and the Department for Business, Innovation & Skills, “The path to strong, sustainable and balanced growth”, (2010). Available at <http://www.bis.gov.uk/assets/biscore/corporate/docs/p/10-1296-path-to-strong-sustainable-and-balanced-growth.pdf>

### Previous reviews of copyright policy

The Hargreaves Review followed on from a series of other policy reviews, consultations and strategic documents summarised in Table 1. These have been undertaken both with a UK focus and across the European Union.

**Table 1: Summary of key reviews, consultations and strategy papers relating to copyright**

Title	Date published	Scope
Gowers Review of Intellectual Property <sup>12</sup>	December 2006	The review examined all elements of the IP system and considered whether it delivers incentives for creative work while minimising inefficiency.
Creative Britain <sup>13</sup>	February 2008	This review re-evaluated the contribution of the creative industries to the UK's economy and concluded that the creative industries should move "from the margins to the mainstream of economic and policy thinking". As a result, the Government announced a number of initiatives to promote growth in the sector.
SABIP Strategic Priorities for Copyright <sup>14</sup>	March 2009	SABIP outlined six areas of current copyright policy which are of strategic importance to the UK and where it intends to focus its medium-term research effort. These include the link between copyright and innovation, coverage of copyright, the effect of digital rights management (DRM), the link between copyright and contract law, framework simplification and changing consumer attitudes.
Digital Britain <sup>15</sup>	June 2009	This review examined the interactions between the digital industries and the economy and how far the current infrastructure, policy and institutional framework supported growth in the sector. The strategy set the high-level objective for the UK to become "one of the world's leading digital knowledge economies".
European Commission Green Paper: Copyright in the Knowledge Economy <sup>16</sup>	July 2009	The EC published the results of a consultation which examined how broad dissemination of knowledge could be achieved within current copyright legislation. The EC's main conclusion was that copyright policy should be more geared towards the digital landscape, with the role of the internet particularly important. Following the consultation, the Commission committed to a series of follow-up actions with implications for library exemptions, orphan works and educational platforms.
Copyright the Way Ahead: A Strategy for Copyright in the Digital Age <sup>17</sup>	October 2009	The review issued a number of questions related to the copyright industries, particularly on whether the existing framework is fit for purpose in the digital age. This resulted in a set of 32 conclusions and actions.
European Commission Consultation on Enforcement of IP rights <sup>18</sup>	July 2011	The EC consultation into its 2004 Directive on Enforcement of Intellectual Property (IP) Rights may impact the enforcement of IP rights on the internet across Member States. The consultation follows on from the detailed report of the EC in 2010 which concluded that despite enforcement procedures improving, the scale of infringements is "alarming", with the internet cited as the main source of abuse.

Source: PwC analysis

<sup>12</sup> Her Majesty's Treasury, "Gowers Review of Intellectual Property", (2006). Available at: [http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/gowers\\_review\\_index.htm](http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/gowers_review_index.htm)

<sup>13</sup> IPO, "Creative Britain", (2008). Available at: <http://webarchive.nationalarchives.gov.uk/+http://www.culture.gov.uk/images/publications/CEPFeb2008.pdf>

<sup>14</sup> SABIP, "Strategic Priorities for Copyright", (2009). Available at: <http://www.ipo.gov.uk/c-strategy-digitalage.pdf>

<sup>15</sup> DCMS, "Digital Britain", (2008). Available at: <http://webarchive.nationalarchives.gov.uk/+http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf>

<sup>16</sup> European Commission, "Copyright in the Knowledge Economy", (2009). Available at: [http://ec.europa.eu/internal\\_market/copyright/docs/copyright-info/greenpaper\\_en.pdf](http://ec.europa.eu/internal_market/copyright/docs/copyright-info/greenpaper_en.pdf)

<sup>17</sup> IPO, "A Strategy for Copyright in the Digital Age", (2009). Available at: <http://www.ipo.gov.uk/c-strategy-digitalage.pdf>

<sup>18</sup> European Commission, "Consultation on the Commission Report on the Enforcement of Intellectual Property Rights", (2011). Available at: [http://ec.europa.eu/internal\\_market/consultations/2011/intellectual\\_property\\_rights\\_en.htm](http://ec.europa.eu/internal_market/consultations/2011/intellectual_property_rights_en.htm)

## *Report structure*

The remainder of our report is set out in three further Sections:

- In Section 2, we analyse the economics of educational publishing and assess the associated economic value it contributes to the UK.
- In Section 3, we examine the role of copyright in educational publishing, focusing in particular on the importance of collective licensing and copyright exceptions.
- In Section 4, we analyse the economic impacts of the Government's proposed reforms to copyright relating to education exceptions.

Appendix A summarises the evidence with respect to each of the consultation questions dealing with education exceptions.

Three further appendices explain:

- How we have estimated the number of books available to UK education establishments;
- The two surveys undertaken by Authors Licensing and Collection Society (ALCS); and
- The data used to estimate the value-added and corporate tax contribution of educational publishing.

## 2 Economics of educational publishing

### Box 1: Summary

In this Section we analyse the economics of the educational publishing sector and its value chain.

1. The economic contribution of educational publishing is significant. In 2010, we estimate the sector was responsible for direct value-added approaching £400m, employing around 9,400 people. We estimate that the contribution to the Exchequer from corporation tax, income tax and national insurance contributions was about £120m in 2010. If the indirect and induced effects of the sector's activities are included, we estimate its contribution is employment of 22,259 people and value added of £1,139m. We also estimate that the investment in education works was £205m in 2007 (the latest year for which data are available). Furthermore, we estimate that in total, UK authors that receive income from educational licences have produced almost 10,000 individual works each year, since 2009.
2. The educational publishing value chain depends on authors and publishers believing that they can make an adequate economic return on their investment of time and money.
3. Nearly 43,000 authors receive secondary licensing income from school, further education and higher education licences. The core market consists of 1,700 authors, who regularly receive annual secondary licensing distributions in excess of £1,000, and account for 65% of educational licensing income that is paid by ALCS (to UK book authors). Works produced by these authors are regularly copied by educational establishments throughout the country.
4. Almost 6,000 enterprises are involved in the publication of books, journals and periodicals. In 2010, UK publishers sold books worth £3.1bn, of which we estimate that £489m were sold to the UK educational market and a further £330m were exported to overseas educational markets. Additionally, we estimate sales of journals to higher education institutions (including printed and digital) was worth £134m to publishers in 2010. There are no reliable estimates of the value of educational journal exports. Using domestic sales as a guide, we estimate exports of £90.2m in 2010.
5. For some publishers, success in the domestic market is a prerequisite to invest in export markets. As Clare Hodder, Associate Director of Rights for Palgrave MacMillan notes 'For textbook exports to thrive, the UK textbook market needs to be commercially viable'.
6. The education sector has seen significant innovation in digital publishing and interactive whiteboards over the last decade although digital products still only have a modest share of the market. In 2010, sales of digital educational publishing works to schools amount to £51m, with sales to higher education establishments a further £36m. Using the domestic market as a guide, we estimate digital publishing exports of £58.8m in 2010.
7. Publishers are investing heavily in developing digital platforms. At Cambridge University Press, 10-15% of educational publishing revenues come from digital platforms. By 2015, they expect digital sales will account for 25% of revenues, and by 2020 they expect the vast majority of publishing sales to come from digital platforms.
8. Despite the importance of the educational publishing sector to the educational system, educational establishments spend only a tiny portion of expenditure on books and printed resources, and other learning resources. On average, primary and secondary schools spent 2.1% of their budget on learning resources. Higher education establishments spent 0.9% of their total budget on learning resources.

## Value chain for educational publications and other works

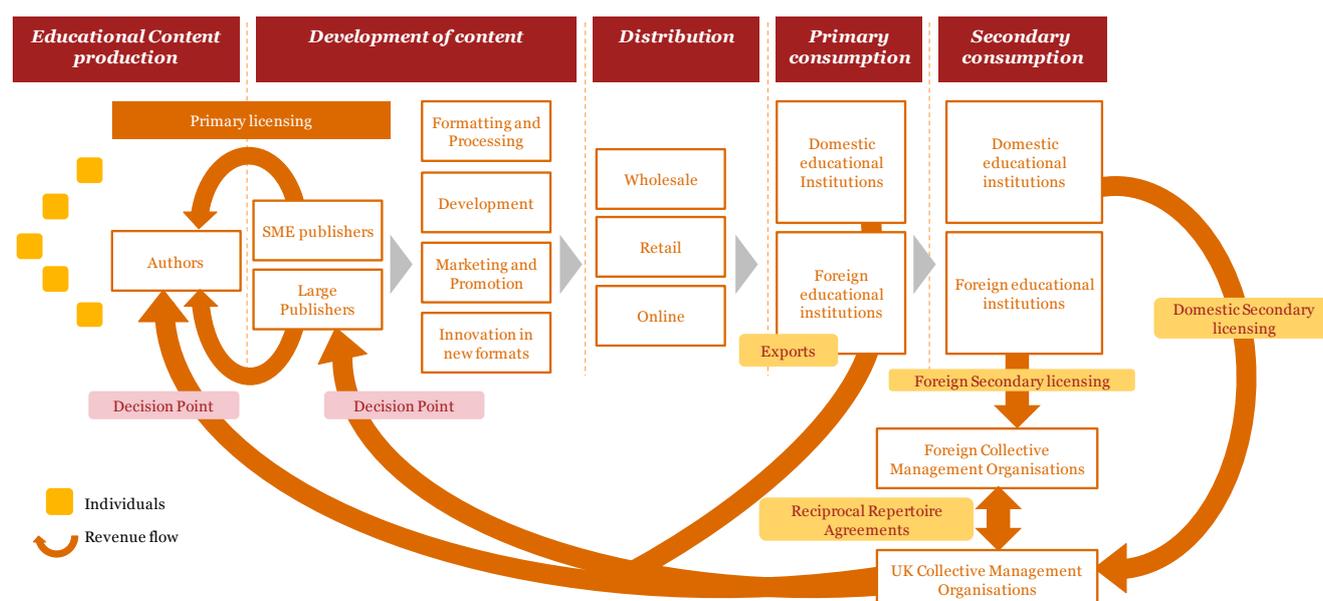
To start with, it is useful to understand the mechanisms through which educational publishing content is created and consumed. A high-level representation of the value chain is illustrated in Figure 1. New educational material originates from individual writers, typically commissioned by publishers. Writers may include those that are self-employed and write either full- or part-time, for educational or other purposes. Educational publishers comprise both larger and smaller, niche organisations. The large, often multinational organisations, offer a diverse portfolio of educational materials that cut across different educational sectors (i.e. schools, further education and higher education). Smaller niche publishers focus on a particular subject matter or product. The publisher invests in developing content to take it to market, where it initially sells directly to educational institutions (primary sales).

Over time, educational institutions and users may wish to photocopy, scan or digitally copy substantial portions of this content. The licensing of the rights for the reproduction of the protected work is usually conducted on behalf of the rights holder by a CMO which then distributes the revenue back to authors and educational publishers (through their representative bodies) in the form of secondary licensing income. The amount of secondary licence income that a publisher or author receives depends on the extent of secondary use of their work(s). The CMO monitors copying activity through a survey to determine appropriate distributions.

Figure 1 depicts two decision points for authors and publishers in the educational publishing value chain. The amount of secondary licensing income expected by authors and publishers plays a significant role in the decision to create (in the case of authors) or publish (in the case of publishers) educational work. In the UK, publishers will typically commission authors to develop educational works. The decision to commission the work will be subject to the expected return on investment (of which secondary income is a component). The authors decision to develop the work will be subject to the terms offered by the publisher and expected earnings from secondary licensing income. There may also be non-economic incentives which influence author behaviour.

This is discussed further in Section 3.

**Figure 1: Educational publishing value chain**



Source: PwC analysis

## Educational authors

Determining the number of educational authors depends on how educational works are defined. We define them as comprising content used in educational establishments (i.e. schools, further education and higher education institutions). Some of these works will have been written by authors specifically for educational purposes (e.g. textbooks for specific curricula, following being commissioned by publishers) and other material may have been written primarily for non-educational purposes, but subsequently find use in educational establishments (e.g. fiction texts which become part of English literature curricula).

The authors of these publications can be segmented according to:

- Whether they spend all or only some of their time working as professional authors: this affects the importance of income from writing; and
- The intended purpose of the publication (i.e. whether or not they write specifically for educational purposes).

In total, official statistics suggest that there are 60,000 people in the UK employed primarily as an author<sup>19</sup>. This figure potentially understates the actual number of people producing works each year. People that nominate other primary professions, who may also produce works for educational or other purposes, are excluded from this estimate.

We have estimated the number of educational authors – both full-time and part-time – using information collected by the ALCS (see Table 2).

**Table 2: ALCS members (2012)**

Category	Number
ALCS members that regularly receive payments of greater than £1,000 from educational licences	1,724
ALCS members whose work has been used for educational purposes	25,362
ALCS members who receive secondary income from school, FE or HE licences	42,771
All ALCS members	86,716

Source: ALCS

There are three distinct groups of educational authors based on these statistics:

- The core group of educational authors, comprising the 1,724 ALCS members that receive annual distributions from CLA greater than £1,000. ALCS estimate that in 2010 this group received 65% of total secondary income from educational licences, that was paid by the ALCS to UK book authors.
- A wider group of UK educational authors comprises the 25,362 ALCS members who write for educational purposes based on the Dewey decimal classification of the works that they produce<sup>20</sup>.
- The broadest group of educational authors includes the 42,771 ALCS members who have received secondary income from CLA's educational licences from CLA (however, in many cases the payments may be quite small and infrequent).

The ALCS conducted two surveys to gather information on its member base that write for the educational market. The first survey was conducted in January 2012 ('the January survey') and was distributed to authors who had recently received a secondary licensing payment from a CLA licence of more than £1,000 (350 recipients in total). The January survey received 190 responses.

The second was conducted in February 2012 ('the February survey'), and was distributed to the 1,000 highest earning ALCS members of CLA income. ALCS estimates that these authors earn approximately 37% of CLA

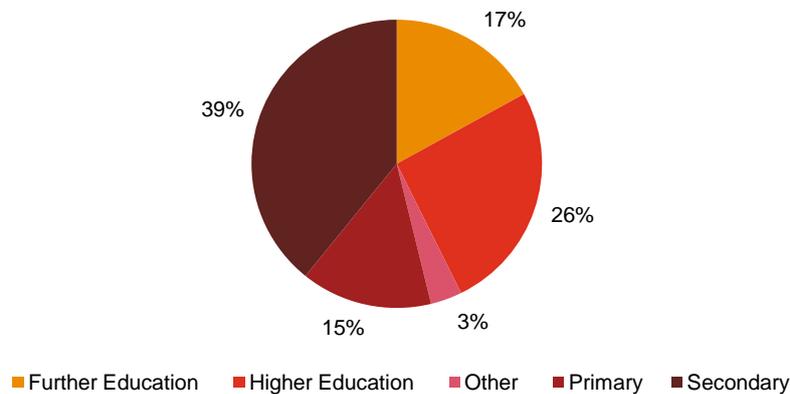
<sup>19</sup> Based on the ONS Labour Force Survey 2010.

<sup>20</sup> Dewey decimal classification codes of the produced works have been used to classify them as educational.

income from educational licences paid by ALCS to UK book authors. The February survey received 175 respondents. See Appendix C for a description of the surveys.

The February survey asked respondents what education sector they focused on. The largest sector of focus within education for authors was secondary schools (39%) followed by higher education (26%) then further education (17%) (see Figure 2).

**Figure 2: Primary market of educational authors**



Source: February 2012 ALCS survey

The February survey also asked educational authors about their employment status. Less than 50% of the respondents indicated that they were self-employed as authors. Almost one-third of the educational authors described themselves as semi-retired, with around 20% indicating that they held full-time employment in addition to writing. More than half the educational authors surveyed indicated that they had other employment in addition to writing (see Table 3).

Using information from respondents to the February survey, we have segmented the group of authors the survey targeted – the 1,000 top earners of CLA income (see Table 3). It is important to note that we focus solely on a select group of authors – the highest earners from CLA educational licences - as these authors are likely to be the most affected by any changes to copyright protection that impacts upon secondary licensing income.

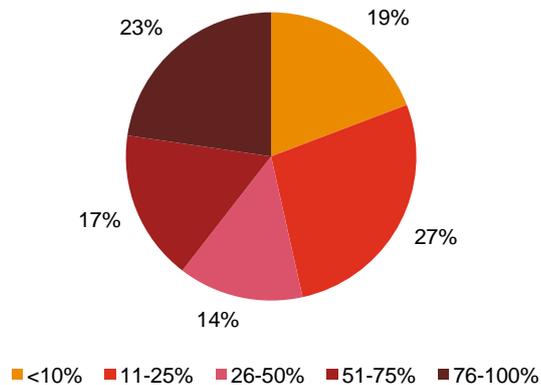
**Table 3: Estimated market segmentation of the highest income earning authors from CLA educational licences, using survey responses**

Employment status	Proportion of survey respondents	Have another job besides writing		Number of authors
		Yes	No	
Self-employed	45%	35	43	450
In full-time employment	19%	31	1	190
In part-time employment	6%	9	2	60
Semi-retired	30%	21	30	300
Total		96	76	1,000

Source: February 2012 ALCS survey, PwC analysis

As Figure 3 shows, almost half (44%) of educational authors indicated that they had spent only a quarter or less of their working time, over the last three years, dedicated to writing educational works. Less than one quarter (23%) of the educational authors surveyed had spent more than three quarters (defined as 76-100%) of their working time on their educational works.

**Figure 3: Percentage of working time that surveyed authors dedicate to educational works**



Source: February 2012 ALCS survey

### Estimated number of individual works produced each year

Survey respondents indicated how many works they had produced over the last three years. We used this information to estimate the number of works produced each year by authors, segmented by their employment status. Self-employed authors produced the most educational works on average each year (4.3). We note too that almost 40% of these authors also have separate employment in addition to writing.

**Table 4: Works produced per year by educational authors by employment status (2010-2012)**

Employment status	Number of survey respondents	Number of works produced per year	Average works per author produced per year
Self-employed	78	338	4.3
In full-time employment	32	109	3.4
Semi-retired	51	129	2.5
In part-time employment	11	34	3.1
Total	172	610	3.5

Source: ALCS member survey

Using this information, we estimated the total number of individual educational works produced by the top 1,000 highest earners of CLA income, from ALCS's membership base. We estimate that this group of authors produces 3,661 individual educational works each year (see Table 5).

**Table 5: Estimated number of works produced by the group of authors that receive regular payments greater than £1,000 from CLA educational licences (2010-2012)**

Employment status	Estimated proportion of highest 1,000 earners of CLA income	Average number of individual works produced each year (2009-2011)	Estimated number of educational works produced each year (2009 – 2011)
In full-time employment	450	3.4	1935
In part-time employment	60	4.3	646
Self-employed	190	2.5	150
Semi-retired	300	3.1	930
Total	1,000	3.5	3,661

Source: ALCS, February 2012 ALCS survey, PwC analysis

We then estimated the number of individual works produced by all educational authors each year, between 2009 to 2011. As the top 1,000 highest earners of CLA income account for approximately 37% of educational licence income distributed by ALCS (to UK book authors), we have assumed that this proportion represents their market share. Based on this approach, we estimate that there were 9,895 individual works produced per year, between 2009 and 2011 that were used by education establishments.

## Educational publishers

Nearly 11,500 enterprises are involved in publishing as a whole (including electronic publishing) in the UK economy (see Table 6). Of these, some 2,200 are publishers of books, 2,705 publish journals and periodicals and 1,780 are involved in other publishing.

**Table 6: Structure of creative industries in the UK 2011**

Sector	Number of enterprises	As a proportion of creative industry enterprises (%)	As a proportion of all enterprises (%)
Publishing	9,700	9.1%	0.5%
Software & Electronic Publishing	1,810	1.7%	0.1%
Total	107,700	100.0%	5.1% <sup>21</sup>
All enterprises	2,100,400		

Source: DCMS Economic Estimates 2011

Table 7 highlights the key characteristics of the educational publishers that focus on different segments of the educational market.

<sup>21</sup> Error due to rounding.

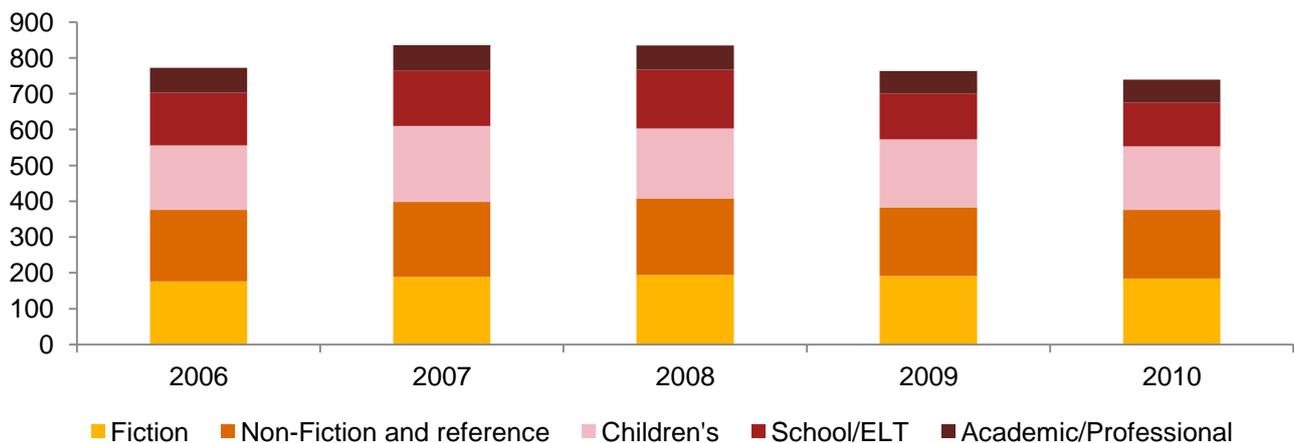
**Table 7: Structure of educational publishing industry**

Market	Structure	Large UK publishers	Niche SME publishers
Schools	Five large publishers and a small number of SMEs	Pearson, Hodder Education, Oxford University Press, HarperCollins and Nelson Thornes	Relatively few SMEs as curriculum is largely set at a centralised level
Further education	Some large publishers involved but market structure is quite diverse	Hodder, Pearson, OUP	Large number of niche players covering a diverse range of subject areas
Higher education	10 large publishers but also featuring a large number of niche players.	Pearson, McGraw Hill, Wiley, Cengage, Taylor & Francis, Elsevier, Sage, Palgrave Macmillan, OUP, CUP	Larger number of niche players, typically focusing on specific humanities subject areas

Source: Publishers Association, PwC analysis

In total, UK publishers sold 739 million books in 2010 of which 446 million were sold domestically and 293 million were exported. Industry revenue grew from £2.9 billion in 2006 to £3.1 billion in 2010 (excluding digital publishing) with a particular growth in exports, which expanded by 23% over the period<sup>22</sup>. These figures exclude sales of journals, which are not tracked by the Publishers Association, but which are relevant for education (specifically higher education).

**Figure 4: Publisher sales of books by category (net units sold, million)**

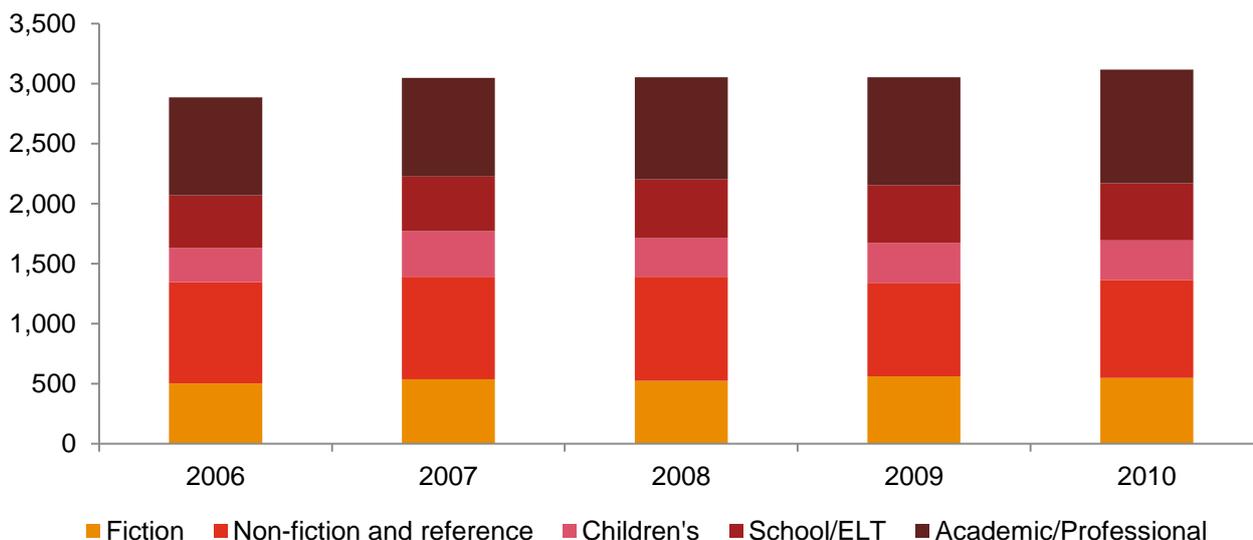


Source: Publishers' Association

Whilst the volume of books sold has declined since its peak in 2008, this masks strong growth in UK publishers' revenue over this period. Between 2006 and 2010, UK publishers' revenue from children's, school (including ELT), academic and professional material increased by 14%.

<sup>22</sup>Publishers Association Statistics Yearbook 2010, p.3

**Figure 5: Publisher sales of books (net value at invoiced prices, £m)**

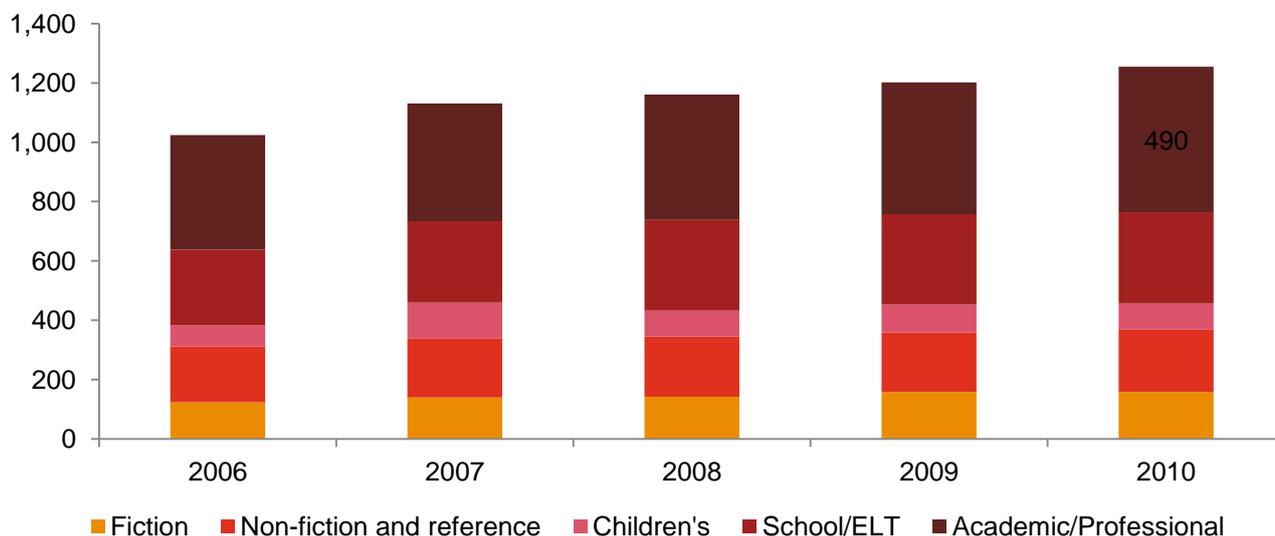


Source: Publishers Association

Revenue growth held up despite a weakening economic environment: the ability to offset volume falls by price rises (helped particularly in export markets by a weak Sterling), high numbers of enrolments in further and higher education and a focus on fast-growing digital and export markets contributed to this growth.

Creative product exports have increased more rapidly than both total UK exports and services exports since 1992. The value of book exports grew by 4% in 2010 to total over £3bn.

**Figure 6: Publisher sales of exported books, by category (net value at invoiced prices, £m)**



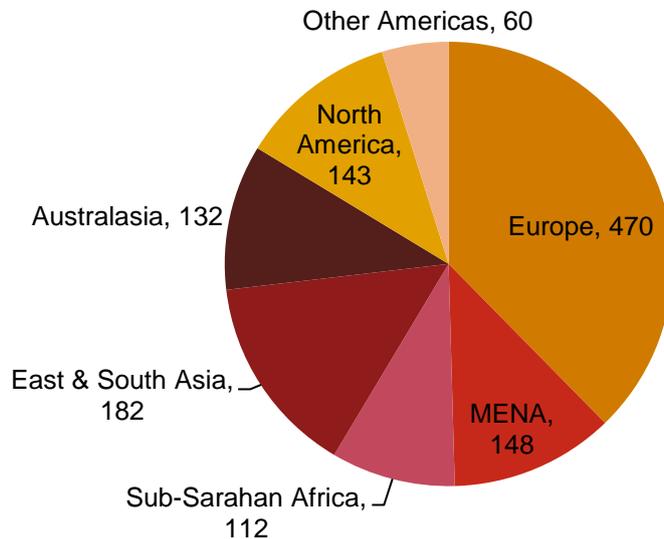
Source: Publishers Association

Europe accounts for two thirds of total exports of all books but the fastest growing markets were the Middle East & North Africa, Sub-Saharan Africa, East Asia and the Americas. Growth continued to be driven by the development of international and English-medium schools over much of the developing world:

*“The reported growth in Asia and the Middle East (averaging 12% growth per year since 2006) is likely to be sustained in the long term. It is not just children who are driving book sales up, but also the increasingly large cohorts entering higher education. Today’s textbook buyers should be*

acquiring something of an English language reading habit for life, we hope. The figures may be understated, because tenders for supplying these new higher education institutions, especially in the Gulf, will largely be for digital products; but the impact on UK publishers will be positive and widespread.” Peter Davison (Cambridge University Press).<sup>23</sup>

**Figure 7: Publisher sales of exported books, by region (2010 net value at invoiced prices, £m)**



Source: Publishers' Association Statistics Yearbook, 2010

Exports are a particularly important feature of the schools and ELT market. They accounted for 61% of all schools books and 98% of all ELT books in 2010<sup>24</sup>. Whilst the European export market contracted in 2009/10, other export markets continued to offer strong growth opportunities: MENA and Sub-Saharan Africa expanded by 14% and 8% respectively.

<sup>23</sup> Page 21, Publishers' Association Statistics Yearbook 2010.

<sup>24</sup> Page 52, Publishers' Association Statistics Yearbook 2010.

## Box 2: The increasing importance of export markets for UK publishers

We spoke with a number of educational publishers in the UK to understand the importance of exports to their business, and the link between the domestic and export markets.

Cambridge University Press (CUP), for example, have built up their English Language Teaching (ELT) business abroad substantially over recent years, focusing on producing material for the International Baccalaureate (IB) set of examinations, which are transferable across a number of countries. Kevin Taylor of CUP stated that

*“Our growth markets are India, South Africa and Australia, where there has been substantial public and private investment encouraging ELT over recent years. Through the ELT division, we are able to leverage sales for a number of different product and service line. The copyright regime of the countries in question is a very important factor in our expansion plans.”*

At Hodder Education exports are becoming an increasingly important part of its business. Additionally, international demand for educational publications is growing with the emergence of developing nations in the global economy. For example, one fifth of Hodder Education’s turnover in its Schools Division is now accounted for by exports to regions including Asia, Africa and the Caribbean. These exports help to drive growth in the economy. Five years ago, (around 2006/07) exports represented around 10% of sales.

Elisabeth Tribe (Managing Director, School Division of Hodder Education), noted that:

*‘Most of Hodder Education’s exported products are designed for specific overseas curricula, and are different from books sold domestically. However, for some books there is a link between the domestic and export markets. For example, books supplied abroad in response to aid-funded tenders will typically be those also sold in domestic markets’.*

For Sage Publications, an educational publisher focused on the higher education market, around 80% of its journals business, and just less than 50% of its textbook business are exported overseas.

For Sage Publications, the success of their export markets is linked to a strong domestic market. According to Leo Walford of Sage Publications:

*“Books that sell well in the UK also often sell well overseas.”*

Exports are also an important part of Palgrave Macmillan’s business, and it exports scholarly content and textbooks to all corners of the globe.

Textbooks have significant international sales, these are concentrated in English-language markets and markets where English is often the language of instruction, such as Scandinavia. Clare Hodder, Associate Director of Rights for Palgrave Macmillan draws a clear link between domestic and exports success;

*‘For textbook exports to thrive, the UK textbook business needs to be commercially viable.’*

Source: PwC interviews

Net export growth drives growth in the UK economy – also helping the government’s aim of diversifying the economy towards more export-orientated activities. More integrated operations with foreign companies also improve their network.

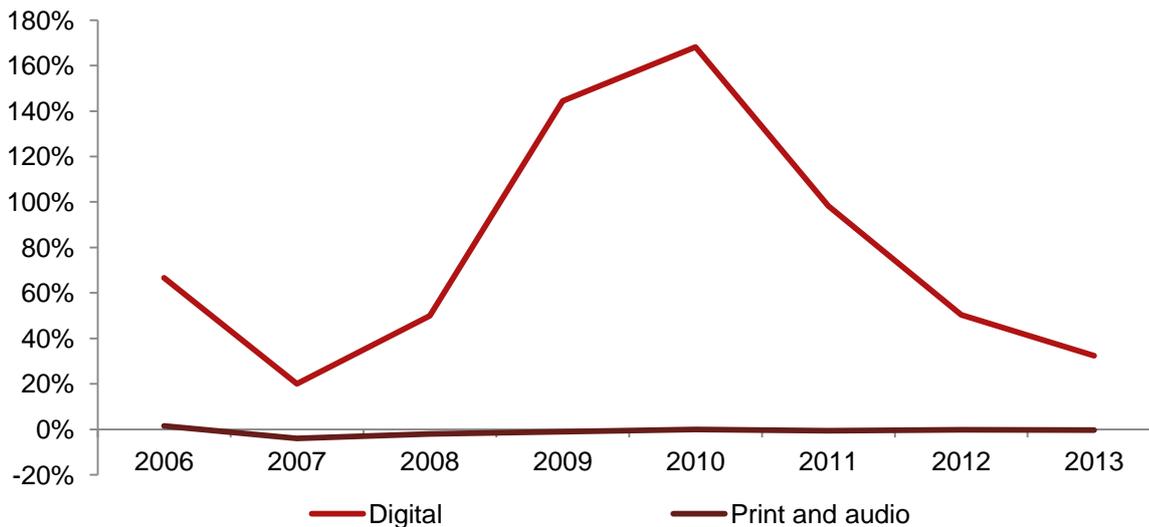
Since the large-scale investment in ICT hardware for educational establishments in the early 2000s, digital learning has played a growing role in student’s education. Educational publishers have built digital technologies into education in a number of different ways:

- Digital versions of educational materials designed to widen student access (for example, e-books, scanned journal articles, online course materials etc);
- Software packages designed to facilitate teaching through digital mediums (for example, software for interactive whiteboards etc); and

- Digital-based learning platforms that bring together instruction, learning resources and student interaction into one environment (i.e. for example, Virtual Learning Environments (VLEs) for distance learners).

Between 2007 and 2010, sales of printed and audio educational books remained broadly flat, whilst electronic educational book publishing grew three-fold. The value of the digital publishing market in 2010 was £170 million, with three quarters of sales made up by educational material<sup>25</sup>. Our forecasts show that sales of electronic educational books are expected to increase further over the next four years (see Figure 8).

**Figure 8: UK educational book publishing % sales growth by type**



Source: PwC Global Entertainment and Media Outlook, 2011-2015. Note values from 2011 onwards are forecasts.

Rising digital consumption in the future will be encouraged by the UK's educational publishers. Big players are developing large online platforms to deliver all their traditional printed materials in digital format, whilst smaller niche players are filling gaps in the market with highly innovative solutions (see Box 3).

### Box 3: Digital publishing innovation within education

The UK's educational publishers are investing heavily in digital technologies for the new generation of students entering education. At Cambridge University Press (CUP), 10-15% of educational publishing revenues come from digital platforms today. By 2015, they expect they will account for 25% and by 2020, the vast majority of publishing sales will be from digital platforms. Many of these investments have already helped stimulate student learning.

Pearson Education has invested heavily in such content over the last few years. Its investment in MyLabs has been one of its most successful. MyLabs is a customizable system providing students at school or within Higher Education a personalized learning path based on their results on various assessment activities. Eight million students used the service last year.

Other publishers have focussed on building online platforms through which students can choose to access materials digitally. Hodder Education has invested heavily in its Dynamic Learning online service, which offers unlimited access to all previous multimedia material through an online platform. The service is currently used in over half of all the UK's secondary schools.

<sup>25</sup> Defined as Schools/ELT and Academic/Professional by the PA Statistical Yearbook 2011. Estimated value of digital book sector inferred from sales data from 70% + of the physical book market.

However, such innovation does not come cheap. For its Dynamic Learning online service, Hodder Education spent roughly one-third of the investment cost on building the delivery platform, with two-thirds spent the production of content. As Elisabeth Tribe, Managing Director of Schools Division noted:

*“Many features of digital products make them much more expensive to develop than printed products. For example, graphics, such as a diagram, are much more expensive to produce in digital format, as an animation, than they are in printed format as a flat diagram.”*

Overall, a sample of seven major UK educational publishers invested a total of £19.2 million in new content creation and delivery in 2011, equivalent to around two thirds of operating profit<sup>26</sup>.

It is not just larger players who have encouraged investment in digital technologies. Some smaller niche players are improving education outcomes through a focus on digital. For example, Espresso Education’s business model is based 100% on digital access to educational material. Espresso provides a video-rich learning environment, using current affairs to help students understand key concepts within the curriculum. Rob Ince, Commercial Director at Espresso Education, added;

*“We invest heavily in our content so that our service is tailored to students based on their age and ability levels and content is updated on a weekly basis. Of our 110 staff, 40 are engaged in producing the learning material directly. This focus on content has encouraged Espresso to grow from a tiny start-up 15 years ago to a company providing learning materials to 9,000 primary schools today, 60% of all primaries in England. In the process we have won 6 British Educational Training and Technology (BETT) awards for innovation in education and been honoured by BAFTA for excellence of service in primary school education.”*

Digital innovation has helped to raise standards in all areas of education, not just instruction. GL Assessment, of the GL Education Group, develops printed and digital educational assessment materials, offers scoring, and provides support in evaluating and analysing the resulting data. One of GL Assessment’s leading tests is the Cognitive Abilities Test (CAT), in addition to other high-stakes assessments, for example in literacy and numeracy. Teachers make important decisions about the pupil’s learning journey, and how that pupil’s potential can be maximised, on the basis of the results gained from the tests. All of the assessments are standardised, so that pupils can be measured against their peers in the same class, school, authority and indeed nationwide.

In the early 2000s GL Assessment predicted that the mix of assessment delivery in the future would be digital as well as print. GL Assessment invested significantly in developing an online assessment engine called ‘TestWise’, which enables e-delivery of its assessments. A main benefit of digital assessment is the immediacy of the scoring and reporting. Following the completion of the online tests, results are fed back almost instantly. Additionally, some research tends to illustrate that taking a digital assessment can be more motivating for some groups of pupils, and the test-taking experience is found to be less intimidating by some.

As Andrew Thraves, Group Publishing and Strategy Director of GL Assessment notes:

*“Schools now want quick access to data and information. If they take one of our assessments online, the immediacy of the reporting means the teacher can be planning very quickly where the pupil should go next”*

Sources: PwC interviews with Hodder Education, Pearson Education, Espresso Education and GL Assessments

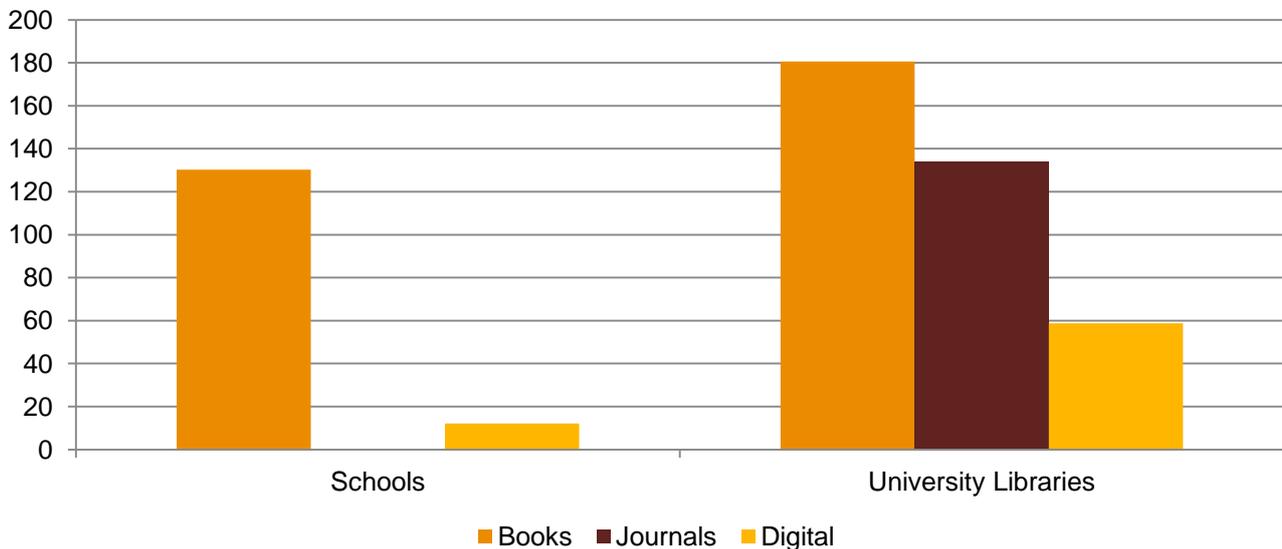
The digital industry is, however, still developing. Whilst digital will play a major role within education establishments in the near future, there are still challenges to overcome for it to fulfil its potential.

Despite significant growth in digital technologies in the publishing industry, this has come from a low base. Printed educational material sales still far outstrip digital material sales in both schools and higher education (see Figure 9). Digital penetration is higher within higher education institutions (accounting for about a fifth of the total market) than in schools (accounting for a tenth of the total market). This divergence reflects both a

<sup>26</sup> Annual investment cost proxied by fixed cost write off in the income statement. EBITA is the measure of operating profit used.

greater demand by students for flexible learning arrangements within higher education institutions but also a greater emphasis on constraining budgets within the publically funded schools sector. The Learning Resources Review<sup>27</sup> showed that 30% of primary school head teachers and 19% of secondary school head teachers expect financial pressures will have a significant negative impact on the purchases of digital content.

**Figure 9: Spend by type of institution for latest year available (£m)**



Source: Schools data refers to monthly supply-side sales data for 2011 collected by the Publishers Association. The data is split between print and digital books – we assume no journal purchases are made. The publishers contributing data represent 80% of the curriculum materials market. University Libraries data refers to demand-side sales data for FY 2009/10 collected by the Publishers Association. The data is split between books, journals and electronic items. Note that subscriptions to learned journals are excluded from electronic items.

Another pressure on digital business models is the conflict between users’ expectations of cheaper access and (frequently) a larger cost base for digital platforms than traditional print materials. This pressure squeezes profit margins for new digital platforms in the short-term. Pressured by tighter budgets, teachers are increasingly tempted to turn to “free-use” in the classroom. In the latest Learning Resources Review<sup>28</sup>, 61% of primary schools and 58% of secondary schools indicated they were “well-resourced” with free online materials, compared to 41% of primaries and 42% of secondary schools that were “well-resourced” in digital material from publishers. However, a free-use strategy risks using lowering the overall quality of student’s education – as standards are not as easily regulated.

Educational publishers are responding by experimenting with open access as a means of promoting content and creating added value for which readers are willing to pay. It is hoped viable business models will be created which satisfy users’ requirement for cheap digital content and maintain publishers’ incentives to create such material. This can be achieved over the long-term – but only by maintaining large-scale investment to allow content creators to experiment with digital platforms and realise economies of scale and scope.

## ***Estimating the size of the educational publishing market***

We have estimated the educational publishing market for both domestic sales and exports.

<sup>27</sup> "The Learning Resource Review", National Education Research Panel, 2011

<sup>28</sup> "The Learning Resource Review", National Education Research Panel, 2011

We define educational publishing as all published works used by educational establishments and their students for educational purposes. In some cases, this may mean that works of fiction (for example) would be included within our definition of educational publishing. This is because works not primarily intended for the educational market may be used in the curricula of schools or further education or higher education institutions (e.g. fiction works used in English literature).

### Domestic educational publishing

We have separately estimated the size of two segments of educational publishing: the educational publishing market for primary, secondary and vocational schools (i.e. further education establishments) and the market for higher education.

For the schools market, we collected supply-side sales data (based on surveys of publishers) from the Educational Market Statistics published by the Publishers Association (see Table 8). The estimated size of sales by educational publishers to schools in 2010 ranged from £226m to £296m, including printed and digital resources.

**Table 8: Estimated sales of educational material to schools by publishers (£m, 2010)**

	Likely value	Maximum value
Core market (curriculum material)	138	209
School library sales	26	25
School library services	11	11
Digital content	51	51
Total	226	296

Source: NERP, LISU & Nielsen BookScan in Educational Market Statistics 2011, Publishers Association

The likely value, includes those sales tracked by the Publishers' Association with the maximum value representing estimates of untracked sales. We have then compared the likely value (£226m) with a demand-side estimate of spend on books and printed resources by primary and secondary schools (i.e. expenditure data from schools), as a sense check. In 2010<sup>29</sup>, primary and secondary schools spent a total of £215m on books and printed resources, according to the Learning Resource Review<sup>30</sup>. We adjusted the £215m to take account of the publishers' discount on the recommended retail price for school books<sup>31</sup>, as school expenditure will overstate the value of the market to publishers<sup>32</sup> (see Table 9).

**Table 9: Estimated value to publishers of school expenditure on books and printed resources (2010)**

	Spend by schools (£m)	Publisher's discount from RRP	Estimated value to publishers (£m)
<b>Books and printed resources</b>	215	30.1%	150

Source: EPC, Publishers' Association, PwC analysis

This demand-side estimate is lower than our supply side estimate. The demand side estimate, however, excludes digital sales (estimated to be £51m based on supply-side data) and sales to vocational schools (i.e. further education institutions). This suggests that demand-side and supply-side estimates are broadly comparable (in value terms).

<sup>29</sup> Statistics were published for 2009/10 and 2010/11; for consistency we have converted these figures into an estimate for 2010 by taking the average across the two years.

<sup>30</sup> Publishers Association, 'Educational Market Statistics: EPC AGM – 5 July 2011', 2011.

<sup>31</sup> Page 73, Publishers Association, Statistics Yearbook, 2010.

<sup>32</sup> Although there may be some sales direct from publishers to schools we understand that this is not significant.

Domestic sales of printed academic/professional resources, and digital sales (which is not split out by domestic and export sales), as estimated by the Publishers Association for 2010, are shown in Table 10. The Publishers Association estimated that sales of textbooks comprise around £100m of these domestic sales.

**Table 10: Estimated sales of academic/professional books (£m, 2010)**

	Domestic sales	Digital sales
Academic/professional	457	120-140

Source: Publishers Association

We have used data on expenditure by higher education institutions and students on educational materials, to estimate the proportion of academic/professional publishing sales that related to higher education institutions in 2009/10 (see Table 11).

**Table 11: Educational publishing industry for higher education**

		2009/10 spend (£m)	Publishers' discount from RRP (%)	Estimate value to publishers (£m)
Student expenditure on books	Undergraduates	230.4	38	142.1
	Postgraduates <sup>33</sup>	232.1	38	143.2
University library expenditure	Books	46.8	38	28.9
	Journals (print and digital) <sup>34</sup>	133.9	0 <sup>35</sup>	133.9
	Other electronic items <sup>36</sup>	58.8	38	36.2
Total (£m)		701.9	38	484.3

Sources: DIUS<sup>37</sup>, DFES, HESA, LISU, SCONUL Annual Library Statistics 2004/05 – 2009/10 in Academic and Professional Market Statistics, Publishers Association, PwC analysis

We have included student purchases of educational materials in our estimate of the size of the educational publishing market, despite these works not being purchased directly by educational establishments. Sales by educational publishers to students can be affected by the exceptions to copyright for educational establishments. For example, restrictions on the amount of a work that can be scanned without a licence (currently 1%) can directly affect textbook sales. Where weaker copyright restrictions exist, students may choose to scan material from a higher education-purchased textbook rather than purchasing one for themselves. Overall, this means that the exceptions for educational establishments can impact on sales to students.

<sup>33</sup> Total postgraduate expenditure on book was calculated using survey evidence carried out by the National Union for Students in June 2010 'Broke Broken', available at <http://www.nus.org.uk/PageFiles/12238/Broke.pdf>. Over 2,200 respondents indicated an average monthly spend on books / library fines. We assumed fines to represent an insignificant proportion of this. We used HESA postgraduate student figures (part time and full time) to estimate a total spend in 2010 (assuming students spend the same average monthly amount for 12 months)

<sup>34</sup> The statistics in the Academic and Professional Market statistics published by the Publishers Association do not separate out printed and digital journal expenditure by higher education institutions

<sup>35</sup> Journal subscriptions to higher education libraries are sold directly between publishers and higher education institutions so no discount has been applied

<sup>36</sup> Other electronic items include e-books, e-book databases other databases, other digital documents (email correspondence with Mandy Knight, Publishers Association, 19 March 2012)

<sup>37</sup> The HESA student figures by broad subject for 2009/10 was applied to the DIUS average expenditure of FT and PT students (for 2007/08), to provide an estimate of total expenditure by students by subject in 2009/2010.

Based on our analysis, we estimated the total size of the domestic educational publishing market in 2010 to be £710.3m, as shown in Table 12.

**Table 12: Estimated size of domestic educational publishing market (£m, 2010)**

	Total
Educational publishing market for books	489.2
Educational publishing market for journals (print and digital)	133.9
Digital educational publishing market	87.2
Total	710.3

Source: PwC analysis

### Educational publishing exports

The Publishers Association has estimated the value of UK publishers' exports for books in 2010 (see Table 13).

**Table 13: Export sales of books (£m, 2010)**

	Total sales
Academic/professional	490
School	103
ELT	205
Children's	88
Non-fiction/Reference	210
Fiction	158
Total	1,254

Source: Publishers' Association Statistics Yearbook, PwC analysis

There is no further evidence available to identify the proportion of these book sales that related to educational publishing. We have therefore relied on the assumption that educational publishing exports, comprise the same proportion of total exports, as we observe for the domestic market (i.e. 30%, see Table 15). Based on this, we estimate educational publishing export sales in 2010 were £329.7m.

**Table 14: Domestic educational publishing as a proportion of domestic publishing (2010)**

Category	Value
Domestic educational publishing sales books (£m)	489.2
Domestic publishing sales books (£m)	1,861
Proportion of educational publishing	26%

Source: Publishers' Association, PwC analysis

We are not aware of any reliable industry-wide statics on the value of educational-related journals from the UK. The Publishers Association does not track journal sales, although in correspondence the Publishers Association have suggested that UK journal exports could be between £1bn to £1.5bn per annum.<sup>38</sup> Not all of these will relate to education. To be conservative, we have assumed that the same ratio of domestic sales of educational publishing to export sales<sup>39</sup>, applies for journals. That is, in 2010 exports of educational journals were 67% of domestic sales. We arrive at an estimate educational journal exports in 2010 of £90.2m

<sup>38</sup> Email correspondence with Graham Taylor, Publishers Association, 20 March 2012

<sup>39</sup> We estimate the educational publishing export sales of books were 67% of domestic educational publishing sales of books in 2010.

For the digital market, the Publishers’ Association does not distinguish between domestic and export sales. In 2010 the Publishers’ Association estimated total sales of digital publishing at to be between £163m and £195m, (see Table 15) with an expected value of between £175 to £180m. In our above analysis, we estimated that domestic educational digital sales were £97.2m. This leaves approximately £80m of estimated sales in 2010 unaccounted for, a proportion of which will relate to educational publishing exports. In the absence of an alternative basis to estimate the value of digital publishing exports, we have assumed the same ratio of domestic to export sales, as we observed in the educational publishing book market (the same approach used for journals). Using this approach, we estimate digital educational publishing exports of £58.8m in 2010 (i.e. 67% of size of domestic market).

**Table 15: Estimates of sales of digital publications by category (£m, 2010)**

Category	Total sales (low estimate)	Total sales (high estimate)
General consumer	17	20
Consumer reference	20	25
School & ELT	8	10
Academic / Professional	120	140
Total	163	195

Source: Publishers’ Association Statistics Yearbook (2010), PwC analysis

### Total value of educational publishing in 2010

Based on the above analysis, we estimate the total value of the educational publishing sector in 2010 to be £1,189m (see Table 16).

**Table 16: Estimated value of educational publishing sector, 2010 (£m)**

Category		Sales
Domestic	Educational book sales (£m)	489.2
	Educational journal sales (£m)	133.9
	Digital educational sales (\$m)	87.2
	<i>Total (£m)</i>	710.3
Export	Educational book sales (£m)	329.7
	Educational journal sales (£m)	58.8
	Digital educational sales (£m)	90.2
	<i>Total (£m)</i>	478.7
<b>Total (£m)</b>		<b>1,189</b>

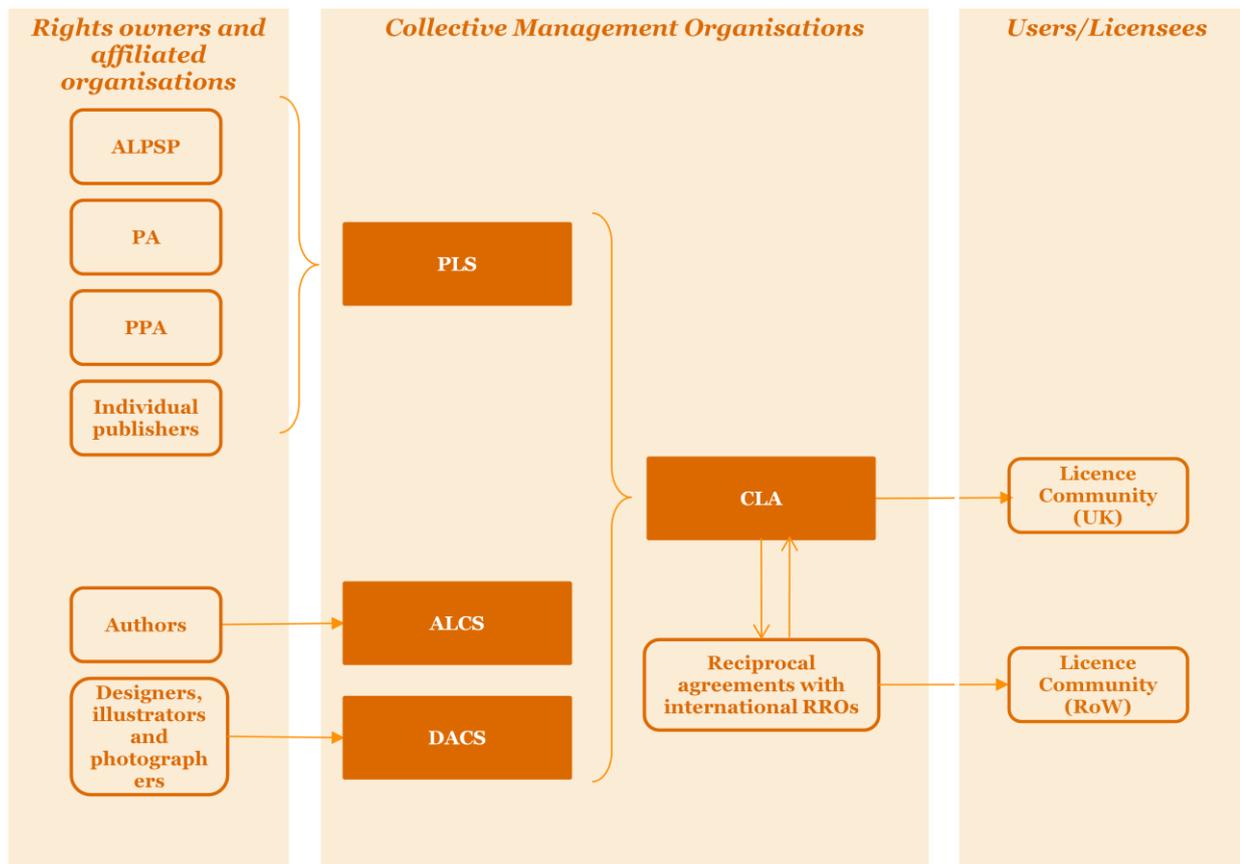
Source: PwC analysis

## The Collective Management Organisations (CMOs)

The activities and relationship between the text-based CMOs is illustrated in Figure 10. The CLA collects secondary licensing fees for authors and publishers from business, education establishments and government institutions. These revenues are then distributed to the PLS, ALCS and DACS, and then to individual members. This is the main source of secondary licensing income administered by these organisations. ALCS receives some additional fees for authors from other sources such as the Public Lending Right (PLR) fees and the

Educational Recording Agency (ERA). DACS also operates a primary licensing scheme and administers Artists' Resale Right (ARR) payments<sup>40</sup>.

**Figure 10: Structure of UK CMOs and affiliated organisations**



Source: PwC analysis

## Users of educational publications

The users of educational publishing material are those who support teaching in educational institutions and, ultimately, the students themselves. Users are distinguished by the type of educational institutions they attend. The key characteristics of these groups are summarised in Table 17.

**Table 17: Key characteristics of educational users**

Type of institution	Number of institutions	Number of students	Consumption habits of user	External factors influencing consumption
Primary schools	16,884 public primary schools in England <sup>41</sup>	3,521,000 full-time equivalent pupils of primary ages (5-10) in England <sup>42</sup>	Schools not yet shown great demand for full online or blended propositions	Departmental resource spending to be cut by 3% in real terms by 2014-15. Number of pupils will

<sup>40</sup> ARR is a small royalty on the secondary sale of an artwork sold at auction.

<sup>41</sup> Note due to data availability, this figure reflects just state-funded schools and thus underestimates the total number of users of educational works. In 2011, there were 1,046 special schools and 2,415 independent schools counted in England. Source: Department for Education "Schools, Pupils and their Characteristics, January 2011". Available at: <http://www.education.gov.uk/researchandstatistics/statistics/statistics-by-topic/schoolpupilcharacteristics/Schools/a00196810/schools-pupils-and-their-characteristics-january-2>

<sup>42</sup> Source: Department for Education: "National pupil projections - Future trends in pupil numbers - December 2011".

Type of institution	Number of institutions	Number of students	Consumption habits of user	External factors influencing consumption
Secondary schools	3,310 public secondary schools in England <sup>4</sup>	3,092,000 full-time equivalent pupils of secondary ages (11-15) in England <sup>5</sup>	Schools not yet shown great demand for full online or blended propositions	grow by 9% by 2015 Departmental resource spending to be cut by 3% in real terms by 2014-15. Number of pupils will shrink by 5% by 2015
Further education institutions	359 public further education colleges in England <sup>43</sup>	849,565 pupils aged 16-18 year olds in full-time education. <sup>44</sup>		Departmental resource spending to be cut by 3% in real terms by 2014-15
Higher education institutions	130 higher education institutions in England <sup>45</sup>	2,097,215 undergraduate and postgraduate students in higher education in England <sup>46</sup>	Frequent creation of "course packs" from a number of providers. Uptake of digital technology has been quicker – accounts for three quarters of all digital publishing sales	Stricter controls on student visas may reduce demand from lucrative overseas students. Higher tuition fees may reduce higher education enrolment in 2011. State-funded teaching budgets are being withdrawn for Social Sciences and Humanities.

Source: PwC analysis

## Trends affecting the markets for educational publishing

The educational publishing industry is particularly prone to fluctuations in demand conditions in its key markets.

### Schools market

Following the Spending Review in October 2010, the Department for Education announced that there would be a total real reduction in departmental resource spending by 3% by 2014-15. The Learning Resource Review<sup>47</sup> shows that these cuts have already started to dampen digital sales. 30% of primary school head teachers and 19% of secondary school head teachers expect financial pressures will have a significant impact on the purchases of digital content (compared to 28% and 17% respectively for printed material). Schools are focussing on "core" learning resources, such as printed textbooks and teacher aides, rather than investing in digital content. 45% of primary schools and 64% of secondary schools are unlikely or not at all able to maintain investments in print and digital content in 2012/13 (up from 34% and 55% in 2011/12).

This likely reflects the greater initial costs associated with digital material, rather than its lack of suitability for teaching resources. Just four in ten schools surveyed stated that they were well resourced in digital content from publishers, compared to six in ten schools that stated they were well resourced in books. When asked about which resources would lead to raising standards of teaching and learning, online resources and interactive white boards ranked higher than books for both primary and secondary institutions.

<sup>43</sup> Source: Learning and Skills Council "Analysis of College Finance Records for 2008/09" (March 2010).

<sup>44</sup> Note that only a small number of 16-18 year olds are taught in public further education institutions. The vast majority are taught in sixth form colleges that form part of secondary schools. Source: Department for Education: "Participation in Education, Training and Employment by 16-18 year olds in England", June 2010.

<sup>45</sup> Source: Higher Education Statistics Agency Limited.

<sup>46</sup> Source: HESA. Available at <http://www.hesa.ac.uk/content/view/1897/239/>

<sup>47</sup> "The Learning Resource Review", National Education Research Panel, 2011

### Further education market

Curriculum change over the last four years has contributed to an almost doubling of sales of vocational material. Further changes to curriculum and funding arrangements are also expected to drive demand in the short term.

Developments in curriculum and assessments over the next few years should have a positive impact on demand for educational publishing. Curriculum change typically means that schools (including further education establishments such as vocational colleges) have more to spend on educational resources. According to the Publishers' Association, direct funding and delegation as to how schools spend their budgets will lead to greater demand for teaching, learning and assessment materials.<sup>48</sup>

### Higher education market

Radical changes to the funding of higher education in the UK are currently being implemented. These may have significant impacts on educational publishers that target these markets. The state-funded teaching budget for Social Sciences and Humanities (SSH) is being withdrawn. Higher education institutions will be expected to cover these costs by raising tuition fees.<sup>49</sup> The impact that this will have on student demand for textbooks is unknown, however if tuition fees are raised significantly a number of aspects of student expenditure may be squeezed. Additionally, budget cuts may also affect the demand of higher education institution libraries for educational resources.

A change in Government policy towards student visas – placing greater restrictions on the number issued – may also affect educational publishers. In March 2011 the Government announced changes to student visa policy which included tougher entrance criteria, limits on work entitlements and the closure of the post-study work route.<sup>50</sup> A significant change in the number of international students may affect demand for textbooks.

**Table 18: Trends affecting educational publishing markets**

Market	Industry trends	Potential value of exports
Schools	<ul style="list-style-type: none"> <li>Digital publishing growth constrained by lower schools resource budgets. Initiatives outlined in the Schools White Paper and National Curriculum Review will lead to greater demand for teaching and assessment materials in some areas.</li> </ul>	<ul style="list-style-type: none"> <li>Opportunities include foreign international schools teaching English syllabus and English Language Teaching (ELT) courses. Europe makes up 45% of total export sales currently, whilst Asia Middle East and Latin America are seen as growth markets. Young Learners market growth in Japan, Taiwan and Kosovo may result in higher export potential.</li> </ul>
Further education	<ul style="list-style-type: none"> <li>Vocational and BTEC market grown strongly over last few years.</li> </ul>	<ul style="list-style-type: none"> <li>As many subjects vocational, the export potential is strong.</li> </ul>
Higher education	<ul style="list-style-type: none"> <li>Hardening of government policy towards student visas may lower demand for textbooks from foreign students</li> </ul>	<ul style="list-style-type: none"> <li>Foreign users shifting demand towards digital technologies faster than in other institutions</li> </ul>

Source: Publishers' Association, PwC analysis

## Economic impact of educational publishing

In the final part of this Section we analyse the economic impact of education publishing in the UK. We consider this in three ways:

- The value added/employment associated with educational publishing, capturing both the direct effects and the indirect and induced effects;
- The scale of investment in educational works; and
- The fiscal contribution of educational publishers, and their employees.

<sup>48</sup> Publishers Association Statistics Yearbook 2010,

<sup>49</sup> France Pinter (Bloomsbury Academic) in Publishers Association Statistics Yearbook 2010.

<sup>50</sup> Accessed at: <http://www.ukba.homeoffice.gov.uk/sitecontent/newsarticles/2011/march/54-student-visas>, 19 March 2011

## Estimating the value added by educational publishing

According to the latest DCMS Creative Industries Economic Estimates (December 2011), the publishing industry was responsible for generating £11.6 billion of gross value added (GVA) (0.9% of UK GVA) and software & electronic publishing was responsible for £570 million or (0.04% of UK GVA).

Only a portion of this value added, however, is attributable to educational publishing. We estimated the total value of educational publishing sales in 2010 was £1,189m. Using this total sales estimate, we estimate the GVA of educational publishing in 2010. We did this in two steps:

- Step 1 – Estimate the average GVA/sales ratio for publishing organisations; and
- Step 2 – Estimate the GVA of educational publishing.

### Step 1: Estimating a GVA/sales ratio for publishing

In order to estimate the average GVA/sales ratio in the publishing industry we analysed the financial accounts of a sample of nine UK publishers. These publishers are listed at Appendix D. We estimated the GVA of each organisation for the most recent financial year for which data were publicly available (2010). The calculation of the amount of GVA for an organisation is as follows:

Net profit before tax + Depreciation and amortisation + Staff costs = GVA

We then compared the amount of GVA of each organisation to its total sales to obtain a GVA/sales ratio (see Table 19).

**Table 19: GVA/sales ratio of publishers' sample**

Number of publishers in sample	10
Minimum GVA/sales	18%
Maximum GVA/sales	46%
Weighted average GVA/sales	34%

Source: PwC analysis

### Step 2: Estimating GVA for educational publishing

We have estimated the amount of GVA for each market segment (see Table 20). We have used our estimate of GVA/sales ratio for the publishing industry (Step 1) and the size of the educational publishing market (Step 2). We estimate the total GVA of educational publishing in 2010 to be £398.5m. The highest GVA was generated through the domestic market (£238.1m), however educational publishing exports also made a substantial contribution to GVA in 2010 (£160.4m).

**Table 20: Estimated GVA of educational publishing (2010)**

		Size of educational publishing (£m)	Ratio of value-added/sales (%)	Estimated GVA (£m)
Domestic	Book sales	489.2	34%	164.0
	Digital publishing sales	87.2	34%	29.2
	Journals	133.9	34%	44.9
	<i>Total</i>	710.3		238.1
Exports	Book sales	329.7	34%	110.5
	Digital publishing sales	58.8	34%	19.7
	Journals	90.2	34%	30.2
	<i>Total</i>	478.7		160.4
<b>Total</b>		<b>1,189.0</b>	<b>34%</b>	<b>398.5</b>

Source: PwC analysis

### *Estimating employment associated with educational publishing*

According to the latest DCMS Creative Industries Economic Estimates (December 2011), the publishing sector as a whole employed 243,809 people and the software & electronic publishing employed 23,205.<sup>51</sup>

**Table 21: Employment in the creative industries**

Sector	Creative employees in creative industries	Support Employees in creative industries	Creative self-employed in the Creative Industries	Support Self-employed in creative industries	Employees doing creative jobs in other industries	Self-employed people doing creative jobs in other industries	Total employment
Publishing	54,596	100,682	16,658	10,804	54,161	6,909	243,809
Software & Electronic Publishing	469	20,944	446	1,346			23,205
Total publishing	55,065	121,626	17,104	12,150	54,161	6,909	267,014

Source: DCMS Economic Estimates 2010

Only a proportion of this employment is attributable to educational publishing. For example, the Annual Business Survey estimated that there were 70,000 workers employed in book publishing and publishing of periodicals and journals in 2010. We have used this employment estimate and the Publishers Association’s estimate of the total sales by book publishers in the UK to estimate the sales per employee ratio for book publishing (see Table 22).

<sup>51</sup> Following the 2010 Statistical Release, there were revisions to the SIC and SOC codes mapped to the creative industries. Most notably, the removal of SIC codes 62.02 (Computer consultancy activities) and 62.01/2 (Business and software development) from Software and Electronic Publishing has significantly reduced the size of this sector, compared with the 2010 estimates. However, the current estimate is more likely to exclude those activities that are separate from electronic publishing.

**Table 22: Sales/employee ratio for book publishing**

Industry	Total turnover (£m)	Number of employees ('000')	Sales ('000) / employee
Book publishing	2,069	27	76.6
Publishing of journals and periodicals	6,793	43	158.0
Total / weighted average	8,862	70	126.6

Source: Publishers Association Statistics Yearbook, ABS, PwC analysis

Assuming the same sales per employee ratio for educational publishing across domestic and export sales of books and digital sales, we estimate that the educational publishing sector directly employs 9,392 people in the UK.

The total output, value-added and employment created by the educational publishing industry extends beyond the direct impacts that we have estimated. This is due to the supply chain linkages between educational publishing and other industries (for example, educational book retailers).

The direct impacts of the educational publishing sector can be measured as either the value-added or the employment created. The indirect impacts are the value added and employment which arise as a result of purchases of goods and services in the publishing supply chain. Employees in the supply chain generate the induced impacts through their purchases. Again, they manifest themselves in additional value added and employment.

We have used the UK's latest input-output tables to estimate the impact that the educational publishing sector has on other industries. We estimate that the total GVA of educational publishing in 2010 was \$1,139.6m, after taking into account indirect and induced effects. We estimate that the educational publishing industry was responsible for the employment of 22,259, after accounting for indirect and induced impacts (see Table 23).

**Table 23: Multiplier impacts of educational publishing**

Educational publishing	Direct impacts	Indirect	Induced	Total
GVA (£m)	398.5	314.8	426.4	1,139.6
Employment	9,392	4,978	7,889	22,259

Source: PwC analysis

### The value of investment in book publishing

In our previous report<sup>52</sup>, we measured the economic contribution of copyright by treating the development of literary works as an investment that generates a stream of revenues that persist over several years. This approach was developed by the IPO in conjunction with Imperial College and the Office for National Statistics (ONS). They estimate that investment in original content has risen since 1998 and reached £4.3 billion in 2007 with approximately £750 million of this invested in books.

We have assumed that the proportion of this investment that relates to educational publishing is the same as the share of the total publishing market accounted for by educational publishing market. We have excluded digital sales from our calculation on the basis that the IPO estimate refers only to investment in books.

<sup>52</sup> An Economic Analysis of Copyright, Secondary Copyright and Collective Licensing, PwC, 2011.

**Table 24: Educational publishing as a proportion of book publishing (2010)**

	Value
Educational publishing book sales	818.9
Publishing book sales	2,995
Educational publishing as a proportion of total publishing	27%

Source: PwC analysis

We estimate that there was £205m invested in educational works in 2007, based on the IPO's estimate of £750m invested in books, for the same year. As the IPO has not produced a more recent investment figure, we are not able to estimate the value of more recent investments in educational works.

### Fiscal contribution of educational publishing

The fiscal contribution of the educational publishing industry is another way to measure the economic contribution of the industry. Educational publishers make a fiscal contribution through corporation tax and income taxes and national insurance contributions related to employment.

To estimate the amount of corporation tax paid by the educational publishing sector, we have relied on financial information from a sample of 11 large educational publishers (see Appendix D). Using the most recent year financial statements for each publisher, we calculated the total operating profit of our sample, and total sales. This gave ratio of operating profit (before tax) to total sales.

**Table 25: Operating profit and sales data for a sample of educational publishers (2010 & 2011)<sup>53</sup>**

Number of educational publishers in the sample	11
Sales (£m)	1,910.1
Operating profit before tax (£m)	169.9
Operating profit before tax / sales	8.9%

Source: PwC analysis

Using this ratio of operating profit before tax to sales (operating margin), we estimated the overall operating profit before tax of educational publishing in 2010. Applying a statutory corporation tax rate of 28%, we estimated a corporation tax contribution of £29.6m in 2010.

**Table 26: Estimated value of income tax contribution for the educational publishing sector in the UK (2010)**

	Value
Estimated value of educational publishing (£m)	1189.0
Estimated profit of educational publishing (£m)	105.7
Income tax rate	28%
Estimated income tax contribution (£m)	29.6

Source: PwC analysis

<sup>53</sup> Financial data were used from the most recent year that it was publicly available.

We then estimated the annual fiscal contribution (income tax and national insurance) of the employees of educational publishing in two steps:

- We collected data on the earnings of employees in book publishing (SIC code 581) for 2011 from ASHE. Earnings data are collected via a survey to estimate a mean salary for all employees and the distribution of earning amongst employees<sup>54</sup>.
- We collected income tax and national insurance rates from HMRC and estimated book publishing employees' income tax and national insurance contributions as well as those of their employers.

**Table 27: Distribution of earnings and income tax and national insurance contributions for educational publishing employees**

Percentile	10	20	25	30	40	60	70	75	80	90
Average earnings (£)	12,319	17,687	18,502	20,907	23,978	30,910	35,728	38,932	42,575	53,006
Income tax (£)	969	2,042	2,205	2,686	3,300	4,687	5,650	6,291	7,020	9,106
Employee national insurance (£)	611	1,255	1,353	1,641	2,010	2,842	3,420	3,805	4,242	5,704
Employer national insurance (£)	611	1,255	1,353	1,641	2,010	2,842	3,420	3,805	4,242	5,704

Source: ASHE, HMRC, PwC analysis

Using this data, and our estimate of the number of educational publishing employees (9,392), we estimate a total annual income tax contribution in 2010 of £41.3m, and national insurance contributions (by the employees and employer on behalf of the employee) of £50.5m.

## The importance of educational publishing to education

In the final part of this section, we briefly consider the significance of the contribution of the educational publishing sector to the UK's education sector at all levels (primary and secondary schools, further education and higher education).

Although the educational publishing sector is a significant sector in its own right and makes an important economic contribution (as illustrated earlier in the Section), its scale appears modest when compared with that of the education sector. For example:

- In 2010/2011, each primary school spent an average of £4,020 on books and printed resources and £9,520 on learning resources out of a total budget of £630,000<sup>55</sup>;
- Similarly, in 2010/2011, each secondary school spent an average of £25,790 on books and printed resources and £51,200 on learning resources out of a total budget of £3.6 million<sup>56</sup>;
- In 2009/10, higher education institution libraries spent £239 million on learning resources out of total higher education institution expenditure of £25.8 billion<sup>57</sup>

Furthermore, such evidence as there is, suggests that the importance of educational publishing as a determinant of the value of education should not be overstated.

<sup>54</sup>The 75<sup>th</sup>, 80<sup>th</sup> and 90<sup>th</sup> percentile estimates for book publishing were not statistically significant (insufficient number of employees within these earnings bands contributed to the earnings survey). We used percentile estimates for the broader 'Information and Communications' industry to extrapolate estimates in the missing percentiles for book publishing.

<sup>55</sup> Publishers' Association, 'The Learning Resource Review', 2011.

<sup>56</sup> Publishers' Association, 'The Learning Resource Review', 2011.

<sup>57</sup> Library Expenditure provided by the Publishers Association "Academic & Professional Market Statistics" (Nov 2011). Total higher education institution spend from Higher Education Statistics Authority (HESA).

In particular, research to understand what drives value in the school system highlights the importance of the quality of the teaching materials rather than their volume. Moreover, the research evidence indicates that the only significant influences on education outcomes were teaching quality and leadership; resources had little impact<sup>58</sup>.

Higher education is more frequently characterised by a “blended” learning environment, combining traditional and interactive-rich forms of classroom instruction with learning technologies. Research within higher education institutions that offer a blended learning environment, points to learner’s choice of delivery method as having a significant impact on perceived learning outcomes of the learners. From a sample of 60 students at a US university, those students who preferred online learning methods showed significantly higher scores for perceived learning than those who did not. Alongside this evidence, a number of studies shows the potential for educational publisher’s digital innovations to improve learning and attainment within the education sector.

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<sup>58</sup> “The Relationship Between Resource Allocation and Pupil Attainment: A Review”, Levacic et al, Centre for the Economics of Education (2000).

## 3 *Role of copyright in educational publishing*

### Box 4: Summary

In this section we analyse the role of copyright in educational publishing from an economic perspective by examining the economic rationale for copyright, collective licensing (and the establishment of CMOs) and the creation of exceptions within the context of copyright. We have reviewed the evidence of the role of copyright as a catalyst for the creation of educational content and examined the use of licensed works by educational institutions. Our key findings are:

1. The economic rationale for collective licensing and the role of CMOs is to provide access to copyright works for benefit of education, business and government and to substantially reduce transaction costs. Without the CMOs, the transaction costs of licensing would be prohibitive. For example, in the higher education sector, the current transaction costs for users and rights owners through CMOs are £6.7 million: with an atomised model, we estimate that the transaction costs would be between £145 million and £720 million per year.
2. We have considered the impact of exceptions and a major issue is the balance of dynamic efficiency as:
  - a. organisations that rely on the reproduction of copyright content are more likely to benefit from exceptions since they can use content without paying for it, but
  - b. on the other hand, organisations which rely on the creation, development and distribution of content are more likely to lose out from exceptions (e.g. the digital publishing industry) thus undermining the government's economic growth agenda.
3. We have examined the available evidence related to the role of collective licensing and secondary licensing income on the incentives facing authors and publishers. It shows that:
  - a. Both economic and non-economic incentives influence authors' decisions whether to develop content which has a potential educational use: they include the expected income and the timing and certainty of income.
  - b. Secondary licensing income has a material impact on incentives: some 54% of the ALCS members who are the highest earners of CLA income suggested that it was 'essential' and 36% indicated it was 'important' in supporting the development of new works. Almost 25% of these authors derived more than 60% of their income from secondary licensing.
  - c. Publishers' incentives to invest in content development also depend on revenues from the licensing of rights for the reproduction of the protected work through a CMO: evidence from a sample of educational publishers indicates that secondary licensing income represents a significant proportion of their investment in content development (18%) and the development of new digital products such as interactive white boards. For these publishers CLA income represented 12% of profit.
4. Whilst licensed works are a highly valued educational input, the licensing costs faced by educational institutions are less than 0.1% of their total costs. There is no economic rationale for copyright works to be provided free of payment any more than there is for software, or broadband access.

## Introduction

This Section analyses the role of copyright in educational publishing from an economic perspective. We start by considering the economic rationale for copyright. We then consider the economic rationale for collective licensing and the establishment of CMOs. We also examine the rationale for the creation of exceptions within the context of copyright. The final part of the section considers the existing evidence of the role of copyright as a catalyst for the creation of educational content and examines the use of licensed works by educational institutions.

## The economic rationale for copyright

Copyright provides producers of content used for educational purposes with exclusive rights to their work and enables them to be rewarded for its production. We are not aware of any developed nation that does not employ a legislative copyright framework and most have done so for many years. Moreover, these frameworks are increasingly spreading to emerging and developing nations.

The most widely used economic justification for copyright is that the creation of works such as educational content exhibits some of the characteristics of a public good which is both non-rival and non-excludable (see Box 5). In practice, most content is neither fully non-excludable nor fully non-rival. In this sense it is a quasi-public good – but even quasi-public good characteristics can lead to an outcome that is not economically efficient under a free market. In particular, markets tend to produce too few goods and underutilise those that are produced. This market failure warrants government intervention.

### Box 5 Definition of a pure public good

A public good is one which has both the following characteristics:

- The good or service is non-rival in consumption: this means that consumption by one person does not prevent actual or potential consumption of the same product by another person (e.g. downloading a picture of artwork from the internet)
- The good or service is non-excludable: this means that once the product or service is provided people cannot be easily stopped from consuming it (e.g. national defence, street lighting)

Markets which display pure public good characteristics will “fail” (a sub-optimum equilibrium will be reached where production and consumption of the good are too low). This is because it is difficult to stop non-payers from consuming the product (due to non-excludability). The lack of revenue reduces the incentive to produce the product.

Markets for educational content can fail because, once the content is produced, it is difficult to prevent those who do not pay for the content from consuming (i.e. it is non-excludable). In other words, consumers potentially can free-ride and so obtain the benefits of the content without paying for it. In the absence of a mechanism that enables creators to recover the costs of their investment in the development of content, there will be an undersupply relative to the optimal level. Copyright is one potential means of stopping free-riding and encouraging the production of products with quasi public good characteristics.

This can be illustrated with a simple example. A textbook may take several years or more to write and, as such, represents a considerable upfront investment by the author and publisher. Once the textbook is written, however, the cost of printing each textbook and distributing it to retailers is relatively low. If the textbook is distributed digitally, the cost of distribution can be close to zero. When choosing whether to invest in writing the textbook, the author must expect to be able to recover their fixed investment. Likewise, the publisher developing the content needs to be reassured of a return on its investment. This requires them to be able to sell the product at a price greater than the marginal cost of distributing it. Without copyright, the author would not be able to prevent others (say an education institution) from copying the textbook and selling it at a lower cost (it would have no upfront investment to recoup). In this example, free-riding by the education institution due

to non-excludability may deter the author from investing resources in writing the book and the publisher investing to print and distribute the textbook.

## *The economic rationale for collective licensing*

In our previous report<sup>59</sup>, we explained the critical role CMOs play by bringing together rights owners and users who make frequent use of reproduction. Their emergence the organisational structure for licensing secondary copyright rights reflects the economic advantages of collective licensing over other potential forms of licensing. In particular, it reflects the difference in transaction costs between a model with collective licensing and one without.

A prospective user of protected material faces several transaction costs associated with secondary licensing:

- Identification costs – potential users of a copyright work may find it costly to identify and locate the rights owner;
- Search costs – the time required to obtain the information needed to negotiate a price for a given use; and
- Transaction time costs – the time taken to negotiate with individual rights owners for reproduction rights.

Rights owners face equivalent transaction time costs and may also incur further costs detecting unauthorised use. For many users and rights owners working alone, therefore, the costs of identification, search and transaction time if rights owners and users licensed every time a photocopy was made would be very large relative to the (user) value of the reproduction rights. This creates the risk that high transaction costs would bring about market failure in secondary licensing<sup>60</sup>. The CMOs are able to realise economies of scale by working with rights owners and users to support a more efficient market in secondary rights. The benefit of CMOs, therefore, is that they can lower transaction costs, pass the cost savings to users and maintain a reward for rights owners (which supports their incentive to continue to create new works).

The scale economies achieved by CMOs can be delivered by establishing a large network which locates and matches potential users with copyright owners thereby consolidating otherwise duplicated efforts by individual rights owners on monitoring infringement and reducing the number of negotiations required between users and rights owners. Such a solution offers economic benefits because users benefit from lower costs of access to a wider range of educational material while rights owners also benefit from lower costs (as well as market access).

In our previous report, we estimated that the transaction costs for higher education licensing under the collective system were around £6.7 million a year. With an atomised model, we estimated that the transaction costs would rise to between £145 million and £720 million per year depending on the proportion of authors assumed to transact with higher education institutions. These transaction costs reflected the time spent by authors, CMOs and users of content.

The potential transaction costs of the atomised system are considerably higher than the current collective licensing-based model. They exceed the amount that higher education institutions pay in licence fees each year, which is a measure of how much these institutions value the ability to reproduce copyright content. It is highly likely that in the absence of the CMOs, the market would fail. As a result, there would be a deadweight loss as users would not be able (legally) to access the content they value and authors would not receive the reward owing to them.

In summary, therefore, the long-term role of CMOs is to incentivise creative content creation by providing a mechanism through which content creators can be rewarded for further consumption of their work. The

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<sup>59</sup> PricewaterhouseCoopers, “An economic analysis of copyright, secondary copyright and collective licensing”, Report for the Copyright Licensing Agency, 2011.

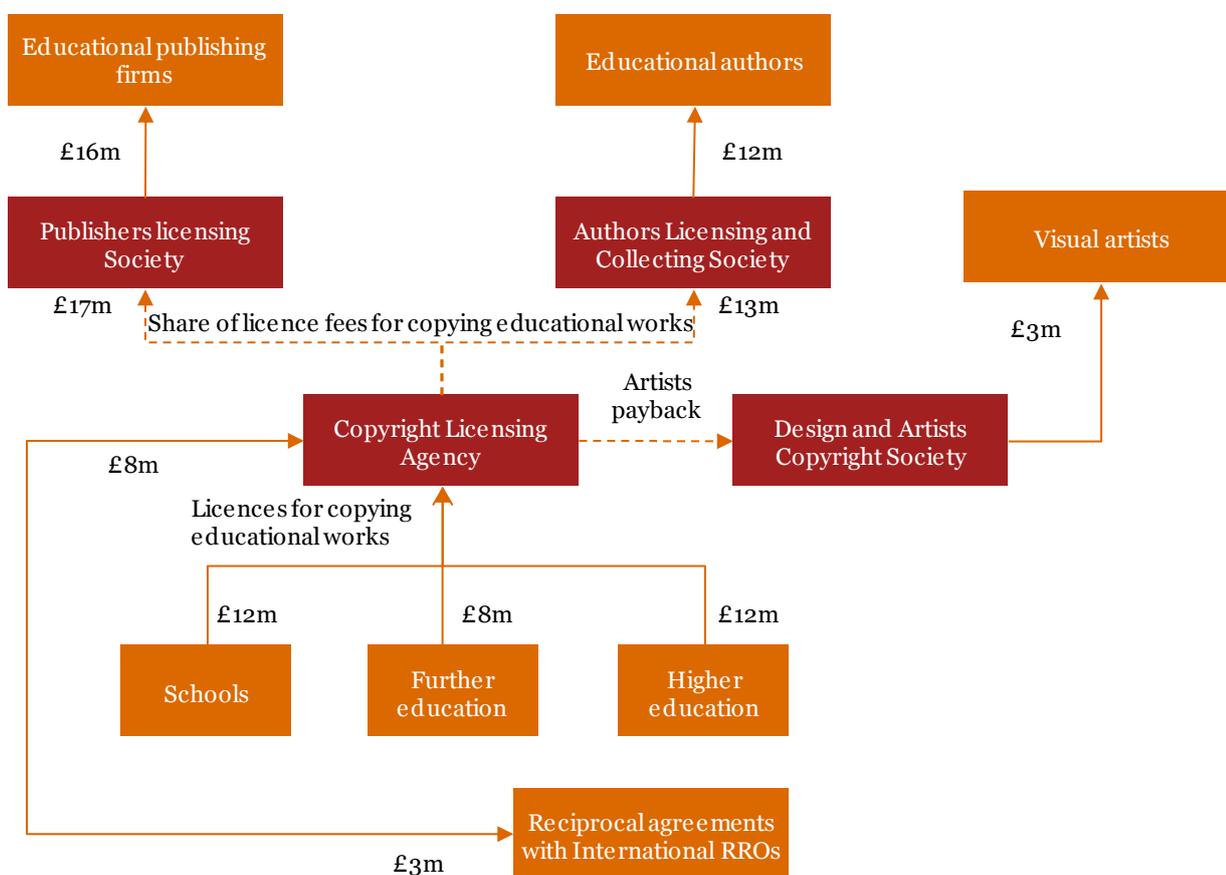
<sup>60</sup> Besen and Kirby, “An Economic Analysis of Copyright Collectives”, *Virginia Law Review* 78(1); 383-411, (1992).

economic rationale for the existence of CMOs in the education sphere, therefore, is that they can lower transaction costs for education institutions, generating cost savings to students and maintain a reward for educational authors.

### Collective licensing in the UK education market

The relationship between educational users and educational content creators, and the role the CMOs play in connecting these two groups, can be expressed in terms of the financial flows between them (see Figure 11 below). The CLA collects secondary licensing fees for educational authors, publishers and artists from education institutions. These revenues are then distributed to the PLS, ALCS and DACS, and then to individual members. This is the main source of secondary licensing income administered by these organisations. ALCS receives some additional fees for educational authors from other sources such as the Public Lending Right (PLR) fees and the Educational Recording Agency (ERA) but these are not included in the figures below.

**Figure 11 Flow of secondary funds from the educational licence between UK CMOs for educational works<sup>61</sup>**



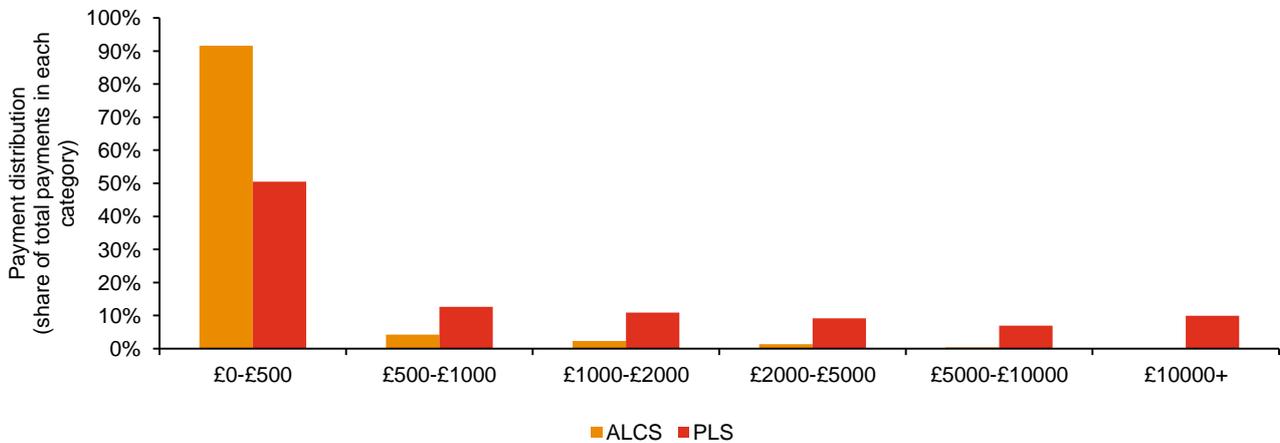
Source: ALCS, CLA, DACS, PLS

The aggregate funds flowing between the CMOs are around £30 million for education. For members these flows are manifested as a large number of relatively small payments. Figure 12 shows the distribution of member payments by volume for the ALCS and PLS. The payments to individual creators made by ALCS are predominantly small; 87% of payments are less than £500.

<sup>61</sup> The data pertain to the financial year 2010/11 and show secondary licensing flows from the education licence only. For the revenue inflow from foreign RROs, a pro-rata share for education within total licensing inflow was estimated. This was based on data submissions from 6 international RROs with £182 million in licensing income between them in 2009.

PLS makes payments to publishing firms that in many cases are small in absolute terms. Of the total payments made in 2009, 50% were less than £500. Of the remainder, only 10% of payments were more than £10,000. The role of CMOs in facilitating a large number of small transactions between rights owners and users is an important part of their value to the UK's major educational publishers.

**Figure 12 Distribution of member payments by size (UK, 2009)**

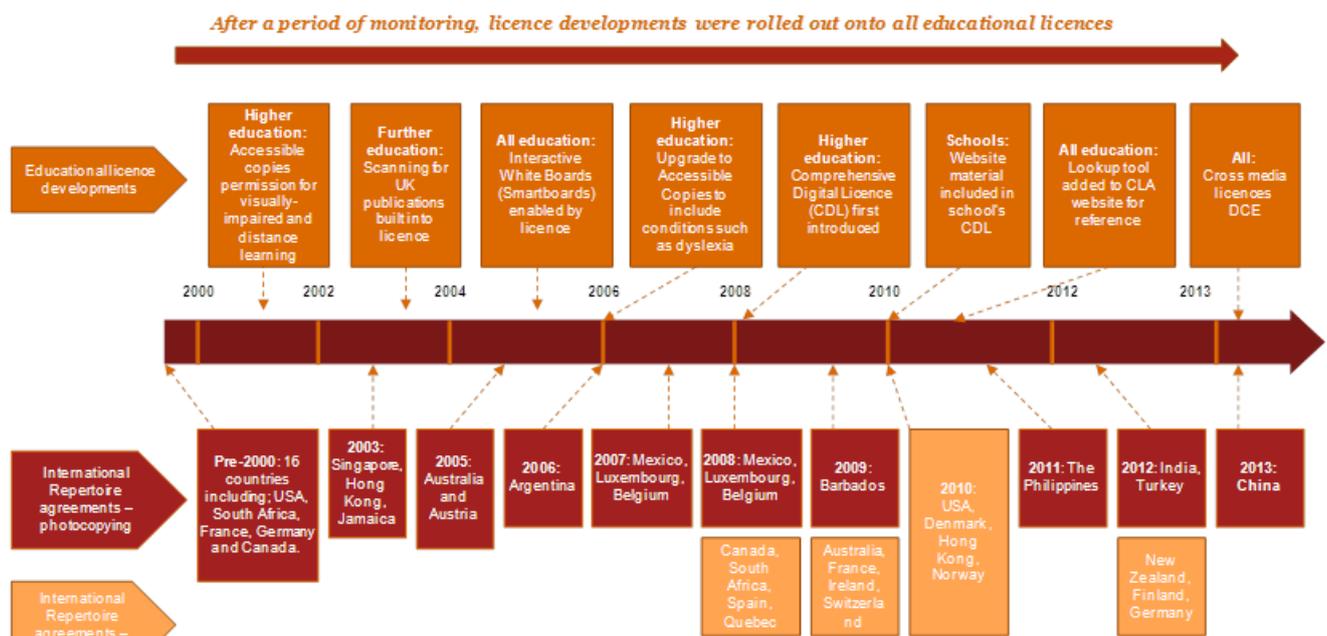


Source: ALCS, DACS, PLS

This is not to say that payments are unimportant to authors and publishers. Later in this Section, we will show the importance of secondary licensing income and the provision of an ordered market for incentivising further content creation.

The role of the CLA and other CMOs within the market for education has evolved over the past decade as the technological environment has changed. In Section 2, we highlighted that educational material is increasingly distributed and consumed digitally. The CLA and other CMOs have responded to this trend in several ways. In particular, new licences have been designed in consultation with educational users which allow them to meet their digital needs. Figure 13 highlights the major licensing developments that have occurred over the past decade.

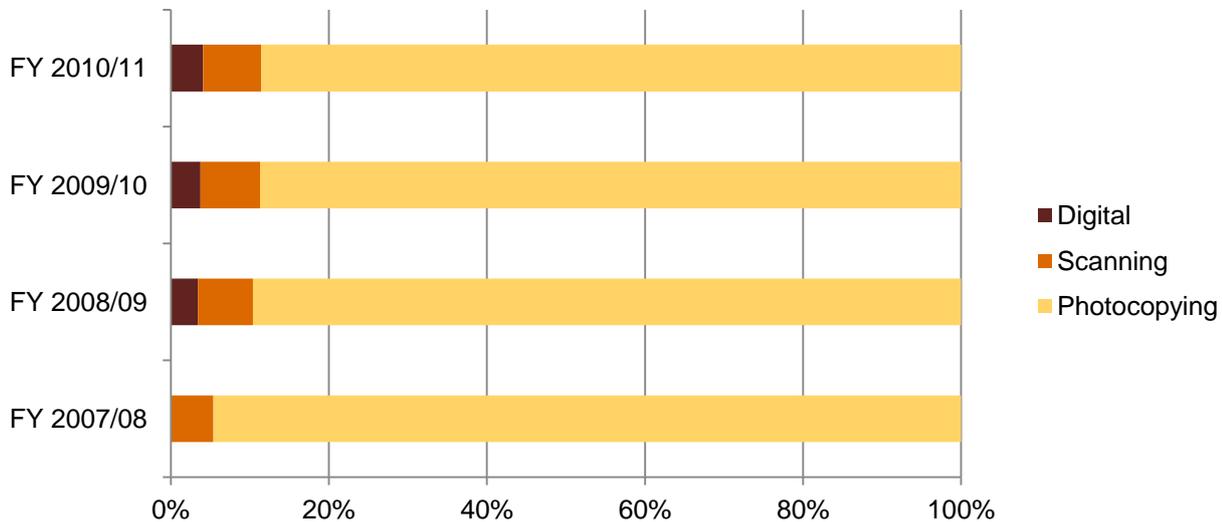
**Figure 13: Timeline of CLA licence innovations 2000-2012**



Source: CLA

The CMOs are taking steps to ensure that licensing is fit for purpose in the digital age by ensuring that an incentive structure for authors and publishers is available in the future. The outcome of this can be seen in the take up of the new licensing services offered by the CLA. Digital copying licences were introduced in 2008, but together with scanning are already accounting for over 10% of licence fees.

**Figure 14: Share of CLA revenues by usage type**



Source: CLA

The second area where digital technologies have played a major role is in enabling the CMOs to improve their efficiency and reduce transaction costs for educational users. CMOs are using digital technology to speed up the licensing process, cut costs and to better inform educational institutions of licensing requirements. Such moves can be welfare enhancing.

One initiative that aims to give users, including educational establishments, a greater degree of flexibility regarding their licensing options is the Copyright Portal (see Box 6).

### Box 6 CLA Copyright Portal

Currently, the CLA relies on blanket licensing for the vast majority of its educational revenues. These licenses have the benefit of being easy to update and can be extended to a wide-base of educational users.

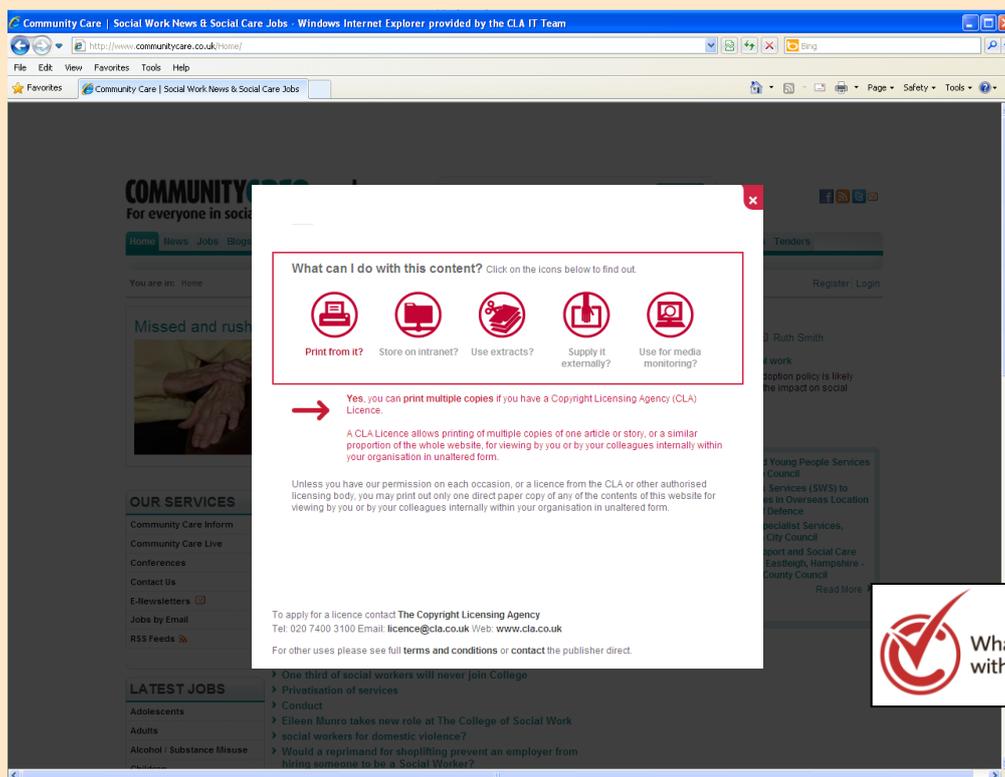
The CLA currently provides a transactional service by clearing individual rights for some materials. The British Library is currently the largest customer for this service. The CLA is considering developing an online central rights portal for transactions, for the online purchase and management of transactional permissions which would be additional to its blanket licensing service. For rights holders, a vital income stream will be protected. Kevin Taylor, Director of Strategy and Intellectual Property at Cambridge University Press added:

*“The CLA is best placed to deliver a one-stop shop for copyright permissions”.*

The CLA is looking to make the system as simple as possible for transactional users. A simple logo has been developed to inform the user that permissions need to be sought before a user can copy the material.

For many internet users, the rules surrounding what can and cannot be legally copied from the web are confusing. It is important for a balanced copyright system that supply of content is incentivised at the same time as making the system simple for users. To this end, the CLA is continuing to develop processes to make using web content easier and clearer. It is also redesigning the way it communicates these messages to users through the development of its website.

To clarify and simplify copyright for online end users, the CLA has developed an online copyright “icon” for use on the websites of participating publishers and content creators. The icon provides users with clear information on what material can and cannot be used for, and for what uses a CLA licence is required. For example, the logo informs the user that if they hold a CLA licence they can print multiple copies of the web page, store its content on an intranet for up to 30 days and use extracts from it in separate materials.



The logo has been developed in response to requests from users. The CLA’s 2010 survey of higher education institutions revealed that 27% of academics thought that existing copyright messages on websites are “unclear so they don’t use the content”. The copyright logo aims to provide a clear and consistent explanation of copyright which can be applied across all participating websites.

UK CMOs are also actively engaged with international organisations. CLA has established licensing agreements with 31 foreign countries to allow UK users to copy material published abroad, and allow foreign users to benefit from copying UK-originated material. The agreements allow UK content creators, including educational authors and publishers, to receive funds from foreign reproduction of their works. CLA figures from 2010/11 for overseas payments and receipts also highlight that the UK is a net exporter in the market for reproduction of educational materials. CLA paid nearly £3.2million to overseas CMOs from its educational licences, whilst receiving £8.3 million.

One of the most important roles CMOs fulfil is the monitoring and enforcement of the copyright system. The economies of scale the CMOs can access enable them to challenge copyright infringement in some cases, an option rarely open to individual creators due to legal costs. We illustrate one aspect of this role which is particularly important for the UK educational publishing industry – monitoring textbook substitution (see Box 7).

### **Box 7: Textbook substitution in the UK**

The CLA Higher Education Licence is intended to broaden and enrich students' learning experience, by enabling higher education institutions to provide greater and easier access to copyright materials. Two ways commonly employed by higher education institutions to distribute this valuable material to students is by creating paper "course packs" and by putting scanned reading material on Virtual Learning Environments.

However, there is a risk of textbook substitution occurring in the creation of these paper and digital "course packs". Textbook substitution exists where an educational establishment copies a number of complementary works just below the 5% or one chapter limit set by the terms of the CLA's licence, which, depending on the nature of the course, would offer students a real alternative to the likelihood of otherwise buying one or more textbooks. This collection of works is generally either texts 'cherry picked' across similar texts in a subject area or the majority of core texts a student needs to read to pass their course of study.

CLA monitors textbook substitution activity on a yearly basis with regard to scanning within higher education institutions and runs an active education programme to work with those institutions where risk has been identified.

The latest review of the raw data highlighted that of the top 50 course packs (by book page count), 19 were found to potentially constitute substitute textbooks, 17 were found to be borderline and 14 were unlikely to constitute textbook substitution. 54% of these course packs were found to exhibit an extent of copying that were in certain or possible breach of the terms of the CLA's digital licence. This compares favourably with the previous year's results and an improvement from year to year, but highlights that technical breaches of the licence continue and concerns regarding textbook substitution remain. It is evident that the benefits of a consistent and managed record of copying aligned with an active education and visit programme within the Higher Education sector by CLA have brought improvement in good practice plus increased peace of mind to both HEIs and authors and publishers.

In contrast to the existing licence framework, a lack of a monitoring body to identify and educate on such issues may increase an educational establishments' incentive to substitute for textbooks and therefore significantly impact the primary sales of authors and publishers – their primary source of income. Over the longer-term, this is likely to influence author and publisher decision about whether or not to invest time in an educational project.

*Source: CLA*

Monitoring and enforcement actions are important for both primary and secondary copyright. They contribute to the incentive structure for educational content creators and developers through reducing the uncertainty that infringement will erode revenue opportunities. This ordered market is present in the UK, in part due the CMOs activities. The contrasting fortunes of other international copyright regimes with varying degrees of protection for rights holders are examined in Box 8. The countries that have made the greatest strides in establishing an ordered market are those which have attracted the most investment flows.

### Box 8: An international comparison of copyright regimes

The benefits of an ordered market in facilitating investment by UK publishers in overseas markets is illustrated through a comparison of Pakistan and India.

In India, in the past booksellers were granted licences to reprint works so that Indian students can buy works at as low as a tenth of the price of the books in home markets. Today, these UK publishers have made direct investments in India, and such reprinting arrangements are generally made through the foreign publishers' own Indian subsidiaries.

Pakistan's printers and book-sellers recently complained that UK and US publishers did not supply them with similar licences to reprint books for the Pakistani market. To date, UK publishers have remained unwilling to grant the Pakistani book sellers these licences. As Peter Davison of Cambridge University Press noted;

*“One of the key reasons why UK publishers did not enter into these licensing arrangements was due to the weak enforcement of copyright protection in Pakistan.”*

The market for pirated books in Pakistan is significant. Peter Davison estimates the pirated market may be as high as 75% of the total market in Pakistan. Sales of UK published books in Pakistan are around £3m per annum, but Peter Davison estimates the actual size of the value of the market to be closer to £12m to £15m. The experience of India and Pakistan over the last two decades highlights the importance of an ordered market in supporting investment in educational publishing. In 1992, the market for UK published books in Pakistan was around ¼ the size of the market in India. What is behind the difference in the growth rates of UK exports to the two markets? According to Peter Davison, breaches of copyright are less of a problem in India: “Over the last two decades, India has worked hard at addressing breaches of copyright, and creating an ‘ordered market’ to support investment”

The existence of an ordered market in India has encouraged UK publishers to invest in overseas subsidiaries. As PM Sukumar, CEO of HarperCollins India notes:

*“The benefits of an ordered market cannot be over-emphasised when considering the return on investment from new titles. We are therefore very pleased to have recently joined the Indian RRO, which will work on rooting out piracy in the market, protecting primary sales and generating secondary income. An ordered market, which allows limited copying, is indeed a benefit to the education sector, but secondary licensing income, policing and strict anti-piracy initiatives are essential as an incentive to continued creation.”*

In China, developments in copyright legislation, and the development of a secondary licensing scheme, have coincided with a reduction in piracy and expansion of UK publishing exports. In 1992 China signed the Berne Convention and developed subsequent copyright laws based on the Berne principles. Nine years later, in 2001, China signed the Trade Related Aspects of Intellectual Property (TRIPS). What followed were provisions on collective administration of copyright, and a specific article covering reciprocal representation for foreign published works. Specific copyright collective management regulations were introduced in 2004.

In 2008, the National Copyright Administration of China set up the China Written Works Collecting Society (CWWCS). The CWWCS has offices in Beijing and Shanghai, employs around 20 staff, and has national coverage, with one collecting society for each sector.

The benefits of the ordered market, which these legislative developments helped to create, can be seen in the expanding size of the legitimate book publishing market. In 2008 piracy was institutionalised in China, with around 30% of the value of the book publishing market generated through piracy. UK book sales to China in 2008 were £15m. However, in 2011 a survey conducted across a sample of 8 Beijing Universities in December 2011 found that a number of measures had been implemented to control piracy. These included restricting library entry to students (with ID cards). There was also an increase in textbook purchases from independent book stores, and a decline in textbook centres in universities. By 2009, UK book sales in China had risen from £15m to £22m in a single year. By 2010, the value of UK book sales into China was £30m.

Source: Interviews with Peter Davison, CUP, and PM Sukumar, HarperCollins India, Kevin Fitzgerald, CLA.

## *The economics of copyright exceptions*

In our previous report, we examined the economic rationale for copyright exceptions. We highlighted an influential article by Gordon<sup>62</sup> where she described the case for exceptions in terms of market failure. Market failure occurs when the transaction costs of secondary licensing are so high that a licensing market will not operate voluntarily. In this case, economic theory provides guidance on when exceptions should be allowed. It would be efficient to allow an exception when the transaction costs of licensing exceed the value consumers attach to use of the material (i.e. their reservation price). In this situation no functioning market for rights will exist voluntarily as the cost of licensing (the transaction cost plus the licence fee) will exceed the value users put on rights. The exception would, therefore, have no impact on incentives to create as the users would not have been paid anyway.

There are, however, several limitations with this framework. For example, as noted by Landes and Posner<sup>63</sup>, a premature or broad exception could undermine incentives for the development of market mechanisms that reduce transaction costs and make economic exchanges possible (such as investment by CMOs in setting up a licensing system). Acknowledging these concerns, a transaction cost focus on exceptions should also be judged in the following terms:

- Where consumers' demands could be met by a collective licensing scheme, exceptions should not be applied;
- Where market development is unlikely, and transaction costs associated with licensing remain significant, an exception should be applied; and
- Where a market could develop if copyright was enforced, and transaction costs are reduced, the absence of an initial market should not automatically lead to the implementation of an exception.

If an exception is granted in a market which would otherwise have operated (i.e. the transaction costs are small in relation to the value consumers attach to the material) then business models which rely on the production and distribution of content may be compromised.

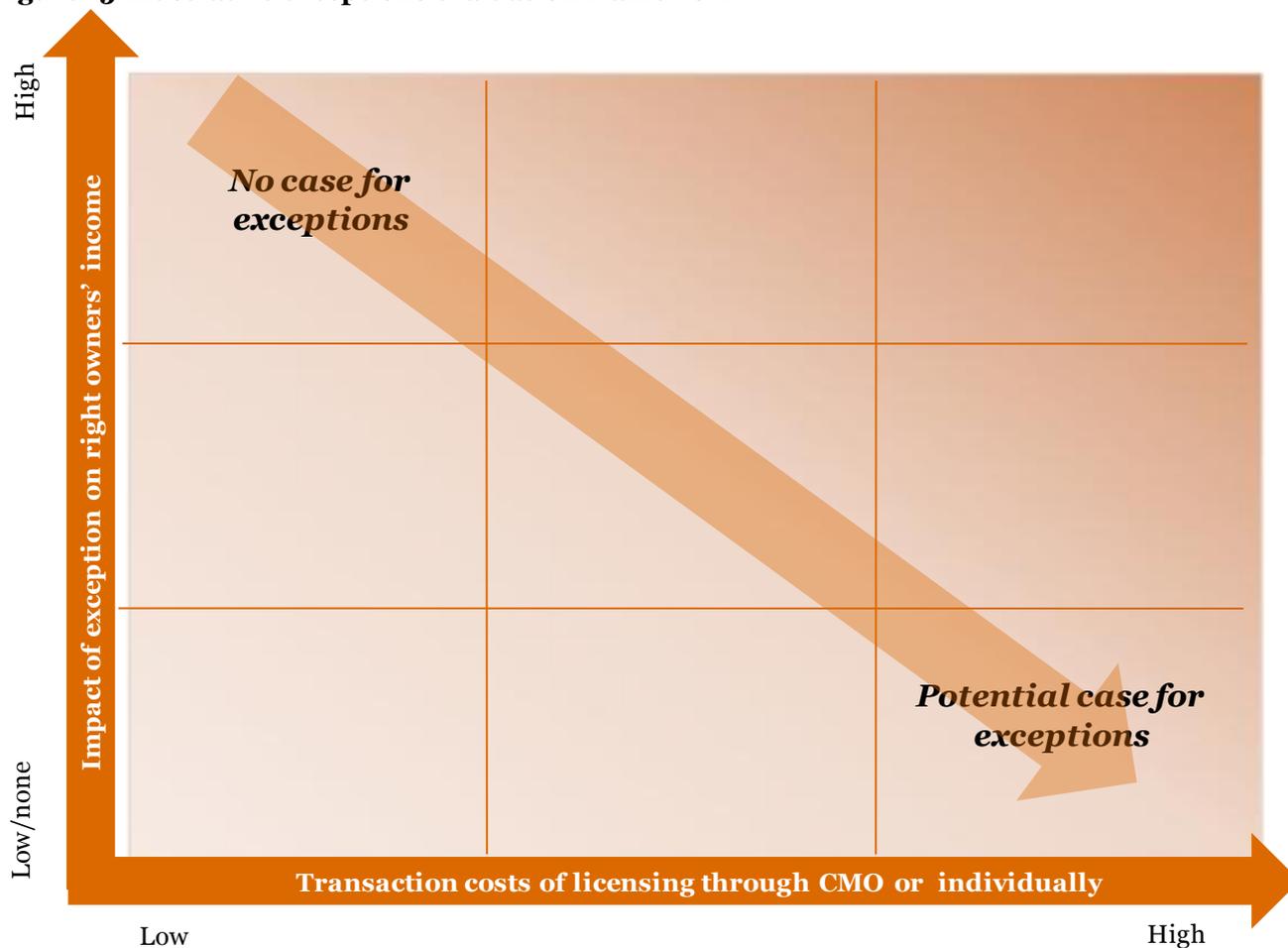
Figure 15 illustrates an economic framework which could be applied when considering individual exceptions such as those related to education. It shows that exceptions will be beneficial where transaction costs are high and the impact on rights owners' (expected) income is small.

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<sup>62</sup> Gordon. W.J., "Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors", *Columbia Law Review*, (82);1600-57, (1982).

<sup>63</sup> Landes W.M. and Posner R.A., "An Economic Analysis of Copyright Law", *Journal of Legal Studies*, (18); 325-63, (1989).

Figure 15 Illustrative exceptions evaluation framework



Source: PwC analysis

Applying this framework in practice to specific cases requires the following information:

- The transaction costs associated with licensing for the user. We have compared the estimated costs of the current CMO licensing system with an atomised system for licensing reproduction of literary works in the higher education sector. Our estimates showed that the total transactions costs of the collective management system are £6.7 million per year; this compares with costs in an atomised model of between £145 million and £720 million per year<sup>64</sup>.
- Whether a market for a particular right exists voluntarily. In the case of higher education institutions which choose to license for reproduction rights. This implies that students, teachers and researchers within these institutions attach more value to their ability to reproduce and use copyrighted works than the transaction cost plus licence fee. In turn, the generation of this revenue creates positive incentives for the production of educational content.

In conclusion, given the low transaction costs and voluntary existence of a market, secondary licensing of literary works is likely to feature toward the top left of the chart.

The theoretical guidance on exceptions is clear but significant implementation challenges remain. These can be assessed by considering the following:

<sup>64</sup> Note, however, that the figures we produced include the rights owner and CMO costs as well as the users transaction costs. Only the latter is considered in the evaluation framework.

- The implications of the fair use and fair dealing approaches to exceptions for long term economic performance and the emergence of new business models;
- Whether and how copyright exceptions can be identified in practice; and
- The legal costs associated with different approaches.

The remainder of this Section considers each of these factors in turn.

### Long term economic performance and new business models

The first issue we consider is how fair dealing and fair use approaches impact on long term economic performance and the emergence of new business models (i.e. dynamic efficiency). In particular, we examine the difficulties of defining an approach to exceptions today which will also be fit for purpose tomorrow and which does not hinder innovation. We do this by considering the evidence in relation to the Australian digital publishing sector. We feel that this case conveys the positive and negative impacts of exceptions in general.

The second case study examines the impact of copyright exceptions for electronic copying in libraries on the Australian digital publishing industry<sup>65</sup> (Box 9).

#### **Box 9: The impact of copyright exceptions to the Australian digital publishing sector**

The key critique of copyright policy was that the government provided a broad exception for digital copying in libraries before allowing rights owners, CMOs and libraries to develop a functioning licensing market. The government's move stifled the Australian digital publishing industry as incentives to invest were weakened. Linking this back to the discussion of Google and fair use, we note the parallels between the exception in this case and the uncertainty caused by fair use when making investment decisions. The impact in Australia was to slow the introduction of digital publishing models despite the significant cost saving relative to traditional publishing and potential efficiency gains for the economy as a whole.

The paper estimated the net expected economic impact of the broad digital exception on library copying using the MONASH economic model. The analysis accounted for both the reduction in access resulting from people needing to pay for what they had previously consumed for free and the benefits of a more efficient digital publishing sector which was able to pass cost savings through to users. The costs of investment in digital publishing and of new rights management systems were also included in the assessment. Under a range of different scenarios it was estimated that the net welfare effect of removing digital exceptions for library copying would be positive – ranging from AUS\$45 million a year to AUS\$63 million a year by 2012.

This research highlighted two further challenges of designing a practical exceptions framework:

- Exceptions must not get in the way of innovation and new business models as technology changes the way copyright content can be produced and consumed. The research suggested that exceptions currently in place should not automatically be transferred to a new platform – rather it is better to wait and see whether rights owners, CMOs and users form a voluntary licensing arrangement; and
- Exceptions have positive and negative impacts on different business models. Organisations that rely on the reproduction of copyright content are more likely to benefit from exceptions (e.g. Google) since they can use content without paying for it. On the other hand, organisations which rely on the creation, development and distribution of content are more likely to lose out from exceptions (e.g. the digital publishing industry).

Source: The Allen Consulting Group

### Copyright as a catalyst to create

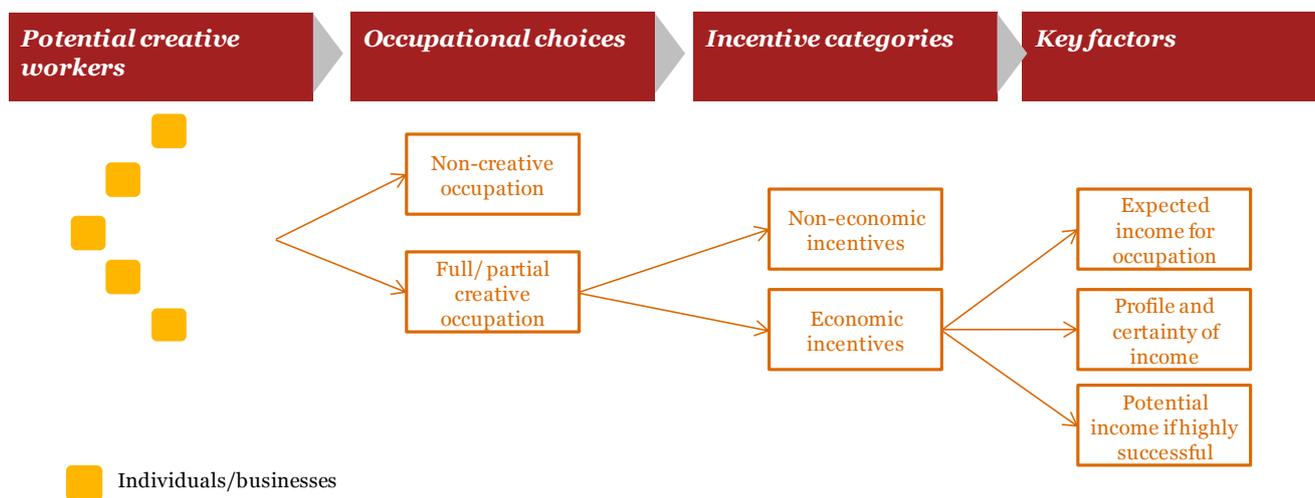
The initial creation of educational works by authors depends crucially on their incentives to invest time producing educational content. Copyright exists to ensure that authors and publishers have appropriate incentives to produce new content. This is important because, a substantial economic value chain depends on new content being created. To capture the importance of secondary licensing, we need to understand how secondary and primary payments affect content creators' incentives.

<sup>65</sup> The Allen Consulting Group, "Copyright Exceptions in a Digital Environment: Matching Outcomes with Rationales", Copyright Agency Limited, Sydney, (2004).

### The importance of secondary licence income for individual creators

For an author, the decision whether and how to invest their time in education content creation reflects a combination of economic and non-economic factors that potentially influence the decision whether to enter or remain in a creative occupation<sup>66</sup> (see Figure 16). The concept of the two decision points (for authors and publishers) was introduced in the value chain for educational publishing (see Figure 1 in Section 2). The framework recognises that non-economic incentives matter.

Figure 16 Illustrative creative worker decision tree



Source: PwC analysis

Focusing on the economic incentives, we believe that three aspects are important to decision making:

- The expected income – the ‘typical’ income the author can expect to receive for working in a creative occupation;
- The profile and timing of income – in general, individuals prefer a more predictable income that is evenly distributed over time which means that some favour a portfolio approach to income<sup>67</sup>; and
- The potential income if highly successful – creative occupations are often exhibit a “winner takes all” structure, with many low paid individuals or small businesses competing to become the next J.K Rowling or Damian Hurst.

We now consider the available evidence on the impact of secondary licensing on these factors.

Many members of the CMOs are engaged in the development of new creative content as their principal economic occupation but, in some cases, they do not do it as their principal job (instead relying on other forms of employment). For everyone involved in the creation of new content, it is important to understand the significance of the income they derive from secondary licensing and its effect on their incentives to create new content.

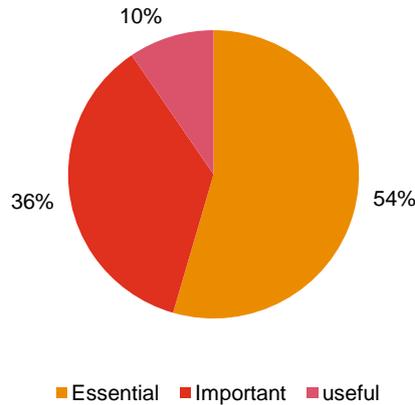
ALCS has undertaken two surveys of its members that provide information on creators’ incomes and the share of income from secondary licensing (see Section 2 and Appendix C).

In the January survey, the ALCS asked respondents to indicate the importance of income received from CLA in the process of supporting development of new works. As Figure 17 illustrates, 54% indicated that secondary licensing income from the CLA was ‘essential’ and 36% indicated that it was ‘important’ in supporting the development of new works.

<sup>66</sup> We present this in terms of an individual’s decision, but it can equally be applied to businesses.

<sup>67</sup> This point is referred to as “income smoothing” in economics and reflects the theory that most individuals will prefer to maintain a reasonable standard of living throughout their life rather than experiencing a mixture of opulence and poverty.

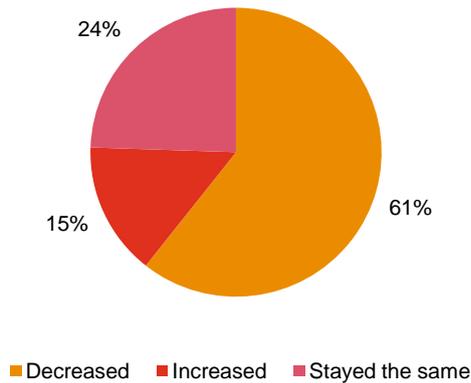
**Figure 17: Importance of secondary licensing income to educational authors**



Source: [First] ALCS survey

The same group of respondents was also asked about the trends in income from primary royalties (i.e. sales) over the last five years. For the majority of authors, income from primary sales had decreased during this period.

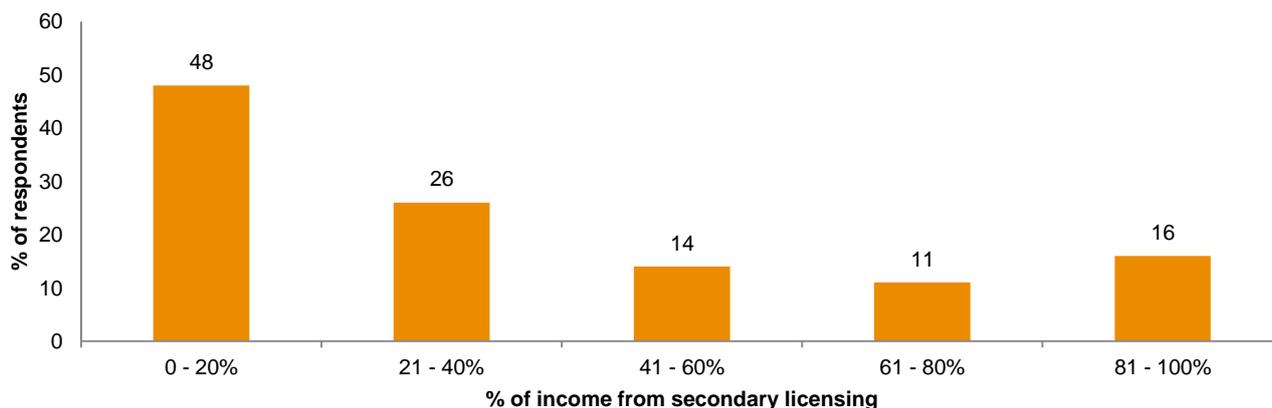
**Figure 18: Trend in income from primary sales over the last five years**



Source: [First ALCS Survey]

In the second survey, respondents were asked to identify the proportion of their income from writing that was derived from secondary licensing income from the CLA. While most authors indicated that less than 40% of their income from writing was derived from this income, almost 25% respondents (27 out of 115) indicated that more than 60% of their income from writing was derived from this source.

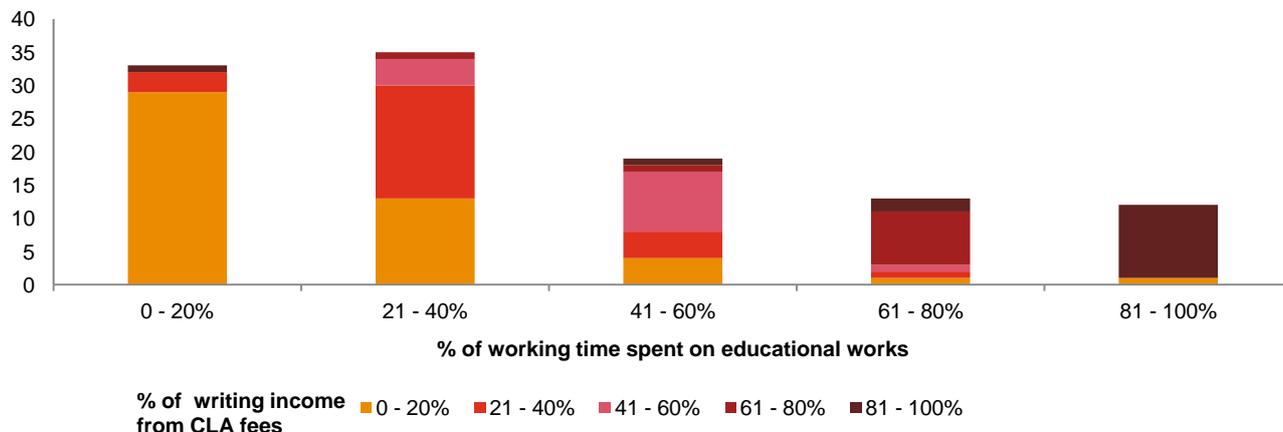
**Figure 19: Percentage of income from writing from secondary licensing income**



Source February 2012 ALCS Survey

We investigated the relationship between the amount of time that authors devote to writing educational material and the proportion of their writing income that is received from secondary licensing. The results showed that where authors spend less of their working time developing educational works, secondary licensing income tended to be a smaller proportion of their income from writing. Conversely, for authors that spent most of their working time writing educational materials, secondary licensing income was much more significant as a proportion of their writing income (see Figure 20).

**Figure 20: Relationship between time spent on writing educational material and secondary licensing income**



Source: February 2012 ALCS survey, PwC analysis

The final important aspect of the economic incentives facing educational authors is the likely profile and timing of primary and secondary licensing income. In general, authors earn their primary copyright income in short periods typically after a work is sold or licensed to a publisher. Even if an author receives a royalty for each book sold the income may still be short lived.

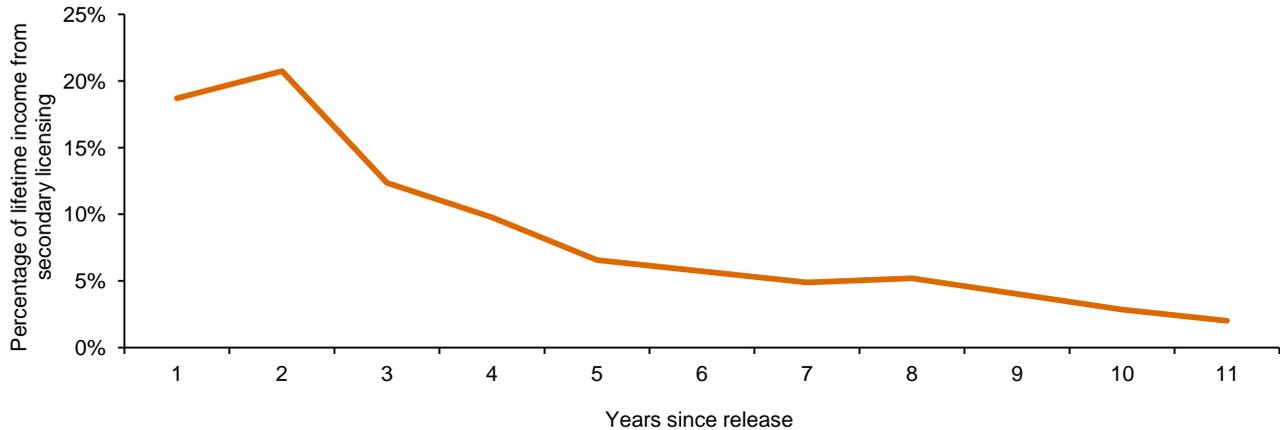
The Gowers Review presented evidence on the profile of sales of fiction books that showed that, on average, sales fell to around 10% of their peak after 24 weeks and almost zero after 52 weeks<sup>68</sup>. This pattern of decline is not mirrored for secondary licensing revenue.

Using a small sample of payments for specific works provided by the ALCS, we have estimated the profile of secondary payments over the lifetime of a work. Our results are shown in Figure 21. They show that secondary licensing income remains significant for up to a decade. Almost 60% of lifetime secondary revenues occur more

<sup>68</sup> Page 53, The Gowers Review of Intellectual Property.

than two years after publication. Secondary payments, therefore, have a significant role to play in smoothing the profile of expected income, and providing a portfolio of incomes from different works that persist over time. In this way, they can encourage creative workers who continue to produce new content. This point is also emphasised by the authors we spoke to, such as Deirdre Howard-Williams (described in Box 10).

**Figure 21 Illustrative secondary licensing revenue profile**



Source: ALCS, PwC analysis

### Box 10 Secondary copyright payments and educational authors

One of the key catalysts of the UK's educational publishing sector is the authors.

Although authors writing for the educational market receive revenues from the publication of their books through primary licensing, they also receive income from secondary licensing fees through the copying, lending or the incorporation of their work in learning materials.

As well as being material to an author's income, secondary licensing fees have an additional benefit in that they help to provide a stable income source over many years. Revenue from primary licensing can be highly variable and only last whilst the book is in print.

Deirdre Howard-Williams, an acclaimed educational author who has written and co-written over 30 English as a Foreign Language textbooks for publishers such as Heinemann, Penguin and Macmillan over a 20 year period, receives an annual secondary licensing payment of £500-800 and cites this income as: *"of great use, especially when working on longer-term projects which could take years to realise primary sales"*.

For Deirdre, secondary copyright payments provide the assurance that the investment she makes when writing a book is protected, particularly because she does not have an agent to protect her interests:

*"the secondary copyright payments give you confidence that you are part of an overarching system which is in place to protect you...this assurance is absolutely vital when I am deciding whether to start a writing project"*.

For most authors, a writing career is often combined with other jobs to generate sufficient income to sustain them:

*"It is impossible for me to live solely off the royalties from book sales. Secondary licensing helped me to juggle my joint responsibilities whilst being able to spend more time writing"*.

In some cases authors are not aware of secondary licensing fees. The ALCS informed her of the payments they had collected on her behalf: *"They contacted me first whilst I was living abroad, informing me that I was eligible for secondary copyright payments and urged me to claim them"*

Source: PwC interview with Deirdre Howard-Williams

In interpreting the evidence on incentives in this Section, we recognise that the motivation to create original works is driven by more than immediate monetary rewards from selling work: for example, academics may wish to enhance their reputation by writing an original paper. Nevertheless, economic returns are important influences at the margin (i.e. when authors make a decision whether to spend their time producing original content or doing something else).

### The importance of secondary income for business developers of content

The preceding part of this Section has focussed on the impact of reward on the behaviour of individual authors. In this part of the Section, we consider the same issue from the corporate perspective.

The incentives for publishers to invest resources in content development activities depend crucially on the strength of their two potential revenue streams relative to the costs:

- A direct sale or licensing of the work to an educational institution; and
- The licensing of rights for the reproduction of the protected work through a CMO (secondary licensing).

The publisher will only invest if the expected return from the two sources outlined above exceeds the expected return from other potential competing demands on their time. For these companies, the economic returns (rather than other forms of return) may be even more important as some of the non-monetary rewards which motivate individuals are less relevant.

There are strong links between the incentives of educational authors and those of educational publishers within this value chain. Both depend crucially on the ability of publishers to realise primary sales from educational institutions and secondary licensing income through CMOs for the reprographic copying of their work.

Where businesses own the rights to works, they also receive secondary licensing payments. To understand the importance of these payments to publishers, we have conducted a series of interviews with UK based firms operating in the educational publishing market. The results of these interviews are summarised in Box 11. Our key finding is that secondary payments have a significant impact on investment decisions (e.g. in relation to investment in new educational technologies). The example of Hodder's Dynamic Learning tools is described below. Based on aggregated financial data from a sample of 7 large educational publishers (collected by the Publishers' Association) we identified that secondary licensing income was on average 12% of earnings before interest, tax and depreciation and amortisation.

### Box 11 Secondary copyright payments and UK educational publishers

Hodder Education has invested in the "Dynamic Learning" product and has developed a new Digital Education Division which now accounts for around 5% of the Schools division workforce. Through its "Dynamic Learning" online service, Hodder Education offers all its previous multimedia material on an online platform which allows unlimited digital access for students to use in over half of all the UK's secondary schools.

For several of the leading educational publishers in the UK, secondary copyright payments play an important role in incentivising investment in new products. Having talked to a number of publishers, revenue from secondary licensing typically adds between 5-20% to the profits generated by the educational division. As one Managing Director for the Schools Division stated:

*"Secondary licensing payments can be collected through CMOs with them expending very little cost .... the primary importance of secondary licensing is the predictable nature of a relatively constant revenue stream, therefore it would be more difficult to invest if secondary licensing was not available".*

This source of investment funds is particularly important given the high fixed costs involved in developing new educational resources platforms. A Managing Director of a major publisher's Education Division said:

*"To create new resources for a single school year over all subjects can cost £4-5million...the extent of this investment is made possible through the secondary licensing revenues we receive from the PLS."*

The strength of copyright and secondary licensing systems is an important factor when publishers make their

investment decisions. Eric Baber, the Innovations Director at Cambridge University Press (CUP), stated:

*“A sound secondary licensing sector is a sign of a serious and robust copyright environment, and equates to the markets where we would be more likely to invest in innovative product. The development of sound secondary licensing agencies in India, for example, would influence our approach to investment in that market.”*

Additionally, international demand for educational publications is growing with the emergence of developing nations in the global economy. For example, one fifth of Hodder Education’s turnover in its Schools Division is now accounted for by exports to regions including Asia, Africa and the Caribbean. These exports help to drive growth in the economy.

Publishers support digital technologies in schools by directing significant investment at improving digital platforms for students and teachers and educating teachers how to use them. Cambridge University Press’ latest innovations in the education sector include blended propositions alongside traditional print materials. Eric Baber stated:

*“Blended propositions take the form of interactive CDs, websites, mobile applications and resources for the Interactive Whiteboard, to ensure that both the teacher and the students are fully supported.”*

Innovation by the educational publishing industry has also brought wider benefits to the UK by enabling education to be delivered more efficiently. A PwC report for The British Educational Communications and Technology Agency on the Economic Impact of Technology in Schools traced a series of effects on investment in technology in schools to potential economic outcomes and showed that for every £1 invested in technology, there was £2.05 of benefit<sup>69</sup>. The majority (85%) of this benefit accrued to pupils through better educational outcomes.

Source: PwC interviews with UK educational publishers

## Use of licensed works by educational institutions

Licensed works form a key input into the learning materials provided to students within schools, further education colleges and higher education institutions. These works may take the form of books, journals, teaching notes, examination materials, digital learning products and more. They are mostly available for purchase directly from publishers. However, educational institutions can make significant cost savings by purchasing a licence to reproduce key segments from existing materials. Copyright and the CMOs allow this to take place.

In FY 2010/11, schools and higher education institutions spent the most on educational licences – £11.9 million and £11.8 million respectively. This expenditure is very small in relation to the total spend by educational institutions (see Table 28). For each type of institution, secondary copyright makes up less than 0.1% of total expenditure and less than 0.3% of operating expenditure.

**Table 28: Secondary copyright expenditure as a proportion of overall education expenditure**

Type of organisation	Secondary copyright spend as % of total spending excluding staff, depreciation and financing costs	Secondary copyright spend as % of total spend
Schools	0.12	0.03
Further education	0.28	0.08
Higher education	0.11	0.04

Source: Higher Education Statistics Agency, Learning and Skills Council, Department for Education, CLA accounts, PwC analysis

<sup>69</sup> PwC, “Becta: The economic impact of technology in education” (2007)

Illustrated in terms of per-student spend, this is equivalent to less than £2.00 in schools and colleges and less than £6.00 in higher education institutions (see Table 29). The higher costs associated with higher education reflect the more extensive copying undertaken in these institutions (an example being the building of “course packs”, that we illustrated earlier when explaining textbook substitution) and the more frequent inclusion of digital and other forms of copying within the terms of the licence.

**Table 29: Average cost of CLA licence fees per student user**

Type of institution	Number of students	CLA licence fee income (£M)	Average cost per student
Schools	7,138,000	11.9	£1.67
Higher education	2,097,215	11.8	£5.63
Further education	4,264,900	7.7	£1.81

Source: Higher Education Statistics Agency, *The Data Service, Department for Education, CLA December 2011/12 Reforecast*, PwC analysis

We can also compare this expenditure against other elements of institutions fixed cost base. When evaluating these costs, it is important to consider any potential for wider benefits resulting from this expenditure. Earlier in the Section we discussed the crucial role secondary copyright payments plays in incentivising authors’ and publishers’ investment in future content creation. Eventually, this benefit flows back into education institutions through high-quality education materials and innovative education solutions. Some recent innovations are actually proving to promote efficiencies in other areas of the institution’s cost base.

### **Box 12: Digital innovation helping to reduce costs in education**

A PwC report for The British Educational Communications and Technology Agency on the Economic Impact of Technology in Schools traced a series of effects on investment in technology in schools to potential economic outcomes and showed that for every £1 invested in technology, there was £2.05 of benefit. The majority (85%) of this benefit accrued to pupils through better educational outcomes.<sup>70</sup>

<sup>70</sup> PricewaterhouseCoopers, “Becta: The economic impact of technology in education”, London, (2007).

# 4 Impact of proposed copyright reform

## Box 13: Summary

In this Section, we analyse the impact of the Government's proposed reforms to the exception to copyright for educational establishments on industry stakeholders.

1. The Government is considering restricting collective licensing and expanding the scope of the exception. It hopes to reduce cost, enable access and provide greater clarity for educational establishments. In reality, we show that only limited cost savings can be achieved, whilst causing significant economic damage to authors and publishers who create economic wealth, in the longer-term.
2. We have re-measured the static framework provided by the IPO to reflect economic reality. We show that of the 1.4 million works available to educational establishments, just 0.25% are supported by the exception, whereas over 99% are already covered by a CLA licence
3. We use this framework to estimate the static impacts of the proposed reforms. The reform that will have the biggest impact on industry stakeholders is removing the ability of the CLA to license over the exception. Implemented in isolation, £6.6 million will be redistributed from educational authors and publishers to educational establishments (implemented together with a fair dealing provision, this redistribution rises to £33.1 million). The cost savings for establishments are extremely small in comparison to the losses borne by educational content creators; copyright payments make up only 0.03% of a school's expenditure, survey evidence indicates that copyright payments constitute 18% of the income of an author focussed on the educational market, and 12% of the profit of educational publishers.
4. In its framework, the IPO fails to consider explicitly the dynamic implications of policy. The surveys, interviews and financial data we have collected from educational authors and publishers allow us to take a longer-term perspective. A reduction in income will disincentivise content creators to invest in educational works:
  - a. A 20% decline in secondary licensing income would result in a 29% decline in output, from the educational authors surveyed by the ALCS. We estimate this would equate to a fall by around 2,870 individual educational works per year across all UK authors.
  - b. We estimate that a 12% cut in publishers' profits would inevitably decrease the amount available for investment as this sum equates to 19% of their annual investment in new materials.
  - c. Several UK publishers suggested that jobs would be threatened, and investment in innovative and creative educational works would be the first products to be cut.
  - d. Research shows that the Australian digital publishing industry was severely weakened by a broad exception for digital copying in libraries.
5. We examine the crucial role the copyright system plays in providing an ordered market for protection against unauthorised copying. We highlight how removing CMOs from the market also removes their role in monitoring compliance and punishing piracy. If the ordered market is weakened, Palgrave MacMillan signalled that this would undermine the economic viability of their textbook publishing businesses in the UK. UK book exports to China have grown rapidly since a strengthening of copyright policy, including a secondary licensing framework and collection agencies, has contributed to the development of an ordered market.
6. We highlight how any contraction in the market for educational material could have long-term adverse impacts on educational outcomes. Over time, any erosion to the UK skills base will feed through into lower economic performance.
7. We show that a combination of expanding the scope of the exception together with restricting the licensing scheme would amplify both the short-term cost savings for institutions but further undermine educational provision in the longer-term.
8. Finally, we challenge the Government's economic justification for expanding the education exceptions. We show there is no economic rationale for copyright works to be provided free of charge any more than other inputs (software, broadband access). Equally, there is no economic justification that educational establishments should be favoured over other licence users.

## Introduction

This Section analyses the potential economic impacts of the copyright reforms related to education exceptions being considered by the Government. We begin by providing a brief overview of the proposed changes and summarising their rationale. We then describe a framework within which to appraise each of the proposed reforms. We then use the evidence we have gathered to analyse the economic impacts of the proposed reforms to education exceptions.

## Overview of proposed copyright reforms

A number of the Government's proposals coming out of the Hargreaves Review of Intellectual Property<sup>71</sup> involve reforms to the UK's copyright regime. One of the key proposals is to widen the current exception for educational establishments to a maximum degree within European Union (EU) law. Changes to this exception falls into two broad categories:

- Fundamental changes to the underlying rights of content creators, licence operators and users; and
- Changes to the scope of the exception.

The former refers to fundamental changes to the existing legislation for the education exception which include:

- *Removing the ability to license over the exception (Consultation Question 89)*. Currently, the education exception does not apply when a collective licensing scheme is in place. The Government is considering whether the education exception should apply even when a collective licensing scheme is in place, removing its ability to license.
- *Increasing the proportion of a work that can be copied (Consultation Question 86)*. Currently, 1% of a work can be copied by an educational establishment under the exception every quarter. The Government proposes either an increase of this limit or substitution with a "fair dealing" exception intended to permit, in general, a greater degree of copying. A fair dealing exception is currently granted to students for private study. In effect, this proposal would see fair dealing extended to the education establishment.

The latter category refers to changes to the application of the current exception which include:

- *Broadening the scope of works included (Consultation Question 85)*. The Government proposes both expanding the type of work covered from literary, dramatic and musical works to include artistic, sound recordings and audiovisual works and extending the type of copying allowed from "chalk and talk" and reprographic methods to modern presentation technologies.
- *Broadening the definition of an educational establishment (Consultation Question 88)*. The Government proposes expanding the definition of an educational establishment from education institutions to a wider range of organisations with an educational purpose, such as museums and art galleries.
- *Extending the exception to cover distance learning (Consultation Question 87)*. The Government proposes expanding the exception to cover transmission of copies to distance learners over a secure network.

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<sup>71</sup> Ian Hargreaves, 'Digital Opportunity: A Review of Intellectual Property and Growth', 2011. Available at : <http://www.ipo.gov.uk/ipreview.htm>

## *Rationale for proposed copyright reforms*

The rationale for the Government's proposed changes to the intellectual property and copyright regime is set out in its Consultation on Copyright document<sup>72</sup>. The underlying driver behind the Government's proposals is to create a business environment that is more conducive to economic growth. The Government sees expanding the copyright exception for education as a significant part of removing copyright regulation in cases where it restricts productive economic activity. The Consultation on Copyright document duly argues that:

- Restrictions within the current educational exception prevent educational establishments using creative content in innovative ways, which is a particular barrier for teaching based on new technologies;
- The circumstances where the educational exception applies are too narrow; and
- There exists a disconnect between what educational users expect to be able to do with creative works and what they are permitted to do under copyright law.

By expanding the educational exception, the Government hopes to support educational establishments in improving educational outcomes and supporting skills growth in the UK economy. The mechanisms through which this goal will be achieved include:

- Removing the financial burden of copyright from educational establishments;
- Enabling the use of more types of copyrighted materials with different copying technologies within a wider range of settings;
- Promoting access for students by facilitating distance learning; and
- Providing greater clarity around the limits of the exception.

When the Government sets policy in this area, it implicitly balances competing short-term and dynamic objectives. The overriding policy objective in the short-term is to reduce costs for education and to facilitate access to materials. Over the longer-term, it is hoped this will promote educational outcomes and boost economic growth. Below, we present a framework for measuring the short-term and dynamic impact of each of its proposals. In doing so, we examine how the Government balances these policy objectives and evaluate if these objectives can be reached in each case.

## *Framework for evaluating the impact of proposed copyright reforms*

To evaluate the key policy questions around copyright it is necessary to develop and use a consistent framework that recognises the benefits and costs imposed by copyright reform. Our summary of the key costs and benefits is shown in Table 30<sup>73</sup>. It distinguishes between the short run and the long run impacts of copyright reform. The long run impacts are especially pertinent for copyright to drive content creation and, so, act as a catalyst for innovation and growth.

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<sup>72</sup> Consultation on Copyright, Intellectual Property Office, 2012.

<sup>73</sup> Adapted from Handke, C, "The Economics of Copyright and Digitisation", SABIP, (2010).

**Table 30 Framework of potential costs and benefits of copyright reform**

Benefits of copyright		Costs of copyright	
Short run	<ul style="list-style-type: none"> <li>▪ Incentivises the creation of new content</li> <li>▪ Allows content creators to exercise some control over how their work is used and what it is associated with as well as protecting their revenue and brand (as creators of the IP)</li> </ul>		<ul style="list-style-type: none"> <li>▪ Administrative and enforcement costs for sellers of rights</li> <li>▪ Transaction costs and licensing costs for purchasers of rights</li> <li>▪ Deadweight loss from setting price above marginal cost</li> </ul>
Long run	<ul style="list-style-type: none"> <li>▪ Supports sustainable business models for creators of new content</li> </ul>		<ul style="list-style-type: none"> <li>▪ Innovation may be hindered by transaction costs and licensing costs</li> </ul>

Source: PwC

In applying this conceptual framework to changes to the educational exception, it is important to assess how each of the different stakeholders are affected. The key stakeholders are:

- Rights holders (authors, publishers and visual creators);
- Licence operators (CMOs);
- Educational establishments; and
- Educational users (students and teachers).

It is also important to consider the costs and benefits against an appropriate counterfactual. This is not the necessarily the same as the baseline and needs to reflect the dynamics of the sector. For example, digital educational publishing accounts for just 9% of the total UK educational publishing market today<sup>74</sup> but is expected to grow over the longer-term. As we have shown in Section 2 and Section 3, the rights holders and CMOs are playing an important role in promoting these developments and are expected to continue to do so. This needs to be taken into account when deciding the most appropriate counterfactual against which the impacts of the changes to the educational exception can be measured.

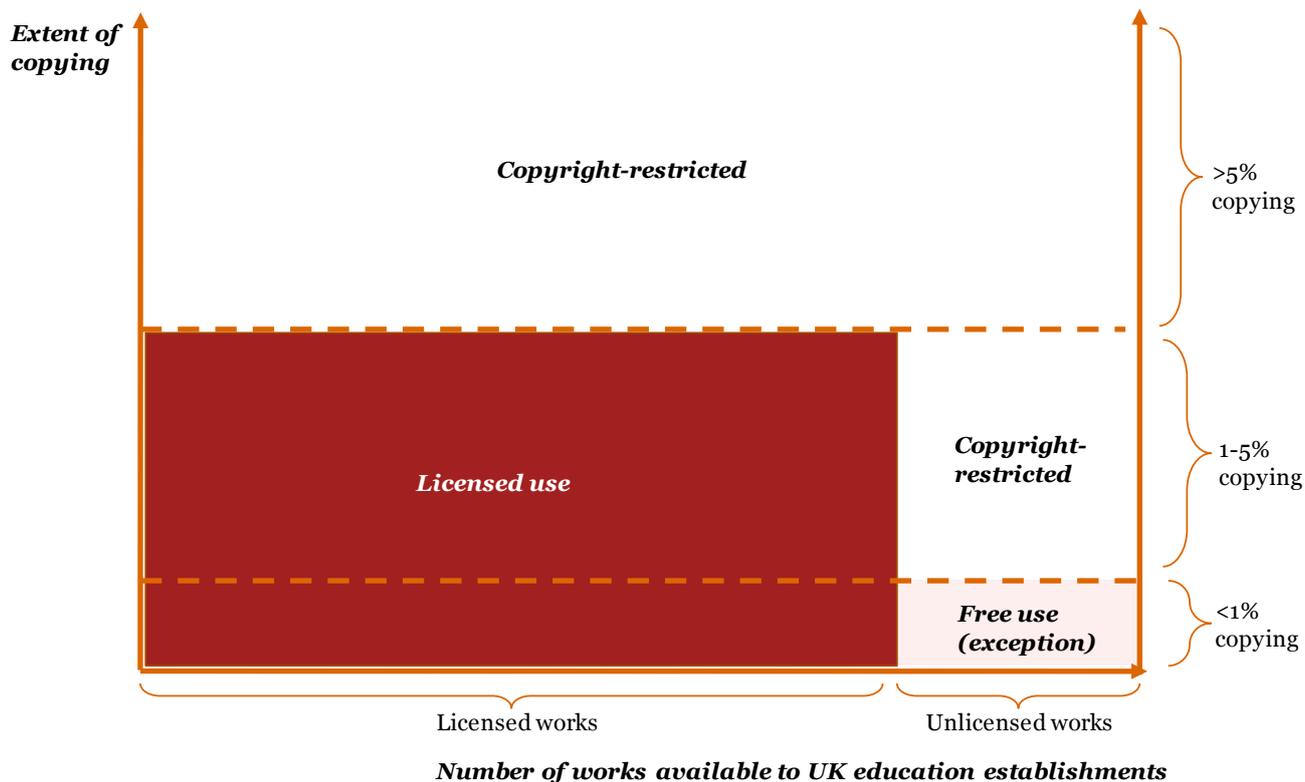
The Impact Assessment on extending copyright exceptions for educational use, prepared by the IPO as part of the consultation<sup>75</sup>, presents a conceptual framework as in Figure 22. This identifies three types of use of educational materials that are supported by the current copyright system:

- *Licensed use*: this reflects copying within education establishments for works covered by a collective licensing scheme. The upper limit of 5% reflects the proportion of a work that can be copied within the terms of a CLA licence.
- *Free use*: under the educational exception, educational establishments are permitted to make copies of works which are not covered by a collective licensing scheme (“unlicensed works”) – up to 1% of the work per quarter.
- *Copyright-restricted*: this reflects use beyond the limits permitted by either the terms of the secondary licence under a collective licensing scheme or the educational exception. Any copying beyond these limits is essentially unauthorised copying (unless explicitly built into a primary licence) and the underlying work has to be repurchased if more extensive copying is needed.

<sup>74</sup> Source: Publishers’ Association, PwC analysis.

<sup>75</sup> “Extending Copyright Exceptions for Educational Use: Impact Assessment”, IPO, (2011).

**Figure 22: IPO framework for analysing impact of changes to the educational exception**



Source: IPO

Before we analyse the impact of the proposed changes to the education exception, we examine the status-quo within the current licensing framework in relation to the education exception. Specifically, we:

- Estimate the dimensions of the static model presented in Figure 21; and
- Estimate the dynamic aspects of the current licensing and legal framework, which occur outside this static representation.

By estimating the size of the licensed and unlicensed components of the current market for educational material, we can understand the current scope and value of both the licensing and exception frameworks. There are also dynamic impacts outside this framework. Over time, investment will lead to an increasing number of works becoming available to education institutions. Innovation also improves access to educational material and, thus, leads to works becoming available in different formats (for example, through digital platforms). Both effects potentially improve educational outcomes and these, in turn, can result in wider economic benefits for the UK.

Changes to the educational exception for copyright will impact both static and dynamic considerations. In the short-run, the changes will redistribute revenue between educational users and educational content creators. Over the longer-term, the changes will influence content creators’ incentives to continue to invest in educational works and then may influence the quantity and quality of educational material for users to consume.

Below, we examine the current dimensions of the static and dynamic framework.

### **Estimating the dimensions of the current static model**

Whilst not defined explicitly in the Impact Assessment, the horizontal axis in Figure 22 refers to the total number of works potentially available to UK educational establishments. The relevant population of works covered by the educational exception is defined by Section 36 of the UK Copyright, Designs and Patents Act 1988 (“Copyright Act”) which refers to “reprographic copies of passages from published literary, dramatic and

musical works ... made by or on behalf of an educational establishment for the purpose of instruction”. There are three aspects to this:

- The *nature of the work*: the exception covers literary, dramatic or musical material and it must be printed and published in hard-copy;
- The *nature of the copying*: the exception only covers reprographic copies which is the reproduction of graphics through mechanical or electrical means and its most common form in education establishments is photocopying; typically, exclusively digital material (e-books, online platforms etc) is thought to be excluded; and
- The *purpose of the copying*: the exception only covers copying where the purpose is educational instruction which means that other non-educational material copied in educational establishments should also be excluded.

We can assess the population of works that is consistent with these three criteria using top-down and bottom-up approaches. The top-down approach requires an estimate of the total population of works and the application of criteria to filter out the works that are not consistent with the definition. The bottom-up approach involves estimating the number of relevant educational works captured by the current collective licensing system. Overall, we estimate that 1.4 million works are available to UK education establishments within a range with a lower bound of 1.0 million and an upper bound of 1.7 million. Our methodology is set out in more detail in Appendix A.

The next step is to divide the total population of works between licensed and unlicensed components. The licensed component pertains to works used in education that are covered by the collective licensing regime. In the case of works available to UK education establishments, the CLA collectively licenses for the vast majority of UK authors and publishers. The education exception applies to those outside the voluntary collective licensing scheme (unlicensed). The total number of unlicensed works encompasses:

- UK works, authors or publishers which have been specifically excluded from collective licensing; and
- Non-UK originated works coming from a country with no reciprocal repertoire agreements in place.

In reality, this group is very small. We estimate that the total number of unlicensed works is just 0.25% of the total population of works available to UK education establishments (see Table 31: Estimated number of “unlicensed” works available to educational establishments).

**Table 31: Estimated number of “unlicensed” works available to educational establishments**

Component of unlicensed work	Estimated number of Works	Notes
UK works excluded from CLA licensing scheme	722	2,407 titles specifically excluded from CLA licensing scheme. Apply estimate that educational publishing market makes up 30% of the total publishing market (derived from Section 1 value-added analysis).
Non-UK originated works that are originated from a country with no reciprocal repertoire agreements in place	2,860	CLA revenue collected over the last six years for foreign repertoire with no bilateral agreement in place was £800,000 at 31 December 2011. This accounts for 0.2% of the £337 million in fees collected over this period. If we assume 0.2% of the total number of educational works available to UK institutions (1.4 million) are originated from countries where no bilateral agreement is in place, this represents 2,745 works.
Total number of “unlicensed” works	3,582	

Source: CLA, PwC analysis

The vertical axis in Figure 23 refers to the extent of reprographic copying that is undertaken by educational establishments. There are two important points of reference on this axis which can be used to segment the market. The first is the 1% copying mark. Section 36 of the UK Copyright Act limits the educational exception to “not more than one percent of any work...in any quarter”. The second reference point is the 5% copying mark. This reflects the proportion of a work that can be copied reprographically within the terms of a CLA photocopying licence. The CLA licence also effectively allows a greater degree of copying than the exception

because the limit for an individual work is couched in relation to a “course of study”, which could be a semester or an academic year, rather than a 3-month time-period. Above this 5% mark, reprographic copying would not be permitted by a CLA photocopying licence.

**Estimating the current value of licensed use and free-use under the exception**

The value of licensed use reflects the CLA income received from education establishments for the ability to make reprographic copies of all licensed works available to education establishments up to the 5% limit. In Section 3 we showed that the CLA’s licensing revenue from schools, further education and higher education in the UK in FY 2010/11 was £31.4 million. The CLA estimates that educational licence income will be £33.3million in FY 2011/12.

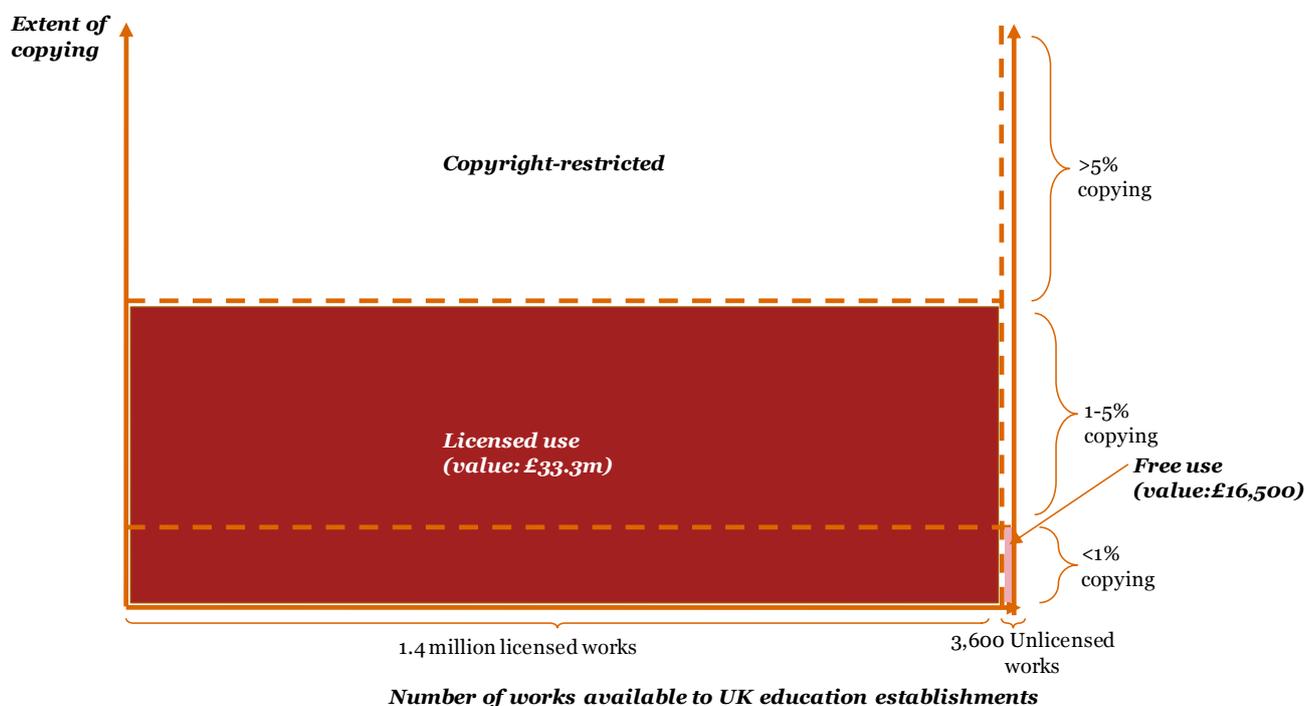
The average effective value of the licence per educational work is equal to this expected secondary licensing income divided by the number of “licensed” educational works (£23.07).

To estimate the value of free-use copying under the exception, we apply this effective value of licence per work to the number of unlicensed works available to education establishments. We also adjust for the extent of copying allowed under the exception, which is essentially a fifth of the copying allowed under a CLA licence. On this basis, we estimate that the educational exception currently supports about £16,500 of “free-use” within education establishments.

The copyright-restricted area in Figure 23 refers to the extent of reprographic copying where the terms of copyright are binding. For licensed works, copyright will be binding for any reprographic copying above the 5% level. Under the education exception, copyright will be binding for any reprographic copying above the 1% level. In both cases, copies are not permitted to be made above this level (unless explicitly covered by a primary licence).

Using our estimates of the number of works and value of licensed and free use, we can re-draw the dimensions on the Impact Assessment framework to reflect economic reality (see Figure 23).

**Figure 23: Application of IPO framework to the current status-quo of copying within educational establishments**



Source: IPO, PwC analysis

This framework highlights that 99.97% of the value of copying of works by educational establishments is supported by the CLA, with just 0.03% supported under the exception.

### ***Estimating the dynamic aspects of the current copyright framework***

The framework we have presented above reflects only the static impact. When analysing the effect of changes to the education exception within the copyright regime, it is also important to consider the dynamic implications. As illustrated in Figure 23, secondary copyright yields longer-term benefits through its impact on incentives to generate content. In Section 2, we presented IPO evidence illustrating that £750 million of investment was made by authors and publishers in books in 2007. Over time, this investment will lead to an increasing number and greater quality of works becoming available to education institutions. Both effects have the potential to improve educational outcomes and result in wider economic benefits for the UK. Section 2 highlights a number of examples where innovation by educational publishers and authors have improved educational outcomes.

Over the longer-term, changes to the educational exception will influence content creators' incentives to continue to invest in educational works – in turn influencing the quantity and quality of educational material for users to consume and having wider impacts for the UK economy. In Section 2, we showed that the educational publishing industry has a significant indirect and induced impact on the UK as a result of its linkages in the supply chain. If these effects of the sector's activities are included, the contribution of the sector is 19,4000 employees and value added of £994m.

The industry also generates wider economic effects through its role as a crucial input into education. Education generates 'spillovers' which reflect the positive economic externalities that arise from its consumption. One of the most important spillovers education generates is through human capital. Education helps to develop and embody a set of skills and competencies which create value across the economy. This is most apparent as students who learn skills, conduct innovation and improve the productivity of their workplaces after leaving education. Whilst the stock of human capital is just one factor which influences how successful an economy is in promoting innovation, it is an important one<sup>76</sup>. It is vital to recognise these wider effects as changes which impact a crucial input into education will eventually impact the outputs from the system, influencing the extent to which these wider impacts will operate in the economy.

### ***Impact of changes to the underlying rights of content creators, users and CMOs***

The fundamental changes the Government is proposing to the educational exception will have the most wide-ranging impact on stakeholders. In this Section we will consider the impact on each stakeholder group from three different scenarios. We assume the proposals are implemented in isolation, unless otherwise stated:

- The CMOs' ability to license over the exception is removed;
- The proportion of work that can be copied is raised or replaced by fair dealing ; and
- Both of the above changes are implemented simultaneously.

#### ***Impact of removing the CMO's ability to license over the exception***

As shown earlier in this Section, 99.97% of total works available to UK education establishments were within the scope of the CLA's licensing agreement. By removing the ability of CMOs to license over these works, education establishments would be able to make "free" reprographic copies of all material up to the 1% copying limit. The total impact, at least in static terms, is best illustrated using the framework we developed earlier. As shown in Figure 24, on the next page, the value of the educational licence falls due to the removal of a portion of the benefit that the licence gives to the user (i.e. the ability to copy up to 1% of a work).

Quantifying the fall in value of the educational licence is more difficult. We can assume a "uniform distribution of copying" exists across each percentile of permitted copying (i.e. an educational establishment is as likely to

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<sup>76</sup> NESTA's report reviews UK and international innovation data to summarise the six WFC's: NESTA, "Measuring Wider Framework Conditions for successful innovation", (2011).

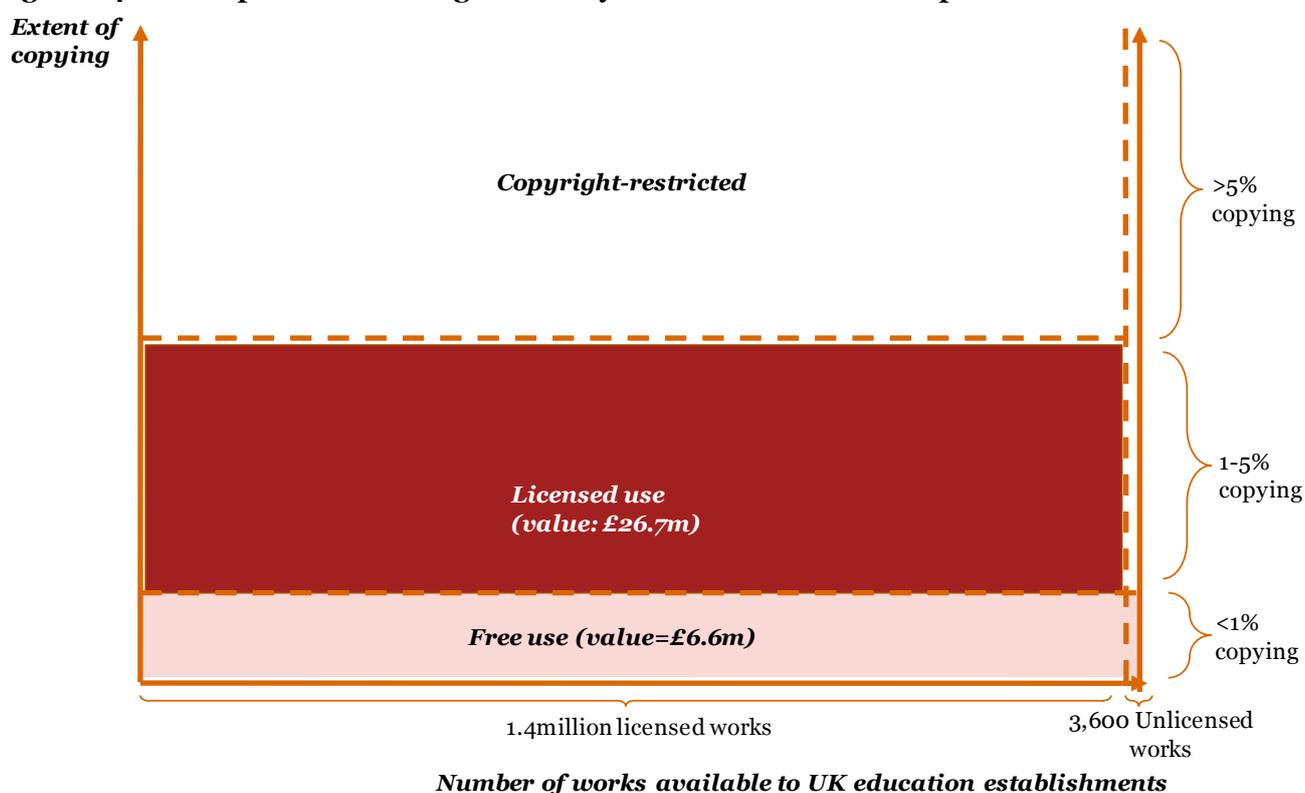
copy 0-1% of a work as it is to copy 2-3%) and that the value of the licence only reflects the degree of copying permitted. Under these assumptions, the value of the educational licence will fall by 20% (£6.6million) and correspondingly, the value of “free-use” would increase by £6.6 million.

If these assumptions fail, the actual fall in value of the educational licence may differ.

The “distribution of copying” within educational establishments is unlikely to be uniform – a much larger fall in the value of the licence may be realised if the distribution is highly positively skewed (i.e. copying occurs more frequently at lower levels). Indeed, extending the exception to all works may incentivise education establishments to shift copying below the 1% limit, further eroding the value of the CLA licence and increasing the unremunerated use of copyright works.

The value of the licence will likely not solely reflect the degree of copying. Figure 13 in Section 3 showed the number of licensing innovations the CLA have made over the last decade. Incorporating scanning and digital copying into the licences, adding international repertoire and developing support services have increased the value of the licence to educational institutions over this time period. This added-value would not necessarily disappear (although it may be reduced) if the ability to licence over the exception was removed.

**Figure 24: The impact of removing the ability to licence over the exception**



Source: CLA, PwC analysis

Below, we consider the impact on each of the major stakeholders:

**CMOs**

The CLA received income of £33.3 million from its education licences in the UK in FY 2010/11. Assuming the fall in the value of the educational licence is fully reflected in the price educational establishments pay for the licence and no growth in CLA educational licence income, the CLA’s income would fall by 20% or £6.6million per year.

Licence operators would also lose economies of scale that they have built up over the past decade by extending collective licensing to more sectors. The CLA has reduced its administration costs from 13% of fees collected in 2003 to just over 9% in 2010/11. The administrative burden may also rise due to the need to monitor copying

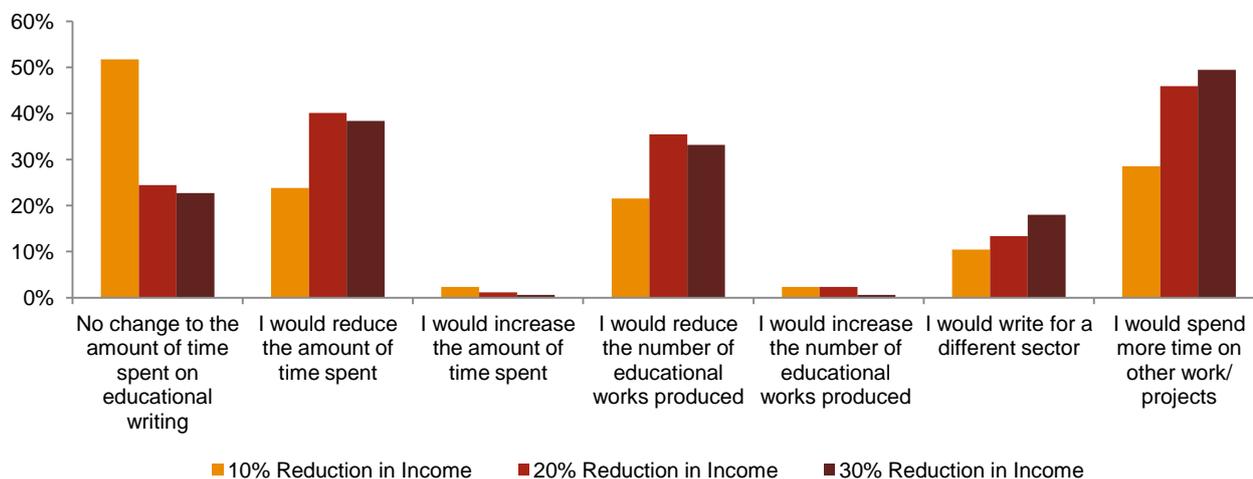
at both the 1% and the 5% level. For establishments that decide they no longer require a CLA licence, disputes may arise, resulting in significant litigation costs. Overall, a rise in the administrative burden borne by the CLA would see a lower share of rights income passed onto content creators.

**Authors and Publishers**

Figure 11 in Section 3 shows that 80% of educational licensing income found its way directly into the pockets of educational authors, publishers and artists. Assuming this proportion holds over time, educational content creators would lose £5.3 million (20% of their secondary licensing income) directly per year as a result of these proposals.

This does not, however, take account of the longer-term dynamic effects. This loss of income will have a negative impact on authors and publishers’ incentives to invest in creating educational content. A recent ALCS survey of authors focussed on the education market showed that a 20% fall in CLA income would trigger a significant behavioural shift (this survey is described in more detail in Appendix C). Importantly, 40% of authors would reduce the amount of time spent on educational writing and reduce the number of educational works they produce if this happened (see Figure 25). A 10% fall in CLA income would see a fifth of authors cut in the time they spent on education writing.

**Figure 25: Effect of a fall in CLA income on authors’ behaviour**



Source: ALCS, PwC analysis

This reduction in income also matters for publishers. In 2011, a sample of seven major educational publishers received £3.6 million in PLS revenue (19% of their annual investment in new materials<sup>77</sup>). For two of these publishers, PLS revenue made up nearly half of all annual investment. Interviews with some of the UK’s top educational publishers reveal the importance of this income for continued investment in the UK’s educational market (see Box 14). Some publishers interviewed indicated they would potentially cut jobs and shift investment abroad in order to maintain profitability.

**Box 14: Case study on importance of CLA income to educational publishers**

We spoke with a number of large UK educational publishers about the importance of CLA income to their organization. Although not wanting to share figures, the publishers indicated that the income received from CLA made significant impacts on their profit, and helped to fund new investments. For Hodder Education:

*‘Licence income received from CLA schools licences make a significant impact on the profitability of the*

<sup>77</sup> There are a number of ways to estimate publisher’s annual investment in new materials. One method appropriate for the publishing industry is fixed cost (plate cost) write off in the income statement. This includes all costs involved in bringing content to a stage that it is ready for publishing.

*schools division. This income is used directly to fund investment in new educational products’ (Elisabeth Tribe, Managing Director, Schools Division, Hodder Education).*

CLA income supports innovation, by enabling Hodder Education to invest in riskier, more innovative products, with a longer-term pay-off.

*‘Hodder Education is investing in digital applications for tablet PCs. This is not expected to make a return in the short term, but at present, supported by steady income streams such as the CLA schools licence, we are able to invest in products such as this.’*

For Sage Publications, income received from CLA licences is an important contributor to its costs of digital investment. Sage Publications is planning investments in new products, worth millions of pounds over the next few years. As Leo Walford notes:

*‘The current copyright framework supports this investment in digital products, as it enables rights to be protected and provides an income stream to invest in new products’.*

As Clare Hodder, Rights Director at Palgrave Macmillan notes, a reduction in CLA income equates to a loss of funds available for investment in new products:

*‘Any loss of CLA income will result in a corresponding loss of profit. That profit is currently invested not only in digital initiatives such as Palgrave Connect, Palgrave Pivot, SkillsforStudyCampus and CourseSmart, but also into value added services such as companion websites, test banks, case studies and MP3 downloads. Currently, these are provided at no additional charge.’*

Source: PwC interviews

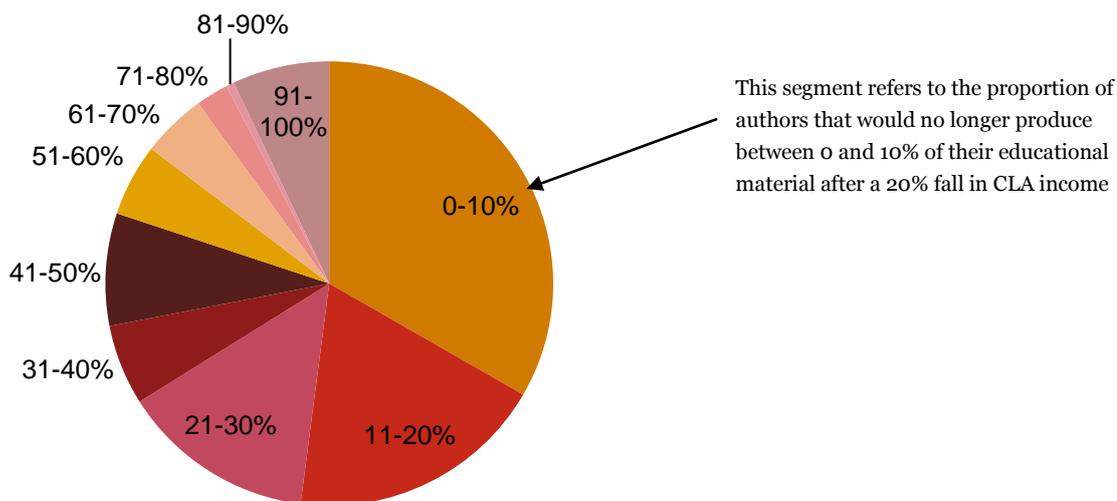
In Section 2, we highlighted some of the investments being made by the UK’s educational publishers, many in digital products. This evidence suggests that any reduction in income from secondary licensing would put at risk at least some of the significant investment currently made in educational content.

It is not just changes in expected income that influence authors and publishers’ incentives to create. Currently, the UK’s copyright regime helps to sustain an “ordered market” which offers protection against piracy and unauthorised copying. Our discussions with publishers and CMOs indicate that the removal of the ability to license over the exception may result in a number of educational establishments choosing not to apply for a secondary licence. In this case, the ordered market provided by copyright may be weakened as no monitoring body would oversee copying undertaken by those establishments. If this were to happen, it could increase the likelihood of textbook substitution as the threat of monitoring and punishment would be weakened. Under these circumstances, there would be a negative impact on the primary revenues of educational publishers.

### **Educational users**

If the value of the educational licence were to fall by 20% and this was fully reflected in the price of the licence, the cost savings to educational establishments would be £6.6million per year. We estimate that this saving would constitute 0.07% of the overall cost base of for a school, 0.16% for a further education college and 0.08% for a higher education institution. This relatively small short-term cost saving needs to be set against the potential for significant longer-term costs in terms of a reduced output of educational works. ALCS recently surveyed its authors who are most focussed on the educational market to gauge the impact on incentives from a potential change in CLA income. The context and scope of this survey is set out in Appendix C. ALCS asked those authors that would likely reduce their output of educational writing from a reduction in CLA income to quantify this reduction in terms of the proportion of their works that would no longer be produced. The responses are shown in Figure 26.

**Figure 26: Effect of a 20% fall in CLA income on educational outputs**



Source: ALCS survey, PwC analysis

A weighted average of these results reveals that there would be a 29% cut in the number of educational works from a 20% fall in income. This disproportionate fall in output partly reflect concerns authors have over the use of their material in education establishments if the ordered market is weakened. As we have discussed, removing the ability to license over the exception encourages educational establishments to choose not to apply for a secondary licence and, instead, to copy under the 1% limit for “free use”. In practice, this is likely to result in an increase in the number of occurrences of unauthorised copying and textbook substitution in these establishments as monitoring and the threat of punishment is removed. Authors and publishers are concerned by the impact this will have on the use of their material which could reduce long-term incentives to create new content.

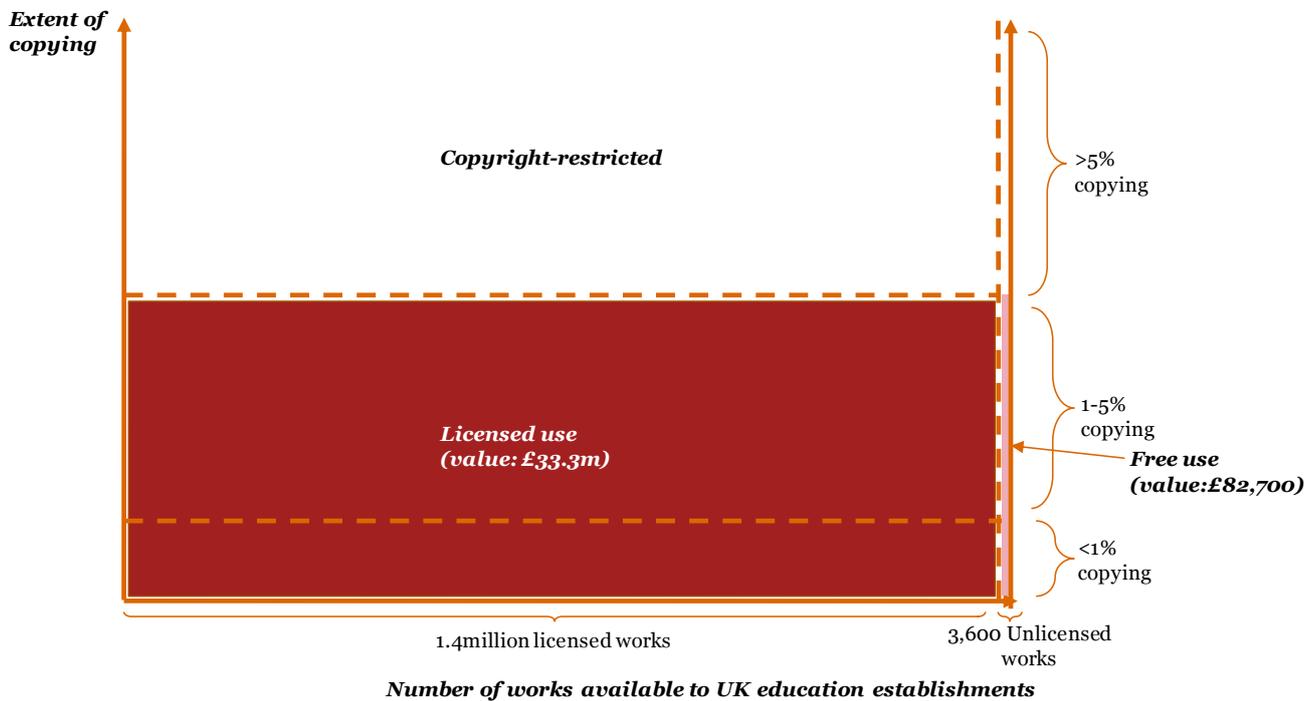
Any cost saving to the educational institution is equal to the loss of income to educational authors and publishers in the short-term (after adjusting for administrative costs). The dynamic impact of this is that the quantity and quality of new educational works produced may fall. In turn, this could impact educational outcomes within institutions and have wider costs for the rest of the UK economy. In this case, the government trades off educational quality in the longer-term in favour of short-term cost savings today.

Next, we analyse the scenario where the proportion of work that can be copied under the exception is increased.

### The impact of increasing the proportion of work that can be copied under the exception

We estimate that about 3,600 works are currently covered under the exception today and these support just £16,500 of copying up to 1% of a work per quarter. The Government proposes either to increase this limit directly or to replace it with a provision for “fair dealing” copies, similar to that currently granted to students for private study. A fair dealing framework does not include explicit limits to copying but instead judges each case on an individual basis. In practice, this will likely lead to increasing the proportion of work that can be copied under the exception. To quantify the potential impact on stakeholders from implementing this proposal in isolation we assume the educational exception is expanded to the maximum degree within the 5% limit of copying under the CLA licence. Under this scenario, the value of the copying supported for these unlicensed works rises to around £82,700, assuming the value of the licence rises in proportion to the degree of copying now permitted (see Figure 27).

**Figure 27: Impact of increasing the proportion of work that can be copied under the existing exception to 5%**



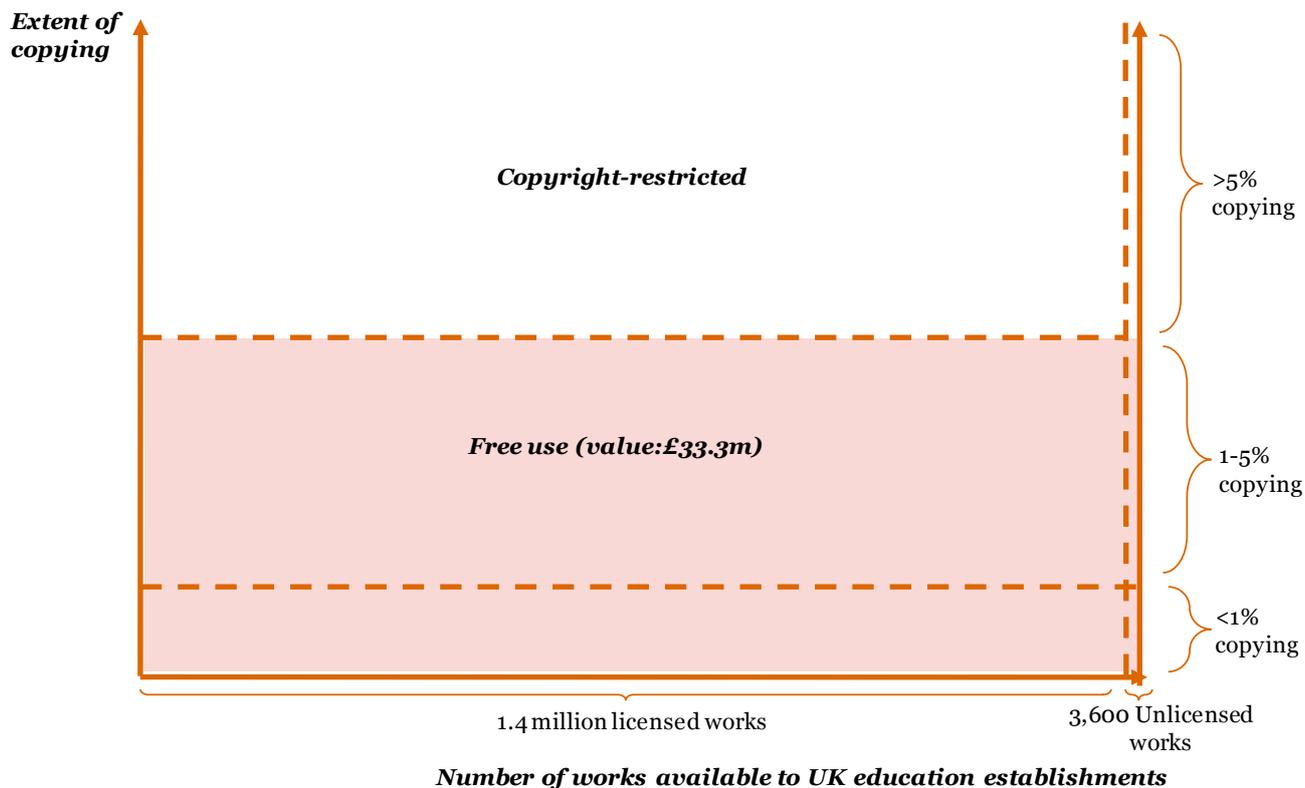
Source: PwC analysis

There would be no direct economic impact on the CMOs as a result of this proposal. The additional value of copying supported by the exception will reduce the need for educational establishments to purchase the underlying material for these purposes. The net effect would be a small transfer of primary revenues equalling £66,100 from the creator to the establishment. In reality, there would also be an increased potential for litigation where copyright owners and institutions differ on what constitutes fair dealing.

### The impact of simultaneously extending the proportion of copying permitted and removing the ability of CMOs to license over the exception

By implementing both proposals simultaneously, the revised education exception would allow copying up to 5% of all works within educational establishments (see Figure 28). In its Consultation on Copyright, the Government suggests that any number of the reforms proposed to the educational exception may be implemented. We specifically examine the effect of implementing these two proposals as it would have a particularly wide-ranging impact on industry stakeholders. Below, we consider this likely impact on stakeholders.

**Figure 28: Impact of increasing the proportion of work that can be copied under the exception and removing the ability of CMOs to licence over it**



Source: PwC analysis

### CMOs

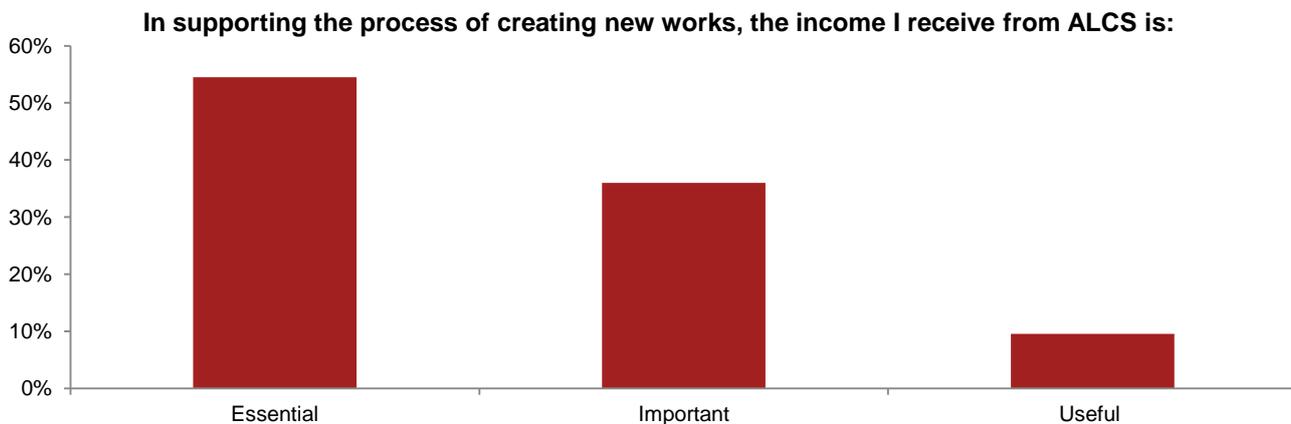
As the ability to licence over the revised exception has been removed, all of the CLA’s income from the educational licence would potentially be lost. This loss is £33.3million per year. By halving the CLA’s total income, this would have knock-on effects for its licensing agreements in other sectors. Given that 10% of the CLA’s cost base is fixed, the loss of revenue on this scale would result in a small loss of economies of scale (as measured by administration costs as a percentage of licence income). As a lower share of licensing income would be passed onto rights holders, this would erode the secondary income sources of other content creators in the creative value chain.

### Educational authors and publishers

Content creators would lose all of the secondary licensing income they currently receive from the education licence. This is equivalent to a loss of £29million per year. This would have important disincentive effects for both educational authors and publishers. In Section 2 we showed that 42,771 authors receive income from the CLA education licence. This includes authors who receive education licence fees as part of a portfolio of income sources and specialists that are specifically focused on the education market. 1,724 authors receive regular four-figure sums from the CLA’s education licence. A recent ALCS survey which targeted this latter group (see Appendix B for more details) showed that CLA incomes made up 18% of author’s total income over the last three years. For some authors, CLA income is more vital: a quarter of survey respondents stated that more than 25% of their income was derived from the CLA over this period. The majority of the authors surveyed are still actively creating educational materials: we estimate that over the last three years, they have spent 40% of their time writing for educational projects. A loss of income of this size may lead to many authors exiting the educational market all together.

Another recent ALCS survey was targeted at a similar group of authors (described in detail in Appendix C). This showed that over half of surveyed authors regarded secondary licensing income as a necessary reward to sustain their investment in creating new works (see Figure 29).

**Figure 29: Importance of income received from ALCS to authors**



Source: ALCS

If we infer from “essential” that investment in new works cannot be made without secondary licensing income, the number of new works produced could fall by half in this scenario. Whatever the specific inference, it is clear there would be a substantial adverse impact on the quantity of educational works produced by authors as a result of these proposals.

As we have noted previously, secondary licensing revenue accounted for 19% of educational publishers’ profitability in 2010<sup>78</sup>. Our interviews with leading educational publishers indicated that they would respond with a range of strategies including; cutting jobs, reducing investment or shifting investment abroad (see Box 15).

**Box 15: Impact of total loss of secondary income on publisher incentives**

For Hodder Education, licence fees received from CLA represent a significant portion of its profit. Any reduction in this income would almost certainly affect their UK operations, as Elisabeth Tribe, Managing Director of Schools Division noted.

*“If a significant proportion of the profit of the business disappeared, we would need to look across the board at making this up in some way, which would almost certainly have implications for jobs”.*

Hodder Education also anticipate that a loss of CLA income would comprise their ability to operate in certain markets. ‘Exports may also be affected, as we would need to make decisions about which markets we could afford to invest in.’

A further impact would be felt in terms of innovation.

*‘We couldn’t afford to invest in new, innovative educational products, such as the E-Textbooks (see Box 3). We have started investing in these digital applications, and while this is not expected to make a return in the short term, at present we are able to afford to invest in products such as this. A reduction, or removal of CLA income would greatly reduce our ability to invest in any of these riskier ventures, that don’t have any foreseeable return in the short term.’*

Concerns raised by Leo Walford, of Sage Publications, suggest that innovation in the UK educational publishing market, and its presence and reputation in export markets, would be most impacted by a reduction in CLA income.

*“There would be two related impacts, following a reduction in CLA income. Firstly, a removal of income*

<sup>78</sup> Profitability refers to earnings before interest, tax and amortisation (EBITA). Survey conducted by the Publishers Association using a sample of seven educational publishers of various sizes.

*makes it more imperative that publishers focus on books that are more certain to make money, which therefore reduces innovation. If Sage was forced to cut new books from its programme, following a loss of CLA income, the first books cut would be the more innovative or scholarly books that are riskier but are also more likely to have scholarly impact in the longer-term. There would also be an impact on exports. Some books written by UK authors would no longer be published, and would therefore not be sold into export markets. This would reduce the reach of UK-based authors in overseas markets. The position of other English-language based academic works in these markets, such as American-authored and published books, would be strengthened. In short the loss of CLA income would not only impact publishers but also the ability of UK-based academics to get published and thus to promote UK research and scholarship on the world stage.”*

Source: PwC interviews with Hodder Education and Sage Publications

There will be a tax effect from the publisher’s loss of profit. Given that secondary licensing income is essentially pure accounting profit due to the very low administration costs associated with its collection from the PLS, we estimate corporation tax take on this profit would fall by £4 million per year<sup>79</sup>. If publishers cut jobs, income tax take and national insurance contributions will also fall. In Section 2 we showed that the employees of educational publishers paid £91.3 million in income taxes and national insurance contributions<sup>80</sup> in 2010.

A particular worry for educational publishers is the loss of an effective hedge against piracy. If the CLA is no longer permitted to licence in the education sector, its role in monitoring users’ adherence to the licence terms will be lost. In these circumstances, we would expect the number of occurrences of textbook substitution would rise as users would have no disincentives to undertake unauthorised copying. This situation could damage primary licensing income and the sustainability of a number of current publisher’s operations in the UK (see Box 16).

#### **Box 16: Textbook substitution effects from losing the CLA’s copyright policing role**

Palgrave Macmillan currently receives income from both photocopying and scanning, with the latter increasing as the former diminishes. A condition of the introduction of the scanning license was that there should be full reporting of what was being scanned.

This reporting has enabled publishers and academic institutions to enter into constructive dialogues about how textbooks are being used within HEIs and the fine line between providing students with easy access to additional reading to support their learning, and providing material which may substitute for a sale of a core textbook.

As Clare Hodder, from Palgrave Macmillan, noted, this framework has helped to create an ordered market in which rights owners are protected, and users can be educated on legitimate secondary uses of works:

*‘Publishers have been able to report concerns of over copying, or cases which may be considered ‘textbook substitution’ to the CLA who have worked with the educational establishments involved by providing additional guidance and supporting education and training for license users within those institutions. Similarly Higher Education Institutions have been able to explain to publishers, how their content is being used to support learning in a modern university environment.’*

This reporting element is critical to supporting primary sales of textbooks:

*‘If the licence is taken away, the reporting element of scanning will disappear, and the useful collaborative dialogue that it enables will disappear with it. There will be no framework in place to assess what books are being scanned or how much content is being copied from each book. There is a risk that without these safeguards, there could be an increase in scanning which may substitute for core sales and ultimately*

<sup>79</sup> Corporation tax loss calculated by: total income to publishers from the education licence of £15.6 million multiplied by the UK corporation tax rate of 26%. Assumes total licensing income is equal to total profit and that entity is in a tax-paying position.

<sup>80</sup> Includes both employee and employer National Insurance Contributions.

*diminish the economic viability of publishing textbooks.’*

Source: PwC interview with Palgrave Macmillan

It is also worth looking at how the weakening of an ordered market for copyright may impact UK stakeholders through international channels.

In Section 3, we showed that educational content creators in the UK receive income from the use of their work abroad through the CLA’s bilateral agreements with foreign RROs. Figure 11 showed that the UK is a net exporter of these licensing flows, bringing in £5million (net of outflows) for UK rights holders. If reforms to the UK copyright regime weaken its role in providing an ordered market against unauthorised copying, it becomes harder for the CLA to:

- negotiate payments from foreign RROs for use of UK works; and
- encourage developing countries to adopt a copyright friendly regime that would lead to higher payments for UK works.

Under these circumstances, the potential value of these exports in the future is reduced. Whilst the amount of reduction is difficult to quantify, an established international publisher from India has suggested the knock-on effects in his country could be significant:

#### **Box 17: Potential loss of foreign RRO income from weakening the ordered market**

In February 2012, the UK and India signed a bilateral agreement for the exchange of secondary licensing income. The CLA hopes this will attract more income for UK rights holders, given the large size of the ELT sector in India. The Indian authorities hope such legislative ties will help strengthen the ordered market in India, which has historically suffered a large amount of unauthorised copying.

However, as Indian copyright law is based on British law, any expansion of the exception may also work to weaken the countries attempt to improve the implementation of copyright protection across the country. PM Sukumar, CEO of HarperCollins India noted;

*“Efforts in Britain to increase exemptions will undermine the Indian Government’s will to help fight piracy and illegal photocopying. If education exemptions spread [from the UK] to other countries (which is likely in India, and elsewhere), that could spell doom for education publishing itself”.*

Over the longer-term, these effects would potentially result in a fall in value of future licensing flows received from India.

Source: Interview with PM Sukumar, CEO of HarperCollins India.

#### **Educational establishments**

In the short-term, educational establishments will save the costs associated with collective licensing. This includes the £33.3 million in licensing fees paid per year and the administrative cost associated with complying with the licence terms. In our first report into copyright, we showed that higher education institutions spent £1.7 million in licence administration costs per year.

However, this cost saving is equal to the loss of income to educational authors and publishers (after adjusting for administrative costs). The dynamic impact of this is that the quantity and quality of new educational works produced may fall. This is particularly significant if publishers conclude the material they develop would not be protected by a sufficiently robust copyright and anti-piracy framework. In this case, there is a risk that publishers will stop developing products for the national market. If they did, that would particularly endanger the quality of education outcomes and have wider costs for the rest of the UK economy. In this case, the government trades off educational quality in the future in favour of short-term cost savings today.

## *Impact of changes to the scope of exceptions*

The Government is also considering changes to the application of the current exception whilst keeping the current licensing framework intact. In this part of the Section we consider the impact on each stakeholder group of three different scenarios. We assume the proposals are implemented in isolation:

- The scope of works covered by the educational exception is broadened;
- The definition of an “educational establishment” covered by the exception is broadened; and
- The educational exception is extended to cover distance learners over a secure network.

### *Impact of broadening the scope of the works covered by the exception*

Currently, the educational exception within existing legislation covers literary, dramatic and musical works using reprographic and “chalk and talk” copying technologies. The Government proposal would expand the exception to include artistic, sound recordings and audiovisual works using modern digital presentation technologies (i.e. through web-based or interactive white board-based platforms).

In this part of the Section, we predominantly consider the impact of expanding the type of copying allowed under the exception to digital forms, given our evidence base focuses on print and digital educational publishing materials.

The framework we have used thus far to analyse the impacts of the Government proposals explicitly considers only literary works copied using reprographic means. It is not appropriate to use this framework as a basis for measuring the impact of broadening the scope of works included. Instead, we consider a wider evidence base.

There are three main types of digital copying available to education establishments:

- Scanning printed works;
- Communicating digital versions of the printed work (i.e. e-mailing a scanned journal article or e-mailing an e-book)
- Communicating works through digital learning platforms (i.e. Virtual Learning Environment’s)

The CLA collects secondary licensing fees for some of copying outlined above. It captures scanning of printed licensed works and onward communication of these scanned copies through its traditional photocopying and scanning licence. It also captures communication of digital-only copies through either e-mail or a digital learning environment for materials that are opted-in to its digital repertoire through its Comprehensive Digital Licence.

We suggest that the impact of a digital exception will depend upon how broadly it is defined in relation to these different types of copying.

If the exception is limited to covering scanning of printed copies, then it would likely only apply to the small number of printed works which lie outside the current collective licensing system. As we illustrated earlier in the Section, we estimate only 3,600 literary works are affected by the educational exception – supporting just £16,500 worth of reprographic copying per year (see Figure 23). In Section 3, we showed that the number of payable scanning events in higher education institutions in 2011 was around four times the number of photocopying events. Correspondingly, the value of copying supported by the revised exception rises may be four times higher. Assuming this relation holds across educational institutions<sup>81</sup>, the value of copying supported by the revised exception may rise to £66,100.

If the exception was applied more broadly, to encompass the onward communication of digital-originated works, there may be more significant impacts. This revised exception could potentially impact all digital works not opted-in to the CLA’s digital repertoire. It is unclear whether such an extension of the exception could even

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<sup>81</sup> In reality, this assumption fails. The majority of payable copying events within schools are associated with photocopying. Very little scanning is undertaken within schools. We include the assumption here for prudence and the fact that school copying data is less reliable than for higher education institutions. The latter are mandated to record all scanning events in a census, collected by the CLA yearly.

be incorporated into the current legislative framework. Seeking advice from Counsel, the CLA concludes that such an exception would both be in contravention of the Berne 3-Step Test within EU law and would, in many cases, result in contract override<sup>82</sup>.

If the Government could overcome these legal issues and define a broad exception, then the development of platforms where digital communication of copies is frequently undertaken, such as Virtual Learning, could be severely undermined as a portion of free-access would be institutionalised in law for those digital-works not opted into the CLA's repertoire. Most digital publishers are still finding the right balance between how primary and secondary licensing work together to provide income and protection for their digital learning environment. Espresso, for example, has built flexible use arrangements into its primary licenses to allow teachers to copy works between platforms. Copyright is not used as income but as a necessary means of protection from piracy. This combination has helped many publishers to flourish. A revised exception, broadly defined, potentially allows a proportion of material to be available under "free-use", to a lesser or greater extent, may cause uncertainty in the digital publishing market where confidence copyright protection is crucial for new digital investments to be made:

### **Box 18: The importance of copyright to digital educational publishing**

In many instances, digital provision of educational material carries increased risks of knowing, or unknowing breaches of copyright occurring. Continued breaches of copyright will affect the income of digital educational publishers, and their incentives to create further works.

As Andrew Thraves of Group Publishing and Strategy Director of GL Assessment notes:

*"Improvements in the ease by which 'home produced' digital resources can be created are a further threat to the developers of high-quality digital educational resources. Such resources made available for 'free' (in place of purchased resources), but unknowingly containing non-copyright free material sourced from the internet or commercial e-learning resources, will have longer-term impacts on the incentives of educational software developers to invest in new resources"*

Combined with improvements in the quality of digital resources available on the internet, specific innovations designed to enhance the educational experience also carry risks for increased copyright breaches.

*"Digital innovations such as iBook author, which allows teachers more seamlessly to compile content assets from a number of different sources, and create good-looking resources by populating pre-existing templates, makes it easier for teachers to unknowingly breach copyright restrictions by using copyright protected materials without an appropriate licence"*

According to Ysanne Heald, of Teem Education, despite the strong international reputation of the UK digital publishing industry, many developers, and the industry as a whole are in quite a precarious position.

*"The educational software publishing industry in the UK has been quite successful over the last decade, leading the way internationally on a number of fronts. However the educational publishing industry is in quite a fragile state at the moment. Previous support from government for digital innovation has stopped, and schools are under increasing financial pressure. Any proposed changes to copyright exceptions by Government that will change the stream of revenue to educational publishers will need to be carefully thought through."*

Any lost income for educational resource developers will affect investment and will ultimately affect the educational experience. As Andrew Thraves (GL Assessments) notes:

*"There is a direct correlation between CLA income received from publishers and content creators and investment in new educational products. The role of educational resource developers is to make high quality resources to support teachers in their successful delivery of the curriculum. The government is about to embark on the creation of a new national curriculum for England. If income received by resource developers*

<sup>82</sup> CLA Response to HMG's Consultation on Copyright (2012).

*is affected this will undermine their ability to support teachers in helping deliver this new curriculum in the classroom”.*

Source: PwC interviews

### Impact of broadening the definition of the “educational establishment” covered by the exception

The current education exception is framed with reference to specific establishments which have as their main purpose the provision of education. In practice, this definition results in the education exception being applied mainly to schools, further education colleges and higher education institutions. The Consultation on Copyright document suggests there is room to expand the definition to cover organisations that offer a range of educational activities to students alongside their core activities. The Consultation suggests there is room to expand the definition to include public institutions such as libraries and museums.

There is likely to be some significant crossover between the type of works used in schools, further education colleges and higher education institutions and the type of works used in the establishments outlined above. However, the potential population of works may be much higher if libraries are included in the definition as this will include a significant proportion of fiction works.

For our impact analysis, we assume the Government expands the exception “to the greatest possible degree” as it has proposed to in its Consultation and the total relevant population of works is equivalent to the number of works captured by the CLA database (7.5million). We showed earlier in the Section that just 0.25% of the total population of educational works are “unlicensed”. Applying this proportion to the new total population of works, we estimate the number of unlicensed works is likely to be just 17,500 or 0.25% of this total. This is equivalent to £80,700 worth of copying<sup>83</sup> - an increase of £64,200 from the status-quo. This is effectively a direct transfer from the educational author or publisher to the educational user. The CMO’s licensing income is left unchanged.

The only major impact that can be foreseen from this policy is by implementing it alongside major changes to the licensing framework outlined earlier in the Section. If the ability to license over the exception was removed and the definition of the educational establishment expanded, this would lead to cost savings to more establishments, but diminished income and incentives for a wider range of authors and publishers.

### Impact of expanding the exception to enable distance learners to access educational materials over a secured network

The Consultation on Copyright document highlights that educational establishments are currently unable to communicate copies made under the education exception to distance learners. The Government argues that by widening the exception to cover distance learning, this will widen access to education.

The materials used for distance learning are almost exclusively in digital format. Earlier in this sub-Section, we described three types of digital copying: scanning, communication of digital versions, communication within digital-learning environments. Distance learning is commonly facilitated by a combination of these types of copying. We suggest the impact of this proposal depends on how broadly this exception is defined in relation to these types of copying.

If the exception is limited to the communication of scanned copies of printed works, it would have little impact. If the underlying printed copies are covered by the CLA’s traditional photocopying and scanning CLA, onward communication is permitted under the terms of this licence. If the underlying printed copies are one of the 3,600 works which are unlicensed, then the revised exception would allow onward communication for distance learning purposes where direct permissions previously had to be sought. The associated increase in access and cost savings is minor. This benefit for distance learners is set against the benefits already realised from the CLA incorporating distance learning into its educational licences in 2001. This innovation gave users the flexibility needed to copy educational material in the appropriate format for distance learners and the visually impaired:

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<sup>83</sup> Assuming the same “effective value of the licence per work” calculated earlier in the Section.

### Box 19: Benefits of CLA incorporating distance learning into educational licences

In 2001, the CLA introduced an Accessible Copies permission into its higher education licence. This permitted a greater degree of copying of works for the purposes of education for the visually-impaired and distance learners. Subsequently, the Accessible Copies permission for distance learning was incorporated into all of the CLA's educational licences. These innovations have helped to widen access to education for distance learners and supported institutions in promoting flexible learning arrangements. Dr Andrew Eynon, Library & Learning Technology Manager at Coleg Llandrillo, a further education college in Wales, noted;

“A growing number of our learners expect and prefer library resources to be made available in electronic format, and having the freedom to do this through our VLE is of great value. For example, many of our students live some considerable distance from the college, so making resources available remotely saves them precious time because they do not have to come into the library on a regular basis to access those resources physically.”

In 2006, the Accessible Copies permission was expanded to include such conditions such as dyslexia.

Source: PwC interview

The main risk for content creators comes if the distance learning exception is applied more broadly, for example, by allowing the communication of digital-originated products purchased under (a primary) licence.

As we discussed earlier in this sub-Section, concerns over contract override and legality within EU law brings about severe questions of implementation. However, if this proposal was implemented, a proportion of free-use would effectively be permitted within digital platforms which do not sign up to the CLA's digital repertoire. Such platforms are extensively used for distance learning purposes within educational establishments today. Whilst opening up access to these materials may provide further cost savings for establishment, it may significantly undermine the incentives for content creators to continue to invest in such digital environments.

## ***Is there a rationale for subsidising inputs to education (rather than other inputs)?***

Part of the Government's rationale for considering changes to the education exception is that it would “permit wider copying of more types of copyright materials, enable use of these materials with digital technology, help students to access education more easily, remove financial burdens and support skills growth in the UK”<sup>84</sup>. Whilst the Consultation on Copyright recognises the danger that “going too far will undermine the financial incentives that encourage the creation of new educational works”, both it and the associated Impact Assessment emphasise the significant financial benefits to educational establishments that would arise from the proposed changes. In the final part of this Section we briefly consider whether there are good economic arguments for deriving the reduction in costs for educational establishments simply by extending the scope of the education exception or if there are other alternatives that would result in greater benefits for students and teachers.

The question can be examined from two perspectives:

- Is there any justification for treating education materials any differently from other inputs into the education process (e.g. computer software)?
- Is there any justification for favouring one type of user of copyright materials (i.e. educational establishments) over other licensees?

In neither case, do we believe that there is a good economic justification for expanding the education exceptions:

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<sup>84</sup> Consultation on Copyright, IPO, 2011.

- Although the provision of education at all levels leads to wider economic and social benefits through the enhancement of skills, this in itself would not usually be seen as a justification for a policy response which effectively leads to the subsidisation of inputs to the education sector. It is hard to argue that the effect of subsidising educational works will be more favourable than one which delivers an equivalent subsidy on other inputs (e.g. computer software, stationery).
- As we have noted in Section 3, the existing education exceptions – like other copyright exceptions – already have the potential to cause economic distortions through their effects on incentives. Specifically, content creators will be encouraged to develop materials for applications where they can enjoy the greatest protection of their rights from copyright. The potential extension of the scope of the education exceptions has the potential to add to these distortions because, at the margin, some educational establishments are effectively in close competition with other organisations (e.g. training providers) which do not benefit in the same way that they do.

# ***Appendix A: Responses to specific questions***

**Q85. How should the Government extend the education exceptions to cover more types of work? Can you provide evidence of the costs and benefits of doing this?**

**Proposal**

- Expand the exception from covering literary, dramatic and musical works to include artistic, sound recordings and audiovisual works.
- Expand the type of copying permitted under the exception from reprographic and “chalk and talk” copying methods to digital presentation technologies (e.g. through web-based or interactive white board-based platforms).

**Rationale**

- To “increase the number and type of materials used in teaching ... and provide more opportunities to use them with digital technology ... enabling teachers to provide a more varied learning environment”<sup>85</sup>.

**Key impacts**

- The impact of a digital exception will depend upon how broadly it is defined in relation to different types of copying.
- The gain in access would be very small. If the exception is limited to covering scanning of printed copies, it may only apply to 3,600 unlicensed works. This gain in access would be very small. Using the framework set out by the IPO in its Impact Assessment<sup>86</sup>, we estimate the current value of photocopying supported by the exception is £16,500 (p.59). Narrowly defined, the revised exception would increase this value by less than £50,000.
- The proposal could create severe distortions for digital business models. If the exception was applied more broadly, for example, to encompass the onward communication of digital-originated works, this revised exception could potentially impact all digital works not opted-in to the CLA’s digital repertoire, whilst establishments would save costs in the short-term (p.70). If primary revenues from such products were under threat, several digital publishers have stated that the level of their investment would fall (see Box 15 on page 67). Questions of legality make it uncertain whether such a broad exception could be incorporated into UK law (p.71).
- New business models could be weakened. When Australia extended its copyright exception for electronic copying within libraries in 2001, the evidence suggests that the change stifled the Australian digital publishing industry as incentives to invest were weakened (Box 9, p.45).

The table below summarises the costs and benefits of a narrowly-defined exception which applies to the scanning of printed copies.

	Costs (narrowly defined exception)	Benefits (narrowly defined exception)
<b>Rights holders</b>	Lose less than £50,000 in primary income per year from revised exception	
<b>Licence operators</b>	No effect	No effect
<b>Education establishments</b>		Save less than £50,000 in cost of primary licences per year
<b>Students/teachers</b>	In the long-term, access and variety may fall only marginally due to lower investment by the content creators affected	In the short-term, access and variety is improved to the 3,600 unlicensed works

<sup>85</sup> Consultation on Copyright, IPO, 2011.

<sup>86</sup> “Extending Copyright Exceptions for Educational Use: Impact Assessment”, IPO, 2011.

## An economic analysis of education exceptions in copyright

The table below summarises the costs and benefits of a broadly-defined exception which applies to the communication of digital-originated works.

	Costs (broadly defined exception)	Benefits (broadly defined exception)
<b>Rights holders</b>	Primary revenues are severely threatened for material not opted-in to the CLA Digital Repertoire Significant risk of litigation costs as legality of the exception is challenged	
<b>Licence operators</b>	By weakening the ordered market, reduces CLA's ability to realise digital repertoire licensing inflows from abroad	May result in more digital-originated works opting into the CLA Digital Repertoire
<b>Education establishments</b>	Significant risk of litigation between rights holders and users	Potential for short-term cost-savings from digital-originated material is higher
<b>Students/teachers</b>	In the long-term, access and variety may fall due to lower investment by digital publishers	Access and variety may be improved to digital-originated works in the short-term
<b>Wider effects</b>	Long-term quality of UK skills base threatened if investment cut and educational quality falls	

### Conclusion

Narrowly defined, the revised exception would result in only minor short-term cost savings for educational establishments. Similarly, improved access for students would be marginal due to the small number of works for which this applies. Broadly defined, distortions may be created for digital business models, which could have longer-term dynamic effects on the quality of educational material.

**Q86. Would provision of ‘fair dealing’ exceptions for reprographic copying by education establishments provide the greater flexibility that is intended? Can you provide evidence of the costs and benefits of such an exception?**

**Proposal**

- Remove the 1% per quarter copying limit in the exception and replace with a “fair dealing” provision.

**Rationale**

- To “increase the proportion of a copyright work that can be copied... in order for it to be useful in education...in particular, when works are small”.

**Key impacts**

- In practice, fair dealing is likely to result in an increase in the proportion of a work that can be copied (p.64).
- Using the framework set out by the IPO in its Impact Assessment<sup>87</sup>, we estimate that the value of the copying supported by the exception will rise from £16,500 to £82,700<sup>88</sup> (p.64).
- The additional value of copying supported by the exception will reduce the need for educational establishments to purchase the underlying material for these purposes. The net effect would be a small transfer of primary revenues equalling £66,100 from the educational creator to the education establishment (p.64). This reflects the ability to copy a greater extent of the estimated 3,600 unlicensed works in the education sector.
- Whilst the economic impact of implementing this proposal in isolation is small, the consequences of implementing it simultaneously with removing the CMOs’ ability to licence over the exception would effectively remove collective licensing from education. In the short-term, the cost savings to educational establishments would be equivalent to less than 0.05% of their cost base (p.52). Over the long-term, there could be lasting damage to educational provision, eroding the UK skills base (p.68).

	Costs	Benefits
<b>Rights holders</b>	The rights holders of the 3,600 licensed works may lose up to £66,100 in primary income per year Over the long-term, this may reduce their incentives to invest in future content creation	
<b>Licence operators</b>	No effect	No effect
<b>Education establishments</b>	“Fair dealing” provision increases potential for litigation over what this constitutes	Save up to £66,100 in primary licensing expenditure per year
<b>Students/teachers</b>	Over the long-term, access may decline marginally if the rights holders of the 3,600 unlicensed works cut investment in new content	In the short-term, access to the 3,600 unlicensed works is improved marginally
<b>Wider impacts</b>	Education outcomes may suffer from any fall in content We suggest any reduction in content and the impact on education outcomes would be minimal	

*Note: This table assumes this proposal is implemented in isolation. If this proposal is implemented alongside removing the CMO’s ability to licence over the exception, the short-term costs and benefits are amplified. Importantly, there would also be a significant adverse impact on authors and publishers’ incentives which would have longer-term effects for the quality of education and wider adverse impacts for the UK economy. Please see our analysis on pages 58-61 for further explanation.*

<sup>87</sup> “Extending Copyright Exceptions for Educational Use: Impact Assessment”, IPO, 2011.

<sup>88</sup> This assumes the revised exception permits a maximum degree of copying of 5% of a work (i.e. aligned with the current usage terms of a CLA photocopying licence),

## **Conclusion**

The fair dealing exception provides only a minor increase in flexibility to education establishments when implemented in isolation. If implemented alongside restricting the CMOs' ability to licence over the exception, the short-term and dynamic impacts are significant. Greater cost savings to educational establishments need to be set against higher disincentive effects for creators and, hence, lower educational provision over the longer-term.

**Q87. What is the best way to allow the transmission of copyright works used in teaching to distance learners? What types of work should be covered under such an exception? Should on-demand as well as traditional broadcasts be covered? What would be the costs and benefits of such an exception?**

**Proposal**

- Widen the exception to cover transmission of works for students studying within a secure distance learning environment.
- Enable transmission of broadcasts and on-demand services for distance learning purposes.

**Rationale**

- To widen access to education for distance learners and, by limiting this application to a secure network, *“limit any potential harm to rights holders”*.

**Key impacts**

- The impact of the revised exception depends on how it is defined in relation to different types of copying.
- If the exception is limited to the communication of scanned copies of printed works, it would have little impact. Wider access relates to the 0.25% of works available to educational establishments are “unlicensed” (p.73).
- This benefit is set against the greater flexibility already given to distance learners by a CLA licence, which applies to 99.97% of works available to educational establishments (p.73). CLA started building permissions for distance learning into its educational licences in 2001 (p.38). A number of users from schools have commented on the benefits that this permission gives when teaching (Box 19, p.73).
- If the communication of digital-originated products purchased under (a primary) licence is covered by the exception, this proposal may create distortions for digital business models (p.70). It is uncertain whether the exception could be implemented in UK law (p.70). If it does apply, there would be legal and economic concerns. The revised exception has the potential to override primary contracts between the user and the rights holder. If these primary revenues were under threat, digital publishers that create digital-based learning platforms would be less likely to invest (p.71).

The costs and benefits summarised below refer to an exception that is limited to the communication of scanned copies of printed works.

	Costs	Benefits
<b>Rights holders</b>	Loss of primary revenue is limited to the creators of the 3,600 unlicensed works	
<b>Licence operators</b>	No effect	No effect
<b>Education establishments</b>		Due to the low number of works this policy relates to, cost savings are minimal
<b>Students/teachers</b>	Access and variety may only slightly fall due to lower investment by digital publishers over the longer-term	Access for distance learners may be improved marginally to the body of 3,600 unlicensed works in the short-term
<b>Wider impacts</b>		

The costs and benefits summarised below refer to an exception that is broadly defined to include the communication of digital-originated works.

	Costs	Benefits
<b>Rights holders</b>	Primary revenues of creators of VLEs, and other Digital-based learning environments, that are not opted-in to the CLA Digital Repertoire are severely threatened	

## An economic analysis of education exceptions in copyright

	Significant risk of litigation costs as legality of the exception is challenged	
<b>Licence operators</b>	By weakening the ordered market, reduces CLA's ability to realise digital repertoire licensing inflows from abroad	May result in more digital-originated works opting into the CLA Digital Repertoire
<b>Education establishments</b>	Significant risk of litigation between rights holders and users	Potential for short-term cost-savings from digital-originated material is higher
<b>Students/teachers</b>	In the long-term, access and variety may fall due to lower investment by digital publishers	Access and variety may be improved to digital-originated works in the short-term
<b>Wider impacts</b>	Long-term quality of UK skills base threatened if investment in digital works is cut and educational quality falls	

## Conclusion

The impact of this proposal depends on how widely the exception is extended within revised legislation. If it is applied to the current body of works outside a collective licensing regime, the benefits to users and costs to rights holders are small. If it was applied more widely, it could create significant distortions for digital business models. The CLA has promoted distance learning by widening access for such groups within its educational licence.

**Q88. Should these exceptions be amended so that more types of educational body can benefit from them? How should an “educational establishment” be defined? Can you provide evidence of the costs and benefits of doing this?**

**Proposal**

- To expand the definition of an “educational establishment” to include organisations that “offer a range of educational activities to students alongside their core activities”, such as public museums and libraries<sup>89</sup>.

**Rationale**

- The revised exception would allow “more teachers, students and educational bodies to benefit”. In doing so, this would also “reflect the diversity of modern education provision”<sup>90</sup>.

**Key impacts**

- This proposal would allow more works to be copied under the revised exception (p.72). Under an optimistic scenario, we estimate that the number of unlicensed works could increase from 3,600 to 17,500, with this revised figure making up 1.25% of works available to education establishments today (p.72).
- Using the IPO in its Impact Assessment<sup>91</sup>, we estimate the value of the copying supported by the exception rises from £16,500 to £80,700 (p.72).
- The net effect would be a small transfer of primary revenues equalling £64,200 from the educational creator to the establishment (p.72).
- Whilst the economic impact of implementing this proposal in isolation is small, the consequences of implementing it simultaneously with removing the CMOs’ ability to licence over the exception are an order of magnitude larger (p.72). In this scenario, this would lead to cost savings to more establishments, but diminished income and incentives for a wider range of authors and publishers.

	Costs	Benefits
<b>Rights holders</b>	Lose £64,200 in primary income per year	
<b>Licence operators</b>	No effect	No effect
<b>Education establishments</b>		Public museums and galleries may save £64,200 in primary licences per year
<b>Students/teachers</b>	Over the longer-term, access and variety may only fall marginally due to lower investment by the creators affected	In the short-term, access and variety is improved marginally
<b>Wider impacts</b>		

*Note: This table assumes this proposal is implemented in isolation. If this proposal is implemented alongside removing the CMO’s ability to licence over the exception, the short-term costs and benefits are amplified for a wider range of rights holders and establishments. Importantly, there would also be a significant adverse impact on authors and publishers’ incentives which would have longer-term effects for the quality of education and wider adverse impacts for the UK economy. Please see our analysis on page 64 for further explanation.*

**Conclusion**

Implemented in isolation, this proposal would create only a small cost saving for educational bodies and widen access for students only slightly. Implemented alongside the removal of the CMOs’ ability to licence over the exception would lead to cost savings to more types of organisations, but diminished income and incentives for a wider range of authors and publishers.

<sup>89</sup> Consultation on Copyright, IPO, 2011.

<sup>90</sup> Consultation on Copyright, IPO, 2011.

<sup>91</sup> “Extending Copyright Exceptions for Educational Use: Impact Assessment”, IPO, 2011.

**Q89 – Is there a case for removing or restricting the licensing schemes that currently apply to the educational exceptions for recording broadcasts and reprographic copying? Can you provide evidence of the costs and benefits of doing this, in particular financial implications and impacts on educational provision and incentives to creators?**

**Proposal**

- The Government is considering enforcing the education exception even when a collective licensing scheme is in place for the works thereby removing its ability to licence over them.

**Rationale**

- “The benefits to educational establishments...will be much more significant...if these became true exceptions that could not be licensed over”.<sup>92</sup>

**Key impacts**

- If this proposal is implemented in isolation, the value of the educational licence could fall by 20%<sup>93</sup> (p.61). Using the static framework set out by the IPO in its Impact Assessment<sup>94</sup>, we estimate that the loss in licence income for the CLA would be £6.6million per year (p.61). Education establishments would make £6.6million in cost savings (p.62). This saving constitutes 0.007% of the overall cost base of for a school, 0.016% for a further education college and 0.008% for a higher education institution. Authors and publishers’ secondary licensing income would fall by £5.3 million per year (p.62).
- Over the longer-term, this income loss would adversely impact authors and publishers’ incentives to invest in creating educational content. From a sample of 170 authors focussed on the educational market<sup>95</sup>, 40% said they would reduce the amount of time spent on educational writing if they experienced a 20% in CLA income (Figure 25 on pg 62). Secondary licensing fees make up 19% of typical education publisher’s annual investment in new materials (p.62). Several publishers we interviewed indicated investment would be cut in a response to a fall in CLA income (p.63). Over the longer-term, the quantity and quality of new educational works produced may fall (p.64). In turn, this could impact educational outcomes within institutions and have wider costs for the rest of the UK economy.
- A number of educational establishments may choose not to apply for a secondary licence. In this case, the likelihood of textbook substitution would rise as the threat of copyright enforcement weakened. The potential loss of primary revenues for educational publishers and authors would further erode their incentives to create (p.63).
- If this proposal was implemented simultaneously with extending the proportion of copying permitted under the exception, all of the CLA’s income from the educational licence would be lost (£33.3million). Authors and publishers would lose £29million per year as a result (p.66). Leading educational publishers indicate that the weakening of protection for their works would make them reconsider the economic viability of their businesses in the UK (Box 15 on p.67 and Box 16 on pg.68). Corporation tax take on publisher’s profits would fall by £4 million per year (p.68).
- A number of other potential inputs to education could be subsidised to reduce costs for educational institutions (p.73). Most would not impact the quality of education provision in the future.

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<sup>92</sup> Consultation on Copyright, IPO, 2011.

<sup>93</sup> This conclusion depends on a number of assumptions. See page 54 for more detail.

<sup>94</sup> “Extending Copyright Exceptions for Educational Use: Impact Assessment”, IPO, 2011.

<sup>95</sup> This sample of 175 authors was drawn from 1,724 authors who are focussed on the educational market (those that receive more than £1,000 in secondary licence income from the educational licence per year). This survey is described in more detail in Appendix C.

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	Costs	Benefits
<b>Rights holders</b>	<p>Creators would lose £5.3 million (20% of their secondary licensing income) per year</p> <p>As a result, many would reduce their output of educational works</p>	
<b>License operators</b>	<p>CLA's educational licensing income would fall by 20% (£6.6million) per year</p> <p>Rise in administrative burden and loss of economies of scale</p> <p>By weakening the ordered market, reduces CLA's ability to realise secondary licensing revenues from foreign RROs</p>	
<b>Education establishments</b>		<p>Short-term cost savings equal to 20% of secondary licensing (£6.6million) per year</p>
<b>Students/teachers</b>	<p>Over the longer-term, educational provision may fall significantly due to lower investment by digital publishers</p>	<p>Increased access as reprographic copying up to 1% per quarter can be made for all works</p>
<b>Wider effects</b>	<p>Wider adverse impacts for the UK economy if educational quality falls</p> <p>The long-term quality of UK skills base is threatened</p> <p>Lower tax take for government through reduced corporation tax revenues from publishers and reduced income tax and national insurance revenues from employees</p>	

*Note: This table assumes that this proposal is implemented in isolation. If it is implemented alongside increasing the proportion of a work that can be copied under the exception, the short-term costs and benefits are amplified. Importantly, there would also be a significant adverse impact on authors and publishers' incentives which would have longer-term effects for the quality of education and wider adverse impacts for the UK economy. Please see our analysis on page 59-61 for further explanation.*

### Conclusion

The case for removing or restricting the collective licensing scheme is based on short-term cost savings for institutions. We have examined a range of evidence showing the adverse impact on rights holders' incentives to continue to create educational content. Over the long-term, the quality of educational provision could be weakened by these proposals. If implemented alongside increasing the proportion of a work that can be copied under the exception, this could push educational publishers to withdraw from the UK market, losing the significant contribution they currently make to the economy.

## Appendix B: Estimating the total number of works used in education

This appendix explains how we estimated the total number of works available to UK education establishments.

This is defined implicitly in the Impact Assessment. The relevant population of works should cover the definition of works covered by the educational exception. Section 36 of the UK Copyright Act refers to “reprographic copies of passages from published literary, dramatic and musical works...made by or on behalf of an educational establishment for the purpose of instruction”. This definition encompasses three parts:

1. *The nature of the work.* The exception covers literary, dramatic or musical material and it must be published.
2. *The nature of the copying.* The exception only covers reprographic copies. Reprography refers to the reproduction of graphics through mechanical or electrical means and its most common form in education establishments is photocopying. Therefore, exclusively digital material which cannot be copied reprographically (e-books, online platforms etc) should be excluded.
3. *The purpose of the copying.* The exception only covers copying where the purpose is educational instruction. Therefore, other non-educational material copied in educational establishments should also be excluded.

The population of works that is consistent with these three criteria can be built from top-down and bottom-up approaches.

The top-down approach refers to estimating the total population of works and then applying the criterion to filter out works that are not consistent with our definition. The best estimate of the total literary works available for reprographic copying is the Nielsen Book Data service which collects book information from over 70 countries and covers 16.2million printed titles. Whilst dramatic and musical works are typically consumed in audio or visual formats, printed versions of these (books incorporating play transcripts, hymns and sheet music) will be covered by this database. Next, we estimate the proportion of this total population that is available to UK Schools to copy for educational purposes. To do this we need to filter down to:

- *The estimated proportion of works which are educational in nature.* In Section 2, an analysis of the UK publishing industry estimated that 28% of output is educational material. Assuming this applies across other countries and applying this to Nielsen Book Data, we estimate a population of 4.6 million educational works.
- *The estimated proportion of works which are available to UK educational establishments.* A number of reasons may prevent educational works becoming available in the UK. These include; licensing restrictions, a lack of market transparency (UK educational institutions unaware of titles) and works only being available in a foreign language. It is more difficult to estimate the proportion of books these restrictions apply to. However, we may expect the fact a book is not written in English language as being the greatest barrier for its use in education.

The 2010 Diversity Report, a report on literary works by the Wischenbart consulting group<sup>96</sup>, showed that 35% of 451 best-performing authors originally wrote their works in English. Clearly, the best-performing books will be translated to English for mass consumption, yet we regard this number as a very small proportion of the overall 16.2 million population of works. Therefore, of the estimated 4.6 million educational works, we approximate that 1.6 million are English language.

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<sup>96</sup> Note this was a survey of fiction authors, but the results should be largely transferrable to the education market. Available at: [http://www.wischenbart.com/diversity/report/Diversity-Report\\_2010.pdf](http://www.wischenbart.com/diversity/report/Diversity-Report_2010.pdf)

We suggest the estimate of 1.6 million is the upper range of the number of potential educational works available in UK education establishment. Considering the other barriers to availability, we suggest an appropriate range is between 0.8 million and 1.6 million works available to UK educational institutions using this approach. Of course, this estimate does not reflect non-English language books used to an extent in foreign-language courses but we also suggest this is a very low number in relation to the total population of works given that foreign languages make up only a small part of both the compulsory UK school syllabus and higher education courses.

The bottom-up approach is based on the number of relevant educational works captured by the current collective licensing system. The CLA database covers 3.5 million UK and 4 million non-UK titles which captures both:

- Titles which the CLA have identified as being copied in their annual surveys.
- Titles which the CLA would have to make a distribution if identified as being copied in an annual survey.

Applying our estimate that 28% UK publishing industry output is of educational material, we estimate that 985,000 UK works are available to UK educational institutions.

Of the 4 million non-UK works identified in the CLA database, we estimate that 28% represents educational material (£1.1million). A proportion of these works were collected through the CLA's annual surveys, with the remainder collected from exchanges in repertoire information with foreign CMOs. We assume that works originating from foreign CMOs are less likely to be used in the UK education sector than those captured from CLA surveys (due to differences in language, licensing and access). Due to these considerations, of these 1.1million titles, we assume half will not be available to UK education establishments. In total, we estimate the number of works available to UK education establishments using the bottom-up approach is 1.5million with the a lower bound estimate of 1.3 million and an upper bound estimate of 1.8million.

This broad range overlaps the range of 0.8 million and 1.6 million using our top-down approach. Overall we estimate that there are 1.4 million works available to UK education establishments with a lower bound of 1.0 million and an upper bound of 1.7 million.

However, there are certain caveats to estimating the number of works under the impact assessment framework. Firstly, the total number of works covered by collective licensing may not be a precise figure. A work is covered by the educational licence unless it has been specifically excluded or there is no collective licensing system in place. This has the potential to be a very large population, equal to the total number of works produced minus the excluded works and works for which no licensing system is in place. However, for our purpose of estimating the number of potential works available to an education institution, we assume that demand and supply conditions result in the vast majority of this total population being excluded. On the demand side, many works will have little or no educational value. On the supply side, the availability of works is restricted by access, licensing and language barriers.

## *Appendix C: ALCS Surveys*

This Appendix provides background information on the two surveys commissioned by the ALCS to gather information on authors that receive income from CLA's education licences. The ALCS commissioned independent surveys of two select samples of its members to gather information in response to the Government's Consultation on Copyright.

### *The first survey*

The first survey was conducted during January 2012. The survey was distributed to authors who had recently received a secondary licensing payment of more than £1,000 from CLA. In total, 350 ALCS members were sent the survey and 190 responses were received back by the ALCS

The survey was brief, and respondents were asked:

- If they wrote specifically for the education sector;
- The importance of CLA income in the development of new works;
- Recent trend in income from primary royalties; and
- Impacts as a result of any reduction in elimination of secondary income (free-form response).

### *The second survey*

The second survey was conducted in February 2012. The survey was distributed via email and to the top 1,000 earners of CLA income, amongst ALCS members. In total, 175 responses were received. The survey asked respondents:

- About their age, employment status (including whether they had other employment);
- Which education sector that they primarily focus on;
- The number of individual works they have produced over the last three years;
- What proportion of their time they devote to educational writing;
- What proportion of their income is derived from CLA fees; and
- What course of action they would take under different scenarios of a reduction in CLA income

# Appendix D: Value-added and corporation tax estimates

This appendix sets out the financial data that we have used to estimate the value-added and corporation tax paid by the educational publishing industry in 2010.

## Value-added methodology

The value-added was calculated for each publisher in our sample using its most recent year of publicly available financial data. The calculation for the amount of value-added by each publisher was:

Net profit (before tax) + depreciation and amortisation + staff costs = value-added. A weighted average value-added to sales ratio was then calculated across the 10 companies in the sample.

## Corporation income tax methodology

We used the operating profit of the publishers included in our sample as a proxy for their corporation tax liability. This was used instead of a tax charge to remove the distortions of carry-forward losses, or overseas tax liabilities on the amount of tax payable by our sample. We calculated a weighted average operating margin of 8.9% (operating profit / sales) for our sample.

This operating margin was used to estimate the operating profit of the educational publishing industry (using our estimate of total sales) for 2010. We then applied the statutory corporate income tax rate in 2010 (of 28%) to this operating profit to estimate the amount of corporation tax paid by the educational publishing industry in 2010.

## Sample of publishers

Publisher	Source	Data used for
Scholastic Limited	Report and Financial Statements 31 May 2011	Value-add estimation and fiscal contribution
A & C Black Publishers Limited	Directors' Report and Financial Statements 28 February 2011 (14 month period)	Value-add estimation and fiscal contribution
Cambridge University Press	Annual Reports and Accounts 30 April 2011	Value-add estimation and fiscal contribution
Bloomsbury Publishing PLC	Annual Report and Accounts 2011	Value-add estimation and fiscal contribution
Hodder and Soughton Limited	Report and Financial Statements 31 December 2010	Value-add estimation and fiscal contribution
HarperCollins Publishers Limited	Report and Financial Statements 30 June 2010	Value-add estimation and fiscal contribution
Nelson Thornes Limited	Directors' Report and Financial Statements 31 December 2010	Value-add estimation and fiscal contribution
Pearson Education Limited	Annual Report and Financial Statement 31 December 2010	Value-add estimation and fiscal contribution
Penguin Books Limited	Annual Report and Financial Statement 31 December 2010	Value-add estimation and fiscal contribution
Sage Publications Limited	Report and Financial Statements 25 December 2010	Value-add estimation and fiscal contribution
Oxford University Press	University of Oxford 2010/11 Financial Statements ('Press' extract)	Fiscal contribution only

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