

The Transition to..... Open Access

Prepared by the Association for Learning Technology (ALT)

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UK Open Access Implementation Group



















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Executive summary

This report, commissioned by the UK Open Access Implementation Group (OAIG), describes and draws conclusions from the transition of the Association for Learning Technology's journal *Research in Learning Technology* from toll-access to Open Access, and from being published by one of the "big five" commercial publishers (Elsevier, Sage, Springer, Taylor and Francis, and Wiley) to being published by a specialist Swedish Open Access publisher. The focus of the report is on what happened in the run-up to and after the transition, rather than on the process of deciding to switch between publishing models, which is covered in detail in ALT's 2011 report for OAIG - *Journal tendering for societies: a brief guide*.

The report is in five main sections.

Section one provides background information about *Research in Learning Technology* and its "parent" scholarly society, and about the approach taken to produce this report.

Section two of the report, which summarises aspects of the specific experience in the transition of Research in Learning Technology:

- 1. comments on:
 - business models for learned society publishing,
 - the practical challenges of finding a new publisher and of switching between publishers,
 - the specifics of the transition;
- 2. identifies a number of weaknesses in the commercial information infrastructure, and points to improvements needed in the UK Serial Group's TRANSFER Code or Practice;
- 3. points to a very substantial increase in the journal's usage following the switch to Open Access, and points to the value of Google Analytics for measuring usage, and comments on the pattern of usage deriving from use of social media services such as Twitter.

Section three makes suggestions for journals on how they might judge the effect of changed publishing arrangements in the longer term, putting forward a framework of ten measures that if collected systematically by a journal would enable the impact of a change in publishing model to be judged in the medium to longer term.

Section four contains some suggested action points for Jisc and national/international agencies, scholarly societies, and publishers.

The report concludes, in **section five**, with acknowledgements and a list of additional resources.

There are **two appendices**. The first provides evidence for the defects in the commercial information infrastructure. The second applies (in part) the metrics framework recommended in section three of the report to data for *Research in Learning Technology*.

1 Background and approach

1.1 ALT and Research in Learning Technology

The Association for Learning Technology (ALT) is the UK's leading membership organisation in the learning technology field¹. ALT's peer reviewed journal *Research in Learning Technology* (RLT) has been published since 1993. RLT was initially published in print only by the University of Wales Press, and then switched to Taylor and Francis (one of the "big five" commercial journal publishers) in 2003 as an online and printed journal. With the exception of its first three years, RLT consisted of three issues per year. In December 2010, following a competitive tendering process, ALT's Trustees decided to change the publishing model for RLT from conventional to Open Access, with effect from 1 January 2012². The change involved a change of publisher from Taylor and Francis to Co-Action Publishing (a small specialist Open Access publisher based in Sweden).

RLT is now an Open Access journal, published under a Creative Commons Attribution 3.0 licence, with no Article Processing Charges, and with a SPARC Europe Seal for Open Access Journals³. The entire back-list of articles is available online from the journal's web site⁴.

During 2011 (RLT's final year as a conventionally published journal) and during the first nine months of 2012 (RLT's first year as an Open Access journal) ALT monitored the transition process with the aim of:

- summarising the knowhow gained;
- devising a framework by which to judge the impact of a move to Open Access.

The monitoring and reporting work that resulted in this report⁵ was supported by the UK Open Access Implementation Group.

1.2 The approach we took

Between February 2011 and September 2012 the author (who was until May 2012 Chief Executive of ALT, with overall responsibility for RLT) observed, collected data and reviewed material about the transition⁶. The data and material included:

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¹ ALT might best be described as a "small to medium" learned society, with an annual turnover of around £0.5m.

² Journal tendering for societies: A brief guide (2011 – http://repository.alt.ac.uk/887/) – summarises ALT's experiences in the tendering process and makes recommendations for scholarly societies who are retendering for a journal publisher. Mary Waltham's 2005 study *Learned Society Open Access Business Models* (to which a link is provided from Section 7 of this report) is also relevant here, particularly for larger learned societies.

³ RLT's TOC page on the Directory of Open Access Journals can be viewed here: http://www.webcitation.org/6B4crCug7 (last accessed 30 September 2012).

⁴ See http://www.researchinlearningtechnology.net/index.php/rlt/issue/archive

⁵ The report's focus is on a transition to Open Access, but inevitably there are several aspects of it that relate to transitions between publishers more generally.

⁶ The original intention was to write the report based on experience gained during the three months following the transition. This proved to be a naïve plan: the inclusion of data from the first nine months after transition helped to an extent; but with hindsight it would have been better to undertake the study

- publishers' reports provided by Taylor and Francis;
- supplementary data provided by Taylor and Francis;
- download and other data provided by Co-Action Publishing;
- screen-shots principally those relating to searches using Google and Google Scholar;
- communications between actors in the process, in particular between the author and Maren Deepwell, Maren Deepwell and Co-Action Publishing, and the author and Co-Action Publishing and Taylor and Francis;
- Google Analytics data.

Maren Deepwell (who was ALT's Operations and Services Manager⁷ until April 2012, and who managed the transition between publishers and publishing models), and Caroline Sutton (Publisher, Co-Action Publishing) each contributed reflections. To gain insights into the workings of Google Scholar and, in particular, about the need for article level redirects between publishing platforms, we interviewed Darcy Dapra (Google Scholar's Partner Manager) by phone. The author and Helle Goldman (Chief Editor of Polar Research⁸, which had made the transition to Open Access in January 2011 and to Co-Action Publishing from Wiley) discussed ideas about the impact framework. Martin Hawksey⁹ configured his Twitter Archiving Google Spreadsheet (TAGS) to collect Twitter-related data about the RLT and provided an analysis for inclusion in this report.

We gratefully acknowledge the comments made – in some cases particularly painstakingly – on a draft of this report by:

- Caroline Sutton¹⁰:
- Günter Mey, University of Applied Sciences Magdeburg-Stendal, Germany¹¹;
- Helle Goldman;
- Mark Patterson, Executive Director of eLife;
- Neil Jacobs, Jisc's Programme Director for Digital Infrastructure¹²;
- Nicky Ferguson, Independent Consultant¹³
- Paul Harwood, Deputy Chief Executive of Jisc Collections.

We also acknowledge the very constructive approach taken by Taylor and Francis to our requests to include data and two images in the report pertaining to the transition.

over a two or three year period, in which case different data would have been available and a different approach to the work would have been appropriate.

⁷ Maren Deepwell has been ALT's Chief Executive since May 2012.

⁸ Polar Research is the scholarly journal of the Norwegian Polar Institute - http://www.polarresearch.net/.

⁹ Martin Hawksey: http://mashe.hawksey.info/

¹⁰ As well as having co-founded Co-Action Publishing, Caroline was founding President of the Open Access Scholarly Publishers' Association (OASPA) - http://oaspa.org/ - until March 2013.

¹¹ Günter Mey is a member of the Editorial Team of the international tri-lingual Open Access journal FQS (Forum: Qualitative Research) - http://www.qualitative-research.net/; and editor of the German Open Access journal Journal für Psychologie, a scholary society journal which became Open Access in 2007 after 14 years as closed access/print-journal - http://www.journal-fuer-psychologie.de.

¹² Neil managed the relationship between ALT and JISC during the production of this report and its predecessor.

¹³ Nicky was part of the ALT team that produced OAIG's Gold Open Access resources in 2012/2013.

We've sought to qualify the report at various points with helpful perspectives shared informally with us by Taylor and Francis; but in so doing we make clear that responsibility for the report rests with ALT.

During early November 2012, the author took part in an invitation workshop in Washington DC – *Open Access, the Social Sciences, and Scholarly Society Publishing* – organised by the American Educational Research Association¹⁴, to which a shortened version of this report was submitted as memorandum.

The remainder of the report is organised in four main sections:

- what we discovered;
- judging the effects of a transition;
- action points for others;
- acknowledgements and references.

Responsibility for the report rests with the author.

2 What we discovered

2.1 Proviso

We do not presume that most or even many other scholarly societies would have been in a position to replicate ALT's approach. Instead it is hoped that summarising what ALT discovered during the transition will assist the decision-making of other learned societies considering changing the publishing model of their journal(s).

2.2 The decision to move to Open Access

Scholarly societies vary very greatly in the extent to which they are dependent on publishing income (direct or from royalties), as well as in the scale of their overall publishing activities. In ALT's case a single journal only was involved; and the majority of institutional subscribers to our journal were member organisations for whom the journal was a part of the overall package of membership benefits. Likewise, for our individual members, who received the journal in print as part of their membership, the journal was only a part of the overall benefits of membership, with other benefits (such as discounts on conference and event fees, the opportunity to participate in an active community, a great conference, having an emerging field properly represented at national level) also important to them. As a result we have been able to make the transition to Open Access in a broadly revenue-neutral way, without introducing article processing charges. Essentially, under the old model, our individual and organisational members were paying for the publication of a closed access journal. They are now paying somewhat less overall for the publication of an Open Access journal, which, as is explained below, is now much more widely accessed than before.15

¹⁴ http://www.webcitation.org/6Bbg3ozY9

¹⁵ So far, the issue that members are paying for the production of something that others access for free has not arisen. Nor have any challenges been raised by authors concerning our decision to publish all content with a CC-BY licence. (It should be noted here that ALT has used CC licenses on its conference proceedings for some years without any adverse reaction from authors.)

2.3 What do stakeholders want?

Scholarly societies differ in the extent to which they are member led, in the extent to which they represent researchers as well as practitioners, and in the extent to which members care about Open Access. Journals differ in the extent to which their editorial board is active or "titular". Fields vary in the extent to which authors, reviewers and readers (who are in some respects the key stakeholders) are interested in or supportive of Open Access, or concerned with impact, however measured. Fields also differ in the extent to which the payment of Article Processing Charges is common, and the extent to which research is funded by agencies with an interest in openness.

In ALT's case we represent practitioners as well as researchers; and we knew from the analysis of our 2008 membership survey that online access to the journal for all members, whether or not they worked for a subscribing organisation, was an important demand; and in our field there is a strong interest in openness, for example in relation to Open Educational Resources. The journal's editorial board was supportive of a move to Open Access, as were our editors (albeit with some trepidation). Some authors were beginning to signal to ALT and to our Editors privately that they were only interested in publishing in an Open Access journal. Alongside this, in the UK, initiated by the previous administration and carried forward by the current one, there has been a strong push by Government for an opening up of publicly funded "knowledge resources", and of government-owned data.

So in the case of RLT, it not being Open Access was beginning to be an anachronism. (It should also be noted that the learning technology field sits at the boundary between the educational research and computer science disciplines, and that computer science as a field has been an early adopter of Open Access.)

2.4 Switching publisher can be complicated: a decision to switch should not be taken lightly

Changing a journal's publishing model may involve the journal in a change of publisher. The following points relate to this change, rather than simply to a switch to Open Access.

Retendering and its timing. Publishing agreements typically run for several years, with automatic roll-forward (i.e. renewal), and offer limited opportunities for renegotiation other than at set points. For example, a five- or six-year agreement might roll forward automatically if it has not been renegotiated or terminated 12 months before the end of its current term. Your team must be mindful of the key dates defined by the current publishing agreement, so that you instigate any renegotiation or re-procurement with sufficient time for the process to play out without you getting boxed in by deadlines. Ideally, six months would be needed to run a procurement, provided this leaves you enough time after agreeing any change then to manage the transition from one publisher to another. This means that, if the society wishes to negotiate an improvement to its publishing agreement as an alternative to reprocurement (and trying to do so is not necessarily the best move – an alternative would be to include the incumbent publisher in the bidding process), you should start that process at least 12 months before the date when the agreement will automatically roll forward. This should give you sufficient leeway so that, if the negotiations fail, you can switch to re-procurement. In any event you should always carefully check the

termination conditions of the current agreement, which may not be as clear as they should be, and may involve some form of penalty clauses, especially in old/longstanding agreements. We have summarised our experiences in the tendering process making recommendations for scholarly societies who are retendering for a journal publisher in *Journal Tendering for Societies*, which we published in 2011¹⁶. *Journal Tendering for Societies* works step-by-step through the main issues for learned societies when deciding whether to tender for a new publishing agreement. It outlines how to go about running a tendering process, including:

- writing a request for proposals;
- judging responses;
- negotiating a new publishing contract.

Relationships. We switched publishers following a competitive tendering process. The outgoing publisher Taylor and Francis was cooperative: indeed it went beyond the minimum required by the TRANSFER Code of Practice¹⁷ (of which more later). But our journal is small, and Taylor and Francis 's journals are very many, so it would have been unrealistic to expect a disproportionate amount of help from the outgoing publisher, outside that which is required under the TRANSFER Code of Practice. Our choice of Co-Action Publishing was based in part on the assessment we made that as a small "niche" publisher, Co-Action would provide a bespoke service based on partnership¹⁸. Perhaps the key point to be made here is that the Open Access world, like the world of Open Source software, is imbued with a particularly collaborative and flexible spirit. In our experience this is in contrast to the world of big conventional publishing, where managing editors (especially of small journals) tend to have to work within a framework over which they have little influence individually.

There is a lot to take care of. Many of these matters are the responsibility of the incoming publisher; but there are plenty of small and larger issues to manage that you and/or the incoming publisher will face. Here is an indicative list:

- Change of article submissions system, learning how to use it, transferring data about referees and about active manuscripts from one submission system to another, whilst remaining "open for submissions" throughout.
- Updating indexing services run by third parties such as CrossRef, the Educational Resources Information Center (ERIC) or Elsevier's SCOPUS service.¹⁹
- Sorting out any necessary changes to ISSNs (which will not normally be needed).

¹⁶ Journal tendering for societies: A brief guide (2011 – http://repository.alt.ac.uk/887/). This provides: guidance on how to tender for a new publishing agreement, considers factors underpinning a decision to move to Open Access, and outlines an approach to the procurement and decision-making process.

¹⁷ TRANSFER Code of Practice: Version 2.0 September 19, 2008 http://www.webcitation.org/665B8YLMn [PDF], current 31/12/2012:

¹⁸ During the 2010 process of tendering for a new publisher, this aspect of the successful bidder's approach had a substantial influence on our choice of publisher.

 $^{^{19}}$ CrossRef <u>http://www.crossref.org/;</u> ERIC <u>http://www.eric.ed.gov/;</u> SCOPUS <u>http://www.scopus.com/home.url.</u>

- Getting listed in the Directory of Open Access Journals (DOAJ), which currently takes many months because of a backlog at the DOAJ end.²⁰.
- Communicating with authors, reviewers, readers, and editors, and with subscribers and the third party organisations that tend to handle library subscriptions.
- Managing any changes in the supply of printed copies of the journal if, as in RLT's case, a print option is retained.
- Ensuring a flow of reliable data about journal usage, ideally with the provison of at least broadly comparable pre-transition data²¹.
- Managing the uploading of back-issue content to the journal's new platform (assuming that a new publishing platform is involved)²²

2.5 Weaknesses in the commercial information infrastructure

We found that for many months after the transfer, search results would point to broken holding pages for articles in RLT in their old location (or even previous location), resulting in a user being liable to find insufficient information to enable her to reach the article in its new location. We illustrate in detail the kinds of problems encountered in Appendix A, relying mainly on screen shots taken between January and September 2012. Many (indeed most) of these problems would be taken care of by changes in the current version of the TRANSFER Code of Practice (Version 2), which requires substantial improvement, to which we now turn.

TRANSFER governs the basis on which a journal is transferred from one signed up publisher to another, with many of the main journal publishers having endorsed it²³. According the UKSG (which hosts TRANSER):

"The Transfer Code of Practice responds to the expressed needs of the scholarly journal community for consistent guidelines to help publishers ensure that journal content remains easily accessible by librarians and readers when there is a transfer between parties, and to ensure that the transfer process occurs with minimum disruption." ²⁴

Although the current version – Version 2^{25} – is dated 2008, it shows very few signs of having been designed for the Web world that already existed in 2008. As indicated above, an important and obvious deficiency in Version 2 concerns "article-level redirects". Specifically, Version 2 of TRANSFER neither requires nor encourages transferring publishers to take the basic and obvious step of ensuring that article-level redirects are put in place to redirect holding pages "found" at a journal's old location (by Google, say) to the same article in its new location²⁶.

²⁰ In December 2012 DOAJ announced major changes in its management and operations which are intended to improve the quality of service - http://www.webcitation.org/6DJg0nVZx.

²¹ We provide illustrate the approach in Appendix B to this report.

²² In the case of Research in Learning Technology, 19 volumes and 54 issues (300 articles, say) required to be uploaded. If the journal had been older and bigger, the work required of the new publisher (as well as for the transferring publisher) would have been correspondingly larger.

²³ A list that was current on June 2012 is shown here http://www.webcitation.org/6DJhq1gMX.

²⁴ http://www.webcitation.org/6DJiBN7es

²⁵ http://www.webcitation.org/6DJiBN7es

²⁶ Use of "301 redirects" – see, for example http://www.webcitation.org/6DJh6WSFf – is standard good practice for web site managers, and has been so for many years.

Encouragingly, the most a recent **draft** that I have seen of the next version of TRANSFER – dated 28 September 2012 – now properly covers article-level redirects²⁷:

"The Transferring Publisher will transfer any existing title-specific journal domain name to the Receiving Publisher. If the journal title home page(s) URL is part of the Transferring Publisher's domain then the Transferring Publisher will provide URL links or redirects from relevant pages on the Transferring Publisher's web site directly to relevant pages (including the home page(s) of the journal) on the Receiving Publisher's site for a minimum of 12 months after the Effective Transfer Date. The Transferring Publisher will provide the Receiving Publisher with an accurate summary of the transitional URL links or redirects so provided. To ensure a smooth experience for readers reaching content through web search engines, and to ensure that search engine indexes are updated automatically and quickly following the transfer, the Transferring Publisher will establish HTTP301 permanent redirects if it will no longer be hosting digital content files. Such HTTP301 redirects will be at the level of individual articles. They will be kept in place for 12 months following the date of transfer, or alternatively the date following transfer on which the Transferring Publisher ceases to host journal articles published before the transfer."

2.6 After switching to Open Access usage substantially increased

Taylor and Francis made RLT freely but temporarily available during April 2011 (along with the content of many of its other education journals). The effect of this was pronounces (see Figure 1), with the number of full text downloads from Taylor and Francis's Informaworld online publishing platform jumping transiently from an average of about 1150 per month (averaged over the previous 12 months) to over 8000^{28} , dropping back the next month and thereafter to roughly the previous baseline ²⁹.

²⁷ We understand from Taylor and Francis that it and a number of other publishers are fully in support of the proposed changes to the TRANSFER that relate to the establishment of HTTP301 permanent redirects.

²⁸ Source: August 2011 RLT Publishing Report from Taylor and Francis.

²⁹ It is important to note here Taylor and Francis's informal observation that, in common with the other educational journals that were made freely available, much of the increase came from users who worked for organisations that already subscribed to this and other Taylor and Francis educational titles, rather than as a result of web searches.

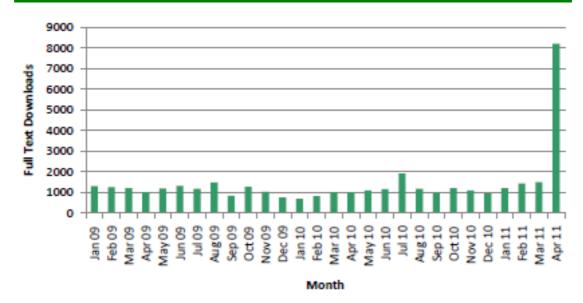


Figure 1 Total Full Text Downloads on Informaworld by month Jan 2009 – April 2011. Image used by kind permission of the David Green, Publishing Director of Taylor and Francis.

Figures 2 and 3 give an early indication³⁰ of the usage changes after the permanent switch to Open Access³¹. Between 2011 and 2012 (first nine months) full text downloads per month for the top 10 most downloaded articles increased on average by a factor of 9.3 (range 7.4 to 12.6). The average number of abstract views recorded per month increased by a factor of 3.4 to nearly 18,000 whilst the average number of full text downloads recorded per month increased by a factor of 9.6 to nearly 17,000³².

³⁰ The term "early indication" is used because of comparability issues with the data. Firstly, Taylor and Francis made at least one change to its publishing platform between 2009 and 2011, thereby introducing uncertainty into its own data. Secondly the change from Taylor and Francis's publishing platform to the Public Knowledge Project's Open Journal System (OJS) (http://pkp.sfu.ca/ojs) used by Co-Action introduces further uncertainty, because the basis on which the two platforms record downloads differs, with Co-Action's data conforming fully only latterly to Release 3 of the COUNTER Code of Practice (http://www.projectcounter.org/) during 2012 and with COUNTER data ignoring full text downloads in formats other than HTML and PDF (RLT offers articles in XML, MOBI and EPUB format as well as HTML and PDF).

³¹ Note that in 2009, two years prior to changing the publication model for RLT, ALT had established an ePrints based Open Access Repository – http://repository.alt.ac.uk – into which, by agreement with Taylor and Francis, RLT articles were placed after an 18 month embargo period. No account is taken – on either side of the transition – of usage of articles hosted by ALT in the repository.

³² Of course it should be noted that ALT made systematic efforts to publicise RLT's transition, and some of the increase in use of the journal will undoubtedly have stemmed from this.

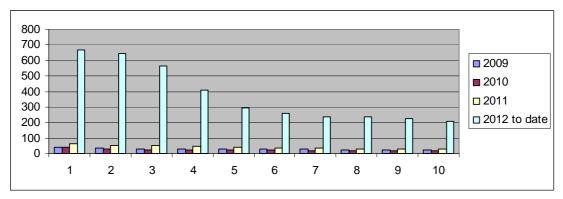


Figure 2 Average monthly full text downloads (PDF format only to 2011; PDF, HTML, ePub and MOBI format from 2012) for the "top 10" articles in RLT, January 2009 to September 2012. (The columns in cluster n represent the nth most downloaded articles for the four years analysed.)

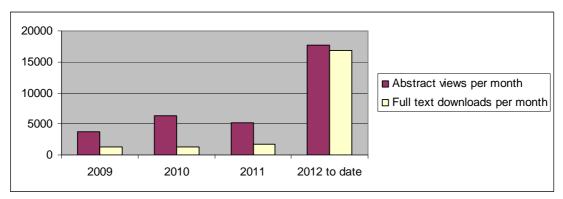


Figure 3 Average abstract views and full text downloads per month (PDF format only to 2011; PDF, HTML, ePub and MOBI format from 2012) for RLT, January 2009 to September 2012.

It is important also to note here that as soon as articles are made available as Open Access content, especially under the most open CC-BY licence³³, there is nothing to stop multiple versions of articles being posted anywhere on the Internet. As a result the traditional concept of "full text download" from a journal's own primary publishing platform – as represented, for example, by COUNTER-conformant data – has to be interpreted even more carefully than under conventional publishing arrangements. For this reason the adoption by Open Access journals of a suitable set of Article-Level Metrics (ALM) is likely to prove of value³⁴.

2.7 Google Analytics

Google Analytics³⁵ provides a very convenient and increasingly ubiquitous means of quantifying in real time web-site traffic and judging web-site usage, providing a seductively comprehensive set of views of site traffic and its sources at the level of

³³ RLT uses the CC-BY Creative Commons licence, which is the most liberal in the suite of licences provided by Creative Commons. See http://creativecommons.org/licenses/by/3.0/.

³⁴ ALM will be provided for RLT, along with other Co-Action titles, during 2013 as a result of work currently underway by Co-Action Publishing and Simon Fraser University, where the Open Journal System is developed and maintained. These will be based on the service and source code used by journals in the PLoS stable.

³⁵ http://www.google.com/analytics/

individual pages, as well as very detailed and well-presented information about the behaviour of users as they access content on a site. In contrast to a publishing system's traffic counting system, which draws on data generated by the virtual or physically discrete server on which the publishing system resides, Google Analytics uses data generated by user interactions with those individual pages into which a small piece of tracking code can be and has been placed. Tracking code cannot, for example, be placed directly within PDF, XML, EPUB or MOBI formatted documents, which means that without careful and knowledgeable configuration of an Open Access journal's publishing platform, Google Analytics does not properly track usage of directly accessed documents in these formats. For this reason, there is an inherent mismatch between the usage data produced by Google Analytics and that produced by the publishing system³⁶. Each need to be interpreted with care, and work needs to be done to reconcile reports from one with the other.

2.8 The impact of Twitter

The micro-blogging service Twitter provides a means – well used in the UK – for disseminating research information via overlapping communities. The act of sharing a link to an article can be interpreted as a recommendation (or, possibly, the opposite!) from the tweet author for followers of the account to read and possibly further disseminate. Between April 2012 and September 2012 the Twitter Archiving Google Spreadsheet (TAGS) template was setup to record tweets marked #rlt or containing links to the website researchinlearningtechnology.net. Reviewing these data indicated that the majority of tweets did not relate to the Journal Research in Learning Technology but as an abbreviation for 'real life test'. Using referral data from Google Analytics for the period January to September 2012, 381 tweets and subsequent retweets were tracked as generating at least one subsequent visit to RLT. In total 2,284 visits were recorded from Twitter referrals, the distribution of these shown in Figure 4. The tweeted link click-through rate is summarised in Figure 5. This shows that the majority (n.281) of tweeted links generate between 1 and 5 visits, the average tweet generating 6 visits (median: 3). It is important to note that Google Analytics can't track tweeted links that do not generate a recordable visit via Twitter referral. Thus the number of missing data points is unknown.

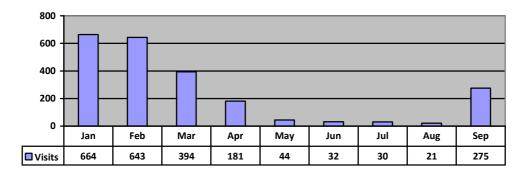


Figure 4 Distribution of Twitter generated visits to researchinlearningtechnology.net

³⁶ ALT, in collaboration with Co-Action, has recently commissioned some expert consultancy the aim of which is to quantify broadly the extent of the difference between the usage data produced by Google Analytics and that given by the OJS system, and to decide on any configuration changes that could be made to OJS to maximise the value of Google Analytics data for journal management purposes.

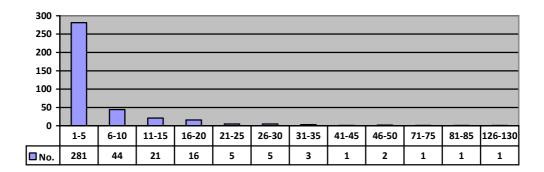


Figure 5 Visits per tweeted link to researchinlearningtechnology.net

Using data collected by TAGS 420 individual Twitter accounts were tracked as tweeting or retweeting links to RLT. The majority of accounts (n. 339) have recorded only one tweet. The distribution of tweets per Twitter account is shown in Figure 6.

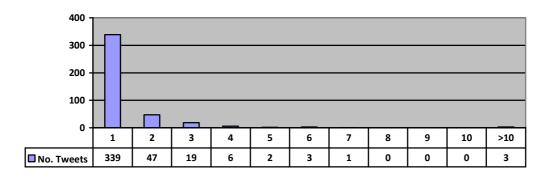


Figure 6 Distribution of the number of times a Twitter account has tweeted a link to researchinlearning technology.net

Notable tweets referencing RLT include the announcement of the journal going open access by the Creative Commons Twitter account³⁷ which at time of writing was followed by almost 500,000 people. Cross-referencing this tweet with Google Analytics data shows that this single tweet generated 128 visits to the RLT web site.

How significant was social media traffic of this kind? The short answer is "not very". Direct referrals to the RLT web site from three particular social media channels were distributed as follows: Twitter (63%), Facebook (22%) and Scoop It (17%) between 1 January 2012 and 30 September 2012, between them comprising only about 10% of visits to the site tracked by Google Scholar.

3 Judging the effect of a transition

Here we summarise two complementary approaches to judging the effect of a change in publishing arrangements from a learned societies point of view.

3.1 Qualitative

"Findability" of content after transition may well be adversely affected depending on whether the Transferring Publisher has or has not made effective use of http 301

³⁷ https://twitter.com/creativecommons/status/154728744454598656

article redirects. For this reason it is important for the society or the Receiving Publisher regularly to conduct some standard searches using Google and Google Scholar to get a broad appreciation for how well indexed by Google and Google Scholar the journal is, post transition. We suggest using text strings from, say, the titles of half a dozen articles with a spread of publication dates. The chances are that the same kinds of possibly irremediable issues will initially be identified through this process as were discovered during RLT's transition. You may not be able to cure the problems, but you will get a sense of their extent and seriousness; and, if our experience is anything to go by, you will discover that the information environment gradually adjusts to the change in publishing arrangements and that over a period of several months, problems of "findability" gradually diminish.

Public reactions to a transition can be detected by judicious use of services like Google Alerts, and by monitoring references in social media to the transition. It is however easy to become overly focused on minor and inherently rather inconsequential representations of community reaction. Furthermore, the effects of a transition will be felt over a period of two to three years, during which time the overhead of systematically monitoring community reaction is likely to be substantial. Nevertheless it is important to record material relating the transfer, and to encourage those affected by it (including authors, readers, reviewers, editorial board members and editors) to provide feedback, and for the society and/or the Receiving Publisher to be seen to be acting on it.

3.2 Quantitative

Here is a framework of measures that might be used by a society to judge the impact of a transition over a two to four year period after the transition, with data perhaps collated and reported each quarter³⁸. It is important to note here that even if no comparable data is available from the period before the transition, a society would need to be in a position to understand the way in which the performance of a journal is changing over the medium term after transition³⁹. We include a table summarising data for most of these for RLT in Appendix B.

- a) Monthly full text downloads for a journal's "top 10" articles
- b) Average monthly abstract views and full text downloads
- c) The geographical spread of downloads
- d) Number of articles submitted in the quarter
- e) Number of articles put into the peer-review process in the quarter (if editors are permitted to reject articles outright without submitting them for peer-review)
- f) Number of articles published in the quarter
- g) Average time between submission and publication for articles published in the quarter
- h) Average time between final acceptance and publication, for articles published in the quarter

³⁸ A key challenge concerns the comparability of data before and after transition, and, if the transition is to Open Access, the practical meaning of "full text download", when, over time, multiple instances of the same article are likely to appear in different places on the Internet.

³⁹ It is important here to note that once a change in publishing model or arrangements has been made it is impossible to know what would have has been made the situation if no change had been made.

- i) Some comparable representation of citation rates and other appropriate article level metrics across the journal's articles and their distribution across the journal's articles.
- j) Some suitable representation of the journal's financial performance, taking into account any "before and after" changes to the journal's business model.

Alongside this it would be useful to collect some standard baseline information about the journal in question including, publishing model, the discipline(s) it serves, the proportion of submitted and published articles by country of lead author, journal impact factor (if any), proportion of articles supported by specific streams of funding. There might also be value in recording some proxy for the extent to which lead (or all) authors are cited (h index might be a suitable proxy⁴⁰) and whether and if yes how this changes over time.

4 Action points for others

Here we summarise in bullet-point format some possible action points based on our experiences with the transition, organised loosely according to the main "actors" to which they relate.

4.1 Jisc and national/international agencies

- Do everything possible to ensure that material relating to http 301 article level redirects in the 28 September 2012 draft of Version 3 of the TRANSFER Code of Practice is retained in the published Version 3.
- Investigate and depending on the outcome then disseminate the broad applicability of the system for Article-Level Metrics (ALM) that is currently used by journals in the PLOS stable⁴¹.
- Encourage use of a simple framework of measures by which to judge the effect of a transition, and encourage journals in transition to opt into reporting against the framework, so that comparative data can be accumulated and analysed, ideally with data shared between transitioning journals.

4.2 Scholarly societies

- Liaise carefully and thoroughly with authors, who may have articles "caught up" in the transition, or who may need some handholding the first time they submit an article to a new system, if they've had prior experience of its predecessor. Likewise reviewers, who may have become accustomed to the predecessor system.
- To the extent that the business relationship enables this, treat the Receiving Publisher as a partner not just as a supplier. Aim to have one person managing the transfer relationship with the Receiving and with the Transferring Publisher.
- Expect some terminology and some processes to differ between the Receiving and the Transferring Publisher, and expect to have to clarify these with key role-holders including editors.
- Unless and until the TRANSFER Code of Practice contains suitable provisions for http 301 article level redirects, seek to negotiate the inclusion of

 $^{^{40}}$ h-index for an author is the largest number h such that h of the author's publications have at least h citations

⁴¹ http://article-level-metrics.plos.org/alm-info/ last accessed 1/1/2013

- equivalent provisions into existing and new publishing agreements. This will protect your journal(s) in the event of that you make future changes in publishing arrangements.
- Treat the transfer as a project some aspects of which will require active management at your end, rather than leaving things mainly to the outgoing and incoming publishers.
- Consider, if funds permit (and depending on the characteristics of the society) buying in specialist support and/or temporary additional staffing during the transition period. The key point here is that during a transition there is a set of "one off" issues and tasks that need to be dealt with which ideally require specialist knowhow that may not routinely be available in a learned society.
- Collect qualitative as well as quantitative data about the impact of transition, for example screen-shots of the kind used in this report so that you can spot and act on unforeseen problems with issues like the visibility to searchers of the transferred journal⁴².
- Ask your publisher to share with you a non-administrator's view of the Google Analytics interface for your journal, noting that it is a simple matter for the person managing the publisher's Google Analytics account to share the non-administrator's view with any Gmail address⁴³. The advantage of this to the scholarly society is to cut out the "middleman" in the supply of data about the performance of the journal.
- Do not underestimate the work involved in updating relevant support documents, and in ensuring that those who need to use them (editors, authors, reviewers, society staff) are familiar with the changes made to them.
- Include the following points in the transfer plan for your journal:
 - a) Careful communication with members, authors, subscribers, editors, editorial board members, and with intermediaries so that they receive clear, relevant, timely (and probably repeated) information about the impending change.
 - b) Training for relevant role-holders in the operation of any different manuscript tracking and publishing system that the journal in its new location will utilise.
 - c) Systematic management of articles that are in the middle of peer-review so that any adverse impact on authors and reviewers of the transition is kept to a minimum.
 - d) Develop with the Receiving Publisher a checklist of actions involved in the transfer, with timings and responsibilities allocated, maintained in such a form that will enable the society and the Receiving Publisher to record progress on each as it occurs.

4.3 Publishers

• Take proper account of the fact that a transfer is a very significant event for a society, whereas for a publisher a transfer is relatively run-of-the-mill. (Societies in turn should not feel disregarded if a publisher does not act on a

⁴² With hindsight ALT would have prepared in advance a small set of standard searches and then run these on a regular (perhaps fortnightly) basis in Google and Google Scholar, storing screen-shots of the results with a pre-planned file-naming structure.

⁴³ It is fairly safe to assume that nearly all publishers use Google Analytics on their publishing platforms.

- specific item with the sense of urgency that the society perhaps judges it to warrant.)
- Ensuring the practicalities of a smooth transition requires practical and detailed coordination between the Transferring Publisher, the Receiving Publisher, the scholarly society, and the journal's editors. Commitment to coordination should be written into publishing agreements, in relation to both future transfers from an existing publisher ("if you transfer your journal in the future we will coordinate systematically")", and in relation to the expected activity of a new publisher ("during the transition we are committed to detailed coordination"). This stands alongside the more technical aspects of transfer that are covered in the TRANSFER Code of Practice.
- Transferring Publishers should reflect on the likely adverse impact on them of incomplete handling of the redirect process. For this reason, in advance of TRANSFER version 3 being adopted, there may be mileage in including "TCP+" clauses that is, steps that remedy some of the inadequacies in TRANSFER version 2 that are identified above in new publishing agreements. Separately, Transferring Publishers should make it their business to ensure that data about the journal that the Transferring Publisher controls or has previously supplied, and which may remain visible on the Internet for months or years after the transfer, are properly managed.
- Work with scholarly societies to provide data under the reporting framework described in 4.2 above.
- If in the course of a transition a journal's articles are moved to a new platform, the publisher should alert Google Scholar, so that Google Scholar can ensure that the newly open content can be as visible as possible in search results, including through potential adjustments by Google to the primary link in the main search results, as well as further identification of the new OA title (via two small XML files hosted on the publisher/platform's site). These actions should ensure that the publisher's open/publicly available PDFs will appear as "direct-access" links on the right-hand side of the search-result set. (See, for example, the green-circled link in Figure 8 below.) This step is particularly important after a transition to Open Access, because over time it is likely that the same article will become available from many different locations on the Internet.

5 Acknowledgements and resources

5.1 Acknowledgements

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- Martin Hawksey, Jisc CETIS learning technology advisor
- Neil Jacobs, Jisc Programme Director for Digital Infrastructure
- Günter Mey, University of Applied Sciences Magdeburg-Stendal, Germany
- Mark Patterson, Executive Director of eLife

- Victoria Quantrell, Managing Editor, Taylor and Francis
- Caroline Sutton, Co-Founder of Co-Action Publishing

5.2 Resources

List of Societies with Open Access journals. Originally compiled by Peter Suber & Caroline Sutton, now an open Google Spreadsheet:

 $\frac{https://docs.google.com/spreadsheet/ccc?key=0AgBYTDKmesh7dDZ6UnBfcnpOdVpnd3ptSnVpQ0xrenc}{pnd3ptSnVpQ0xrenc}$

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Appendix A – defects in the commercial information infrastructure

A1 Slow updating of the Google Scholar index

Several months after the transition, searches made with Google Scholar were still pointing to articles in their old location. Here, for example, is a screen-shot of a Google Scholar search for a specific article in RLT made just over four months after the transition:



Figure 7-4 May 2012 result of a Google Scholar search for an RLT article still pointing to the article in its old location. (The first page of this search result is identical to one made on 22 January 2012.)

By the end of September 2012, nine months after the transition, searches made with Google Scholar were yet to point reliably to articles in their correct location, although links to Taylor and Francis had disappeared. Note, however, that a user who clicked on the first result in Figure 2's "All 12 versions" would arrive at a page of results showing the article in its correct location. See Figures 8 and 9.

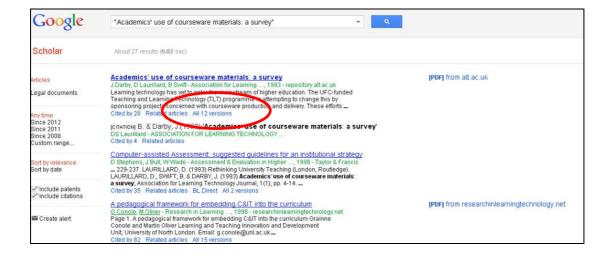


Figure 8 – 30 September 2012 result of a Google Scholar search for an RLT article now pointing to the article in its location in the ALT Open Access Repository⁴⁴ rather than in its correct location.

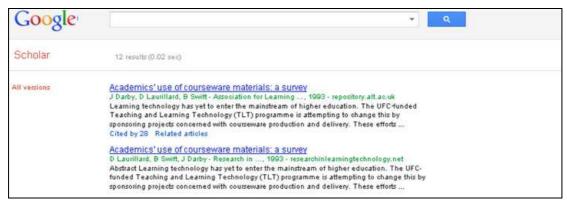
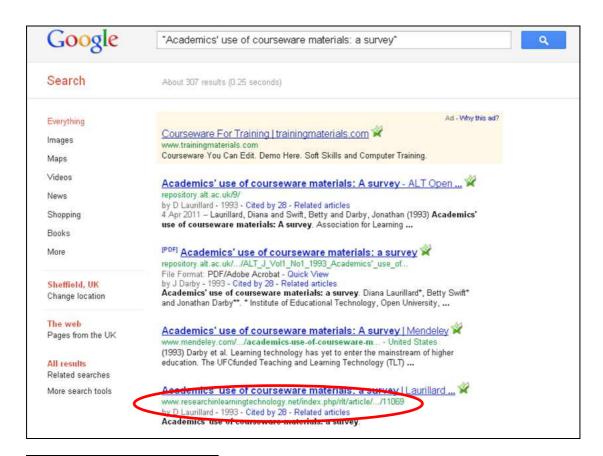


Figure 9-30 September 2012 click-through to "All 12 versions" showing article in its correct location as the second result.

In contrast, Google's main index gets updated much more quickly, as indicated by Figure 10, which shows a screen-shot taken only one month after the transition, with the searched for article already visible as the fourth highest ranked link in the search result.



⁴⁴ Note that in 2009, two years prior to changing the publication model for RLT, ALT had established an ePrints based Open Access Repository – http://repository.alt.ac.uk – into which, by agreement with Taylor and Francis, RLT articles were placed after an 18 month embargo period. As a result, instances of RLT articles hosted in the repository show up in web searches.

Figure 10 - Screen-shot of Google search performed on 1 February 2012.

A2 Absence of http 301 redirects on old publisher's publishing platform

If the transferring publisher has not implemented what are known as "http 301 redirects" on its publishing platform then users will not be smoothly redirected from an article's old URL to the URL of the article in its new location, Furthermore, Google Scholar and Google will be impeded in indexing the journal's content in its new location. This is a relatively trivial task from a systems engineering point of view. With article level redirects in place the user's experience is seamless. Without them, the user is met with an uninformative and unhelpful error page on the previous publisher's system such as that shown in Figure 11. The key point to note here is that from the individual user's point of view, finding uninformative dead ends of this kind is likely to damage how the user views the journal as well as the user's overall search experience.

A further and deeper problem is that search engines update their indexes by "spidering" – that is, by following links between resources on the Web. A spider "has nowhere to go" from a page such as is shown in Figure 11. As a result search engines' indexes get updated much more slowly – at the expense of search quality – than would be the case if the transferring publisher had implemented http 301 redirects.

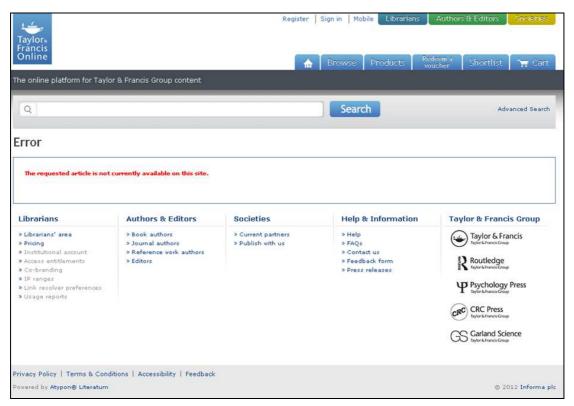


Figure 11 – 21 January 2012 click through from top-ranked link in Figure 6 to error page on Taylor and Francis's systems. Screenshot used by kind permission of the David Green, Publishing Director of Taylor and Francis.

A3 Services with out of date content that Google scrapes

The British Library's BL Direct offprint supply service relies on a British Library created Electronic Table of Contents (ETOC) which is scraped and/or crawled by Google⁴⁵, thereby ensuring that BL Direct records appear in Google search results of the kind shown in Figure 12 below, with the associated BL Direct record shown in Figure 13. Until the BL ETOC is updated by the BL (at the behest of the publisher) "rogue" results of this kind will continue to be found.

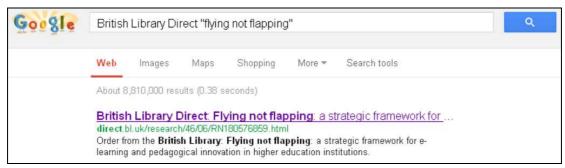


Figure 12-1 January 2013 result of a Google search for an RLT article which points to a record in the BL Direct service



Figure 13 – Record from BL Direct accessed on 1 January 2013 stating that a copyright fee would be charged on an article that has been Open Access for 12 months. Screenshot used by kind permission of the British Library.

⁴⁵ Information kindly provided to Seb Schmoller by Richard Walker of BL Customer Services.

Note that it is not just services like BL Direct that can provide "rogue" results. Figure 14 shows a 30 September 2012 search result whose first result is a link to the Ingenta Connect sales page for the journal. Figure 15 shows that the Ingenta Connect sales page shows the journal under its old publisher, and what is worse, with a title that was changed from January 2011.

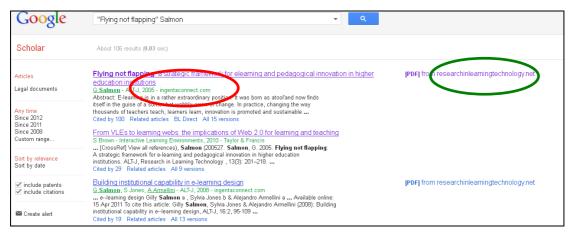


Figure 14 – Search made using Google Scholar on 30 September 2012 showing an article on of the previous publisher's platform (red oval), as well as in its current, correct location (green oval).

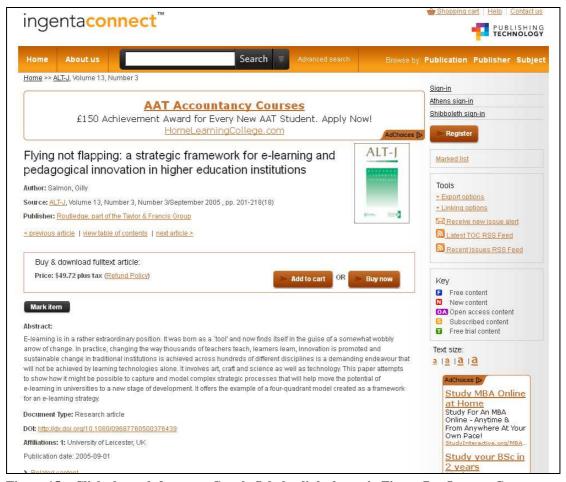


Figure 15 – Click-through from top Google Scholar link shown in Figure 7 to Ingenta Connect listing of "Flying not flapping". Note that it is several years since Taylor and Francis ceased

using Ingenta Connect as part of its publishing arrangement. (Screenshot used by kind permission of Publishing Technology plc.)

This problem would be solved for past transfers if publishers simply managed their web systems in a modern, web-savvy way, using http 301 redirects; and it will be solved in future transfers once Version 3 of the TRANSFER Code of Practice comes into effect, as explained in the section 3.5 of the main report.

Appendix B – summary of quantitative data from RLT

Monthly full text downloads for the journal's "top 10" articles							
	Vol 17	Vol 18 Vol 19		Vol 20			
	2009	2010	2011	2012			
#1	42	41	66	670			
#2	36	28	51	643			
#3	30	23	50	562			
#4	29	22	44	409			
#5	28	22	38	294			
#6	27	21	35	258			
#7	26	19	32	237			
#8	25	18	29	236			
#9	23	18	28	225			
#10	21	18	28	206			

	Vol 17 2009	Vol 18 2010	Vol 19 2011	Vol 20 2012
Average number of abstract views per month	3811	6292	3856	18327
Average number of full text downloads per month	1275	1352	1764	16420

The geographical spread of article views (Google Analytics data for 2012)						
Rest of World	n/a	n/a	n/a	26.3%		
UK	n/a	n/a	n/a	30.7%		
US	n/a	n/a	n/a	16.6%		
Aus	n/a	n/a	n/a	10.6%		
Can	n/a	n/a	n/a	4.8%		
Swe	n/a	n/a	n/a	2.6%		
Ind	n/a	n/a	n/a	2.0%		
Ger	n/a	n/a	n/a	1.7%		
Ire	n/a	n/a	n/a	1.7%		
NZ	n/a	n/a	n/a	1.6%		
Mex	n/a	n/a	n/a	1.4%		

				Vol 2	0 2012	2		
	Vol	Vol	-					
	17 2009	18 2010	19 2011		Q2	Q3	04	Total
Number of manuscripts submitted in the quarter (excluding supplements and conference proceedings) [per year for 2009-2011 if known]	69	59	81	35	35	18	9	97
Number of articles put into the peer-review process in the quarter (excluding supplements and conference proceedings) [per year for 2009-2011 if known]	65	59	78	14	21	16	15	66
Number of articles published in the quarter (excluding supplements and conference proceedings)	17	18	20	13	1	6	9	29
Number of articles published in conference proceedings (not part of journal in 2009 and 2010	n/a	n/a	15	0	0	18	0	18
Number articles published in supplements								
	0	0	0	0	0	0	0	0
Number of articles published in special issues								
	6	7	9	0	0	0	6	6
Average time in days between submission and publication for the articles published in the quarter (excluding special issue and supplement and conference proceedings)	340	290	290	385	349	308	223	318
Average time in days between final acceptance and publication for the articles published in the quarter (excluding special issue and supplement and conference proceedings)	160	108	77	100	108	142	67	143
conference proceedings)	160	108	77	199	108	142	67	143

Google Scholar h5-index articles published in the last 5 complete years. It is the largest number h such that h articles published in 2007-2011 have at least h citations each.	17
Google Scholar h5-median - the median number of citations for the articles that making up the h5-index	31