Abstract
In 2015 Tony Coughlan was awarded the Open Education Consortium award for Creative Innovation, recognising the impact of his CYP-Media project in using open educational practices (OEP) to increase access to learning in the children and young people’s sector. Core to CYP-Media is a blog (www.cyp-media.org) in which Tony curates and evaluates free e-learning, textbooks & journals for working with children of different ages and needs. The reach of these blog posts is maximised by dissemination through Facebook and Twitter. The CYP-Media.org blog cost only $30 to set up, yet its impact is substantial. The CYP-Media Facebook page has an average reach of 7,244 per item, with a maximum of about 500 shares or 50,000 views of an individual item, and Tony himself has been identified as one of the top 50 most influential social media-using professionals in UK higher education. CYP-Media shows how just one person can make a huge difference to achieving educational and social equity with a tiny financial investment and a commitment to openness. This paper outlines the conceptual background to CYP-Media, with its roots in Perryman and Coughlan’s (2013) ‘Public Open Scholar’ research, Weller’s (2011) concept of the ‘digital scholar’, and the emerging practice and theories of digital curation. The paper details CYP-Media’s multi-platform social media strategy and the challenges encountered since the project’s inception in 2010, in addition to presenting a mixed methods analysis of CYP-Media’s reception within the children and young people’s sector. We conclude that openness does not have to be the province of institutions and organisations, or even smaller projects and that by listening to the needs of your target audience, rather than adopting a top-down approach, real educational transformation through OEP is within the reach of anyone.

Introduction & Rationale
The benefits of open educational resources (OER) and open educational practices (OEP) are often denied to those who most need them in that the content, size, format and level of resources has long been tailored to meet the needs of formal, higher education. In addition, there remains a lack of awareness about OER outside formal education and resources can be difficult to find (McAndrew and Farrow, 2013, p. 69). The injustice of this is not lost on the Hewlett Foundation who, in 2013, identified the huge potential for OER use and production beyond higher (and formal) education when stating that ‘by enabling virtually anyone to tap into, translate and tailor educational materials previously reserved only for students at elite universities, OER has the potential to jump start careers and economic development in communities that lag behind’ (The William and Flora Hewlett Foundation, 2013, p. 4). While McAndrew and Farrow (2013) have observed that a connection between OER and social justice is currently re-emerging, much work needs to be done to ensure that the transformative power of openness is not exclusive to a well-informed, well-educated elite.
Since 2011 we have been addressing the challenge of extending the reach of openness beyond formal education by developing the Public Open Scholar role (Perryman & Coughlan, 2013; Coughlan & Perryman, 2012), which revives the centuries-old role of 'public academic'. Modern-day public academics in the UK include particle physicist Brian Cox and anatomist Alice Roberts. However, while these academics' TV broadcasting is a largely supply-push process the Public Open Scholar inverts the relationship between academic and public, identifying online communities who might benefit from OER in their specialist area, identifying community participants' expressed needs, and sourcing OER to meet those needs on a demand-pull basis (see Figure 1). As such, the Public-facing Open Scholar role is an extension of Weller's 'digital scholar' - 'someone who employs digital, networked and open approaches to demonstrate specialism in a field' (Weller, 2011, Chapter 1). In 2014 we expanded the role to include social curation of resource collections on a needs-led basis, rather than the object-led basis that typifies much online content curation (see Perryman and Coughlan, 2014). A Public Open Scholar gathers the content for their collection(s) while performing step 4 of the role (see Figure 1), having listened to the needs of the communities with which they are working (step 2).
CYP-Media

In 2011 Tony Coughlan began performing the Public Open Scholar role by developing CYP-Media - a multi-platform project based around a Wordpress blog (www.cyp-media.org) in which he curates and evaluates free multimedia and e-learning resources relevant to trainers, academics and the children and young people's (CYP) workforce. CYP-Media usually publishes one blog post per month. The blog posts’ reach is maximised by dissemination through a Facebook page (http://fb.me/freeCYPmedia) and a Twitter account (www.twitter.com/CYPmedia). CYP-media was developed in response to a realisation that there were an increasing number of multimedia resources scattered around the Internet but they could be hard to find, of unknown quality, and vague about whether they might be pirated or copyrighted materials. CYP-Media curator Tony Coughlan is well qualified to assess these resources, being an experienced tutor and e-learning author himself, and until recently a Chair and Director of a children's charity.

The CYP-Media.org blog cost only $30 to set up, yet its impact is substantial. Indeed, in 2015 Tony Coughlan was awarded the OE Global Creative Innovation award for CYP-Media and later that year was identified as one of the 50 most influential social media-using professionals in UK higher education, again for CYP-Media. The audience for CYP-Media has built gradually. Figure 2 shows that the Wordpress blog has received 66,000 views during the four and a half years since it was founded in January 2011.

The audience in the early days was negligible and CYP-Media only really took off in mid-2013, two and a half years later, when the blog began to be publicised through Facebook. Thus far, 59 posts have been published. In 2015 the blog received an average of 88 views per day. This paper reports our mixed methods analysis of CYP-Media's reception within the children and young people's sector, for which we aimed not only to investigate the processes at the heart of CYP-Media, and their effectiveness, but also to offer a template that others might use as the basis for developing a similar project.
Methods and findings

One advantage of platforms such as Wordpress, Facebook and Twitter is the analytics data available to account-holders. We used this data, together with a directed content analysis of Facebook posts and tweets, to answer the following question: ‘How can multiple social media platforms be used to increase access to free, high quality learning through OER and OEP?’ This, in turn, required exploration of the following topics:

- How to identify audience/user characteristics and needs, and how to best respond to those needs.
- How to optimise audience engagement through an informed view of social media platforms’ typical audiences, and user behaviour.
- The strengths and limitations of an analytics-based evaluation.

Who and where are the audience?

[Figure 3: Facebook audience analytics]
Studying the location of CYP-Media’s Twitter, Facebook and blog audiences reveals a common demographic. Figure 3 shows the Facebook audience: 87% are female and 62% are aged 25-44. This audience is overwhelmingly English-speaking, mostly spread across Commonwealth countries and the USA. Behind this language commonality – unremarkable bearing in mind the fact that CYP-Media is an English language project - are shared social systems and beliefs. For example, approaches to disabilities and processes like adoption are quite similar across Commonwealth countries and the USA, but can be very different elsewhere, so the CYP-Media resources are not necessarily applicable worldwide.

Figure 4: CYP-Media blog audience locations and referrers
Figure 4 shows the location of the audience for CYP-media’s Wordpress blog. Again, it is mostly spread across Commonwealth countries and the USA. Of more interest is the ‘Referrers’ data. The CYP-Media Twitter account has a following of about 1600 to accompany the blog, but it directs only 400 visitors to the blog per year, compared to over 7000 referrers from Facebook. This may be due to the demographic of CYP-Media’s audience as a whole; mostly female and young, and therefore more likely to habitually be using Facebook than Twitter.

What content is popular and for how long?

The viewing and sharing statistics for Facebook vary considerably for each evaluated resource and this can be partly attributed both to the resource topic and the timing of the blog posts. Figure 5 illustrates a typical Facebook item - a 28-page booklet on Attention Deficit Hyperactivity Disorder (ADHD), released by US government with a Public-Domain licence. It has been viewed 8300 times and shared 160 times in the nine months since posted in Facebook.
Three of the posts in Figure 6 were similarly received, with a reach of 12,000-14,000. A fourth received very little attention; it was about adoption, for which there is only a small niche audience. In contrast the fifth post, covering The Natural Learning Initiative (NLI), was the most popular resource reviewed thus far, reaching an audience of almost 50,000. This can be attributed to it being a high-quality item on a topical issue and its timing; in Europe, June is an ideal time to be experimenting with environmental play due to the good weather. While interest in some resources peaks on publication of the related blog post, and then quickly wanes, other resources attract steady ongoing interest.
Figure 7 shows the viewing history for a blog post entitled ‘Free Autism Spectrum e-books’, first published in Aug 2013. Viewing and sharing of the post has been remarkably steady over the two years since its publication. This pattern is common for the e-books and e-journals reviewed on CYP-Media, but is entirely different from the articles about MOOCs, which attract a short-term audience. In general, static items such as e-books and e-journals are much more popular than multimedia (videos and podcasts), with e-learning and MOOCs somewhere in the middle. This could be to do with perceived value; for example reviews for a number of titles from the US's National Academies Press that cost $69.95 as paperbacks, but can be downloaded free as e-textbooks, have been particularly popular. The popularity of particular resources may also be to do with utility or necessity; for example the audience may be students needing a textbook for their studies.

**How are audiences behaving?**

![Post Details](image)

*Figure 8: interactions with the NLI post on Facebook*

The audiences respond well to items that circulate within their own familiar networks. Figure 8 shows the dissemination pattern for The Natural Learning Initiative (NLI) resource mentioned earlier. An interesting dimension here is that less than half of the interactions were with the native post; there were more interactions around subsequent shares amongst friends and in groups. The number of Likes shows this graphically, only 13 on the native post, but 395 on shares. The number of comments follows the same pattern: 5 on the native post, but 33 on shares. This may indicate that only a small proportion of audiences are actively searching for items, but a much larger proportion interact with items that circulate within their own familiar networks. It may also reflect the trust that audiences have in their peers.
While quantitative analysis of social media analytics data allows some valuable evaluation of a project’s reception and impact it is important to triangulate any findings to strengthen the validity of any conclusions drawn. Comparing statistics for individual posts with general patterns can be useful here, as can adopting a mixed methods approach. It should also be noted that sometimes social media analytics are inaccurate and should therefore be treated cautiously. For example, Figure 9 appears to show an audience of only 89 for the Natural Curiosity e-book, but those 89 individuals interacted 822 times and made over 1000 post clicks! Examining the details revealed that in fact the audience was ten times larger than indicated. It is useful to have the overall patterns shown in Figure 6 above as a benchmark for rogue results like these.

**Implications**
The analysis of CYP-Media clearly indicates that one individual, with a tiny budget, can extend the benefits of openness way beyond formal education. Our findings show the multiplier effects possible with social media but also highlight the importance of working methodically across social media platforms, using analytics to continually evaluate the strengths of each platform and the typical behaviour of an intended audience. Above all, our study shows that it is vital to pay attention to an audience’s expressed needs (Step 2 of the public open scholar role), listening, rather than just broadcasting. This is particularly important when a target audience spans multiple cultures, legal systems, countries and workplace settings, and should include consideration not only of preferred content but of preferred resource types. For example, in some developing countries YouTube videos can be problematic due to bandwidth limitations and the expense of streaming. Our analysis also shows that curating and sharing resources alone limits the value of the Public Open Scholar role and that audiences appreciate the reviews and evaluation provided in the CYP-Media blog posts - content that an open academic who is a specialist in their field will be well equipped to provide.

**Conclusion**

CYP-Media is just one example of how a Public Open Scholar might engage with subject communities pertinent to their own interests and expertise. Comparable projects in other disciplines exist, for example Suzanne Schlechte’s Early Childhood Education Pinterest collection ([http://bit.ly/1RQtb1X](http://bit.ly/1RQtb1X)) which has been formally compared with CYP-Media (see Perryman and Coughlan, 2014). CYP-Media itself continues to develop, with new resources being regularly added and with the communities of practice it serves expanding. However, we need more people from the open education community to become Public Open Scholars in their own disciplines, leading small scale projects that contribute to a much bigger picture of educational transformation and equity through openness.
References


