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Pockets of Freedom, but Mostly Constraints

Emerging Trends in Children's DIY Media Platforms

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The spread of “web 2.0” and WYSIWYG (“what-you-see-is-what-you-get”) content creation tools has led to a massive increase in user-generated content across the connected digital landscape. According to a survey conducted by YouTube and Ipsos Reid, over 90 per cent of online “millennials” create content at least once a month (YouTube, 2014). From citizen journalism to personal “vlogs,” producing do-it-yourself (DIY) media has become a key component of many young people's digital experience. One of the most important aspects of this phenomenon is how it expands even younger children's access to “mass” media production and distribution. Whereas child-made media was once relegated to refrigerator doors and classroom bulletin boards, it can now be published online.

From an educational perspective, this shift has the potential to open up numerous social learning practices that build on long-acknowledged aspects of learning (e.g. Buckingham, 2009; Vygotsky, 2004). From a rights perspective, increased participation in media making has important implications for children's cultural rights and potential rights as authors, artists and performers. At the same time, designing DIY media platforms for children is situated at the crossroads of a number of challenging – and oftentimes competing – social expectations and

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controversies. These include geographically bound regulatory requirements (Grimes, 2013), commercial influences, parental concerns, digital divides, and emerging “hierarchies of access” (Grimes & Fields, 2012).

The *Kids DIY Media Partnership* seeks to identify the types of support systems – regulatory, infrastructural, and technical – that most effectively and sustainably foster a rights-based, inclusive, child-centric approach to addressing children’s cultural participation online. The first stage¹ of this project consisted of a media scan aimed at identifying websites describing themselves as having a focus on DIY media, that were determined to be targeted to children or otherwise child-inclusive (for a few examples see Images 1-4)². The sites identified through this scan were then subjected to two forms of content analysis: first a broad analysis of their graphic user interface (GUI) designs (herein referred to as “designs”) and texts, and second a review of their privacy policies and terms of service documents. The third stage consisted of two workshops that brought together designers, educators, researchers, and children’s media policy advocates to discuss some of the challenges and issues associated with children’s DIY media creation and sharing. Drawing on the findings and discussion of the research above, in this chapter we argue that children’s freedom of expression is constrained within the online DIY media landscape in three main ways: the low



Image 1. Tate Kids homepage (partial view). Users create art and games, and browse ideas from the Tate Museum.

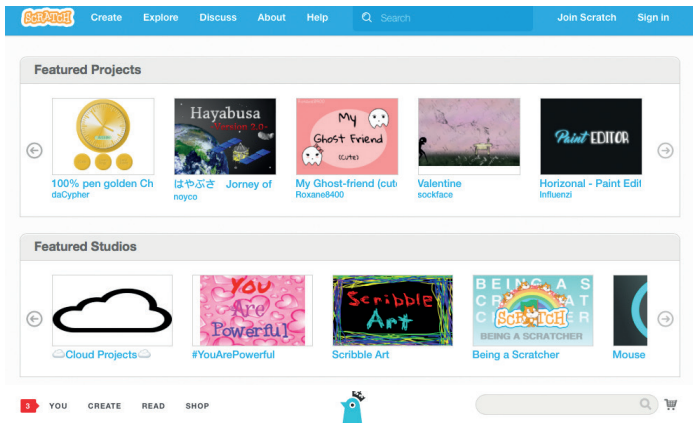


Image 2. Scratch.mit.edu homepage (partial view). Users share their computer programming creations as well as browse other users' work. The homepage on Scratch is dominated by user-generated content.

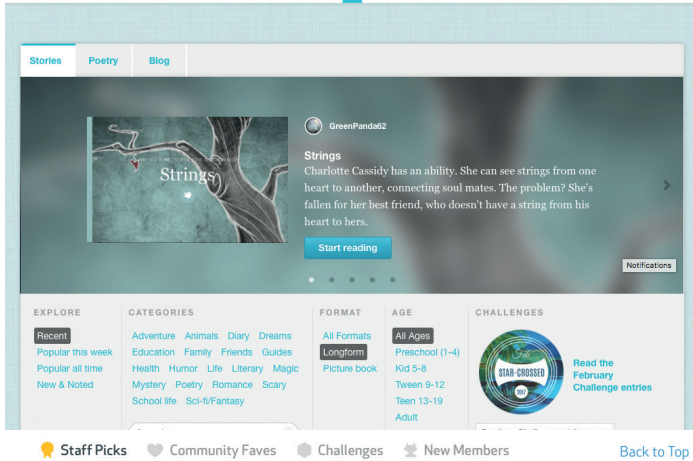


Image 3. Storybird.com homepage (partial view). Users write and share stories by assembling professionally created illustrations.

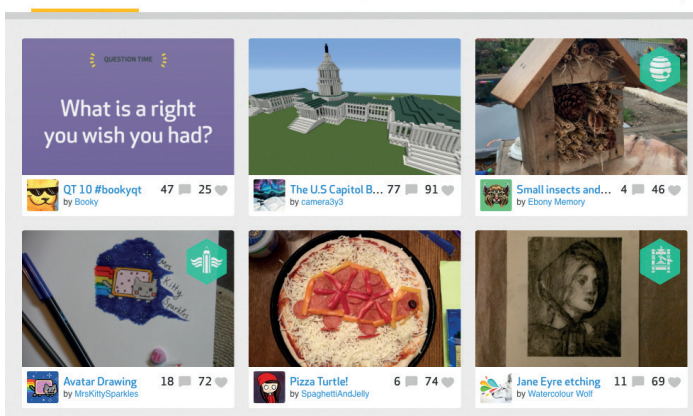


Image 4. DIY.org homepage (partial view). Users share a wide range of things they have made both digitally and physically.

availability of sites where children can lawfully share their DIY media creations; the limited design features for sharing and creating found on these sites that *are* available to children; and the absence of adequate guidelines and policies prioritizing children's freedom of expression currently available to designers.

Literature review

Previous academic research on children's digital media making has been limited in many ways. For one, large surveys of Internet use tend to exclude children entirely, focusing instead on teens and young adults. Important exceptions to this include works associated with the *EU Kids Online* project (Livingstone, 2008), longitudinal research conducted as part of the *Young Canadians in a Wired World* project (Steeves, 2014), and research by Svoen (2007). Even here, younger children aged 0 to 8 years are absent from most available data sets. While a growing number of qualitative studies examine the experiences of younger children creating and sharing content online (e.g. Burn & Richards, 2014; Willett et al., 2013), it remains an underexplored area of research. Among recent studies that do attend to children's DIY media production, there is a tendency to focus on classroom contexts, and most do not explicitly consider children's *sharing* of their creations (for an exception to this, see Fields, Kafai & Giang, 2016). Instead, sharing behavior is implied instead of described, or simply noted as a potential implication of creative production (e.g. Kearney, 2007).

As with other aspects of children's digital technology use, few (if any) previous studies consider the overall scope and quality of the available spaces, tools and platforms for children's DIY media making, especially with consideration for how larger policy influences might shape these designs. To date, much of the scholarship on children's online spaces has focused on single websites, some of which were developed under highly unique circumstances – such as at a university (e.g. *Scratch*), or through a special funding initiative (e.g. YouMedia). Similar trends can be found in the literature on children's games, apps and other digital technologies (e.g. Rafalow & Salen Tekinbas, 2014; Bailey, 2016) – leaving a dearth of comprehensive and comparative research to draw on.

These gaps in our understanding are problematic, as we cannot assume that trends exhibited by teens and young adults will hold for

children, or that the features found on one site are universal. This is especially the case when we consider not only the vast differences in development experienced between the preschool and teenage years, but also differences in family structures and supervision of online activities. For instance, even among users of similar ages, sharing behaviors can differ substantially (e.g. Svoen, 2007). Concurrently, however, emerging research suggests that increased participation in media making and sharing can provide children with a myriad of valuable opportunities from giving and receiving constructive criticism (e.g. Black, 2008), to public and civic engagement (e.g. Bennett, 2007), to exercising one's communication rights (e.g. Coombe, 2010). Furthermore, the spread of child-created content has the potential to make media as a whole more diverse and democratic, through the inclusion of the voices, ideas and perspectives of a group that has until recently been largely excluded from directly contributing its content (Grimes & Fields, 2015).

The kids DIY media online landscape

The first step in our research was to map out the scope and shape of online DIY media platforms available to children under the age of 13 years. A media scan was conducted with the goal of identifying all available English-language websites where children could make and share media content they themselves had created, remixed or heavily customized. While our search yielded a handful of intergenerational websites previously known to include child users, we largely focused on those that described themselves as, or otherwise indicated that they were, targeted specifically to youth, kids and/or children. The scan was completed over a four-month period in 2013-2014 by researchers located in different geographic regions using multiple search engines (e.g. Google, Bing) and search terms (e.g. "DIY media," "stories by kids," "children's music websites").

The media scan produced several unexpected findings. First, we were surprised by the relatively small number of sites it yielded. Our preliminary data set counted in the low hundreds, and was further reduced once we eliminated sites that claimed to be for children (e.g. in their self-descriptions) but contained terms of use or privacy policies that forbade children under the age of 13 from participating. Second, relatively few DIY media sites for children contained sharing

features. A significant number of our early search results contained tools or resources for creating media, but did not provide any features or systems for sharing this media with others. During the early stages of coding, 107 sites – nearly half the sites in our preliminary data set – were eliminated for failing to include built-in sharing features, despite containing descriptions or other indications that such features would be provided. In terms of major trends within the online children's DIY media landscape, “making” clearly trumped “making and sharing.” Ultimately, our media scan identified only 140 websites that allowed children under the age of 13 to both make and share their own media content (Grimes & Fields, 2015).

What do kids DIY media sites look like?

The content of 120 of the sites identified in the media scan was subsequently analyzed using a standardized, 83-item coding protocol. The content analysis did not extend to content made or posted by the sites' users, but instead focused solely on content created by the sites' owners/operators, including features of the sites' designs, descriptive texts (e.g. About Us pages, instructions), advertisements, terms of service, and privacy policies. While a comprehensive overview of the content analysis findings is beyond the scope of this chapter, a discussion of dominant trends can be useful for understanding what the children's online DIY media environment looked like in 2014 (see Table 1 for layout of results discussed below).

As this was a criterion for inclusion, all the sites examined provided tools, features and/or forums for users to either make or upload some form of DIY or user-generated content, which could then be shared with either the public or other registered users. The vast majority enabled on-site sharing, while another significant proportion enabled users to share through third-party sites such as Facebook. We examined the extent to which user creations were included in the construction of the site's public face or “front page,” and found that most, seven out of ten, showcased their users in some way. The most popular means of showing user involvement on the front page was by displaying users' shared content, their DIY media creations.

Another key consideration was the extent to which children's content was moderated, censored or otherwise restricted on the sites.

Table 1. Qualities of Kids DIY Media Websites (per cent)

Supports for sharing user-generated content	%
On-site sharing	96
Sharing in third-party sites	68
Visibility of users on front page	
Showcase users on front page	74
Showcase users' creations on front-page	65
Moderation	
Moderate users' content before posting	19
Site moderates content of users' communication	26
Instructions to report unacceptable content	65
Networking residues	
Commenting	80
Liking/favoriting/rating	68
Private messaging	48
Text chat	16
Curate projects in a gallery or list	49
Finding and following other users	
Friend users	37
Follow users	52
Search for other users	56
Support for creating content	
Support for creation within the site	55
User forums	44
Expert support	22
User-generated tutorials	17
No support from site	45

N=120

Note: Sites provided multiple features which is why the sum within each category exceeds 100.

Source: Compiled by the authors

Notably, only a fifth of the sites analyzed moderated user content before it was posted, while less than a third monitored users' contributions to on-site forums, comment sections, and other communication channels. Support for various forms of peer moderation was more prevalent: 65 per cent of the sites instructed users to "report" unacceptable or offensive content. It is important to note that the content analysis did not extend to the sites' own creation tools, which may very well have contained design limitations that restricted users at the

point of creation (including banned words filters, missing features, or reduced menu options).

Creation does not happen in a vacuum: many supports, both technical and social, are needed to help children develop the skills and understanding to be creative in a particular area, as well as to cultivate the conditions in which a shared cultural experience might emerge. As such, we also examined the ways, and the extent to which, the sites fostered community and allowed for users to provide one another with peer support. Eight out of ten sites did provide users with features allowing them to leave (public) comments on other users' projects. Many also enabled users to "like," "favorite" or otherwise rate each other's creations. Other forms of communication were less common. Less than half the sites offered private messaging or text chat features, and less than half enabled users to curate projects to a public list or gallery.

In terms of friending and following, just over half the sites allowed members to friend, follow or search for other users. Many of the sites provided means of creative support from within their own communities, but most did this through the inclusion of user forums – a feature that previous research has found to often be used by only a small proportion of core users (e.g. Kafai & Fields, 2013). In addition, some sites were designed for other means of community support such as expert support and user-generated tutorials. However, at nearly half the sites analyzed, there were no places explicitly designed for users to find help from each other.

Overall, we found that some children's DIY media sites do provide a range of technical and social supports for younger users to engage in media making and sharing, but also that this is far from consistent or even pervasive. Although most of the sites showcased user content on their front pages, thereby including children's voices in the construction of the site's "public face," tools for socializing, networking, and providing peer support were sparse and limited. An unexpected finding was the lack of identifiable moderation policies found on so many of the sites. While this could potentially have beneficial implications for children's freedom of speech rights, it also raises serious questions about compliance with the US Children's Online Privacy Protection Act (COPPA) and the status of children's privacy, safety and well-being within the DIY media realm.

Navigating a complex terrain

Since the partnership was launched in 2013 we have hosted two workshops, bringing together project partners with established children's media producers and designers, educators, policy experts, and academic researchers. These workshops have presented a unique opportunity to share and receive feedback on our preliminary findings, and discuss relevant issues with a cross-sector group of key stakeholders. The first workshop was held in early 2014, included 22 participants (along with 8 members of the research team), and focused on the theme "sharing." The second was held in early 2016, included 18 participants (in addition to 11 members of the research team), and centered on the theme "agency."

An important set of issues brought up by our participants concerned the legal requirements, regulatory protections, and costs associated with maintaining a DIY media platform for children online. Some reported that designers often choose to exclude children (through the inclusion of formal age restrictions, for instance) because of governmental regulations on collecting data from users under the age of 13, particularly those established by COPPA. If companies do target users under 13, they risk opening themselves up to potential litigation and civil penalties. The challenges involved in moderating online content and communication in order to make sites "safe" for children were raised as a related concern. Effective moderation requires people who can review all content and comments, which necessitates a significant investment of time and money. In both cases, money spent on legal fees or moderator salaries was described as detracting investment from the sites themselves – for making them better, expanding their features, and so on. Participants discussed the implications these legal and moderation concerns had on the kinds and quality of digital media available to children.

Another issue raised by our workshop participants was the perceived lack of resources available to help designers navigate regulatory requirements, as well as evaluate and apply appropriate ethical standards to the design and management of children's online DIY media spaces. Some of our participants suggested that placing strict limits on certain words, themes or images was an unavoidable part of hosting a space where children post and view user-made content, but they also acknowledged that defining these limits was sometimes difficult. This discussion shifted to the lack of appropriate standards and guidelines to

refer to when making such decisions. Relatedly, participants discussed tensions around the privacy policies and terms of service contracts contained within children's websites, games and apps, specifically those that arose when the desire to ensure that children (and parents) understood the policies conflicted with the various legal requirements associated with such documents. Some reported that although they had wanted to include child-friendly language about privacy, intellectual property ownership and other terms of service in their policies, their legal departments had ultimately nixed these plans, opting instead for standard, legalese-laden documents.

Our participants also expressed concerns about younger children's access to adequate information on the implications of posting content online. A number of them proposed that at least some of the problems we discussed might be addressed through digital literacy curricula specifically aimed at teaching younger users about their rights and responsibilities as content creators. Others mentioned that many parents and educators also lack a firm understanding of the various issues involved, and did not have the adequate resources to effectively guide their children through complex copyright and privacy issues. This led to some concerns about the ability of both children and parents to make informed decisions about the legal relationships they enter online, as well as some preliminary questions about how digital literacy can be addressed in, or perhaps even built into, privacy policy and terms of service documents.

The discussions that unfolded during these workshops thus provided additional context for understanding the findings of our media scan and content analysis, while introducing some contradictions as well. On the one hand, the participants revealed some of the probable reasons behind the paucity of sites available to children for creating and sharing their own DIY media content, highlighting the various challenges that designers face at various points in the development process, as well as the lack of adequate support available to them when it comes to tackling the emerging ethical and legal issues involved. On the other hand, our findings suggest that not all sites are equally limited by the types of considerations raised by our workshop participants – at least not in ways discernable through our content analysis. For instance, very few of the sites we examined appeared to moderate or review user-made content. As mentioned, this raises important questions about the rates

of COPPA compliance found in this area of the children's digital landscape, as well as the implications for children's freedom of expression and other cultural rights. It also raises new questions about how and where regulatory requirements and industry standards relating to the publication of children's content might both overlap and conflict.

Conclusion and next steps

Overall, the findings of our media scan and content analysis show that many sites did not sufficiently afford or support users' sharing content with the public or sharing ideas with other creators. This trend is concerning, since sharing and interacting with others play such an instrumental role in many of the benefits associated with media making. It is important to note, however, that our research also identified a number of promising exceptions to the dominant trends identified above. This included a site that incorporated creative commons licensing and a site that provided detailed editorial feedback on all user-created submissions, as well as a handful of sites featuring peer mentoring tools and support systems. While these exceptions were not discussed in this chapter, they do form the basis of the next planned step in our research – a series of in-depth case studies aimed at better understanding the workings, rationale and uses of sites (as well as digital games and apps) found to contain particularly noteworthy, child-centric, and ethical approaches to supporting children's DIY media making and sharing.

The findings described here have informed our research in other ways as well. Key among them are the contradictory findings that emerged around issues of content moderation, COPPA compliance, and children's freedom of expression rights. Previous research suggests that many web 2.0 platforms opt to ban children under the age of 13 in order to avoid the costs and potential challenges associated with moderating children's content and ensuring COPPA compliance. Many of our workshop participants confirmed that this was often the case, and some related anecdotes about projects or features that were ultimately discontinued on these very grounds. Our media scan results appear to support this finding; however, our content analysis results do not. The discrepancy raises a number of questions: Does the lack of on-site moderation observed among these sites translate into greater freedoms for children to express themselves and be creative? Or are these trends

evidence of a lack of accountability and responsibility on behalf of the site creators? Or, were our results skewed by the limited scope of our coding protocol, or alternatively, by a lack of transparency about underlying content moderation and censorship practices?

On these and other issues, our findings have raised more questions than answers. This is especially the case when it comes to thinking about *why* children's DIY media sites are designed the way they are, and *what* the implications are for children's creativity, learning and cultural rights. In addition to justifying the need to conduct an in-depth comparative case study, our findings to date inform some of the questions we will be asking in our upcoming interviews with children's DIY media site designers. We are also drawing on these findings, particularly the issues and questions that emerged during our workshops, in our planning of a daylong consultation event with a select group of child media makers, to be held in the final year of the *Kids DIY Media Partnership*. While there is still much work to be done, we anticipate that at the project's end our study will yield a rich and detailed mapping of the contemporary children's DIY media landscape, and provide a set of recommendations for building and managing child-centric, ethical and rights-based platforms, policies and approaches for supporting children's media making and sharing online.

Notes

1. Additional research stages associated with this project include a transnational policy analysis and a series of in-depth case studies, both of which are currently underway. Once the data from these stages have been analyzed, we furthermore plan to hold a daylong "child advisory" event, which will bring together *Kids DIY Media* partners and child creators to discuss the implications of our findings, and establish a series of next steps and priority areas.
2. The sites covered a broad range of media, from writing and art to game-making and science. A few examples are Scratch.mit.edu, storybird.com, youtube.com, diy.org, roblox.com, gamestarmechanic.com, and kids.tate.org.uk.

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