

Where Does all the Money Go? Free and Paid Transactions on TeachersPayTeachers.com

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Online curricular marketplaces such as TeachersPayTeachers.com (TPT) are challenging conventional notions of curriculum, the professionalization of educators, and the exchange of capital in P-12 education. In this research note, we explore these issues by presenting an accounting of: (a) the size and scope of TPT, (b) the number of TPT resources being downloaded, and (c) the financial transactions associated with TPT educator-storefronts. Findings indicated that TPT hosted 4,018,173 classroom resources from 208,748 educator-sellers with 1.5 billion all-time downloads and \$3.9\$ billion in total sales. 69% of all TPT downloads were of free materials. However, an overwhelming 81% of total TPT sales were attributed to the top 1% of educator-sellers (n = 1,524). TPT's massive scope suggests it has introduced an important disruption in P-12 curriculum, with implications for the professionalization of educators. Furthermore, TPT's unequal distribution of wealth across educator-sellers suggests disparities in the extent to which individual sellers are part of this disruption.

In a recent *Teachers College Record* commentary, Hodge et al. (2018) asserted that online curricular marketplaces such as OER Commons, ReadWriteThink.org, and TeachersPayTeachers.com (TPT) offer possibilities for enhancing teacher professionalism. When teachers create and curate their own curricular materials through such sites, they exercise professional agency, challenging educational reforms that frame them as unskilled conveyors of standardized content (Apple, 2013; Pittard, 2017). Indeed, online curricular marketplaces may "disrupt the existing ecology of curriculum providers dominated by textbook companies" (Hodge et al., 2018). Yet, for-profit approaches to this model, such as TPT, also pose challenges. Contrary to idealists' hopes, technological "innovations" sometimes fail to disrupt and instead remake or even extend the social predicaments reformers hoped to fix (Sims, 2017).

If for-profit educator-to-educator models represent a possible future for the buying and selling of classroom resources, it is important for educational professionals and stakeholders to consider: *is this the future that we want?* We ask this question within the context of one flourishing for-profit curriculum market, TPT. By presenting an accounting of the curricular resources, downloads, and financial transactions taking place on TPT since its 2006 creation, we explore three issues surrounding this possible future of for-profit curriculum marketplaces.

First, to what extent does teachers paying teachers provide *economic* benefits to teachers? On one hand, supporters praise TPT as a disruptor in P-12 education, because the platform "allow[s] dedicated teachers to earn additional money for their hard work" (Boitnott, 2015). This view is supported by data that show some "online teacherpreneurs," or individuals who sell original curriculum online, report sizable earnings. Some report *monthly* sales well beyond a typical United States (U.S.) teacher's *annual* salary (Shelton & Archambault, 2019, 2020), although the extent to which this is common is unknown. On the other hand, detractors criticize for-profit marketplaces for relying upon sales funded largely from individual teachers' pockets (Bennett, 2019; Pittard, 2017). In light of recently declining teacher salaries in the U.S. (Allegretto & Mishel, 2019), TPT's profit model may be particularly problematic. Nonetheless, the extent to which teachers actually spend money on TPT, as opposed to using it for free resources, is unknown.

A second issue is to what extent sites like TPT actually meet teachers' *curricular* needs. On one hand, there are some concerns about the quality of teacher-created and teacher-vetted materials available on TPT (e.g., Polikoff & Dean, 2019; Sawyer et al., 2019). On the other hand, teachers must be finding some curriculum support from online curriculum marketplaces based on the heavy use of such sites. For example, TPT reported that 2/3 of United States (U.S.) teachers have used a resource from the site (TPT, n.d.), and a recent survey of a nationally representative sample of U.S. teachers found that 55% of English Language Arts teachers reported using TPT once or more each week (Kaufman, Opfer, Bongard, & Pane, 2018). However the full extent of teachers' downloading resources from TPT currently (and over time) is unknown.

The third issue is to what extent for-profit curriculum exchange models promote teachers' professional autonomy and agency. As Hodge and colleagues (2018), along with others, have argued, online curriculum platforms give teachers space to assert their own curriculum decisions, further professionalizing the role of teacher (Hodge et al., 2018; Hodge, Salloum et al., 2019; Pittard, 2017). Researchers have also discussed the value of sites like TPT to educator content creators. By self-publishing on such sites, teachers exercise professional leadership and innovation (Shelton & Archambault, 2019, 2020; Berry, 2011). In contrast, a critique of the teacherpreneur phenomenon is that it shifts the view of teachers as providers of a vital social service to viewing teachers as individual capitalists (Bennett, 2019; Highfill et al., 2016). Within TPT's capitalist model, it is unclear which and how many aspiring content creators have a chance for their materials to be seen, downloaded, and then used in classrooms.

In the present study, we explored these three issues, web-scraping the TPT website in its entirety to produce an accounting of: (a) the size and scope of TPT, (b) how often resources are being downloaded, (c) and the impact of the financial transactions for educator-sellers. The results provide complete descriptive data that may help teachers, school leaders, policy makers, and teacher educators develop informed perspectives regarding the controversial for-profit educator-to-educator model of curriculum sharing. Previous research has considered curricular exchanges in terms of resource quality (e.g., Polikoff & Dean, 2019; Sawyer, Dick, et al., 2019), how teachers select and implement such resources (e.g., Schroeder et al., 2019), the work and perspectives of content creators or "online teacherpreneurs" (Shelton & Archambault, 2018), and implications for neoliberal education reforms (Pittard, 2017). However, little work has been done accounting for the size, scope, downloading activity, and financial exchanges happening in for-profit curriculum markets.

PURPOSE

In this descriptive accounting of resources, downloads, and financial transactions on TPT, we examined over 4 million TPT resources and over 200,000 TPT stores. Using this data, we described:

- 1. the size and scope of the TPT economy
- 2. the extent of free-resource downloading and for-money resource downloading
- 3. how evenly money was shared across the educator stores on TPT

Understanding the size and scope of TPT's economy (i.e. how much money is exchanged) informs discussion about the economic benefit or harm to teachers. Second, understanding the extent of free and for-money resource downloading sheds light on TPT's impact as a source of curriculum for teachers. Finally, how evenly money was shared speaks to the extent that a broad range of educator content creators are professionalized on the site. We acknowledge the potential of perhaps-well-intentioned tech innovations aiming to disrupt P-12 education (Sims, 2017) but investigate whether TPT may instead merely remake traditional models of curriculum provision by giving voice to only a few elite content creators. In other words, by examining "where the money goes," we hope to better inform discussions of the extent to which sites like TPT are benefiting educators or failing them.

METHODS

We collected data through web-scraping, the gathering of information embedded within the highly-structured HTML files for all TPT resource pages. Following guidelines offered by the SIGCHI Ethics Committee (2017), we protected the privacy of individuals by only reporting aggregate data (Kosinski et al., 2016), thereby not identifying any individual accounts or educator stores. Because computational methods were used for both data collection and analysis, two authors carefully collaborated to ensure code integrity. One author wrote the majority of the code, which a second author reviewed and tested on samples of data to check for accuracy. When errors were discovered, both authors corrected them through an iterative process of revision until a complete data check revealed accurate final data.

Data included the resource pages on TPT created between the site's inception in 2006 and September 2019, excluding any resources that may have been posted but subsequently removed from the site by either the store owner or TPT. Data extracted from each TPT resource page included the full listed price, the number of times downloaded, and the store that sold the resource. We omitted resources that had outlier values in some fields. For example, a few resources had erroneous creation dates listed before the inception of TPT. Data were also collected at the store level. We aggregated the total number of resources available within the store, the total number of times each of those resources had been downloaded, and the total sales within the store.

To calculate total sales (in dollars) across stores, we first collected the full listed price for each resource. The sales data we share in this paper assumed that purchasers paid the full listed price for each resource. However, we were unable to account for promotions, sales, or special offers on TPT, so our numbers overestimated to some extent the total value of sales. In one exception to the rule, we used the listed sale price for *bundles*—collections of two or more resources packaged as a single resource and offered at a bulk discount (TPT, n.d.)—rather than the sum of the full listed prices of the individual items in the bundle.

A related limitation was that the portion of each sale that TPT receives varies due to (a) a store's seller status ("premium" vs. "basic"), (b) changes in the company's profit-sharing structure over time, and (c) any discounts offered by sellers or TPT. At the time of data collection, TPT's website reported that the company took 20% of sales from "premium" sellers along with an annual fee of \$59.95 per year, and 40% of sales from "basic" sellers who paid no annual fee (TPT, n.d.). In short, the sales presented in the results of this study indicate dollar transactions, not seller profits.

A final caution is that our results regarding total store sales (in dollars) represent a store's earnings over the entire span of

its existence on TPT. To illustrate our point, consider a hypothetical store that had amassed \$1,000,000 in sales. If that income had been accumulated over 14 years, with TPT taking 20% plus an annual fee, that store would be making a relatively-modest \$71,428 per year before income taxes. In contrast, if that store earned that same million dollars in just one year, this would represent a significant financial windfall. We share these hypothetical examples to emphasize that a "TPT millionaire seller" may sound impressive, but depending on how long the store has existed, it could represent a relatively humble small business.

FINDINGS

THE SIZE AND SCOPE OF THE TPT ECONOMY

Table 1 summarizes the size and scope of the TPT economy in terms of the resources, educator stores, transactions, and sales from 2006 up through September 2019. By these measures, TPT is a large enterprise with over 4 million resources available from more than 200,000 educator stores and over \$3.9 billion in transactions.

Table 1. Summary of Size and Scope of the TPT Website

Resources	
Number of resources on TPT	4,018,173
Stores	
Number of stores on TPT	208,748
Number of stores with at least one nonfree resource	152,393
Transactions	
Number of downloads (transactions)	1,530,382,712
Sales	
Total money exchanged	\$3,919,306,981

Over 92% of transactions were for \$5 or less. The average resource on TPT was downloaded 381 times, and generated \$975.40 in sales.

THE EXTENT OF FREE-RESOURCE DOWNLOADS AND FOR-MONEY RESOURCE DOWNLOADS

A surprising 69% of all downloads on TPT were for free resources, although only 15% of the resources on TPT were listed as free. In short, the demand for free resources was proportionally greater than the availability of free resources on TPT. Accordingly, the average TPT resource had a listed cost of \$3.73, but the average transaction was \$2.56, because free and low-cost resources were downloaded more frequently.

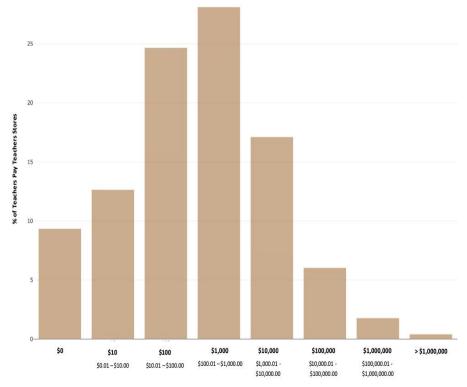
In contrast, 31% of the downloads (transactions) were for-money exchanges totaling over \$3.9 billion. These data highlight the ways in which TPT operates in both the free-resource marketplace and the for-profit marketplace at the same time, albeit with important differences between the two kinds of activity.

HOW EVENLY MONEY IS SHARED ACROSS THE EDUCATOR STORES ON TPT

Store-level analyses indicated that 27% of stores only listed *free* resources and that 34% of stores had \$0 in sales. The 73% of stores with at least one resource for sale (n = 152,393) shared the over \$3.9 billion in sales.

The sales were not shared evenly across stores - over three-quarters of stores did not have substantial sales, with store lifetime totals between just \$0 and \$1,000 (Figure 1). This uneven distribution of sales is further highlighted by considering median sales across stores: \$131.00, notably lower than the average store sales of \$24,615.

Figure 1. Percentage of educator stores (n = 152,393) by total sales level (exponential scale).



Total Sales Level

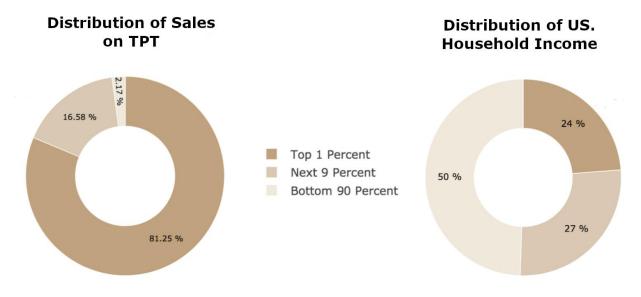
The Top-Performing 1% of TPT Stores

The skewed distribution of sales across stores prompted a closer look at the top-performing stores. The top performing 1% of stores (n = 1,524) accounted for 81% of TPT's total sales dollars (approximately \$3.2 billion), leaving the other 99% of stores to share the remaining 19% (approximately \$0.7 billion). Stores in TPT's top 1% brought in an average of \$2.0 million, with a lower limit of \$315,177. As previously noted, these numbers represent a store's total sales over its lifespan, which could be up to 14 years.

Sales Inequality Among TPT Sellers

Figure 2 contextualizes the uneven TPT sales distribution further with a comparison to the often-cited income inequality of U.S. households. The degree of revenue concentrated in the hands of a few teacherpreneurs on TPT is striking. In any marketplace, some vendors will be more successful than others, but sales on TPT were overwhelmingly dominated by a small percentage of educator-sellers. We remind the reader that the sales data represent dollar transactions, not seller profits.

Figure 2. Sales distribution (in dollars) for TPT stores (n = 152,393) compared to the income distribution of U.S. households (Center on Budget and Policy Priorities, 2019)



DISCUSSION AND IMPLICATIONS

This descriptive study of the TPT economy demonstrates that TPT is a significant force in the online marketplace for educator-created materials in terms of its size (over 4 million resources), sales (over \$3.9 billion), and activity (1.5 billion downloads). At the beginning of this note, we asked if for-profit educator-to-educator models represent a possible future for classroom resources as Hodge et al. (2018) proposed. Our findings indicate that yes, TPT is a notable player in the future of P-12 curriculum, given the platform's sheer scale of impact. Nonetheless, *is this the future that we want?* Our findings point to two conclusions.

MOST DOWNLOADS ON TPT ARE OF FREE RESOURCES

The first conclusion is that critiques of TPT's for-profit model (i.e. the site's reliance on teachers paying TPT sellers) may be somewhat overstated, given that the average resource costs \$3.73 and 69% of downloads from TPT were of free resources. Teachers appear to overwhelmingly prefer free resources from the site. With so much downloading happening on TPT, it may be more appropriate to consider TPT as simultaneously providing both free and paid access to resources, blending two models for teacher-to-teacher curriculum sharing. In the end, however, TPT makes money by taking a share of each sale.

While the issue of teachers spending their own funds on for-profit curriculum remains a sticky one, we hope our findings shed light on the issue by noting how many teachers are using the free features of TPT. Moreover, the majority of downloads on the site are for less than \$3. Those who critique TPT's reliance on teachers buying their curriculum might find the free uses of TPT more acceptable. Nonetheless, schools, districts, and policy makers may have to consider revising funding models to support teachers in selecting and purchasing low-cost materials of their choice without having to spend money out of pocket.

MOST TPT SALES ARE ATTRIBUTABLE TO ONLY THE TOP 1% OF SELLERS

Our second conclusion is that while TPT's name might conjure visions of a space where any teacherpreneur can share and be compensated for their original classroom materials, that is far from reality. The top 1% of TPT stores commanded a staggering 81% of all TPT sales (in dollars). A small minority of TPT sellers receive substantial financial benefit, while most do not.

IMPLICATIONS FOR FUTURE RESEARCH

Ultimately the TPT platform overwhelmingly gives voice to just a few power sellers (the top 1%), who may not reflect the diversity that might be hoped for in curriculum creators (Shelton & Archambault, 2020). A glance through TPT's website showcases many White, attractive, female seller profile images. Further investigation should explore top sellers and the explicit and implicit perspectives and experiences they bring to their work. We wonder what barriers sellers of color, or other minority statuses, may face on TPT and how the site's profit model and search algorithms, as well as TPT buyers' purchasing behaviors, impact who has a chance to be seen and heard on the platform.

Another venue for continued research is around the quality of resources offered by TPT power sellers. There seem to be significant limitations in TPT's model of teacher resource vetting (i.e. TPT quantitative user ratings are universally high and thus not useful; Abramovich & Schunn, 2012; Polikoff & Dean, 2019; Shelton et al., under review). Given TPT's scope and knowing the extent to which TPT's elite sellers profit, we wonder how TPT's vetting process could (and should) be made more rigorous, or at least comparable to that of bigger curriculum publishers.

CONCLUSION

Online curricular marketplaces may offer new opportunities for P-12 curricular innovations and a way to validate teachers both professionally and economically (Hodge et al., 2018; 2019; Pittard, 2017). As Hodge et al. (2018) suggested, sites like TPT may be a space for teachers to take control—or at least increase their influence—as creators and consumers of curricula. Our findings suggest that TPT's for-profit model is indeed a notable force in the future of P-12 curriculum, due to its sheer scope of use. But is this a future we want? By examining how money is exchanged within the site, we find that teacher-buyers readily use TPT for the exchange of free resources—69% of all downloads were of free resources. Additionally, we find that influence on TPT is largely shared among a small, elite subgroup of sellers. TPT's model may look more like big publishing companies than its creators intended or its users imagine, and thus we worry that inequities perpetuated by this status quo, capitalist model, may persist on TPT as well. Nonetheless, teacher educators, school leaders, and teachers who use TPT gain agency to impact what curriculum is provided and used from the site. Savvy users may be the only way TPT stands a chance to ultimately be a force for good in the future of P-12 curriculum.

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