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Who Are Online Teacherpreneurs and What Do They Do? A Survey of Content Creators on TeachersPayTeachers.com

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Abstract

Online teacherpreneurship occurs when current or former P-12 teachers distribute their original classroom resources and ideas through online educational marketplaces such as TeachersPayTeachers.com (TpT). Online teacherpreneurs' materials have become prolific in classrooms, but little is known about these individuals or their practice. This study sought to understand the characteristics, school environments, practices, and impacts of teacherpreneurship through a survey of TpT sellers (n = 412). Descriptive results show that online teacherpreneurs were predominantly female, white, highly educated, and experienced practitioners. They viewed themselves as helpful, hard-working, creative, and organized. Most separated their school and business work, and they spent considerable time creating educational resources, collaborating with teachers online, and building their business. Online teacherpreneurs reported experiencing improvements to their teaching practice and teacher leadership opportunities. (Keywords: online teacherpreneurs, professional learning networks, social media, teacher leadership)

Online teacherpreneurs are current and former preschool to 12th grade (P-12) teachers who market their original classroom materials and ideas online (Shelton & Archambault, 2018). Online teacherpreneurs' materials have become popular with teachers given the advent of educational marketplace websites including Teachers Pay Teachers, TES, Amazon Inspire, and Houghton Mifflin Marketplace (Gomes, 2015). According to Teachers Pay Teachers, the most popular of these online educational marketplaces (Gomes, 2015), over two-thirds of United States (U.S.) teachers have used a resource from the site (TpT, n.d.). If you step into a U.S. P-12 classroom today, you are likely to see lessons, activities, and learning materials that were created by an online teacherpreneur.

Teachers have historically shared lesson plans and classroom resources with colleagues; however, online technologies now enable the sharing of digital goods at a larger scope, among a broader network, and in exchange for money. Online educational marketplaces such as TeachersPayTeachers.com (TpT) are virtual platforms where teachers search for and purchase classroom activities, lesson plans, worksheets, and décor. The technological affordance of these virtual resource pools (Hu, Torphy, Opperman, Jansen, & Lo, 2018), or sites of curriculum sharing (Gallagher, Swalwell, & Bellows, 2019), is that they offer quick access to teacher-created resources that meet a specific need on demand.

As teacher educators, we have observed that our students (both practicing P-12 teachers and preservice teachers) commonly use classroom resources from TpT. They enthusiastically follow their favorite online teacherpreneurs on social networks such as Instagram and Pinterest, platforms that have emerged as popular marketing venues for online

teacherpreneurs (Carpenter, 2016; Hu et al., 2018; Pittard, 2017; Schroeder, Curcio, & Lundgren, 2019; Staudt Willet, 2019). Although some researchers have suggested that teacherpreneurs' social media content may be unhelpful or distracting to teachers seeking to improve their practice (Carpenter, Koehler, Willet, & Greenhalgh, 2019; Staudt Willet, 2019), our students have described online teacherpreneurs' social media activity as useful – in fact, they seek it out.

In 2017, TpT reported over 80,000 sellers (Thompson, 2017), and that number continues to grow. Some teacherpreneurs earn significant profits and experience satisfaction when teachers chose to pay money for their resources (Shelton & Archambault, in press; Pittard, 2017). They also stand to become online influencers in education, whether at a small or large scale. Along with these positive aspects, there are also concerns. The practice thrives because teachers are willing to spend their personal funds to purchase teacherpreneurs' resources. Another issue is since essentially anyone can upload teaching materials to the online market, the quality is unclear. Given online teacherpreneurs' potential impact on education and the nuanced nature of their role, they are a worthy topic of scholarly examination.

Peer-reviewed studies of online teacherpreneurs are limited (see Pittard, 2017; Shelton & Archambault, 2018, in press); however, our recent work (Shelton & Archambault, in press) has begun to explore who online teacherpreneurs are and what they do. We interviewed 10 TpT sellers to describe their characteristics, school environments, practices, and impacts. We found that elite teacherpreneurs (those whose total sales were in the top 1% of all sellers across TpT) viewed themselves as helpful, hard-working, organized, creative, and risk-taking. They tended to separate their business and classroom teaching. Some elected not to disclose their role as teacherpreneurs to their school employers or colleagues. The teacherpreneurs reported meticulously creating classroom resources that they believed to be of high quality. They saw their work as positively impacting their own classroom teaching because it made them more critical and likely to perfect their materials. They also saw their practice as helping them to be more in-touch with educational research and trends and believed it made them more likely to innovate or try new classroom approaches. Finally, elite teacherpreneurs reported serving as virtual mentors for the teachers who used their materials, read their blogs, or engaged with them via social media. However, the extent to which these findings are generalizable to mainstream online teacherpreneurs is unknown.

Purpose

The current study sought to extend our previous findings (Shelton & Archambault, in press) to the mainstream teacherpreneur population. By conducting a wide survey of TpT sellers, we examined the characteristics, school environments, practices, and impacts of mainstream teacherpreneurs to describe the practice and its participants more generally and quantitatively. Findings may help us better understand the efforts teacherpreneurs put into creating their materials and the skill sets they bring to the practice. In addition, understanding teacherpreneurs' school environments may provide useful information regarding the support teacherpreneurs seek at school. Finally, examining the impacts of teacherpreneurship may help us better understand the extent to which this practice is productive (or unproductive) professionally. Ultimately this information may help stakeholders make more informed decisions when it comes to online teacherpreneurship for teachers and schools.

Literature Review

A history of online teacherpreneurship

Online teacherpreneurship has arisen amidst a confluence of events over the past decade. In 2006, the most popular and established online educational marketplace,

TeachersPayTeachers.com, was launched (Gomes, 2015; TpT, n.d.). TpT established a place for teachers to upload original classroom material that could be purchased by others for a small fee. In 2010, Pinterest came onto the stage, and teachers surfaced as early adopters (Grote-Garcia & Vasinda, 2014). Teachers accessed the platform's digital pin-board to collect classroom ideas and share them; meanwhile, online teacherpreneurs used Pinterest to market their resources to teachers (Carpenter, 2016; Gallagher et al., 2019; Hu et al., 2018; Pittard, 2017; Schroeder et al., 2019). Later the same year, the U.S. Common Core State Standards were released (Common Core State Standards, 2019). As states adopted the Common Core, this created a new demand among U.S. teachers to adapt their curriculum to align with the standards. By 2012, U.S. online teacherpreneur Deanna Jump was the first to be publicized for earning one million dollars through the sale of her curricula on TpT (CNN, 2012). While some online teacherpreneurs have followed in her footsteps, most have experienced varying degrees of economic success. Teacherpreneurs' success has shown that there is a high demand among teachers for teacher-created curriculum. As Schroeder and colleagues observed, "Teachers' use of [Pinterest and TpT] is a tacit acknowledgment that the site contains within it legitimate sources of information, particularly around hands-on, engaging activities" (p. 13).

Simultaneously, another factor that may have driven online teacherpreneurship is declining teacher salaries. In 2018, U.S. public school teachers' salaries declined to approximately 67% of other U.S. college graduates (Allegretto & Mishel, 2019). This decrease may have created a demand among ambitious teachers for alternative ways to augment income. Currently, nearly one in five U.S. public school teachers (18%) works a side job outside of fulltime classroom teaching (NCES, 2018). Of those, only 50% related to education. Online teacherpreneurship may be an appealing option for teachers wanting to supplement their income while using their professional training and experience to contribute to education. The bitter irony is that while the practice puts money in the pockets of the teacherpreneur, it is typically at the expense of other classroom teachers. As an appealing alternative, some districts and schools have arranged for teachers to use school funds, which is an option now offered via TpT for Schools (TpT, n.d.).

Empirical evidence regarding online teacherpreneurship

Past empirical evidence regarding teacherpreneurs (Pittard, 2017; Shelton & Archambault, 2018, in press) and teachers' use of Pinterest and TpT (Hertel & Wessman-Enzinger, 2017; Hu et al., 2018; Schroeder et al., 2019) informed the current study. Pittard (2017) examined teachers' interactions with TpT from a new materialist feminist perspective. Over a school year, she observed one online teacherpreneur and three teachers who used TpT as buyers. The online teacherpreneur had over 15 years of teaching experience and found joy in creating classroom material. She designed resources that were visually appealing and met teachers' needs, based on what worked in her classroom. The other teachers shared these qualities but preferred their role as buyers. They used TpT to save time rather than creating their own resources, to find new approaches for their classroom, and to make their classrooms attractive. The four participants viewed online teacherpreneurship positively; however, Pittard observed that Pinterest and TpT may enhance teachers' drive to makeover themselves as professionals, fostering an unattainable cycle of improvement-seeking. The teachers may have enjoyed the makeover process and participated by choice, yet their participation perpetuated the neoliberal ideal that women teachers are not good enough. Overall, Pittard observed impacts including: (a) the teacherpreneur's sense of satisfaction in creating something that another teacher wanted, (b) teacherpreneurship enabled the teacherpreneur, rather than curriculum or textbook companies, to be compensated for her work, (c) teacherpreneurship may perpetuate unrealistic or inaccurate ideals of good teaching.

In another small-scale study, Shelton and Archambault (2018) explored a private online community of teacherpreneurs who sold Spanish resources on TpT. Using a survey method, we found that the 25 participants were experienced teachers, having taught for an average of 13.5 years, and were predominantly female (92%). They met through TpT and established a Facebook group to grow their small businesses. Their practices included collaborating online to share teaching ideas and business strategies, engaging in collaborative marketing, and providing emotional support for one another. They reported that their collaborations produced impacts like business growth, better TpT products, improvement in teaching skills, and new ideas for their classrooms. Taken together, Pittard (2017) and Shelton and Archambault (2018) provide small-scale qualitative evidence that online teacherpreneurs are skilled and experienced collaborators who experience personal and professional gains.

Other research has also informed our understanding of the practice of online teacherpreneurship through their exploration of teachers' use of Pinterest, a social media site where much of the educational content has been produced and curated by online teacherpreneurs (Hertel & Wessman-Enzinger, 2017; Hu et al., 2018; Schroeder et al., 2019). Hertel and Wessman-Enzinger found that one-third of Pinterest math lessons had computational errors and were infrequently used a real-world context. Hu and colleagues observed preservice and in-service teachers' curation of Pinterest math education content. They found that most of the learning activities that teachers curated from Pinterest were low in cognitive demand. On average, more experienced teachers tended to pin lessons that were higher in cognitive demand (Hu et al., 2018). While effective math teachers likely use activities that span all ranges of cognitive demand, depending on learning goals, Hu and colleagues found activities higher in cognitive demand were pinned disproportionately less. These studies question the quality of resources that teachers curate on Pinterest, many of which have been created by teacherpreneurs.

Nonetheless, more recent work by Schroeder and colleagues (2019) found that teachers interacted with Pinterest in a complex and thoughtful way. In a study of teachers' perspectives, they found that the teachers surveyed used Pinterest to find new lesson ideas, to increase classroom engagement, and to collect content-specific lesson supplements that were current and authentic. Schroeder et al. concluded, "While we are unable to make the claim that teachers do not use some of these poor-quality resources, we are able to suggest that the teachers in this study claim to be thoughtful in their choices" (p. 14). Overall, the Pinterest studies (Hertel & Wessman-Enzinger, 2017; Hu et al., 2018; Schroeder et al., 2019) have called into question the quality of online teacherpreneurs' educational resources. However, they also suggest that practicing teachers value teacherpreneurs' creations despite potential quality issues.

Although limited existing studies (Pittard, 2017; Shelton & Archambault, 2018, in press) point toward nascent understandings of online teacherpreneurs and their practice, they are qualitative and small-scale in nature. The current study sought to explore online teacherpreneurs' perspectives at a larger scale to better understand the background and processes that teacherpreneurs bring to their craft.

New approaches to teacher leadership

A final concept that informed the current study was online teacherpreneurship as a new approach to teacher leadership. Teacher leadership occurs when teachers are given greater authority and influence in their schools, districts, and communities through coaching, mentorship, curriculum development, and by providing classroom support (Wenner & Campbell, 2016; York-Barr & Duke, 2004). In the same vein, teacherpreneurship may pose a novel way for teachers to gain professional authority and influence (Holland, Eckert, &

Allen, 2014). We reviewed literature on teacher leadership to consider the characteristics, practices, and impacts of teacher leaders, as these topics were central to the current study.

Studies of teacher leaders have shown they are highly experienced teachers who excel in their practice (Katzenmeyer & Moller, 2009) because they are creative, hard-working risk-takers who are respected by colleagues (Little, 1988; Wilson, 1993). Teacher leaders succeed in school environments where they are encouraged to take initiative and have the autonomy to do so (Katzenmeyer & Moller, 2009). When schools recognize their work and compensate them, teacher leaders feel supported (Vernon-Dotson, 2008). Teacher leaders' impacts include leadership, organizational, and instructional skills (Marks & Louis, 1997; York-Barr & Duke, 2004), and increased professional satisfaction (Wenner & Campbell, 2016). Teacher leaders face increased professional stress, especially relating to having sufficient time (Wenner & Campbell, 2016) and maintaining collegial relationships while leading peers (York-Barr & Duke, 2004). Our study sought to explore the extent to which online teacherpreneurship and teacher leadership may (or may not) overlap.

Homan (2014) showed that teachers' participation in digital spaces has blurred the lines between teachers' work and leisure, strangers and their "friends," and their professional and personal lives. Our past work on online teacherpreneurs suggested that they are highly networked on digital platforms, where they engage in rich professional collaborations with peers and with their teacher followers (Shelton & Archambault, 2018; in press). The virtual space may serve as a unique outlet for teacherpreneurs to advance their roles as teacher leaders whose reach is amplified through the online medium.

The current study sought to expand upon the understanding of online teacherpreneurship through a quantitative survey of TpT sellers. The survey was organized around the conceptual model from Shelton and Archambault (in press) to explore teacherpreneurs' characteristics, school environments, practices, and impacts. We addressed these research questions:

1. What are the characteristics of online teacherpreneurs?
2. In what school environments do online teacherpreneurs work?
3. In what practices do online teacherpreneurs engage?
4. What impacts do online teacherpreneurs experience?

Methods

Participants

Participants were current and former P-12 teachers who sold educational materials on TpT. TpT sellers were selected because TpT is the most popular online educational marketplace in North America (Gomes, 2015; Opfer, Kaufman, & Thompson, 2016). After attaining clearance from our university Institutional Review Board, we used a nonrandom, purposeful sample to identify potential participants through the TpT website's "Top 100 Sellers" lists. We also solicited participation from four TpT seller Facebook groups and from the TpT online seller's forum via a written invitation. Because the first author had previously run a TpT store, she used her connections in the TpT seller community to recruit and establish credibility with participants. Through our recruitment efforts, we created a purposeful sampling frame of 929 potential respondents.

Instrument

The survey instrument was designed to address the four research questions, aligning with the themes identified in our previous qualitative study of elite, top selling online teacherpreneurs (Shelton & Archambault, in press). To translate our previously identified qualitative themes to variables associated with Likert type items, a mixed methods instrument development joint

display was used (Guetterman, Fetters, & Creswell, 2015). The joint display included four constructs of interest: characteristics, school environments, practices, and impacts. Under each construct, we listed previously identified themes (Shelton & Archambault, in press). We identified key words and phrases from the interview participants' responses that embodied each theme and wrote items using this in vivo language (Tracy, 2013). We aimed to include three items per variable for consistency and brevity. The survey ended with items addressing demographic and teacherpreneur background that were written to align with the U.S. National Council for Education Statistics teacher survey (Taie & Goldring, 2017). The developed survey was housed in the digital survey tool, Qualtrics.

Content validity. Expert review and think aloud pilot testing established the instrument's content validity (Dillman, Smyth, & Christian, 2014; Fowler, 2009). Three tenured education faculty served as experts who provided feedback regarding items' scale, readability, understandability, and overall perceptions. Then first author conducted think-aloud pilot testing with three online teacherpreneurs. Pilot participants took the survey and entered their responses, expressing their thought processes verbally as they completed it (Dillman et al., 2014; Fowler, 2009). As a result of expert review and piloting, instrument revisions included formatting changes such as adding a progress bar and modifying page numbers or item options for mobile display optimization. The scale was shortened from 6 points to 5 points because a shorter scale would be simpler to distinguish options and may have facilitated analyses of continuous data. We also modified the scale wording and revised items for readability and understandability. For example, "I struggle to understand business strategy," was rewritten to be less abrasive, becoming, "I seek mentorship to help me understand business better." Finally, any typos or logistical errors in the instrument were corrected.

Procedure

Over a six-week period, the survey was deployed using the Tailored Design Method (Dillman et al., 2014), a systematic approach for attaining higher response rates with web-based surveys. First, a pre-notification email was sent to all 929 potential respondents to increase participation (Fowler, 2009), as well as to identify inactive email accounts ($n = 5$), duplicate email accounts ($n = 2$), or requests for removal from the pool ($n = 2$). The final set of 920 potential respondents were emailed the survey three days later. Over the next three weeks, weekly reminder emails were sent, conveying increasing urgency to participate. As an incentive to complete the survey, we offered a $5 (USD) e-gift card to 300 of the participants selected at random.

Data analysis

Descriptive statistics, including frequency, mean, and standard deviation, were calculated for all items. Allen and Seaman (2007) suggest that item level results are valuable, considering that results from analyzing ordinal survey data as interval data can be misleading. While two survey items may have the same mean rating, their response patterns across the Likert items may show different distributions. To avoid misleading results, it is necessary to examine item level data and to consider the response patterns within the items (Allen & Seaman, 2007). This approach aligned with the exploratory and descriptive nature of this study.

Results

Participants

We distributed the survey to 920 TpT sellers and received 475 responses, representing a response rate of 52% which is considered acceptable for an online survey (Manfreda,

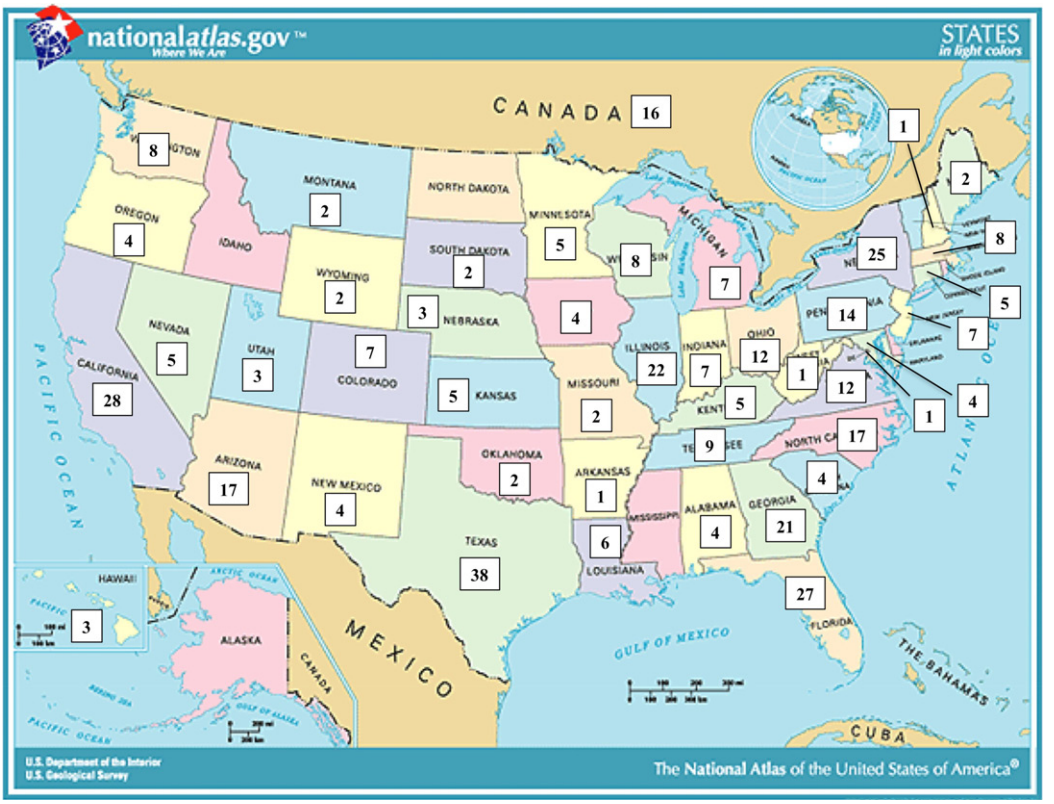

Figure 1. Number of responses across the United States and Canada.

Bosnjak, Brezelak, Hass, & Vehovar, 2008; Shih & Fan, 2008). The data set was cleaned to remove respondents who did not sell an educational resource on TpT ($n = 6$), did not have P-12 classroom teaching experience ($n = 32$), completed the survey twice through a second email account ($n = 1$), or did not complete over 50% of the survey ($n = 24$). The final sample included 412 participants. All percentage frequencies were calculated with this denominator unless otherwise noted.

Demographics and teaching background. Respondents were distributed across 43 states ($n = 379$; 92%) and internationally ($n = 31$; 8%) (Figure 1). Participant demographics and teaching background are summarized in Table 1.

Respondents ranged in age from 23 to 74 years, with an average age of 37.75 years ($SD = 24.51$).

When compared to the U.S. teacher population (Taie & Goldring, 2017), participants were somewhat younger, more predominantly female, less diverse, and more educated than average U.S. teachers. Over half ($n = 246$; 60%) were employed either full-time or part-time at a P-12 school or district, while the other 40% ($n = 196$) were retired or not working in schools.

The largest group within the sample ($n = 80$; 19%) had pursued online teacherpreneurship for six years at the time of the study (Table 2). Respondents were entrepreneurial in various ways: 35% ($n = 146$) sold educational materials on sites besides TpT and 37% of respondents ($n = 153$) engaged in other entrepreneurial efforts, such as selling homemade goods, running service-oriented businesses, and providing private tutoring, coaching, or educational consulting.

Table 1. Participant Demographics and Teaching Background ($N = 412$)

Variable	Category	*n*	%
Gender	Female	378	92
	Male	21	5
Race, ethnicity	White, Caucasian	366	89
	Hispanic, Latino	10	2
	Asian	5	1
	Black, African American	5	1
	Multiracial	2	.4
	American Indian, Alaska Native	1	.2
	Self-identified:	3	.7
	"Middle Eastern" ($n = 1$)		
	"South Asian" ($n = 1$)		
	"Rez Kid" ($n = 1$)		
Highest degree	Bachelor's degree	124	30
	Master's degree	271	66
	Doctoral degree	11	3
Completed university coursework in education?	Yes	392	95
	No	13	3
Previous or current grades taught	Preschool (3–5 years of age)	70	17
	Elementary (K – 6^{th})	296	72
	Secondary (7^{th} – 12^{th})	192	47
Previously or currently held position	Teacher	296	72
	Teacher leader	97	24
	Tutor	79	19
	Teacher's aid	43	10
	School or district administrator	20	5
	Librarian	11	3
	Speech pathologist or therapist	10	2
	School counselor	7	2
	Social worker	1	.2
Years of teaching experience	Less than 4 years	11	3
	4–9 years	136	33
	10–14 years	99	24
	15 years or more	162	39
Current employment	Employed fulltime at a P-12 school or district	217	53
	Employed part time at a P-12 school or district	29	7
	Not employed at a P-12 school or district	144	35
	Retired	52	13

Table 2. Online Teacherpreneur Background

Variable	Category	*n*	%
TpT start year	2007 or prior	10	2
	2008	8	2
	2009	15	4
	2010	11	3
	2011	28	7
	2012	80	19
	2013	71	17
	2014	73	18
	2015	56	14
	2016	39	9
Number of TpT stores	One store	388	94
	More than one store	21	5
Co-seller(s)	Does not have a co-seller	278	67
	Has a co-seller (or co-sellers)	33	8
TpT exclusive	Sold exclusively on TpT	266	65
	Sold on TpT and other marketplaces	146	35
Other entrepreneurial endeavors	TpT was their sole entrepreneurial endeavor	258	70
	Currently or previously engaged in other entrepreneurial endeavors	153	37

Table 3. Descriptive Statistics of Characteristics Items

Subscale and Item	*N*	*M (SD)*	Completely true (5) & Mostly true (4)		Somewhat true (3)		Not very true (2) & Not at all true (1)	
			n	%	*n*	%	*n*	%
Helpful								
I want to help teachers to be good at their jobs	411	4.90 (.34)	407	99	4	1	0	0
I want to help teachers feel successful	411	4.86 (.37)	407	99	4	1	0	0
I want to help lighten teachers' loads	412	4.80 (.47)	401	97	10	2	1	.2
Hard-working								
I consider myself to be a hard worker	409	4.82 (.42)	403	99	6	1	0	0
I devote lots of thought to the TpT materials I create	411	4.79 (.50)	401	98	6	1	4	1
When I set my mind to something, I am persistent in reaching my goal	411	4.47 (.67)	375	91	33	8	3	1
Creative								
I enjoy creating new things in my free time	411	4.68 (.57)	391	95	19	5	1	.2
I create educational resources that are "unique."	412	4.17 (.74)	336	82	73	18	3	1
When creating student resources, I put ideas together in ways that most teachers may not think of	411	4.09 (.75)	316	77	93	23	2	.5
Organized								
I have long term plans for my TpT work	411	4.32 (.89)	332	81	62	15	17	4
I use lists to keep myself on track	410	4.28 (.96)	334	81	47	11	29	7
I am an organized person	409	4.21 (.90)	330	81	55	13	24	6
Risk-taking								
I invest time in my TpT business, even if I don't know how it will pay off in the end	410	4.27 (.87)	333	81	62	15	15	4
I am always looking for something new to try to see if it is better than what I'm already doing or using	410	4.24 (.82)	335	87.70	75	18.29	11	2.68
I put new TpT resources out there as soon as possible, worrying about any glitches later	409	2.27 (1.06)	58	14	75	18	276	67

Characteristics

Table 3 presents the item level descriptive statistics for characteristics, organized by variable, from highest to lowest mean rating. The items with the most respondents rating "completely true" or "mostly true" addressed teacherpreneurs' helpfulness; they desired to help teachers be good at their jobs (99%) and to feel successful (99%). One item related to risk-taking: "I put new TpT resources out there as soon as possible, worrying about any glitches later," showed the reverse pattern, with the majority of online teacherpreneurs (67%) reporting this risk-taking behavior was "not very" or "not at all true" for them.

Table 4. Descriptive Statistics of School Environment Items

Item	N	M (SD)	Completely true (5) & mostly true (4)		Somewhat true (3)		Not very true (2) & Not at all true (1)	
			n	%	*n*	%	*n*	%
My school community supports my work as an online teacherpreneur	239	3.02 (1.29)	84	35.15	79	33.05	76	31.80
I keep my work as a teacher and my work as a TpT seller separate	245	4.01 (1.10)	171	69.80	49	20.00	25	10.20

School environments

Two items addressed school environments, with skip logic used so that only respondents currently employed in a P- 12 ($n = 246$) were prompted to answer (Table 4).

On average, it was "somewhat true" that participants' school community supported their work as an online teacherpreneur ($M = 3.02$). Responses to this item were dispersed similarly across the ranking options, indicating that while some respondents worked in supportive school communities, just as many worked in unsupportive or somewhat supportive school communities. The second item's results indicated that on average, it was "mostly true" that participants kept their work as a teacher and TpT seller separate ($M = 4.01$). Overall, these results indicate that online teacherpreneurs worked in schools with varying levels of support, and they tended to keep their TpT work separate from their teaching practice.

Practices

Participants reported spending an average of 16.23 hours ($SD = 13.21$) per week on teacherpreneur activities, with a range of 0–60 hours per week. Table 5 presents the item level descriptive statistics for the 12 Likert items addressing practices, organized by variable from highest to lowest mean rating.

Five of the 12 items had a majority of respondents indicate that they engaged in the given behavior "all the time" or "often." These included considering educational research for practice (87%), considering how to support students of diverse backgrounds to succeed (78%), collaborating with teachers in social media communities (68%), cultivating friendships with fellow TpT sellers (56%), and testing resources in the classroom before selling (55%). This finding suggests that making efforts to create high quality resources and collaborating with teachers were frequent components of online teacherpreneurs' practice.

For two of the 12 items, a majority of respondents indicated that they engaged in the given behavior "rarely" or "never," including working with other online teacherpreneurs to create content (54%) and facilitating an online community for teachers (66%). These practices may be more advanced activities that mainstream online teacherpreneurs did not pursue.

Impacts

The first impact was that all respondents reported financial gain. Monthly earnings ranged from \$5 to \$68,000 per month, with an average of \$3,091 (SD = \$5,707) and a median of \$1,000. Table 6 presents the item level descriptive statistics for Likert items addressing impacts.

Seven items had a majority of respondents indicate that it was "completely" or "mostly" true. These included all items relating to teaching practice: trying new techniques with students (90%), being exposed to new ways of thinking about education (88%), and trying

Table 5. Descriptive Statistics of Practices Items

Subscale and item	*N*	*M (SD)*	All the time (5) & Often (4) *n*	%	Sometimes (3) *n*	%	Rarely (2) & Never (1) *n*	%
Creating resources								
When designing my educational resources, I consider educational research for best practices	408	4.28 (.80)	353	86.52	43	10.54	12	2.94
When designing my educational resources, I consider how these resources can support students of diverse backgrounds to succeed (e.g., linguistically, culturally, racially, and/or economically diverse students)	408	4.19 (.86)	318	77.94	75	18.38	17	4.16
I test my educational resources in the classroom before I put them up for sale	409	3.57 (1.09)	223	54.52	128	31.30	58	14.18
Collaborating with online teacherpreneurs								
I cultivate friendships with fellow TpT sellers	409	3.63 (1.25)	228	55.75	104	25.43	77	18.83
I work with other TpT sellers to promote each other	409	3.23 (1.20)	172	42.05	142	34.72	95	23.23
I work with other TpT sellers to create content to share on TpT, blogs, and/or social media	409	2.44 (1.22)	76	18.58	111	27.14	222	54.28
Entrepreneurship								
I work to develop my business skills	409	3.30 (1.06)	165	40.34	171	41.81	73	17.85
I seek mentorship to help me understand business better	409	3.03 (1.13)	139	33.99	148	36.19	121	29.58
I study online business strategy	409	2.85 (1.18)	114	27.87	144	35.21	151	36.92
Collaborating with teachers								
I collaborate with teachers in social media communities (e.g., Facebook, Twitter, Instagram, and/or Pinterest)	410	3.90 (1.16)	277	67.56	79	19.27	54	13.17
I communicate with teachers who use my TpT resources via personal email, messages, phone calls, etc	410	3.09 (1.12)	142	34.63	145	35.37	123	30.00
I facilitate my own online community for teachers	410	2.12 (1.39)	79	19.27	61	14.88	270	65.85

unique classroom approaches (82%). It also included all items relating to leadership: wanting teachers to try new ideas (85%), seeing oneself as a mentor for teachers (73%), and encouraging teachers to think about educational approaches (72%). This category also had one professional stress item indicating that participants found it challenging to do everything that online teacherpreneurship involves (64%).

Table 6. Descriptive Statistics of Impacts Items

Subscale and item	*N*	*M (SD)*	Completely true (5) & mostly true (4)		Somewhat true (3)		Not very true (2) & not at all true (1)	
			n	%	*n*	%	*n*	%
Teaching practice								
Being an online teacherpreneur makes me want to try new techniques with my students	244	4.50 (.75)	219	90	19	8	6	2
Being an online teacherpreneur exposes me to new ways of thinking about education	244	4.45 (.77)	214	88	24	10	6	2
Online teacherpreneurship motivates me to try unique approaches in my classroom	243	4.29 (.87)	200	82	34	14	9	4
Leadership								
I want teachers to try new ideas that I value	408	4.31 (.81)	346	85	52	13	10	2
As an online teacherpreneur, I see myself as a mentor for other teachers who use my materials and ideas	409	4.08 (.96)	297	73	85	21	27	6
I encourage teachers to think about educational approaches that I believe in	409	4.06 (.95)	293	72	94	23	22	5
Career								
I find my online teacherpreneur work more satisfying than classroom teaching	244	3.01 (1.14)	72	30	93	38	79	32
I hope to leave (or reduce) my teaching position to pursue online teacherpreneurship more	244	2.89 (1.44)	83	34	59	24	102	42
Professional stress								
I find it challenging to do everything that online teacherpreneurship involves, such as creating resources, marketing, using social media, and more	408	3.93 (1.05)	261	64	106	26	41	10
I find it challenging to keep up with all the new trends in online teacherpreneurship	408	3.54 (1.12)	198	49	143	35	67	16
I worry about my business progress measuring up to that of other online teacherpreneurs	408	3.26 (1.17)	158	39	151	37	99	24
I am concerned about how the resources and ideas I share as an online teacherpreneur will be received	407	3.03 (1.15)	130	32	144	35	133	33
I am concerned about maintaining (or establishing) positive relationships with other fellow online teacherpreneurs	407	2.88 (1.21)	122	30	119	29	166	41
I worry about the uncertainty of my success on TpT	408	2.83 (1.20)	112	27	122	30	174	43

On average, respondents rated the two items addressing career impacts in the "somewhat true" range. The item, "I find my online teacherpreneur work more satisfying than classroom teaching" ($M = 3.01$) had responses dispersed similarly across the ranking options,

indicating that while some respondents viewed teacherpreneur work as more satisfying than classroom teaching, just as many others did not. Responses for the second career impact item, "I hope to leave (or reduce) my teaching position to pursue online teacherpreneurship full time," ($M = 2.89$) were more concentrated toward "not very" and "not at all true" (42%), suggesting that while some respondents hoped to leave teaching to pursue online teacherpreneurship, even more did not.

Discussion and Implications

Characteristics

Our results show that teacherpreneurs bring a skill set to the craft of creating curriculum. Like teacher leaders (Wenner & Campbell, 2016; York-Barr & Duke, 2004) and elite teacherpreneurs (Shelton & Archambault, in press), mainstream teacherpreneurs reported being creative and highly experienced, with a desire to help teachers. This finding may be relevant for teacher educators and school leaders who question teacherpreneurs' capacity as resource creators. Teacherpreneurs' skills may enable them to create resources that may be engaging and effective for today's classroom.

A concern presented in our data is that online teacherpreneurs were somewhat less racially diverse than the U.S. teacher population, which already lacks in diversity (Taie & Goldring, 2017). Teachers with diverse backgrounds and experiences may give voice to ways of thinking that can help teachers support students who are traditionally disempowered in schools (Bartolomé, 1994). To begin to address this issue, stakeholders should consider ways to amplify and encourage diverse teachers' voices online. Teacher buyers stand to play a powerful role as well, given they are the gatekeepers who select and bring teacherpreneurs' materials to their classrooms. Teacher educators should encourage teachers to think critically about a content creator's background when selecting classroom materials.

School environments

Online teacherpreneurs worked in school environments that varied in the extent to which they were supportive. Most online teacherpreneurs kept their school and business work separate. This finding was understandable, given the potential conflict of interest that may arise when mixing classroom work with one's side job. Nonetheless, our previous research showed that elite online teacherpreneurs who worked in supportive school environments felt a particular satisfaction in being recognized as teacher influencers (Shelton & Archambault, in press). There may be an opportunity for teacherpreneurs and school/district leaders to work together to find mutually beneficial and legal ways for teacherpreneurs to connect their business and classroom work. Teacher educators should take the opportunity to facilitate exploration of the legalities surrounding teachers' contractual obligations at local schools. Understanding contractual rights and practicing negotiation may be valuable for all current and aspiring teachers whether they pursue online teacherpreneurship or a non-education related side hustle.

Practices

This study supports Shelton and Archambault's (in press) finding that online teacherpreneurs' practice involved meticulous creation of resources along with teacher and teacherpreneur collaborations. When creating materials, teacherpreneurs reported considering educational research and how to support students of diverse backgrounds. Most online teacherpreneurs seem to believe they do their due diligence to create quality resources; however, the objective quality of teacherpreneurs' creations is unknown and may vary widely.

Increasingly, scholars (Gallagher et al., 2019; Hertel & Wessman-Enzinger, 2017; Hu et al., 2018) have questioned the quality of select TpT resources on Pinterest, and further investigation into the issue of resource quality on TpT is needed.

Our findings also show that online teacherpreneurs' practice involves providing virtual mentorship for teachers. Teacherpreneurs reported collaborating with teachers in social media communities and communicating with teachers who use their resources via personal email, messages, and phone calls. As Carpenter and Krutka (2014) demonstrated, virtual connections can be a worthy source of professional support for teachers that combat feelings of isolation prevalent in the field. School and district leaders should consider the added value that online teacherpreneurs may provide the teachers they support. Standardized textbook curriculum cannot and does not provide this level of personalized support that teachers appear to crave. We found that teacherpreneurs viewed themselves as teacher leaders who advanced their educational ideals. Online teacherpreneurs stand to amplify teachers' voices, which are too often unheard (Cuban, 2006; Holland et al., 2014).

Impacts

When considering teacherpreneurs' impacts, we found they experience financial gains that vary from significant to modest. While we are not able to independently verify the reported amount of income earned, it is clear that online teacherpreneurs benefit financially. Given that teachers earn roughly 67% of other U.S. college graduates (Allegretto & Mishel, 2019), the ability to supplement income in an education-related endeavor may be an important motivator.

Online teacherpreneurs also reported gains in teaching practice. They reported trying new and unique approaches in their classrooms and being exposed to new ways of thinking through their teacherprenuerial activities. This finding supports Shelton and Archambault's (in press) study showing that online teacherpreneurs in the top 1% of sellers for total sales on TpT believed they became better teachers through teacherpreneurship. The act of creating new materials, staying abreast of educational research and trends, and reflecting through blogging and marketing resulted in improved pedagogy (Shelton & Archambault, in press).

The present study's finding regarding teaching gains suggests that online teacherpreneurship may offer an important opportunity in light of the deskilling of the teaching profession, a process by which a teacher's autonomy and agency are stripped (Apple, 2013). Teacherpreneurs may be engaging in reskilling, as they take control over their teaching and curriculum as designers. Teachers who purchase materials may experience similar benefits as they assemble a curriculum of their choosing and modify it to fit their needs (Pittard, 2017). Nonetheless, assembling a curriculum can be a challenging and complex endeavor. Teacher educators need to support teachers in learning how to find, critique, curate, and implement online curricular resources of their choosing. One way to start is by including opportunities in teacher education for teachers to learn how to evaluate the quality of online classroom materials. Useful resources may include Gallagher and colleagues' (2019) rubric for evaluating the quality of Pinterest history resources, Achieve's rubric for evaluating open online education resource (OER) objects (Achieve, 2011), or even general rubrics such as the Universal Design for Learning Guidelines (CAST, 2018).

Limitations

As with all research, there were limitations to the current study. First, we used a purposeful sample so it is not possible to generalize our findings to the TpT seller population as a whole. Because we recruited through teacherpreneur Facebook groups, the TpT Seller's forum, and TpT Top 100 Sellers lists, participants may have been more active teacherpreneurs, more tech-savvy, and more experienced or successful TpT sellers. Nonetheless, the large sample size (412

responses) and high response rate (52%) mitigate the likelihood of sampling error, thus increasing the reliability of our survey estimate (Dillman et al., 2014; Fowler, 2009). Additionally, the respondents varied based on age, teaching experience, grade taught, and geographical location, suggesting a highly credible sample whose demographics approach a representation of the online teacherpreneur population (Weisberg, 2005).

Another limitation is that because of the self-report nature of survey-based research, we were only able to collect data regarding participants' perceptions of their characteristics, school environments, practices, and impacts. As researchers, we value teachers' experiences and perspectives, and a survey method was a useful way to gather exploratory data from geographically distributed online teacherpreneurs. Future research investigating teacherpreneurship using observational methods or from the perspectives of other stakeholders such as teacher educators, school leaders, teachers, and students will be useful.

Conclusion

Our findings suggest that online teacherpreneurs bring an esteemed skill set and persistent process to the development of their classroom materials, and they continually support teachers in implementing their approaches. When teachers, school leaders, and teacher educators value teacherpreneurs' work, we indicate that we value teacher-led contributions to the field of education. We also show that we value and trust teachers' ability to create, curate, and modify curriculum. However, a serious concern is that some online teacherpreneurs' resources are not rigorous (Hertel & Wessman-Enzinger, 2017; Hu et al., 2018) or culturally responsive (Wect Staff, 2019). In an open-market system, the consumer is trusted to make informed decisions, and teachers likely need more support to be able to find, select, and implement curricular materials that are best for their students. Teacher education stands to play an important role in this endeavor.

We have observed that teacher educators sometimes disregard teachers' interest in using resources from Pinterest, TpT, and other online curricula sharing sites because they believe them to be shallow, inaccurate, or ineffective. However, today's teachers have shown that they value teacherpreneurs' materials (Opfer, Kauffman, & Thompson, 2016), and our study suggests that online teacherpreneurs can be capable curriculum designers who provide teachers with continual support. Given these findings, we encourage teacher educators to explore online curriculum sharing sites in their courses. Current and future teachers need instruction and practice on how to critique classroom resources if they are to become critical consumers of online educational content.

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References

Achieve. (2011). *Rubrics for evaluating open education resource (OER) objects*. Mountain View, CA: Author. Retrieved from https://www.achieve.org/publications/achieve-oer-rubrics

Allegretto, S., & Mishel, L. (2019, April 24). *The teacher weekly wage penalty hit 21.4 percent in 2018, a record high: Trends in the teacher wage and compensation penalties through 2018*. Economic Policy Institute. Retrieved from https://www.epi.org/publication/the-teacher-weekly-wage-penalty-hit-21-4-percent-in-2018-a-record-high-trends-in-the-teacher-wage-and-compensation-penalties-through-2018/

Allen, I. E., & Seaman, C. A. (2007). Likert scales and data analyses. *Quality Progress*. Retrieved from http://asq.org/quality-progress/2007/07/statistics/likert-scales-and-data-analyses.html

Apple, M. W. (2013). *Teachers and texts: A political economy of class and gender relations in education*. New York, NY: Routledge.

Bartolomé, L. (1994). Beyond the methods fetish: Toward a humanizing pedagogy. *Harvard Educational Review*, *64*(2), 173–194. doi:10.17763/haer.64.2.58q5m5744t325730

Carpenter, J. P. (2016). Teachers at the wheel. *Educational Leadership*, *73*(8), 30–35.

Carpenter, J., Koehler, M., Staudt Willet, K. B., & Greenhalgh, S. P. (2019, March). Spam, spam, spam, spam: Methodological considerations and challenges for studying educators' Twitter use. In Society for Information Technology & Teacher Education International Conference (pp. 2702–2711). Association for the Advancement of Computing in Education (AACE).

Carpenter, J. P., & Krutka, D. G. (2014). How and why educators use Twitter: A survey of the field. *Journal of Research on Technology in Education*, *46*(4), 414–434. doi:10.1080/15391523.2014.925701

CAST. (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.

CNN. (2012, September 27). See how teacher became a millionaire. Retrieved from https://www.youtube.com/watch?v=f9ediTKt6a8

Common Core State Standards. (2019). About the standards. Retrieved from http://www.corestandards.org/about-the-standards/development-process/

Cuban, L. (2006). Educational entrepreneurs redux. In F. M. Hess (Ed.), *Educational entrepreneurship: Realities, challenges, possibilities* (pp. 223–242). Cambridge, MA: Harvard Educational Publishing Group.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. Hoboken, New Jersey: John Wiley & Sons.

Fowler, F. J. (2009). *Survey research methods* (5th ed.). Thousand Oaks, CA: Sage.

Gallagher, J. L., Swalwell, K. M., & Bellows, M. E. (2019). Pinning" with pause: Supporting teachers' critical consumption on sites of curriculum sharing. *Social Education*, *83*(4), 217–224.

Gomes, P. (2015). A market for teachers to sell, share, and shine. *Edsurge*. Retrieved from https://www.edsurge.com/news/2015-11-18-a-marketplace-for-teachers-to-sell-and-shine

Grote-Garcia, S., & Vasinda, S. (2014). Pinning and practice: Using Pinterest as a tool for developing pedagogical content knowledge. *Texas Journal of Literacy Education*, *2*(1), 36–45.

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine*, *13*(6), 554–561. doi:10.1370/afm.1865

Hertel, J. T., & Wessman-Enzinger, N. M. (2017). Examining Pinterest as a curriculum resource for negative integers: An initial investigation. *Education Sciences*, *7*(2), 11–45. doi:10.3390/educsci7020045

Holland, J. M., Eckert, J., & Allen, M. M. (2014). From preservice to teacher leadership: Meeting the future in educator preparation. *Action in Teacher Education*, *36*(5–6), 433–445. doi:10.1080/01626620.2014.977738

Homan, E. (2014). The shifting spaces of teacher relationships: Complementary methods in examinations of teachers' digital practices. *Journal of Technology and Teacher Education*, *22*(3), 311–331.

Hu, S., Torphy, K. T., Opperman, A., Jansen, K., & Lo, Y. (2018). What do teachers share within socialized knowledge communities: A case of Pinterest. *Journal of Professional Capital and Community*, *3*(2), 97–122. doi:10.1108/JPCC-11-2017-0025

Katzenmeyer, M., & Moller, G. (2009). *Awakening the sleeping giant: Helping teachers develop as leaders*. Thousand Oaks, CA: Corwin Press.

Little, J. W. (1988). Assessing the prospects of teacher leadership. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 78–106). New York, NY: Teachers College Press.

Manfreda, K. L., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus other survey modes: A meta-analysis comparing response rate. *International Journal of Market Research*, *50*(1), 79–104. doi:10.1177/147078530805000107

Marks, H. M., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, *19*(3), 245–275. doi:10.3102/01623737019003245

NCES Blog. (2018, June 21). A closer look at teacher income. Retrieved from https://nces.ed.gov/blogs/nces/post/a-closer-look-at-teacher-income

Opfer, V. D., Kaufman, J. H., & Thompson, L. E. (2016). *Implementation of K-12 state standards for mathematics and English language arts and literacy: Findings from the American teacher panel*. RAND Corporation. Retrieved from http://www.rand.org/t/RR1529

Pittard, E. A. (2017). Gettin' a little crafty: Teachers Pay Teachers, Pinterest and neo-liberalism in new materialst feminist research. *Gender and Education*, *29*(1), 28–47. doi:10.1080/09540253.2016.1197380

Schroeder, S., Curcio, R., & Lundgren, L. (2019). Expanding the learning network: How teachers use Pinterest. *Journal of Research on Technology in Education*, *51*(2), 166–168. doi:10.1080/15391523.2019.1573354

Shelton, C. C., & Archambault, L. M. (2018). Discovering how teachers build virtual relationships and develop as professionals through online teacherpreneurship. *Journal of Interactive Learning Research*, *29*(4), 579–602.

Shelton, C. C., & Archambault, L. M. (in press). Learning from and about elite online teacherpreneurs: A qualitative examination of key characteristics, school environments, practices, and impacts. *Teachers College Record*.

Shih, T., & Fan, X. (2008). Comparing response rates from Web and mail surveys: A meta-analysis. *Field Methods*, *20*(3), 249–271.

Staudt Willet, K. B. (2019). Revisiting how and why educators use Twitter; Tweet types and purposes in #Edchat. *Journal of Research on Technology in Education*, *51*(3), 273–289. doi:10.1080/15391523.2019.1611507

Taie, S., & Goldring, R. (2017). *Characteristics of public elementary and secondary school teachers in the United States: Results from the 2015–16 National Teacher and Principal Survey. First look*. (NCES 2017-072). National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs2017/2017070.pdf

Teachers Pay Teachers. (n.d). About us. Retrieved from https://www.teacherspayteachers.com/About-Us

Thompson, C. (2017). Teachers cash in, big time, by putting lessons for sale. Retrieved from http://www.apnewsarchive.com/2017/Teachers-selling-lessons-to-other-teachers-online-has-become-a-booming-business/id-3c2537fcbb2b470c8e652bf5481e4dc1

Tracy, S. J. (2013). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. Malden, MA: John Wiley & Sons.

Vernon-Dotson, L. J. (2008). Promoting inclusive education through teacher leadership teams: A school reform initiative. *Journal of School Leadership*, *18*(3), 344–373. doi:10.1177/105268460801800305

Wect Staff. (2019, March 11). New Hanover school board apologizes for 'Monopoly-like slavery game. *NAACP responds*. Retrieved from https://www.wect.com/2019/03/11/new-hanover-school-board-apologizes-use-monopoly-like-slavery-game/

Weisberg, H. F. (2005). *The total survey error approach: A guide to the new science of survey research* (3rd ed.). Chicago, IL: The University of Chicago Press.

Wenner, J. A., & Campbell, T. (2016). The theoretical and empirical basis of teacher Leadership: A review of the literature. *Review of Educational Research*, *87*(1), 1–38. doi:10.3102/0034654316653478

Wilson, M. (1993). The search for teacher leaders. *Educational Leadership*, *50*(6), 24–27.

York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, *74*(3), 255–316. doi:10.3102/00346543074003255