How students and principals understand ClassDojo: Emerging insights

Introduction

Created in 2011, ClassDojo is an educational platform with a mission to "bring communities together and give them the tools, ideas and energy to improve education for all kids" (www.classdojo.com). Initially created by venture capitalists "to help teachers win back control of crazy classrooms," this technology start-up gained incredible monetary momentum through its noted ability to collect a lot of behavioral data (Empson, 2012, para. 2). ClassDojo is now a multimillion-dollar company, and its application in educational settings is popular worldwide: Over three million teachers and 35 million students use it in over 180 countries. Within the United States, the ClassDojo company claims their platform is used in over 95% of classrooms (www.classdojo.com). The platform provides diverse functions, including home-school communication, strategies for positive behavior interventions and classroom management for many users: parents, students, teachers and school administrators. It allows for communication between teachers and families in real time and across many languages. Teachers can send pictures of children; comment about student behavior, achievements or activities; share information about upcoming programs and more, all via a self-contained online platform that can be accessed through a mobile-based application (hereafter, app).

On ClassDojo, each student has an avatar, and teachers can track student behavior through awarding (or subtracting) points based on student performance. Teachers can decide what counts as good behavior and decide how often to communicate with parents using the platform. For example, if a teacher decides that raising one's hand is good behavior, students' avatars receive points for doing so. By contrast, if going to the bathroom out of turn is deemed bad behavior, then students' avatars lose points. All of these behaviors are saved and monitored—and potentially shared with parents. ClassDojo transforms the actions and behaviors

of students (e.g., participating in a discussion, raising one's hand or speaking out of turn) into data that are recorded, stored and shared. In this way, it is a classic contemporary example of *datafication* (van Dijck, 2014) of learning in educational and familial contexts.

From a sociocultural perspective, learning is a social and relational phenomenon—one that is facilitated by and through iterative, fluid interactions with a range of mediational means, including more experienced others, embodied content/materials and discourse/language (see Vygotsky, 1934/1978; Wertch, 1984). What, then, are the implications of the in-the-moment and over-time datafication of one's learning experiences and interactions? How might students' awareness of the datafication of their actions (including discourse) mediate the very relations that are so central to their processes of learning and becoming? These are big questions, to which we can only offer the beginning of answers. The purpose of this article, then, is to contribute to this conversation by offering an empirical examination of students' and principals' perceptions about ClassDojo. In particular, we focus on students' perceptions of how the app shaped their relationships with their parents and teachers, because we understand these relationships to be central to both how students learn and their broader schooling experiences.

Literature Review

Understanding the ClassDojo platform requires understanding its relationship with existing educational practice. That is, ClassDojo can be understood as both a contemporary application of long-standing practices and as a fundamental change to those practices. In the following sections, we describe the ways that ClassDojo builds on existing educational practices and the concerns that are raised by how these practices are carried out through ClassDojo.

ClassDojo as Extension of Established Practice

ClassDojo's broad acceptance is likely because it provides a technologically mediated way of carrying out established practices such as teacher-parent communication and behavior management. In the following subsections, we address how ClassDojo builds on each of these practices and how these uses have been evaluated in the existing literature.

ClassDojo and Teacher-Parent Communication

ClassDojo can be thought of as a contemporary entry to a large list of technologies facilitating teacher-parent communication. For example, in 2008, Thompson described e-mail as a "new and growing" mode of communication that "represents a significant change in parent-teacher communication" (p. 202). In response to previous studies that had uncritically advocated for teachers' communication with parents through email, Thompson (2008) found that e-mail-mediated communication was typically negative, received mixed reactions from students who were the subject of communication, only reached a "small fraction of parents on a consistent basis" (p. 218) and varied according to parents' socioeconomic status. Yet, despite the complexity of technology-mediated teacher-parent communication, Thompson and colleagues (2015) found that parents largely preferred email and other, emerging modes of communication for communication with teachers. In recognition of this reality, recent scholarship has considered the potential and effectiveness of modes such as websites (Gu, 2017) and social media platforms (Korang et al., 2020)—and has considered the role of technology in teacher-parent communication during the COVID-19 pandemic (Laxton et al., 2021).

ClassDojo and Behavior Management

Although ClassDojo can be—and is—used for teacher-parent communication, it is most well-known for its role in behavior management (including the communication of behavior to parents). Like teacher-parent communication, ClassDojo is often framed in research as a

contemporary implementation of existing practice. For example, Krach, McCreery and Rimel (2017) framed it as an alternative to paper and pencil behavior management charts in their comparison of the two modes; likewise, MacLean-Blevins (2013) presented the platform as a technical implementation of a set of class rules that could have existed independently of ClassDojo. In short, ClassDojo is just one of several means of carrying out a behavior management system based on extrinsic motivation (Krach, McCreery, et al., 2017; MacLean-Blevins, 2013).

In keeping with this vision of ClassDojo, there has been considerable empirical evaluations of the platform in the educational psychology and behavioral literature. For the most part, these studies have found ClassDojo to be beneficial for classroom management. Studies within this category relied on a predominantly behaviorist and positivist lens (Burger, 2015; Chiarelli et al., 2015; Dadakhodjaeva, 2017; Krach, 2017; Krach et al., 2016; MacLean-Blevins, 2013; Robacker et al., 2016). Collectively, this body of work generally found ClassDojo to be an effective classroom management tool, primarily in the realm of decreased poor behavior and increased school to home communication. For example, Krach et al. (2017) argued that ClassDojo facilitated the increased and more consistent collection and use of behavioral data in a positive-behavioral intervention classroom. MacLean-Blevins's (2013) analysis found that the use of ClassDojo afforded an "overall increase in the frequency of identified positive behaviors and overall decrease in the frequency of the identified negative behaviors" (p. 8). And Bahceci (2019)'s study suggested that families' care about students' coursed increased as a function of ClassDojo communication. Taken together, this literature attempts to speak to the ways in which the use of ClassDojo has altered student behavior and home-school relations. Importantly, however, it falls short of an examination of educational impact beyond normative or typical

accountability metrics (e.g., outside of a "butts in chairs" or "number of parent clicks into online course" perspective). In other words, what remains less clear is a more nuanced understanding of how the use of ClassDojo is impacting students' actual learning or ideas about schooling.

Concerns Related to ClassDojo's Effect on Practice

Although ClassDojo can be understood as a contemporary, technological implementation of established classroom practices, it is important to note that such a technological implementation changes the nature of those practices. For example, authors have argued that ClassDojo is serving to reify power dynamics through discipline and compliance (Bradbury, 2019; Manolev et al., 2017; Robinson, 2020; Soroko, 2015) and that the building of a platform around these practices fits into broader patterns of "platform capitalism" (Manolev et al., 2017; Williamson, 2017a; Williamson, 2017b).

It is important to note that althoughmost of this literature was scholarly and peer-reviewed in type, it remained at the theoretical level. For example, using the methodological approach of a sociotechnical survey to disassemble the data assemblage that is ClassDojo, Williamson (2017) argued that the platform has evolved rapidly into "an infrastructural substrate of schooling that orchestrates student tracking, parent communication, and the diffusion of discourses and best practice models of teaching and learning" (p. 61). Soroko's (2015) study argued that the platform is "masquerading as a progressive and empowering tool for student engagement and parental involvement" while it is in fact "a gamified version of traditional school practices involving intimidation, discipline, and compliance" (p. 64) that serves to normalize surveillance. Manolev, Sullivan and Slee (2019) echoed this position, positing that ClassDojo is "altering the disciplinary landscape in schools through the datafication of discipline

and student behavior" (p. 36) and that conversations about datafication ought to take seriously the ways in which power and privilege shape who, how and for what purposes data is used.

Public media and news outlets have also raised concerns about student privacy as related to ClassDojo. For example, in a *New York Times* article, Singer (2014) reported on teachers' and principals' perceptions of ClassDojo as generally beneficial for classroom behavior management, though they acknowledged the absence of documented and necessary caution or preventative measures toward the protection of student privacy and security. This and other articles in popular media emphasized various stakeholders' concerns related to privacy, alongside a lack of documented or concerted effort on the part of those same stakeholders to address these issues (Pilleci, 2014). Simply put, what emerged from this theme within the literature was the sense that privacy and data concerns are real but understudied and not well understood.

Summary and the Present Study

In sum, the existing literature establishes ClassDojo as: a) building on established classroom practices and as b) a potentially effective implementation of those practices, but as c) potentially having pernicious impacts on students through the commodification of their educational behavior. In contrast, there appears to be little empirical investigation into stakeholders' (students, teachers, families and school administrators) perceptions of how ClassDojo shapes *learning or schooling experiences* more broadly, or how and in what ways the platform mediates teacher-student or parent-student relationships in and outside of the classroom. For example, even if school-home communication has increased, what effect does that have on student participation and engagement in the substance of their classes? Perhaps of particular relevance for the readers of this journal, there is similarly a lack of empirical understanding into

how stakeholders are making sense of the datafication of their educational actions and the ways in which this mediates individual or collective educational processes and trajectories.

While it is outside the scope of this article to address each of these notable areas of dearth, we want to emphasize the need for further empirical investigation into these dimensions of the use of ClassDojo and other platforms related to teaching and learning. Our review of the literature made clear the need for studies that could begin to yield insight into a range of primary stakeholder experiences and perspectives in a range of empirical contexts—e.g., those from students and school personnel within and across various cultural contexts. Attentive to this need, we recruited students from a range of geographical locations and school leaders from across an entire state to respond to our surveys. In what follows, we detail the methods employed to carry out this investigation.

Methods

Data Sources and Collection

For this study, we relied on survey data from a) students and b) principals with prior schooling experience with ClassDojo. The student survey, administered in Spring 2020 and Fall 2020, was designed to elicit retrospective perspectives on and experiences with ClassDojo during their secondary schooling. These included where it was used (i.e., in which grades/subjects) and how it was used (e.g., as a way to communicate with parents, as a way to manage student behavior, as a way to collect and showcase student work). The survey also elicited students' perspectives on use (e.g., if it made them angry, frustrated, motivated, if it had any consequence on their academic or home life, etc.), including if and how it mediated their relationships with their parents and teachers. The survey had a variable design that only presented the most relevant questions to students based on their previous answers. In general terms, however, students

answered one set of (mostly) multiple-choice demographic and contextual questions, identified from a multiple-choice list the ClassDojo features their teacher(s) used (including the feature used most often), and then answered a series of Likert-scale items related to each of the identified features, including how they and their parents felt about each feature and how their parents used each feature. Then, students responded to a series of general multiple-choice (with open-ended follow-up) questions about how they felt about ClassDojo. We also invited students to provide feedback on the survey—based on this feedback and on emergent trends from student responses, we prepared a second administration of our survey in Fall 2020 that included clarified questions and a few new questions specifically related to students' perceptions on if and how the app impacted teacher, peer and parent relationships. In the sections that follow, we refer to this as our second *iteration* of the student survey.

The principal survey protocol was designed to elicit current perspectives on and experiences with ClassDojo, including where and how it was used in their schools, and their sense of teachers, parents and students' feelings toward it. Like the student survey described above, this instrument followed a variable design that provided principals with the most relevant questions for their situation. In general terms, principals answered one set of (mostly) multiple-choice demographic and contextual questions and then described how ClassDojo was being used in their school based on a multiple-choice item of preselected descriptions. Based on their school situation, principals then responded to further multiple-choice contextual questions as well as questions about different populations' feelings toward ClassDojo (including open-ended follow-up questions). Principals also identified the ClassDojo features that were being used in their schools and then commented on school policies and populations' sentiment with regards to each identified feature. For this study, we focused in particular on principal responses to open-ended

items that asked about their perspectives on their administrators'/teachers'/students'/parents' perspectives on ClassDojo use.

Neither the student nor the principal surveys included items that were adapted from previous studies. Rather, item design was based on the authors' collective understanding of how to best investigate students' and principals' sense-making of ClassDojo. Qualtrics software was used for pilot tests and all survey administrations. Both surveys were initially pilot tested by members of the research team, who themselves are previous educators. In addition, pilot tests were conducted with external participants similar to our intended sample, including a first-year college student at a different university and a high school administrator in a school district outside of [state blinded for review]. Feedback from pilot tests related to accessibility and comprehensibility of language was incorporated into early survey revisions.

Participants

For the student survey, we recruited college students who were part of a research subjects pool as a function of their enrollment in a core Information and Communication Technology course in the authors' department. While we did not collect demographic information of respondents, we know that a majority of the students in this research subjects pool were in their first or second year of college. A requirement for participating in the survey was that students had some experience with ClassDojo.

In the Spring and Fall of 2020, 124 students with experience with ClassDojo responded to the survey. The vast majority of students completed high school in the United States, though 3 attended high school in China and 1 in Saudi Arabia. Of the students who completed high school in the United States, a majority attended schools in the state where our university is located, with 19 other states also represented. Approximately 70% (n = 87) of students surveyed attended

public high schools, with others reporting that they attended alternative or specialized public schools, private schools, religious schools, independent schools and other institutions.

For the principal survey, we recruited principals through a departmental list of state principals as well as a listserv for state principals. In the Spring of 2020, 48 principals responded to the survey. For the purposes of this analysis, we excluded responses from principals who did not directly engage with ClassDojo, with a final N of 30 school principals.

Data analysis

We took a descriptive approach to analysis of closed-ended, Likert-style survey items, using the SPSS statistical analysis software. Our approach to analysis of open-ended responses was guided by a primarily inductive approach, whereby we applied predominantly descriptive first level codes to students' statements (Miles, Huberman, & Saldaña, 2019). Actual coding of open-ended responses was completed via a shared google excel sheet, where individual answers were imported from the Qualtrics survey portal. Given the relatively small amount of survey responses as well as the short nature of the open-ended responses, more complex coding software was unnecessary. As aforementioned, for the purposes of this analysis, we took a deep dive into the survey responses from the two open ended items and the close ended items that focused on *parent and teacher relationships*, as well as *students' attitudes toward app use*, which taken together, are particularly salient for generating insight into student perspectives on the sociorelational dimensions of app use.

After the first author inductively generated the initial descriptive codebook by eliciting patterned themes at the lowest level of inference possible for the select set of items, this draft set of codes was applied and tested by all three authors, with each response being coded by at least

two authors. Slight revisions were then made to the codebook to reflect the collective sense-making of the team, and the final set of codes was applied to all responses.

Findings

In what follows, we first present findings that speak to where and how ClassDojo was used in the students' lives, followed by a more focused analysis of how, if at all, the students understood ClassDojo to be impacting their relationships with their teachers, classmates and/or parents. Also included is the presentation of findings of data from the principal survey, which speaks to principals' perceptions on ClassDojo in their school and from the vantage points of various stakeholders.

Experience with ClassDojo

We began our survey by asking students about their experiences with ClassDojo in broad terms. As indicated in Table 1, students more frequently reported experience with ClassDojo in younger grades and in traditionally core content areas (e.g., English, Math). In addition to the information reported in the table, nearly 80% of students (n = 99) reported that only some of their teachers used ClassDojo, and 35.5% (n = 44) reported that teachers used ClassDojo differently. In contrast, 3 students (2.42%) reported that there were school level policies that governed teachers' use of ClassDojo.

[PLACE TABLE 1 ABOUT HERE]

We also surveyed students on their—and their parents'—experiences with different Class Dojo features. The terms listed in Table X reference the following features listed in our survey and derived from ClassDojo promotional materials:

- a private feed that can share classroom moments with families
- a private messaging system that allows for communication with parents

- portfolios that allow students to document their work and share it with home
- a news feed that allows for sharing school-wide updates and announcements
- a function that automatically translates messages into other languages
- a feedback system for giving or taking away points or awards from students based on behavior and demonstrated skills
- an option to communicate points, awards and other feedback with students' parents
- a teacher toolkit with functions such as a timer, a group maker, a noise meter, etc.
- a collection of videos that help students learn skills related to social-emotional learning

As seen in the table, more students reported experience with communication and behavior management tools (and the teacher toolkit) than other features; similarly, a plurality of students reported that of all the features their teachers used, the behavior feedback points for which ClassDojo is (in)famous was the primary tool. Relatively few students reported that their parents set rules, rewards, or punishments based on ClassDojo information, though behavior feedback points were an occasional source of rules setting, and an important minority of students reported their parents' using information from communication tools such as news feeds and portfolios to ask their children about school. Students generally reported their parents' attitudes toward ClassDojo features as being slightly higher than their own; however, even students' attitudes towards all features were positive.

[PLACE TABLE 2 ABOUT HERE]

Effects of ClassDojo

We surveyed students about their perceptions of how ClassDojo use affected their school experience. As seen in Table 3, most students felt positive or neutral toward ClassDojo, generally agreeing that it had positive effects and generally disagreeing that it had negative effects. In the second iteration of our survey (recall that we slightly revised the survey after the first administration based on initial analysis of response quality), we asked more specific questions about students' perception of ClassDojo's effect on their grades, behavior and well-being. Table 4 shows that students' perceptions of ClassDojo in terms of these specific effects was likewise generally neutral or positive.

[PLACE TABLES 3 and 4 ABOUT HERE]

Impact on relationships with parents

When asked about how the use of ClassDojo in their class(es) impacted their relationship with their parents[1], students' responses varied to a large extent (see Table 5). Of note, about one-third of students reported that the use of the app in their classrooms made "no real difference" on their relationship with their parents, and several students reported that their parents did not use the app even though it was part of their teachers' classroom practice.

[PLACE TABLE 5 ABOUT HERE]

Of those that reported an impact on their relationship, the most frequently occurring pattern (22%) centered on parents having an *increased awareness* of some aspect of their schooling as a function of ClassDojo. Within this code, nearly all responses spoke to a general awareness of schooling. Only a handful of responses within awareness-focused responses spoke directly to increased awareness of a more specific aspect of schooling, such as student

[1] Parents here is used as a short term for adult caregivers, including guardians, extended family members and/or others who might have overseen the educational provision of the participating students.

achievement (e.g. “it helped keep my parents in the loop with my grades”) or learning (e.g. “it helped them know what I was learning and could help me if I needed it”). We frequently applied multiple codes to these more robust responses. Consider the following student response:

> “The app made my relationship with my parents much more open and communicative. The app allowed my parents to observe my behavior and grades, so I would ask them for help more often and I would tell them about my schoolwork before they even asked.”

In this response, we understand the student to have perceived the use of ClassDojo as linked to a) increased communication between them and their parents, b) increased awareness: performance; and c) increase chance of parental support. Alongside naming how the app facilitated increased parental awareness, a handful of students also mentioned the increased opportunity for surveillance that accompanied that awareness. The following student excerpt shows this well:

> “It definitely helped me keep track of grades with my family, but it essentially gave them the ability to breathe down my neck at all times.”

Though not in the majority, there were also a handful of student responses that spoke in the same vein to the ways in which the use of ClassDojo shaped parental rewards and/or consequences. These existed along a positive-to-negative spectrum, in that students reported that negative feedback via ClassDojo would prompt negative consequences from their parents, and positive feedback would prompt praise and/or positive reinforcement. At times, students mentioned how it would prompt their parents to take some action in either direction, as the following response illustrates:

> “When my parents saw that I was doing well in school then I was rewarded but if I did something bad then I was punished.”

Related to the above articulated phenomenon of parental consequence or praise as a function of ClassDojo, a majority of the students who reported that ClassDojo *did not* impact their relationship with their parents said that to be the case because of the fact that they were "good" students (*emphasis* added).

> "The app didn't influence our relationship very much *because I was always on-top of my homework and I behaved in class*."
>
> "It did not influence my relationship at all. *I did well in high school so my parents did not check my grades or keep up with my classroom apps*."

In these responses, we understand the students to be implying that perhaps this would not have been the case if they weren't a well-behaved or well-performing student—and that if things were different with their behavior and/or performance, their parents may have used the app more or differently.

In the second iteration of our survey, we accompanied the open-ended question on this subject with a Likert scale question asking them to describe ClassDojo's impact on their relationship with their parents. As indicated in Table 6, most students were neutral or positive about ClassDojo's effect on this relationship.

[PLACE TABLE 6 ABOUT HERE]

Impact on relationships with teachers

When asked about how the use of ClassDojo in their class(es) impacted their relationship with their teachers, students' responses also varied greatly, as reflected in Table 7. Of note, around 24% of students reported that the use of ClassDojo made no real difference in their relationship with their teacher(s).

[PLACE TABLE 7 ABOUT HERE]

Among the set of responses that spoke to how the app shaped some aspect of student participation, four themes (child codes) emerged. The most frequent sentiment that emerged from students was that ClassDojo made them pay attention to their own behavior in class—most often in order to avoid negative repercussions or reflect on how to improve, behaviorally or academically. Second most frequent within this subset was the sentiment that the use of the app in class improved and/or increased overall classroom participation. Interestingly, a few students reported how the app had the effect of either amplifying their own voice or experience in the classroom or increasing student-to-student competition within their classroom.

Another 12% of student responses collected the code "increased student-to-teacher connection." These responses tended to convey the sense that the app led to more or better feelings of closeness or connection between students and teacher(s). Related to the expressed sense of the app improving or increasing connection, 14% of student responses spoke to the ways in which the app provided improved or increased communication between teachers and students. Within this set of responses, many spoke directly to how the app facilitated ease of communication. Others, however, suggested that the app was serving as more of "a bridge for communication" by "making it so much easier to communicate," and at times, allowing for students to "express if [they] were struggling privately to [their] teacher."

While not the majority, several students' responses relayed the important sentiment that the app made their teachers more aware of them as students. And of those students that directly ascribe a positive or negative impact on their relationship, twice as many reported the impact as positive.

In the second iteration of our survey, we accompanied the open-ended question on this subject with a Likert scale question asking them to describe ClassDojo's impact on their

relationship with their teachers. As indicated in Table 8, most students were again neutral or positive about ClassDojo's effect on this relationship.

[PLACE TABLE 8 ABOUT HERE]

Impact on peer relationships

In the second iteration of the survey, when asked about how ClassDojo impacted their relationships with their peers, nearly half of students (44%, $N = 18$) reported that it made no real difference, while 27% ($N = 11$) reported that the use of the app increased competition in their classroom. These responses spoke to the ways in which ClassDojo increased a sense of competitiveness amongst peers, and illustrated by the following excerpt:

> "Instead of letting each other speak and truly listening, we were all more concerned about earning our required number of speaking points."

While not the majority, such responses are not insignificant when one considers the organization and well-being of a classroom community. Other than these two predominant patterns ("no real difference" and "competition"), no additional patterns emerged, with a handful of students mentioning how it made the classroom more uncomfortable or simply that the students talked about how funny the ClassDojo videos were.

We accompanied the open-ended question on this subject with a Likert scale question asking them to describe ClassDojo's impact on their relationship with their classmates. As indicated in Table 9, most students were neutral about ClassDojo's effect on this relationship, with a large minority feeling positive about this effect.

[PLACE TABLE 9 ABOUT HERE]

Principals' perspectives on ClassDojo use

Findings from the state-wide principal survey remain emergent because the follow up rounds of data collection were paused due to the onset of the COVID-19 pandemic. At present, however, we briefly present an overview of findings that stem from analysis of data of survey response questions that speak directly to principals' (N = 30) perspectives on how their students, teachers, parents, and administrators feel about the use of ClassDojo in their schools.

When asked "how would you describe the overall feelings of students toward ClassDojo?" 40% of principals reported "very positive," 37% reported "somewhat positive," and 17% reported "unsure" (response option included very positive, somewhat positive, unsure and N/A). When asked to explain these responses, principals' ideas varied to a large extent. Of note, 47% of principals provided no descriptive response to this question. Of those that did respond descriptively, 17% said that students liked getting positive points (e.g., "The kids love getting points and working towards something"), and another 17% said that students used the app to share photos with teachers and/parents (e.g., "Students like seeing their photos [of their work in their classroom] shared with parents)." The remaining responses included mentions that not all students were motivated by points, they didn't use the app to communicate with students, and the recognition that they themselves hadn't given much thought to this question of how students felt about ClassDojo.

When asked "how would you describe the overall feelings of teachers in their school toward ClassDojo?", 63% of principals reported "very positive," 30% reported "somewhat positive," 3% were unsure, and another 3% reported N/A (response options included very positive, somewhat positive, negative, unsure and NA). When asked to explain their response, 46% of principals said that ClassDojo facilitated *better, easier, or more rapid communication*

between teachers and parents and/or students. The following two responses are illustrative of this set:

> "An easy way to communicate with all parents. Teachers can monitor if parents read their message or not."
>
> "It has improved communication between teachers and parents in my building."

Of the remaining, 33% provided no descriptive response, and the remaining handful mentioned that it either eased teacher workload, teachers liked it/struggled with it, or "were open to it."

When asked "how would you describe the overall feelings of parents toward ClassDojo?", 53% of principals reported "very positive," 37% reported "somewhat positive," and the remaining couple (7%) reported "unsure." When asked to explain their response, 57% of principals said that ClassDojo facilitated *improved, faster, or easier communication* between parents and teachers and/or students, with several noting the positive of immediate feedback for parents. The following two responses are illustrative of this set:

> "Easy way to communicate with teachers that is convenient for all."
>
> "Great, immediate feedback for parents."

Of the remaining, 23% provided no descriptive response, and a couple (7%) mentioned that some parents are disconnected and therefore the app is less useful.

When asked "how would you describe the overall feelings of administrators toward ClassDojo?", an overwhelming 77% of principals reported "very positive" and just 17% reported "somewhat positive." When asked to explain their response, 70% of principals said that ClassDojo again facilitated *improved, faster, or easier communication* channels in their school, between parents and teachers, with several noting that they appreciated how it helped keep

parents in the loop with what was going on at the school and/or in the classrooms. The following two responses are illustrative of this set:

"It has improved the communication between teachers and parents in my building."

"Good method for parent communications of the activities taking place in the classroom." Then, 17% of principals spoke to its use as a part of the broader behavior management program at their schools, with the remaining handful mentioning that its use in their schools varied by teacher.

Discussion and Limitations

The results from this study into students' and principals' experiences with and perspectives on ClassDojo are varied. The closed-ended items suggested that for the most part, students felt positively or neutrally toward the use of ClassDojo in their classrooms. Substantive percentages reported that ClassDojo in fact made them more motivated to do well in class, and that it had a positive effect on their grades, well-being, and behavior. This finding is consistent with previous studies that found ClassDojo to have a positive impact on behavior (e.g Dadakhodjaeva, 2017; MacLean-Blevins, 2013; Robacker et al., 2016).

From the open-ended responses, we can glean a little more nuance, and yet the picture becomes perhaps even fuzzier. Recall that about ⅓ and ¼ students directly reported "no real difference" in relationships with their parents and teachers, respectively, as a function of ClassDojo. Of those that did report on some aspect of impact or difference in their relationship with their teachers, most frequent responses tended to center around either improved or better communication, or how the app mediated some aspect of participation—ranging from fostering student-to-student competition to amplifying shier students' voices. Of those that did report on some aspect of impact or difference in their relationship with their parents as a function of the

app, the most frequent responses centered on how its use increased their parents' awareness about what was going on in school. Again here, these findings are somewhat consistent with previous studies that suggested the use of the app increased parents' care about their students' courses (e.g. Bahceci, 2019). At the same time, our findings also suggest that the use of the app may be having less difference on students' educational relationships (with their teachers, parents, etc.) than it purports to have, given that many stakeholders' disregard it and/or have parents that opt out of its use, even when it is the primary mode of communication in a given class.

With regard to principals' perspectives on the use of ClassDojo in their schools, they themselves reported predominantly very positive attitudes, and this was similar for how they understood their teachers and parents' perspectives on it. When it came to principals' perspectives on their students' feelings toward ClassDojo, these results were more varied in the sense that about the same amount (~40%) cited students' feelings as either "very positive" or "somewhat positive," with descriptive rationales ranging greatly and lacking in detail. While we did not encounter specific studies focused on principals' perspectives, the sense that school personnel are broadly in support of the use of the app is similarly consistent with previous studies (Krach, 2017; Krach et al., 2016).

Understanding if and how the app is shaping relations between students and their teachers or parents is important because from our vantage point—a sociocultural perspective—learning happens by and through the relationships students have with their teachers, their parents, and of course their peers and other mediating artifacts in their educational and everyday environments. From this data set, we see that for the most part, if students reported on some aspect of difference as a function of the app, they associated the parental relational improvement with increased parental awareness of their positive behavior or work completion. And if they cited some aspect

of relational difference with their teacher, they associated it with improved or increased facile communication. Given the culture of schooling in the United States (with the focus on instrumental achievement and particular types of acceptable performances of academic identity, see Tyack, 1974; Wortham, 2012), these sentiments are not surprising. But they are not, from our vantage point, an accurate reflection of students' *learning lives* (Erstad & Sefton-Green, 2017). In other words, because we understand learning as shifting participation in meaningful sociocultural activity over time (Rogoff, 1991), such points-based measures of behavioral performance or efficient communication do not (and perhaps shall never?) serve as holistic indicators of students' learning.

As an app that is being used to monitor, count, and report home on students' participation and everyday schooling experiences, the question of if and how it is shaping students' own perceptions of their participation and relationships, then, is not insignificant. The purpose of this study was to begin to understand if and how students understand the app as a mediator of these relationships and their broader classroom experiences. Our findings suggest that while many students may not associate the use of the app with a relational difference, and those that do often report a difference connected to some form of increased monitoring or awareness. To be sure, a small percentage of students (~12%) did speak to how use of the app either served to either increase connection between them and their teacher, or increased chance of parental support at home (~5%)— but given its near ubiquitous use in K-12 classrooms today, we would hope both percentages to be far greater.

Limitations

There are important limitations to this study. First, our student data is based on retrospective accounts. That is, we asked students to recall their former schooling experiences

with ClassDojo— and the passage of time is not inconsequential as a mediator of one's ability to situate and make sense of experience and relationships. Second, while we chose to include the principal data as a source of triangulation into various stakeholder attitudes toward the use of the app in their schools, we recognize the limitation of principals' insights into students', parents', and teachers' everyday feelings and experiences. Lastly, because both samples are small and based on volunteers for credit and/or small research incentives, it is not necessarily representative of the broader population of K-12 students or principals in the United States.

Future Research and Concluding Remarks

First and foremost, there is a grave need for *more* empirically grounded research that is focused on how students, teachers, and families understand and use ClassDojo. Given its ubiquitous use in K-12 classrooms in the United States and around the world, there is a dearth of rigorous research that is focused on the difference, if any, ClassDojo makes on students' learning and educational experiences. From our vantage point, this work should center the voices, experiences, and perspectives of children and youth. It should also not be restricted to evaluations or assessments of the utility or efficacy of the tool, but rather on the impact on students' broader schooling experiences. While institutional evaluations and public media articles have provided useful insights, we suggest that more thoughtful, mixed-methods research carried out by non-partisan researchers *without* conflicting interests is a necessary next step.

Again, because learning is a situated phenomenon deeply mediated by social relations and cultural contexts, it is critical that the field learn more about how the use of apps like ClassDojo is shaping *how students themselves* make sense of and reflexively organize their participation in various learning environments. Even from this small study, we have concerns, like others over the past several years (Selwyn, van Dijck, etc.), related to the ease with which

the app allows for and promotes the surveillance of student behavior and performance— and the implications this has for how students themselves conceptualize *what counts* in environments of teaching and learning. Learning is more than one's behavior and achievement— it is an everyday phenomenon that allows humans to lead the lives they have reason to value. It is not, from where we stand, a phenomenon that can (or should!) be captured through the accrual of points.

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