Skin in the Game: A Policy Implementation Study of How School-Level Bureaucrats Set and Rationalize Advanced Placement Exam Fees for Low-Income Students

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Abstract

As part of their strategies to increase college readiness and reduce educational inequalities, at least 29 states subsidize Advanced Placement (AP) exam fees for low-income students. However, while Michigan's state-level policy subsidized low-income student exams to \$5 per exam, we found wide-ranging fee structures at high schools—from \$0 to \$50. Through a lens of policy implementation theory and using an embedded case study approach, this study examined this disjuncture between the state and school policies using interview data from 33 school personnel—counselors, AP Coordinators, administrators—in 31 high schools and state personnel in Michigan; state policy artifacts; and publicly available school data. We identified three major challenges—many schools hedged and set higher fees because they were unsure how much the legislature would approve each year; the state subsidy did not account for additional exam costs (e.g., exam proctors) that were passed down to the student; and the policy as written lacked enforceability and accountability. Policymakers were largely unaware of the amount schools ultimately charged low-income students. In the presence of an ambiguous policy and constrained resources, school personnel relied on their personal perspectives on fees and behavior (e.g., the need to reduce moral hazard and increase “skin in the game”) to rationalize low-income students fees. Together, these findings help explain how low-income students pay vastly different AP exam fees depending on the high school they attend in Michigan—with some schools severely impeding low-income students' college preparatory opportunities.

Keywords College preparation · Reducing inequality · Policy implementation · Low-income students · Advanced placement · High school

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Introduction

The Advanced Placement (AP) program offers high school students the opportunity to engage in college-level courses that culminate in end-of-course exams. Receiving a passing score on an AP exam has numerous postsecondary benefits. For example, at nearly 80% of 4-year postsecondary institutions,¹ students can potentially earn college credit that may place them out of introductory college courses, reduces tuition expenses, and accelerates time-to-degree (College Board, n.d.-d). Although low-income students stand to benefit the most from AP exam credits, they are underrepresented as exam-takers. In 2013, while 48% of public-school students were eligible for free-or-reduced lunch, they only represented 28% of exam-takers (College Board, 2014). These income-based gaps in AP exam-taking raise concerns about the ability for low-income students to benefit from credit-bearing courses like AP at the same rate as their higher-income peers. The relatively high cost of AP exam fees (\$94 in 2019–2020 academic year for most exams; College Board, n.d.-b) are one potential barrier.

In order to address financial barriers to AP exams, both federal and state policymakers have long-since provided subsidies for low-income AP exam-takers as part of their college readiness efforts (Education Commission of the States, ECS, 2006, 2016; United States Department of Education, 2016). In 2016, at least 29 states appropriated funds to lower the costs of exams for low-income students—many reducing the price per exam down to a range of \$0 to \$15 (ECS, 2016). Yet little is understood about how these state-level fee-reduction policies are implemented within schools, which are charged with collecting fees and administering exams. This qualitative study is part of a larger mixed-methods research study that examined school-based practices and policies in AP course- and exam-taking in Michigan. During data collection, we found what is now this study's central finding: Schools vary widely in the amount they charge low-income students per AP exam even though the state subsidizes the price with the intention that low-income students pay \$5. This seemingly routine process—reducing the price of AP exams, appropriating funds at the state level, and creating procedures to collect fees in schools—has garnered little attention by researchers, yet is critically important to providing access to college credit-bearing opportunities for low-income students. Given the implications such findings have for low-income students' access to AP exams and potential college credit, and to better understand this discrepancy in pricing, we therefore pursued the following research question: *How do schools implement state-level AP exam price-setting policies?*

As the first study, to our knowledge, to examine the school-level implementation of AP exam price-setting policies, findings from this study contribute to an understudied phenomenon that is of great consequence for low-income students' ability to afford AP exams. Our study also has direct implications for state policymakers in improving college preparatory opportunities for low-income students and reducing class-based exam-taking inequalities more broadly. For low-income students, the ability to afford AP exams has implications for their subsequent competitiveness in college admission and potential to accrue credits at their chosen college.

¹ Analysis of 4-year institutions in IPEDS Institutional Characteristics file, 2019.

The Michigan AP Exam Context

For over a decade, Michigan has prioritized Advanced Placement as a way to promote college and career readiness (Michigan Department of Education, MDE, 2006). The state has employed two broad mechanisms to bolster its AP program: expand the number of students enrolling into AP courses and increase the number of students earning AP credit (MDE, 2006). To meet the latter goal, Michigan has traditionally subsidized part of the AP exam fee for low-income students. Then, in 2016, the state reaffirmed that it views AP access as a critical tool in the state's postsecondary readiness agenda by making it part of the newly announced "Top 10 in 10" strategic plan. Michigan's Department of Education introduced this plan with the goal of transforming Michigan into a Top 10 education state in 10 years by 2026 (MDE, 2016a). As of 2019, Michigan ranked 14th for total number of AP student enrollments and exams (College Board, 2019). The state's historic commitment to AP access—including its more recent affirmation in the 2016 strategic plan—makes Michigan an ideal site to understand AP state-level policymaking.

The focus on low-income students' access to AP exams is a salient one in Michigan. A substantial share of high school students in Michigan are low-income (44% qualified for free-or-reduced-price lunch, FRL; MI School Data, 2019). Further, with each AP exam priced at over \$90, subsidization is necessary for low-income students to afford the exam. Yet even when subsidized, low-income students are underrepresented in the pool of exam-takers. The most recently available data from College Board show a 31-point gap between public schools' low-income student representation in Michigan versus their representation in AP exams (College Board, 2014). Therefore, if Michigan is going to meet their college readiness goals and reduce class-based differences, the state recognizes they need to improve AP participation among low-income students (MDE, 2019).

To reduce exam fees for low-income students, states participate in a general cost-sharing agreement with College Board, the federal government, and families. In previous years, College Board subsidized about a third (\$31) of the price. The federal government, up until the 2016–2017 school year, offset a portion of costs through federal appropriations that supported AP-designated programs (e.g., Advanced Placement Test Fee Program). However, with the enactment of the Every Student Succeeds Act, the AP subsidization responsibility shifted completely to states—making the state's role in the process critically important to understand (Klein, 2016). For example, the year after the federal government ceased earmarking AP funds, Michigan's share went up from 16 to 52% (MDE, 2016b, 2017). Across states, the cost of an AP exam for low-income students varies, with most states (29) providing some level of support to lower exam fees (ECS, 2016). To varying degrees, districts and schools can also further subsidize the price. Finally, families are expected to cover the remaining balance.

In 2014, as part of the annual appropriations bill, the Michigan Legislature added and passed Section 94, the Advanced Placement Incentive Program, to HB 4295 (hereafter, "Section 94") to subsidize AP exam fees for low-income students and codifying the cost-share agreement. As noted by the bill, "The pupil for whom payment is made pays at least \$5.00 toward the cost of each test for which payment is made" (State of Michigan, House of Representatives, 2014). With this law in place, the cost-sharing agreement for a \$94 AP exam is as follows: College Board allocates \$32, Michigan contributes \$48, and low-income students pay a minimum of \$5 per exam (see Fig. 1). For

Fig. 1 AP exam cost-sharing in the 2018–2019 academic year. *Notes* the “Gap Remaining” is the difference between the total cost of the exam and expected subsidies from College Board and Michigan. Included in “Gap Remaining” are the state-stipulated \$5 student contribution and a \$9 College Board rebate schools forgo for subsidized students. Contribution information from *Information about the Advanced Placement (AP) Test Fee Reduction Grant for 2018–2019 School Year* by Michigan Department of Education, 2018 (https://www.michigan.gov/documents/mde/AP_Test_Fees_636911_7.pdf) and *Exam Fees* by College Board (<https://apstudents.collegeboard.org/exam-policies-guidelines/exam-fees>)

unsubsidized exams, schools receive a \$9 rebate per AP exam from College Board to offset costs to administer exams, but schools forgo this amount for subsidized exams (i.e., low-income students; College Board, n.d.-a).

Steps to implement this cost-sharing agreement became part of the yearly exam-taking cycle. Prior to 2019, College Board outlined the following exam-taking expectations: Students would indicate their interest in taking an exam in the winter, and school personnel register students for exams by the spring while noting the students qualified as low-income (College Board, 2018).² College Board then billed schools only for the school and student share, as the bills already included reductions for College Board and state contributions (MDE, 2017). Schools in our sample collected monies from families prior to the exam and held these funds or drew monies from extant accounts to pay their portion of the bill after the exam. Following exams in June, College Board then billed the state of Michigan for their share (MDE, 2017).

In order to communicate to schools the state’s portion, MDE typically addressed memos to district and school leaders noting the cost-sharing partners and the expected student contribution (e.g., MDE, 2018). Since the 2013–2014 school year, depending on the partners, the memos have noted that the combination of subsidies “results in a \$5 per exam fee for low-income students” (MDE, 2018)—a small but important distinction from the language in the appropriations bill of “at least” \$5 per exam. In 2018–2019, the program spent about \$815,000 subsidizing nearly 17,000 AP exams.

² Although not discussed here, starting in the 2019–2020 academic year, College Board moved the deadline for exam registration to October.

The Use of Policy Implementation Theory in Education Research

In his theoretical model, Matland (1995) combines two prevailing perspectives on policy implementation to develop a means of understanding how implementation of a particular policy may unfold. The first—top-down implementation—focuses on policymakers' attempts to control the implementation process by clarifying the intended outcome and designing the policy with this outcome in mind. Through this lens, researchers are concerned with the clarity of a policy's goals and whether the clarity allows for prescriptive implementation. Matland combines this theoretical perspective with bottom-up implementation, which focuses on the ways that public service workers (e.g., school personnel) interpret and deliver policy in a manner suitable to their local context. Commonly referred to as street-level bureaucrats (SLBs; Lipsky, 2010), these workers' individual and collective actions are central to the way in which policy goals are interpreted and policy design is implemented.

Matland argues two aspects of a given policy drive whether the analytic focus should be top-down or bottom-up: (a) policy conflict, or the extent to which a policy goal has broad support; and (b) policy ambiguity, or the extent to which a policy's goals are well understood and the resources necessary to implement them are present. In the case of AP exam fee subsidization in Michigan, there is little goal conflict, as people generally agree that low-income students should not face financial barriers in order to take an AP exam, as evidenced by bipartisan support of Section 94. However, the legislation itself is highly ambiguous—the language set the price of each subsidized exam as “at least \$5,” yet the MDE memos sent to school districts noted a singular \$5 fee. Further, while memos communicated the price and state allocation to support subsidization, they did not detail how districts should collect monies. This lack of specificity may be due to a historic deference paid to school-level implementation. Based on this background, we categorize Section 94 as a highly ambiguous but low-conflict policy.

When policies are highly ambiguous and generally have broad support, as is the case with Michigan's AP exam fee-subsidization policy, Matland (1995) theorizes that implementation occurs from the bottom up. This bottom-up implementation is dependent upon and shaped by the decisions of ground-level actors and availability of local resources, two factors that naturally result in variation in implementation across sites. As such, “the opportunities are excellent for bureaucratic entrepreneurs to create policies to deal with local needs” (Matland, 1995, p. 166). Lipsky (2010) argues that street-level bureaucrats such as school personnel have a great deal of discretion in their implementation of policies due to the specialized and complex nature of their work. He further describes how these personnel work in environments characterized by heavy workloads with typically insufficient resources, where they are asked to discriminate among “clients” (or in our case, students) to provide differential levels of service.

Scholars have previously applied the concept of street-level bureaucrats to study the role of counselors. For example, Carlson and Planty (2012) found high school graduation credit reform did not increase student achievement and preparation on a national scale because high school counselors, as street-level bureaucrats, did not implement the policy with fidelity. The authors discovered counselors managed competing priorities and goals—increasing graduation credit requirements while minimizing dropouts—with limited fiscal and staff resources. As a result, they selectively enforced new credit requirements and graduated students who did not meet the new minimums. Similarly, in their mixed-method study, Sattin-Bajaj et al. (2018) studied how 8th grade counselors shaped New York students'

high school choices. An important aspect of the New York City high school choice policy was that counselors were expected to support students through their choice process. Though a subset of counselors exercised equitable, family-oriented approaches, the authors noted the majority of counselors diverted the school choice process to parents when balancing competing time and resource demands. This diversionary response is consistent with the idea that SLBs will privilege efficiency when faced with resource constraints.

In the case of executing AP exams, school personnel (typically an AP coordinator and/or school counselor) may be charged with managing the many steps of the AP exam cycle. This includes communicating with students about exams and prices, tracking exam registration, ordering exams from College Board, securing space and personnel to administer the exam, collecting fees, and—critical to our study—determining the price to charge the school's low-income students. These responsibilities typically fall alongside other counseling responsibilities. Lipsky (2010) argued that as street-level bureaucrats, school personnel find ways to accomplish their tasks efficiently and within their resource constraints. In the acknowledgement that schools vary in their resources, and together with Matland's (1995) perspective that low-conflict, high-ambiguity policies are implemented differently across sites, we would expect schools to have different subsidization schema for low-income AP exam takers.

Resources and Beliefs: Variation in Policy Implementation Across Sites

There are two important determinants of exam fee implementation as it relates to local-level policymaking: the availability of school resources and the perceptions and beliefs of the SLBs who set school policy. Absent from Lipsky's (2010) conceptualization of street-level bureaucrats is attention to the variation in resources across sites. Schools—as the sites where SLBs operate—have historically been differentially funded, both through formal taxing schemes (Morgan & Amerikaner, 2018) as well as informal mechanisms such as fundraising (Posey-Maddox, 2016). The result of differential funding is disparate access to resources across high schools, which can manifest in the nature and volume of counselors' workloads. For example, research shows counselors at low-income high schools have larger caseloads and spend a larger share of their time on non-college preparatory activities, relative to their counterparts in high-income schools (Perna et al., 2008; Woods & Domina, 2014). As such, the available resources brought to bear on AP exams is fundamentally different across high schools. These differences in resources can determine the extent to which high school counselors are client-serving (where they privilege clients' desires and needs) or client-processing (where they privilege their own bureaucratic needs; Lipsky, 2010). We therefore theorize SLBs are more likely to implement ambiguous policy with less fidelity in resource-constrained schools—those serving more traditionally marginalized students—than their higher-resourced counterparts.

A second important factor specific to exam price-setting is SLBs' beliefs about fees and subsidization. Scholars have argued that school fees are a form of privatization used to make up for budgetary losses—such as state divestment—over time (Winton & Milani, 2017). In their study of school fees and fundraising, Winton and Milani (2017) explained the conceptual argument for school fees as one of privatization and neoliberalism. Through this framing, there is a delineation between what should (and should not) be publicly funded, driven by the categorization of educational activities as public goods or private benefits. Foundationally, public schools should provide what is minimally required for

students' education as is consistent with their role in serving the public good. The argument then goes that costs of additional educational services and programming that yield private benefits should be shouldered by parents, which include activities such as prom, trips, and, increasingly, co-curricular activities and sports (Bouman & Brown, 1996; Winton & Milani, 2017).

Perceived as an important tool in college readiness (e.g., Michigan's Top 10 in 10 Plan; MDE, 2016a), the costs associated with the administration of AP courses are typically incurred by states. However, the benefit of AP exams—college credit, reduced time to degree, and tuition savings—are largely framed as private. As such, only a few states fully cover exam costs for *all* students who take AP courses (ECS, 2016). Consequently, if a student wants to reap the benefits of an AP exam, they must individually fund this good. However, many school-fee studies argue the imposition of school fees—even optional ones like AP exams or pay-to-play extracurricular fees—have exclusionary effects that stratify opportunities at the school level (Bouman & Brown, 1996; Bucy, 2013; Hobbs, 2019; Myhand, 2018; Winton & Milani, 2017).³ The deployment of fee waivers is a way of addressing concerns of unequal access to fee-related opportunities. This approach is consistent with the *ability-to-pay principle* in taxation theory, or rather that individuals should pay what they can afford for services (Bouman & Brown, 1996). This subsidization approach to exam fees is common—29 states eliminated or reduced exam fees for low-income students in a 2016 survey of state AP policies (ECS, 2016)—and supported by research that suggests reducing the costs increases exam take-up (Jeong, 2009). While there is generally consensus that low-income students should receive school-fee subsidization, the amount subsidized and manner of implementation can vary across states and schools.

Although not a central purpose of their five-district school-fees study in British Columbia, Bouman and Brown (1996) found disagreement among school personnel in their beliefs about subsidization, which we organize into four perspectives. First, some school personnel were concerned with burdening low-income families with any costs and found ways to eliminate fees. Second, other personnel in their study believed a nominal fee induced “the sense of student responsibility,” particularly with school property (e.g., textbooks, p. 679). This idea stems from the economic concept of *moral hazard*: a subsidized fee could be so low that it not only reduces the barrier to take-up but also encourages negative behaviors in recipients—such that they are more willing to engage in risky behavior (e.g., not show up for the exam; Rowell & Connelly, 2012).⁴ Indeed, moral hazard is a common consideration in cost–benefit assessments of government programs that offer financial support, such as financial aid (e.g., Scott-Clayton & Schudde, 2016) and safety net programs (e.g., unemployment benefits; Chetty, 2008) in support of curtailing waste and subsidies. Importantly, there has been little evidence that supports the presence of moral hazard in the provision of financial aid (Doyle, 2013). A third perspective found in their study was the idea that benefits outweighed the baseline fees (Bouman & Brown, 1996). For example, in exchange for a \$10 “shop fee,” high school students gain access to expensive tools, consume materials, and craft projects they would not otherwise be able to afford. A fourth perspective rationalized fees as necessary due to budget cuts and limited budget funds, which aligns with the

³ There is considerable variation across states as to whether schools can charge fees, from whom, and for what activities and services (Eyler, Piekarz-Porter, & Serrano, 2019).

⁴ This concept is drawn from insurance literature, whereby for example the use of deductibles would serve as a deterrent from risky behavior.

SLB perspective of trying to accomplish bureaucratic tasks within a context of scarcity. Across most of these different perspectives, schools can leverage different and intersecting reasons to impose fees on students. We use these four perspectives as a starting point to understand how counselors rationalized their fee structures.

In sum, the ambiguous nature of Michigan's Section 94 places implementation at the discretion of school personnel—the street-level bureaucrats—which allows for considerable variation in implementation both within and across schools. The limited research on school fees suggests the choices school personnel make regarding exam-fee policies are influenced by two overarching factors: resources available to SLBs and their beliefs about fee subsidization. The former is financial in nature (e.g., Do schools have the funds to cover the costs?). The latter encompasses SLBs' perspectives in several ways—including the public and private nature of education, how fees influence behavior, and whether exam fees ought to reflect students' ability to pay or the potential benefits they might receive. Given the lack of research on exam fee subsidization policies, especially in the United States, we make important contributions in (a) revealing variable exam fee rates for low-income students despite state policy, and (b) understanding the mechanisms behind these differential prices.

Methods

To understand the implementation of Michigan's AP exam fee-reduction policy, we employed a case study design (Yin, 2018). An embedded, single-case study approach (i.e., Michigan as the main case) is particularly useful for investigating the complex and nuanced ways in which state-level policies are understood and implemented by street-level bureaucrats within their respective contexts (i.e., schools as the subunits; Yin, 2018). Data for this study stemmed from a larger, ongoing 5-year mixed methods project that examined AP opportunity structures, which yielded findings of considerable exam fee variation across high schools. We therefore focused this study on the roles of school and government personnel and the way these individuals understood and administered the AP exam fee-reduction policy in their respective positions. As such, our data collection and analytic processes were iterative. Further, we bound our case study to the academic years in which the majority of data collection occurred: September of 2017 to June of 2019. In the following sections, we outline: our researchers' positionality; site selection and recruitment; participants; and process for data collection and analysis.

Researchers' Positionality

Each research member's identity, perspective, and experiences with AP shaped this study. As such, we make the following acknowledgements about our identity and our positionality towards this work. First, we recognize through lived experiences the unequal and inequitable ways in which educational opportunities are structured by race and class. This lens enabled us to focus on lines of inquiry that examine such opportunity structures. Second, we believe policymaking is a non-neutral endeavor and policymakers should actively seek ways to remedy the educational debt (Ladson-Billings, 2006) owed to marginalized student populations. As researchers of marginalized identities, we seek to further a social justice agenda and share a desire to see more students of color and low-income students in rigorous coursework, which includes dissemination of our research as efforts towards disrupting

these opportunity barriers that may disadvantage low-income students or students of color. Third, we acknowledge our previous experiences with AP—whether as students or professionals—informs our perspectives regarding school personnel, school policies and practices, and students. These former experiences allow us to formulate questions and interpret data in ways that reflect our own individual experiences. Fourth, two of the research team members graduated from Michigan public schools and lend their familiarity to this research study.

Site Selection and Recruitment

Consistent with our framework that pays particular attention to SLBs situated in differently resourced environments, we employed a sampling strategy to recruit a diverse set of high schools within Michigan that would allow us to examine how AP opportunities varied by school resources. We first used school characteristics data from 2015 to 2016 Common Core of Data (CCD) and 2013 to 2014 Civil Rights Data Collection (CRDC) to restrict our sample to non-virtual, non-alternative high schools located in Michigan that offered at least one AP course; this yielded 191 high schools. We then used a maximum variation sampling approach (Palinkas et al., 2015) to purposively recruit along two school characteristics important to the provision of AP—representation of low-income students (i.e., FRL population) and AP course availability (Klugman, 2013; Kolluri, 2018, 2019; Rodriguez & McGuire, 2019). We operationalized the representation of low-income students as the percent of FRL students and AP availability as the number of AP courses offered per 100 students. Next, we categorized the Michigan schools into “high,” “mid,” and “low,” using the bottom, inter-, and top quartile ranges of our two measures of interest, thereby creating a 3×3 matrix with nine categories (e.g., “high” FRL and “mid” AP course offerings). Moreover, given our explicit attention to race in our larger project, we also considered racial representation in our purposive sampling. The majority of our sample schools fell into three categories: few low-income students and many APs (23%), moderate low-income student representation and few APs (20%), and many low-income students and moderate AP offerings (13%, Table 1).

Recruitment began in Spring 2018 and ended in Spring 2019. To obtain representation among our matrix categories, we employed multiple rounds of recruitment. As part of the recruitment process, we contacted and asked school leaders to identify the person most knowledgeable about AP, then recruited those recommended individuals. Additionally, in our interview protocol, we asked participants to recommend other potential participants, which added a snowball sampling approach to our recruitment process. All study participants were compensated with a \$25 gift card for their time. These multiple and layered recruitment approaches yielded 33 participants in 31 high schools. Most participants in our study identified as AP coordinators/counselors (78.8%), with variation in years of experience (Table 2). A sizeable share of high schools in this study were large (55%, between 1001 and 2000 students) and primarily located in suburbs (52%). In addition to school personnel, we also reached out to state government agents in Spring 2019 and interviewed one individual.

Data Collection

For this study, we collected data from multiple sources to understand how Michigan’s Section 94 policy was both implemented in schools and communicated by the state

Table 1 Participating school resources and characteristics (N=31)

Variable	N	Percent
School resources ^a		
Low representation of low-income students		
Low AP Availability	0	0.0
Mid AP Availability	4	12.9
High AP Availability	7	22.6
Moderate representation of low-income students		
Low AP Availability	6	19.4
Mid AP Availability	4	12.9
High AP Availability	4	12.9
High representation of low-income students		
Low AP Availability	0	0.0
Mid AP Availability	4	12.9
High AP Availability	2	6.5
School characteristics		
Urbanicity ^b		
City	8	25.8
Town	3	9.7
Suburb	16	51.6
Rural	4	12.9
Student enrollment		
≤ 500	5	16.1
501 to 1000	5	16.1
1001 to 1500	7	22.6
1501 to 2000	10	32.3
> 2000	4	12.9

We limited our sample to high schools that offered at least one AP course and were not labeled as virtual or alternative high schools. School characteristics data from the Common Core of Data's Public School finder for the year 2017–2018 (<https://nces.ed.gov/ccd/schoolsearch/>) and 2015–2016 Civil Rights Data Collection (CRDC) (<https://www2.ed.gov/about/offices/list/ocr/docs/crdc-2015-16.html>)

^aRepresentation of low-income students is defined as the percent of free-or-reduced-price lunch students in the school. AP Availability was operationalized as the number of AP courses offered in a school per 100 students. “Low,” “Mid,” and “High” categories for both representation of low-income students and AP availability represent the lower-, inner-, and upper-quartiles of the distribution in Michigan

^bUrbanicity is measured using National Center for Education Statistics (NCES) classifications

(Guba, 1981; Yin, 2018). Given the emergent nature of our study, we describe our data collection approach in three distinct phases: our original larger project study of Michigan high schools (embedded cases); a focus on the state policy context (main case); and the reconciliation of conflicting data and gaps in our understanding of school and state processes (both embedded and main cases).

Table 2 Description of participants (N = 34)

Number	High school	Position	Years in role
002-1 ^b	Fillmore	AP Coordinator ^a	7
003-1	Vanhorne	AP Coordinator ^a	8
011-1 ^c	Helsinki	Counselor	13
011-2 ^c	Helsinki	Counselor	2
012-1	Perry	Counselor	1
016-1 ^b	Quayle	Counselor	3
018-1	Bensimon	AP Coordinator ^a	3
021-1	Johnson	Counselor	10
023-1	Barkely	Counselor	7
027-1	South Hills	AP Coordinator	3
034-1 ^b	Polk	AP Coordinator ^a	10
038-1	Yates	Teacher	20
046-1 ^b	Washington	AP Coordinator ^a	N/A
050-1	Biden	AP Coordinator	8
058-1	Taft	AP Coordinator ^a	N/A
061-1	Adams	Counselor	10
072-1	Southview	Principal	8
074-1	North Hills	Principal	8
079-1	Gerry	Principal	5
086-1 ^c	Fairbanks	AP Coordinator ^a	13
086-2 ^c	Fairbanks	Principal	11
088-1	Carter	AP Coordinator ^a	N/A
096-1	Stockholm	Counselor	6
104-1	Dawes	AP Coordinator	3
110-1	Colfax	AP Coordinator ^a	N/A
118-1	Curtis	AP Coordinator ^a	N/A
119-1	Dallas	AP Coordinator	2
129-1 ^b	Hobart	AP Coordinator ^a	13
134-1	Garner	Principal	11
137-1	Hayes	AP Coordinator ^a	N/A
140-1	Humphrey	AP Coordinator ^a	N/A
142-1	Tompkins	Assistant Principal	25
196-1 ^b	Dole	Counselor	N/A
999-1 ^b	N/A	State Agent	N/A

All participant names and high school names are pseudonyms. Position description, years of service and ethnicity are self-reported in the interview and/or the demographic form

^aIf participant held various positions, we privileged their AP Coordinator position. We do not report all their positions to protect their identity

^bDenotes those who participated in a follow-up interview. In the analysis, quotations from follow-up interviews are denoted with “F” following the identification number

^cAt these school sites, we interviewed more than one participant

As part of our first wave of data collection, we gathered data on how school personnel set and subsidized AP exam fees. To do so, we first conducted 33 semi-structured interviews that lasted approximately 60 to 90 min (27 in-person and 6 over the phone). Among other topics, our interview protocol included AP exam fee collection procedures and costs of subsidized AP exams. With the exception of two, all interviews were audio-recorded and transcribed by an external source, which we later reviewed, edited, and redacted to ensure confidentiality. We produced handwritten notes of non-audio recorded interviews and transferred them to digital copy. Further, as part of protocol, interviewees completed demographic (e.g., race, gender, title) and AP course questionnaires (e.g., courses offered in the school). We also collected school artifacts during our visits, which included school profiles, communications to parents, and internal data reporting. Moreover, we gathered school characteristic information from publicly available datasets such as school enrollment (2017–2018 CCD), AP participation (2015–2016 CRDC), and academic performance (MISchooldata.org). Preliminary findings regarding variations in subsidized exam fees prompted our data collection at the state-level.

For our second wave of data collection, we gathered state legislative documents to understand the nature, funding, and communication of Section 94. We first searched the Michigan Department of Education's memo archive to identify monetary disbursements from federal and state governments. Between January and February 2019, we searched for and examined documents dated between 2002 and 2018 using terms such as “advanced placement,” “exam,” and “test.” These memos provided a roadmap to pinpoint when Michigan began allocating funds to subsidize AP exams. A search through Michigan's legislative public acts register identified the mandate that enabled the state to appropriate funds. We also obtained the amount of funds allocated to subsidize AP exams through the legislative fiscal year summaries from the *School Aid* series and searched for “advanced placement” between the 2013–2014 and 2018–2019 fiscal years. Moreover, we collected relevant College Board documents (e.g., AP Coordinator Manuals) from their website. We triangulated these documents to understand Michigan's AP funding context. Finally, to clarify this information, we recruited a state agent into the study as a participant to (1) clarify the funding and reimbursement mechanisms that subsidize AP exams for low-income students; and (2) triangulate school personnel's perceptions. The interview protocol for the state agent was informed by school-level interview data as well as our analysis of memos.

Our third wave of data collection was guided by the reconciliation of conflicting or unclear information regarding the subsidization process in both the main and embedded cases. In December 2019, we sought further insight from school personnel regarding the financial process of exam registration and exam fee-setting. For these follow-ups, we identified school personnel based on their familiarity with the state's fee reduction policy and/or their role in overseeing the AP exam's finances. Of the eight school personnel re-contacted, we interviewed a total of six over the phone. Interviews lasted between 30 and 60 min and included topics such as fee collection procedures and perceptions of state funding. We also conducted another policy memo scan on MDE's memo archive website to ensure we identified relevant documents. Moreover, to clarify the fee waiver funding and reimbursement mechanisms as well as communication processes we interviewed the state agent again through an online video platform that lasted approximately an hour.

Additionally, we sought to understand how schools publicly shared information about AP exams and priced non-subsidized exams. In December 2019, we conducted an online search for each of the participating schools using the term “advanced placement,” which yielded newsletters, curriculum guides, letters, and other related documents from the schools' web domains. While this data was collected a year after the

qualitative interviews and prices had changed, we used this information to understand the way schools: (a) communicate a regular price for an exam, (b) communicate a reduced price for low-income students, and (c) indicate whether and what steps low-income students were asked to take to receive the discounted price. All websites and documents were archived. These iterative data collection efforts yielded rich, multi-perspective data on the state and respective high school contexts in our sample.

Data Analysis

Given both the iterative process of our study and the dual nature of analysis that an embedded case study requires, we begin this section by describing our original analysis that served as the impetus for this study, then discuss our analytic approach for each layer of the case study (i.e., the state policy context and school-level implementation).

We began our analysis by compiling and organizing our data in an encrypted database (Yin, 2018), NVivo. Our first-cycle coding process included a combination of initial and structural coding (Saldaña, 2016). We began with a preliminary codebook and used it to individually code a set of transcripts. As a team, we came together to discuss the initial codes and both expanded and contracted these codes until we reached consensus as well as a more robust codebook (Saldaña, 2016). For this paper, we selected and then analyzed a subset of our codes by both cost of exam as reported by school personnel and representation of FRL students in order to examine potential patterns by subsidized AP exam costs and resources (Saldaña, 2016).

To understand the implementation of Michigan's Section 94 policy, we used state memos, interviews, and other artifacts along with College Board fee information to construct descriptive tables of the cost-sharing agreement over academic years. We also analyzed state- and school-level interview data to create a timeline of the registration process for the academic year (e.g., when and how fees are collected, when the legislature appropriates funds). This approach enabled us to identify and understand discrepancies between the *intended* implementation of the policy relative to its *actual* implementation.

In our school-level analysis, we sought to understand: the patterns in whether and how school personnel discussed the legislation; their perceptions of state subsidization; and their pricing schemes. These areas were informed by our understanding of the gaps in implementation, above, and produced both deductive and inductive codes (e.g., "upcharging") to identify bureaucratic processes. In line with our theoretical framing, we also examined the rationales school personnel deployed when confronted with bureaucratic challenges. We reanalyzed the school interviews using concepts found in previous literature (e.g., "outsized benefits," Bouman & Brown, 1996) as well as open codes that emerged from the data (e.g., "fairness"). Additionally, we used enrollment and AP exam participation data to triangulate with, contextualize alongside, and juxtapose against participants' responses (Guba, 1981). Through each coding process, we came together to amend and expand codes until we reached consensus.

Together with our iterative coding approaches, theoretical framework, and data triangulation, we refined our codes and identified the following main themes as challenges to implementation: uncertainty in legislative timing; unaccounted for costs in AP test administration; and lack of enforceability and accountability.

Trustworthiness

We employed a number of strategies to bolster the trustworthiness of our findings. In terms of credibility, our team of researchers (one primary investigator and six research assistants) collected different sources of information through a variety of methods that we triangulated and analyzed together (Guba, 1981). We conducted member checks with select participants in our follow-up interviews. These interviews provided a way to reaffirm patterns found in our data, seek additional information, and clarify processes in the policy's implementation (Guba, 1981). We also sent a draft of our policy context to MDE for review for accuracy. In addition to presenting our positionality and cross-checking our data, we maintained the consistency and dependability of our study by generating memos at each stage of our data collection phase, thereby creating an "audit trail" (Guba, 1981, p. 87).

Limitations

This study is not without limitations. First, despite multiple rounds of recruitment efforts, we were unable to recruit participants in some matrix categories for two reasons. Structurally, some combinations of low-income student representation and AP resources would yield few eligible schools from which to recruit (e.g., High FRL/High AP or Low FRL/Low AP) given the historic and current distribution of educational resources that are classed (Iatarola et al., 2011). As such, there are few public schools that serve affluent communities that experience a dearth of rigorous courses, and few that serve low-income communities and have an abundance of college preparatory coursework. The second issue is we encountered low response rates from schools that serve high FRL populations, despite our oversampling efforts. One possible reason is that administration and counseling offices at high-FRL schools face many demands on their time and are frequently understaffed (Gagnon & Mattingly, 2016). Moreover, marginalized communities with tenuous histories with research and researchers may be leery of participation and protective of their school communities (Ellard-Gray et al., 2015). Nonetheless, we were able to recruit schools along each dimension of low-income representation (36% Low, 45% Mid, and 19% High) and AP resources (19% Low, 39% Mid, and 42% High).

A second and related limitation regards the use of FRL as a proxy for low-income status and—in the aggregate—the share of FRL students as a proxy for school-level socioeconomic status. FRL status, as a binary indicator of income, does not fully capture the complex nature of socioeconomic status and the (in)ability to leverage financial resources for educational opportunities. Importantly, FRL status does not capture the financial realities of families right above the cutoff or of those who did not complete their applications for status. Given these limitations, when considering the share of FRL students at a high school, we acknowledge that the absence of FRL students does not necessarily mean the presence of wealthy students. Nevertheless, FRL is among one of the few available metrics to compare income and resources within and across schools that also reflects how federal resources are allocated through programs such as Title I. Finally, our study is limited to Michigan and is not generalizable to other states. However, 28 other states have a similar policy (ECS, 2016).

Findings⁵

Part of Michigan’s AP program expansion in the last 10 years included subsidizing exams for low-income students at or *at least* \$5. The term “at least” introduced ambiguity in state-level documents that, though seemingly negligible, ultimately shaped schools’ implementation of this policy in practice. Despite MDE memos suggesting low-income students pay \$5, schools had a wide range of exam fee structures. Some schools did not experience challenges setting the subsidized price at or below \$5. Three schools reported charging \$5—with Curtis High School citing “state legislation” for doing so. Another group of nine schools did not charge FRL students for AP exam-taking in a bimodal fashion. The first set of schools were generally high-resourced, with a combination of few FRL students (10% or fewer) and additional resources (e.g., discretionary funds) from which to draw upon. The second set of schools were typically considered low-resourced high schools with a large FRL population (60% or higher); these schools had additional Title I funding to absorb the exam costs.

In contrast, almost half of our sample ($N = 13$) reported they charged FRL students more per exam—as high as \$25 to \$50 (see Table 3). Schools in this category fell in what we termed the less-obvious *murky middle*: they served a considerable population of FRL students, but most did not qualify for additional government subsidies. These schools may not have had resources necessary to offset all the costs associated with administering exams for their sizable FRL populations. In the following sections, we enumerate the major challenges that limited the ability for resource-strapped schools to implement the \$5 fee policy with fidelity and discuss how school personnel beliefs shaped price-setting.

Challenges to Implementation

While we did not initially set out to examine the implementation of Section 94 in Michigan, the between-school variation in exam pricing and its implications for class-based inequality in exam taking warranted an investigation of school price-setting processes and rationales. We found three major areas in which uncertainty and ambiguity in the nature of the policy compromised the aim to reduce financial barriers for low-income students.

Challenge #1: Uncertainty of Legislative Subsidy and Timing

One challenge for schools to execute a price-setting strategy was year-to-year uncertainty about whether, when, and how much subsidy the legislature would approve. School personnel depended on these legislative decisions to set and advertise subsidized prices, register students, and manage payments (including payment plans) traditionally between December and March. Until the appropriations bill passed, schools could not be certain whether they would receive any funding to subsidize AP exams. To assuage some of these concerns, MDE noted past funding support in their written and verbal communication to districts. In conversations with us, MDE noted Section 94 received bi-partisan support, making defunding unlikely.

⁵ To protect the identities of schools, data presented in this section (e.g., percent free-or-reduced-price lunch) were rounded; all school and personnel names are pseudonyms. School numbers and pseudonyms are used interchangeably.

Table 3 Frequency table of subsidized fee-per-exam response

Subsidized exam fee	School subsidization strategies	School personnel rationales	Schools, FRL ^a
\$0	<p>Paid for all FRL</p> <p>Paid for any student disclosing hardship without requiring documentation</p> <p>Used discretionary funds to cover exam fees</p>	<p>Title I schools had additional financial resources</p> <p>Low number of FRL students requiring coverage</p> <p>District paid for all exams</p> <p>Cost should be no barrier</p>	<p>[011, 5%]</p> <p>[027, 10%]</p> <p>[119, 10%]</p> <p>[086, 20%]</p> <p>[088, 35%]</p> <p>[134, 35%]</p> <p>[023, 60%] (free)^b</p> <p>[038, 65%]</p> <p>[096, 65%]</p> <p>[003, 95%]</p>
\$5	<p>Established different fees for free-and-reduced price lunch students</p> <p>Used discretionary funds to cover exam fees</p> <p>Gave all students some level of discount</p> <p>Fundraised to cover FRL student exam fees</p> <p>Fees modelled after existing fee program</p>	<p>State legislation set price</p>	<p>[118, 30%]</p> <p>[046, 45%] (free)^b</p> <p>[196, 50%]</p>
\$9–\$50	<p>Followed district policy</p> <p>Collected deposit for unused test fee followed by IOUs and refund checks</p> <p>Set an out-of-pocket maximum to cap amount students would pay for all exams</p> <p>Charged all students for administrative costs (e.g., proctors, space)</p> <p>Provided additional subsidization if students asked</p> <p>Asked students, “What can you afford to pay?”</p>	<p>State funding was unstable</p> <p>Price included unused exam fee</p> <p>Fees ensured student investment, or “skin in the game”</p> <p>Price was a “huge discount”</p> <p>Potential benefits to students outweighed exam fee</p> <p>Prices matched those of nearby schools</p> <p>Cost should be no barrier</p>	<p>[061, 10%]</p> <p>[079, 10%]</p> <p>[129, 10%]</p> <p>[074, 15%]</p> <p>[110, 20%]</p> <p>[016, 25%]</p> <p>[034, 30%]</p> <p>[137, 30%]</p> <p>[104, 40%]</p> <p>[046, 45%] (reduced)</p> <p>[002, 50%]</p> <p>[050, 50%]</p> <p>[023, 60%] (reduced)</p> <p>[012, 10%]</p> <p>[142, 20%]</p>
Participant did not know subsidized fee			

Table 3 (continued)

Subsidized exam fee	School subsidization strategies	School personnel rationales	Schools, FRL ^a
Subsidized Fee Unclear			[058, 35%] [140, 50%] [018, 85%] [072, 25%] [021, 80%]
Subsidized Fee Unknown			

Information on free-or-reduced-price lunch student (FRL) populations is adapted from National Center for Education Statistics, Common Core of Data's Public School finder for the year 2017–2018 (<https://nces.ed.gov/ipeds/data/ipedssearch/>)

^aPercent represents number of FRL students divided by total student population, rounded to the nearest 5th

^bThese schools charged different prices for free-lunch students and reduced-price-lunch students

However, three facets of the funding process made school personnel uneasy. First, some school personnel perceived this year-to-year approval as precarious. As one AP Coordinator expressed, “we typically cross our fingers” [104-1] when referring to whether the state would allocate funds to offset exam costs. School personnel expressed relief that the state “come[s] through,” however delayed [104-1], but also noted that “you just don’t know” [016-1]. Another AP Coordinator shared: “[The state]... They’ve talked about removing the help each year for a long time now” [118-1]. Second, delays in the legislative process heightened uncertainty. For example, disagreements over the appropriations bills for FY2019 delayed its passage until December 2019, substantially altering the typical August approval (Gibbons, 2019). Third, the level of subsidization from the state sometimes fluctuated—in AY 2017–2018, the amount changed three times over a 4-month period, resulting in three memos from MDE. School personnel shared they were unclear about the state’s portion of the cost-sharing agreement, which made it difficult to set prices and order exams.

The response to these uncertainties varied by school. Some schools noted they could absorb the costs should the state not meet their share. In contrast, other schools intentionally set exam prices to create stability. A counselor from Quayle High School—that has 25% FRL—explained:

If we were one of those schools that said, we’re going to charge you the \$5 and then it came back to us that, no, they’re not going to give it to the kids for \$5, then absolutely that would affect—If I worked in a district that was higher free and reduced lunch, it would totally affect that process because how could you know what to charge the kids? But for me, luckily we, since we charge at [\$]25, it doesn’t affect me because I keep it pretty stable.

This participant drew attention to the ways resources and demand matter by distinguishing between Quayle and districts with greater shares of low-income kids (and arguably greater demand for fee subsidization). Especially for schools in the murky middle, if school personnel set exam prices with an assumption that past funding levels would continue, a decrease in state appropriations would necessitate additional fees or redistribution of scarce resources in order to balance the books. This counselor offered a solution to this instability in funding (whether perceived or real) by setting a price well above the minimum \$5 fee, thus hedging their bureaucratic processes against potential shocks. For low-income students, however, a \$25 exam fee may hinder their ability to take one—say nothing of multiple—exams.

Challenge #2: Unaccounted-for Costs

MDE calculated their per-student contribution so the presumed balance for low-income families totaled \$5. This calculation used the registration fee charged by College Board (e.g., \$94 in 2018–2019) as their benchmark. However, this approach did not account for the numerous, and sometimes substantial, costs associated with AP exam administration. In this section we outline two unaccounted for costs: unused test fees and the (actual) cost of test administration.

Unused Test Fees When setting AP exam prices, some schools factored into the price an unused test fee—a penalty charged by College Board when students registered but did not attend their scheduled exam (i.e., \$15 in 2018). Neither College Board nor state subsidies

covered this no-show fee for low-income students. Therefore, schools could potentially absorb this required penalty fee if a low-income student did not sit for the exam.

To mitigate this potential financial risk, some schools included the price of the unused test fee when establishing their exam price. In the AP Coordinator's Manual, College Board suggests schools can collect student deposits for the unused test fee (College Board, 2018). As one example, the AP Coordinator at Curtis High School—with 30% FRL students—historically charged low-income students \$20 per exam because that amount “covers the cost of ordered tests that end up not getting used.” Collecting deposits, however, can require additional administrative burdens. After this AP Coordinator collected a deposit from low-income students, for example, the coordinator would then either collect additional fees or issue refunds depending on the final subsidization amount from the state. However, not all schools treated the unused test fee as a deposit. Polk High School (another school with 30% FRL students) charged low-income students \$15 to pass along “the unused test fee, just as a precaution” but did not later issue refunds. Despite offering the unused test fee as the rationale for the price of their AP exam, in the case of Polk and others, the school did not return the fee if students sat for the exam.

The (Actual) Cost of Test Administration A potentially larger challenge to implementing Michigan's \$5 exam subsidization policy, we found, was that the state-calculated subsidization level (e.g., \$48 in 2018–2019) did not account for additional costs of test administration. In order to be compliant with College Board regulations around the examination process, schools must have proctors administer and supervise the exams and secure spaces in which students can take their exams undisturbed by bells or announcements (College Board, 2018). Due to these exam-testing parameters, some schools incurred additional costs (e.g., hiring proctors or renting space) to administer AP exams.⁶ At Hobart High School, a school with few FRL students (10%), the AP coordinator detailed that with over “600” test-takers for one exam, they need “in the ballpark of 30 proctors.” Due to the growth in test-takers at this school, they had to “rent these janky tables” and have students test in other parts of the school (e.g., gym), which cost “thousands of dollars.” Their response underscored the increased complexity and cost for high schools that administer many exams. Indeed, many schools passed these costs onto examinees. At Hobart, non-FRL students paid \$100 per exam, while data from school websites showed that some charged as much as \$115 per AP exam.⁷

Schools receive some assistance for test administration. College Board issues schools a rebate of \$9 per exam specifically to help cover such costs after the final invoice is settled. However, College Board policy does not permit rebates for low-income students, presumably because College Board already subsidizes part of the exam cost. However, regardless of whether the exam is subsidized, schools bear the financial costs for low-income students that a rebate would cover otherwise. As the AP Coordinator from Hobart High School underscored, “That is just money we're not getting.” In other words, for a school charging \$115 per exam, the \$48 state subsidy does not account for the additional \$19 the school

⁶ In addition to space and proctors, schools also incurred charges for third-party test-registration services, credit card processing fees, and test-taking materials.

⁷ Not all schools published their exam price on their websites. Other schools within the state that were not part of the study charged \$130 in 2018–2019. College Board acknowledges that schools may charge students an amount above and beyond the College-Board established price (\$94 in 2018) to cover administration costs (College Board, n.d.-b).

added to the \$94 College Board price. If such a school passes this cost down to low-income students (\$5 student fee plus \$19 cost of test administration), the student would pay nearly five times the state-intended price (\$24).

The ways in which schools handled administration costs varied. Some schools either incurred the costs or sought ways to reduce the overhead to administer exams. For schools in the murky middle, the decision to upcharge low-income students also depended on the school personnel's focus on affordability and inequality. As the AP Coordinator at Washington High School, which has a sizeable FRL population (45%) explained, "We go bare minimum and if we have to do it, we have to do it, and we will find a way to make that extra money up somehow. We don't want to ever charge parents or families any more than we have to." Washington High School did so by differentiating the price between free (\$5) and reduced-price (\$15) lunch students. However, another school (Fillmore) in the murky middle (50% FRL) upcharged both FRL and non-FRL students (to \$20 and \$100 per exam, respectively), so they could ensure there was "a little bit extra... in the kitty of the fund" just in case "the [state] funds weren't there" when they had to settle the final AP bill. Thus, in the absence of additional resources and depending on the personal philosophy of school personnel in charge of exam-price setting, some schools in our study bundled these extra expenses in students' exam fees, including those of low-income students.

Challenge #3: Un(Enforceability and Accountability) of AP Exam Price-Setting

Finally, a key challenge to implementation was the lack of enforceability and accountability of Section 94. First, MDE officials remained largely unaware that schools upcharged AP exams for low-income students. One state official noted that, with the exception of one school that reported adding a credit card processing fee:

If the school's adding additional costs, neither us nor College Board is picking up, and they shouldn't be charging the student... Now again, if I knew of schools that were doing that I'd probably have to give 'em a call and say, 'What are you doing?'

Because the state received the final invoice from College Board, they only saw the number of low-income students that registered for an AP exam. Therefore, the state does not know key facets of individual schools' processes—from the fees charged and collected by school personnel to how they communicate about or identify low-income students for the subsidy.⁸ Therefore, the state had no mechanism to know whether or how much schools charged low-income students and no way to hold schools (or districts) accountable.

Second and most importantly, MDE cannot mandate schools charge low-income students exactly \$5. While the state legislature required a nominal fee from low-income students, MDE noted that the \$5 is more of a "guideline" because "if we dictate it under school law, then whatever we say is a requirement we have to fund." Given this inability to enforce a \$5 fee, there were no consequences for schools that charged low-income students more than \$5—including those who planned to charge 10 times the recommended price.

⁸ To qualify for a fee reduction, both the state policy and College Board defined low-income students as those whose families earn less than 185% of the poverty line, aligned with the federal guidelines for free-or-reduced lunch. Although not a primary finding of this study, our interviews revealed that some district-level privacy policies prevented school personnel from accessing any list that identified students' FRL status, citing privacy laws. This policy made it difficult for personnel to target and counsel low-income students about the fee subsidy, leaving it to students to self-identify or request financial assistance.

Together, (1) uncertainty of legislative subsidy and timing, (2) unaccounted for costs, and, (3) lack of enforceability and accountability of AP exam price-setting made it difficult to implement Section 94 and created conditions where school personnel wielded a great deal of discretion over setting AP exam fees. School personnel, as street-level bureaucrats, need to complete the complex and multi-faceted tasks of test registration and administration. Lipsky (2010) argues SLBs will privilege the organization and process above equitable access to services and goods. As such, they provide services so long as their own processes are not compromised. This perspective is perhaps most salient for SLBs situated in resource-strapped institutions (and a sensible explanation for why we observed price-setting that aligned with the cost for no-show exams). In the presence of ambiguous, unenforceable policies, they turned to values-based street-level policymaking. The resultant systems they devised, however, were not always in the best interest of low-income students.

SLBs Flex Their Rationales in AP Exam Fee Subsidization

SLBs will cope with their inability to service all clients adequately and the burden of having to ration services and deny clients through their own sense making (Chase, 2016; Lipsky, 2010). One way of doing so is to rationalize the process or subsidized price. In addition to the bureaucratic rationales provided in the section above that focused on their administrative tasks and budgets, school personnel also offered reasons based on their personal perspectives on subsidization and who should receive it. We start each section below by highlighting high schools emblematic of the *skin in the game*, *outsized benefits*, and *fairness* rationales, respectively. We selected these high schools to underscore the unintended consequences of ambiguous policymaking and the power that SLBs possess. We present these as a set of (rather than discrete) rationales upon which counselors drew, as our study participants oftentimes offered multiple reasons for their AP exam-fee policies.

Skin in the Game

Hobart High School has a robust selection of AP course offerings and roughly one-third of students take AP courses. With about one in every 10 students qualifying for free-or-reduced-price lunch, Hobart has a relatively small FRL population. The AP Coordinator at Hobart described their rationale for setting the exam fee at \$15:

So we've set it at \$15 per test for any students on free or reduced lunch, or any students that we're aware of...any additional financial hardship. Our thought there is it's a very discounted price and at least there's some kind of commitment to, 'I'll be there. This is important.' That idea that at least there's—usually, that's acceptable. And if there's any problem with that, too, we can work with the student, but that's what we set it at, \$15.

Here, they rationalize that paying a nominal fee signals to students the exams should be taken seriously and solidifies a commitment to “show up.” The participant further explains, “I mean, if I'm generalizing, not that it's true with everybody, but some people, if it's just like, ‘Yeah, sign me up. It's free,’ then it's, even up to that day before, it's like, ‘It's no big deal if I don't show up.’” In referencing a hypothetically free exam, the AP Coordinator at Hobart suggests exam take-up would increase from less-serious low-income students. As such, the fee acts as an intentional barrier for students, which the coordinator suggested

they can choose to remove for students (who qualify for free-or-reduced-price lunch or not) who absolutely cannot afford it.

Invoking the specter of moral hazard and requiring low-income students to have “skin in the game” was the most common rationale for charging low-income students for AP exams among our participants. Questioning low-income people’s morality, motivation, and deservingness can be one way SLBs cope with the rationing of services. For school personnel, this rationale was undergirded by the idea that without some “investment,” students would not take the exam seriously because they themselves were not paying for it—either they would be induced to sign up but perform poorly or register but not sit for the exam.

Importantly, there was little evidence from our study or others that subsidizing fees introduces moral hazard. The Fillmore AP Coordinator reported only 2 to 3 no-shows a year, adding it was usually the kids who were “paying the lower price” (i.e., low-income students). Moreover, although Quayle High School required parents to sign contracts that acknowledged the unused test fee and threatened to withhold report cards if fees went unpaid,⁹ the counselor felt “lucky” that the students and families “[were] committed” and never missed an exam “on purpose.” This lack of evidence of moral hazard might be due to the subset of students that school personnel were concerned about—low-income students enrolled in the school’s hardest courses—would arguably have *higher* levels of motivation when engaging in college preparatory activities than most students. Nonetheless, the narrative of lack of commitment and no-shows was prevalent, despite very low cases or counselors not having “really assessed it or done any evaluation on it” [129-1]. In the eyes of resource-strapped school personnel, the *possibility* of these behaviors had consequences for their workload and ability to ration resources. Therefore, “skin in the game” rationales serve as a type of insurance to protect school personnel and their budgets.

The insurance is not only financial, but in the case of Fillmore High School, one of achievement.

I think the main reason why I wanted [the fee] to be a little higher was just, like I said, so there’s some skin in the game. And then it put more seriousness on the test. Like kids, other students would be like, ‘Wow, it’s only going to cost me...20 bucks to take it, you know, and I’ll just try it. Whatever.’ ...those are the ones that usually end up getting like ones and twos on the test. They don’t score well... the kids who were more dedicated, paid full price.

Here, students’ income and academic ability are intertwined, and the participant equates dedication with ability to pay the full price. Because passing rates are a common metric used to judge high schools (e.g., on high school profiles used in college admission or on state data dashboards), such deficit perspectives of low-income student ability can manifest into pernicious pricing strategies that aim to keep low-income students out of the testing pool.

Outsized Benefits

Fillmore High School serves a predominantly suburban, working-class community, with over half of students eligible for free-or-reduced-price lunch. Overall, they have very low AP course participation despite offering over 10 AP courses, and about two-thirds of AP

⁹ This policy was new for AY 2019–2020, but was not based on any historic pattern of student behavior.

course-takers sit for at least one exam. During our first interview, the AP Coordinator shared that she planned to charge low-income students \$50 per exam that academic year. During our follow-up interview 13 months later, however, the AP coordinator revealed the subsidized exam fee was adjusted down to a more affordable \$20 instead.

I wanted it to be different [\$50]. But it was basically, we were trying to find a number that would be useful for our kids that would be within paying for the test...I think we felt like the \$20 was a relatively good price for that range. And that's what we had to kind of match whatever the other high school was doing with our sister school. So I originally wanted it to be \$50 because I think just part of me is like, 'You're paying potentially for a college course, so that's pretty cheap.'

Another approach SLBs can use to cope with their rationing of services and goods is to abandon consideration of one's ability to pay and focus on one's ability to benefit. We found this rationale deployed when counselors shifted the frame from whether the exam fee was affordable for low-income families to the benefits of accruing college credits. When comparing a \$15-to-\$50 fee with the potential of earning college credits priced at thousands of dollars, some concluded the exam price was a bargain. When considering whether to price exams at \$5, the counselor at Quayle High School rationalized,

But I do feel that there's that investment piece there that the parents are like, 'Yeah, \$25, this is what potentially my student could gain, and this is the comparison, \$1500 at a community college or three grand at a four-year university, and this is what's saving them from it.'

The resultant fee was then deemed an acceptable price point—regardless of whether a low-income family can afford it.

However, this logic is faulty when the ability to benefit is conditional on successfully completing several interim steps (and, therefore, benefits are not guaranteed). In the case of AP exams, college credit can only be accrued if students are admitted to and enroll in a college that accepts their exam scores. However, the opportunities of successful completion of all these steps are structured differently across schools. In high schools with low or moderate exam-passing rates, few students will have the opportunity to realize the credit-bearing benefits of AP exams. Therefore framing AP exam fees in these schools as an outsized benefit is particularly problematic.

Fairness

At Quayle High School—a small school that served a moderate level of low-income students (25% FRL)—school personnel *upcharged* the AP exam price for FRL students (to \$25) while simultaneously *discounting* the fee for non-FRL students (to \$60). Unlike other schools that passed down exam administration costs to students, Quayle—perhaps due to their small test-taking population—did not report any additional exam administration costs that may have strained the school's available resources. Rather, their subsidization practices reflected a complex philosophy about fairness, uncertainty of state funding, and “skin in the game” rationale. As the counselor reasoned:

We discount it to \$60...per test for students, regular students, and then we discount it to \$25 for free-and-reduced lunch. Part of that reasoning is because last year we didn't know how much the state would supplement, and they ended up supplement-

ing it to I think \$5, but we still choose to do the \$25 just because it's the investment of the family.

When asked whether FRL students received a refund after the school knew the state's final subsidization level, this counselor stated: "We do not give them a refund. So we just charge the \$25 as a part of their price." Concerns over state funding contributed to the upcharge, but other philosophical reasons were the main drivers of this school's price-setting decision, such as the "investment of the family." With no test administration overhead, it is possible that the school may have profited from each test taken by an FRL student.

Notably, price-setting at this school did not just involve surcharges on FRL students, but also subsidization for non-FRL students. When asked where the funds for the \$34 subsidy for "regular" students came from, the counselor explained:

I honestly don't know where the funding comes from...when I got this job they said, 'We will discount the AP test as part of those funds.' I'm sure it had something to do with state funding.

Importantly, the counselor at Quayle did not have a strong understanding of who "state funding" was intended to target. Although state funding played a role in AP exam cost-sharing for FRL students, the school's fee structure was a large departure from the intended subsidization plan. Because Quayle may have netted funds from FRL student exams, it was possible these funds could then be used to cover exams for non-FRL students. When surcharges on FRL students effectively subsidize non-FRL students, they function like a regressive tax—a practice we deem "Reverse Robin Hood."

The extent to which policymakers consider "fair" and efficient ways to allocate limited resources is the essential work of policymaking (Stone, 2011). Concerning fairness in subsidization, the goal is to distribute resources in a way that removes financial barriers for those unable to pay while charging everyone else full price. Conceptually, however, there may be a point at which the difference between fee subsidization and full cost is so large that the full-pay price is perceived as unfair. At this point, the notions of fairness are turned on their head, whereby the focal point becomes the harm incurred by the unsubsidized. At nearly \$100 per exam, AP exam fees are ripe for such challenges to fairness, as many counselors believe the full cost of exams are unreasonably high. Particularly if students take multiple exams, paying several hundred dollars in exam fees might make it "difficult for some families that want to take full advantage of the program and have the opportunity to take more than one exam" [016-1]. Moreover, given the dichotomous nature of the eligibility requirements for the subsidy, students of moderate means who fell just above the free-or-reduced-price lunch cutoffs would struggle to afford the full-price exam fee, as the AP coordinator from Fillmore High School explained:

The kids that are not free and reduced lunch aren't rich... it's a hurt for them too. So it's hard for [parents] to hear, 'Well, my kid has to pay 100 bucks...but because I make five grand more a year than my neighbor, they're only paying 20 bucks.' ...There are a lot of kids who truly can't afford it. And there are a lot of kids who are just, they're maybe middle, like lower middle class, but just make enough money to be able to afford it.

We found some school personnel drew upon these notions of fairness and the cost of the full exam to consider the extent of their subsidy, as did the AP coordinator in Fillmore: "Let's make it somewhere more within reason. \$50 is still half off. Where else do you get 95% off on something, ever?" Here, she perceived the subsidy as a "huge discount." School

personnel at Quayle High School took it one step further to actively find ways to close that gap between the two price points by potentially rerouting resources that could have otherwise gone towards low-income students to subsidizing full-pay students, while charging low-income students five times the state-recommended price. Together, counselors in some high schools leveraged their beliefs about skin in the game, the outsized benefits of AP exam-taking, and fairness to craft narratives and set pricing policies that ultimately harmed low-income students' opportunities.

Discussion¹⁰

Recognizing the importance of reducing inequality in college preparatory opportunities, 29 states have policies to subsidize low-income students' AP exams (ECS, 2016). Despite its popularity, little attention has been paid to how these policies are implemented on the ground. We revealed that while policy documents in Michigan priced low-income exams at \$5, half of the high schools in our sample charged more (with one school contemplating a fee as high as \$50). Through the lens of policy implementation, we found state policy documents were ambiguous and unenforceable, which led to local school personnel—mostly AP coordinators and counselors in resource-strapped schools—to set their own fee structures. School personnel used narratives about low-income student motivation, the benefits of AP credits, and notions of fairness to rationalize their fees. Ultimately, street-level policymaking undermined the goals of AP exam affordability, as low-income students were asked to pay vastly different prices for the same exams across the state. Below, we offer recommendations for policymakers to reduce the deviations in policy implementation and summarize our contributions to policy implementation and college preparation literature.

Recommendations for Policymakers

Clear state policy that establishes subsidized AP exam fees should bolster exam-taking among low-income students. However, the implementation of this legislation in Michigan faltered due to its ambiguity and unenforceability. The confusion over whether the policy required prices set at or “at least” \$5 and the absence of state oversight all contributed to a policy that not only lacked “teeth,” but was also largely invisible to the school personnel. While some personnel cited the state as a source of funding, few had knowledge of the cost-sharing players and processes that further undermined implementation. Ultimately, the only clear parameter to Section 94 was the eligibility requirements.

As Lipsky (2010) posits, when faced with finite resources, street-level bureaucrats will pursue the most efficient options. In considering solutions to improve implementation, a sensible starting point is the main source of the pricing variation—school personnel's uneasiness with year-to-year funding and the additional unmet costs of testing administration. However, it is unrealistic to recommend states change their appropriations procedures.

¹⁰ During the writing of this paper, the COVID-19 pandemic caused the nation (and the world) to undergo widespread changes through our social relationships and acute economic downturn. We bear this historical event in mind as we make the following recommendations, recognizing that states, and in turn the public sector, has entered a period of financial austerity. However, it is arguably more important now than ever to address the structural and systemic barriers to equality in our society and invest in the educational opportunities of historically marginalized students.

Moreover, with severe budget cuts as a result of the recent COVID-19 pandemic (Burnette, 2020; Strauss, 2020), it is also impractical to recommend states spend more to cover low-income students' test administration fees (and, in particular, the \$9 College Board rebate that high schools have to forgo for low-income students). Instead, we offer some low-cost recommendations with the twin aims of reducing ambiguity and increasing accountability that could be applicable to any state with an AP exam fee subsidization policy for low-income students.

Reducing ambiguity by adding stipulations to the funding would improve consistency in implementation across schools, and perhaps increase the state's visibility in the cost-sharing agreement. First, states can restrict schools' ability to profit from test administration and/or redistribute funds. By zeroing out their AP exam budgets, it forces schools to charge no more than is required for the sole purpose of test administration. This is particularly salient during lean times when schools may try to generate alternative forms of revenue (Winton, 2019). Policymakers can also prohibit low-income students' contributions from subsidizing other students. This would preclude regressive fee structures (i.e., "reverse Robin Hood") like those that we suspect were in place at Quayle High School. We also recommend provisions that require schools to refund fees charged for provisional purposes (e.g., if students skip the exam or the state budget passes after exam fees are set). Several schools collected these funds on the premise of uncertainty but did not return funds once the uncertainty was resolved. These guidelines would acknowledge the complexity of resource-challenged schools and their need to accomplish the bureaucratic tasks associated with test administration while protecting low-income students from excessive exam fees.

A second set of recommendations addresses the policy's lack of enforceability and accountability. State representatives appeared largely unaware that schools charged their low-income students more than \$5 per AP exam since their final invoice did not reflect these upcharges. A first step for Michigan (and other states with similar policies) is to include reporting requirements about the cost of both subsidized and non-subsidized exams. State officials can then (a) monitor the real-time exam fee structures and (b) probe schools that charge outlier fees. We also recommend schools include an explanation of how they derive their fee structures. In some cases, the mere act of reporting can deter unreasonable pricing schemes. Moreover, this feedback loop can also serve as a line of communication between the state and those who coordinate AP exams. For example, MDE can learn about schools' challenges with proctoring costs and facilitate best practices, such as the formation of low- or no-cost partnerships to provide testing venues. If states are going to highlight fee-reduction policies as a way to demonstrate they are reducing class-based inequality, they need to be more involved to ensure these goals are realized. Currently, however, MDE does not receive funds to oversee the AP fee waiver program. MDE can consider expanding personnel's roles to include this responsibility, but the state should appropriate the funds to support this additional oversight.

Moreover, without acknowledging the disparate access to Advanced Placement exams, higher education institutions can exacerbate these class-based inequalities. Therefore, information about pricing should be shared with higher education governing and coordinating boards that have purview over the acceptance of AP exam scores for credit at higher education institutions. It is therefore important for higher education policy practitioners to understand these important disparities in pricing in order to craft and revise equitable policies around credit accrual and sophomore standing, as University of California recently did (Yu, 2015).

Notably absent from our recommendations is the enforcement of a \$5 fee. As one state representative acknowledged, the policy is unenforceable in Michigan because the state

is unable to provide additional monies to cover exam administration and therefore cannot mandate that schools cover test administration costs. Our third set of recommendations target the cost-sharing partners. State policymakers nationwide should turn a critical eye towards the College Board policies that create the need for schools to upcharge exams. Given the challenges that some AP coordinators shared about their ability to meet the costs of space and proctoring requirements established by the College Board, we recommend College Board provide a refund for low-income student exams that currently schools forego when students receive a subsidy. This would reduce the burden on murky-middle schools that may have to forego a sizeable share of their refund. Moreover, College Board should differentiate their refunds so that low- and moderately-resourced schools receive additional supports. College Board's desire to address race- and class-based test-taking inequalities should translate to equitable support to schools.

Finally, the COVID-19 pandemic has substantially changed the landscape of Advanced Placement exam administration, including digital exams for 2021 that can be administered from students' homes and the temporary elimination of the unused test fees (College Board, n.d.-c; College Board, 2021). Perhaps these developments will allow for lower exam fees and permanent elimination of unused test fee penalties. In addition, the federal government—which last appropriated state funding in 2016–2017—should reconsider supporting states in assisting with low-income student subsidies as well as support schools with test administration costs. Federal involvement may also reduce the perceptions of year-over-year uncertainty in funding to which the state appropriations process is subjected. The need for federal support is heightened now more than ever as all state budgets face imminent and significant cuts due to the recent COVID-19 pandemic.

Implications for Research

Here, we sought to complicate and extend the conceptualization of bottom-up policy implementation and the behaviors of street-level bureaucrats by underscoring two important aspects of implementation that are not class-neutral. First, the *level of resources* to which SLBs have access is an important consideration, particularly with un- or under-funded policies. Given the wide variation in school- and district-level resources, school-based SLBs are distinct from other bureaucratic employees that may experience less variability in resources (e.g., SLBs in social service offices). The variation of resources found in schools, moreover, is not ahistoric nor is it race- or class-neutral (Ladson-Billings, 2006). We saw better-resourced high schools were able to marshal discretionary funds to cover students, while some of their less-resourced counterparts could not. Rather than take Lipsky's (2010) approach that all school-based SLBs are resource-challenged, careful attention to resources is required when considering policy implementation across school settings.

This study also contributes to the burgeoning body of research (e.g., Chase, 2016; Friedline et al., 2020; Watkins-Hayes, 2009) that examines the ways in which SLBs' beliefs and perceptions shape policy implementation. While Lipsky (2010) acknowledges SLBs treat their clients differently based on their biases, including classism, he undertheorizes the role of SLBs' perceptions and beliefs in policy implementation (Chase, 2016). These perceptions and beliefs are particularly salient when SLBs take on responsibilities that amount to equity work—such as AP fee subsidization and, at the collegiate level, financial aid programs (Ramirez-Mendoza & Jones, 2020)—where the discretion they wield can result in withholding opportunities and goods from disempowered individuals (Chase, 2016; Maynard-Moody & Musheno, 2012). We found SLBs' perceptions of low-income students

and beliefs about subsidization were linked to their fee structures. School personnel who charged more than the suggested \$5 sought to rationalize their pricing by deploying classist narratives about irresponsible test-taking behavior and poor performance, the monetary benefits of AP credit accrual, and the unfairness brought upon full-paying examinees. These findings support arguments that bottom-up implementation studies that examine policies that reduce inequality need to consider SLBs' beliefs about the problem of inequality, equitable solutions, and marginalized identities of the beneficiaries.

In addition to contributions to the conceptualization of bottom-up policy implementation, this study sheds light on a new and largely unexplored area of inquiry—the setting and collecting of AP exam fees. There is a dearth of research on the overall variation in AP exam fees and levels of subsidization, although nearly three of every five states subsidize low-income students' AP exams (ECS, 2016). To our knowledge, schools are not asked to report this information to any entity, and our attempts to scan school websites for this information was challenging. Moreover, while we know subsidization increases AP participation (Jeong, 2009), we do not know the ways in which fees preclude participation. We also do not know how exam fees shape if and how low-income students consider the tradeoffs of taking multiple exams. Given the importance of rigorous college preparatory courses to both college admission and credit accumulation, more research is needed to better understand the role of exam fees on low-income student participation in key cornerstones of college readiness and affordability.

Conclusion

By designing policies meant to reduce inequality in an ambiguous manner—both in language and funding—Michigan ceded their statewide college readiness goals to school-level bureaucrats, for better or worse. Our study reveals how policy implementation cannot be divorced from—and in many ways depends upon—individuals' perceptions and beliefs. What resulted was a highly inequitable system, whereby the high school a low-income student attends will determine how much that student will pay to take AP exams, ultimately affecting whether and how many exams they take. Considering AP's continuing relevance and currency in the college-going process across the nation, policy implementation that undercuts the spirit of state exam-subsidization programs can significantly alter marginalized students' postsecondary trajectories.

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