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Why Does Voluntary Participation Distort Educational Outcomes? An Institutional Analysis of School Based Decision-Making Programs in India

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Abstract: ***Educational programs that aim to improve decision making and financial understanding are often designed around voluntary participation. The underlying assumption is that students who are interested, motivated, or capable will naturally choose to take part, allowing programs to identify talent and generate meaningful engagement. However, large scale evaluations of educational and financial literacy initiatives frequently report modest or uneven impact even when curriculum quality and institutional intent are strong. This raises a prior and less examined question: whether participation rules themselves influence who enters these programs and whose ability becomes visible.***

This paper examines how voluntary and mandatory participation structures shape selection, competition, and observed outcomes in school based decision making programs. The analysis draws on direct involvement in two contrasting initiatives conducted in an Indian secondary school between 2023 and 2025. The first was an eligibility based mandatory financial literacy program implemented through quizzes and structured group discussions. The second was a voluntary skill based competition that relied entirely on opt in participation. Rather than evaluating curriculum content or long term learning outcomes, the paper focuses on participation funnels, competition density, and patterns of performance that emerged under different institutional designs.

Across both cases, participation appeared to impose non academic costs that varied significantly across students. These included fear of public underperformance, social exposure, and reputational risk. In the voluntary setting, students with low perceived cost of participation were more likely to opt in, while several capable students chose not to participate despite demonstrating skill in informal settings. As a result, competition was uneven and observed performance reflected the characteristics of those willing to enter rather than the underlying distribution of ability. In contrast, mandatory participation removed the initial decision to opt in and shifted attention toward performance once the activity began. Although not all participants were equally engaged, competition was deeper, outcomes were less predictable, and several strong performers emerged from students who had not previously been identified as high achievers. The comparison suggests that voluntary participation can unintentionally select for visibility rather than ability, while mandatory participation within a defined group can reduce self selection bias and allow latent capability to surface. This does not imply that compulsory participation is universally preferable or that motivation is irrelevant. Instead, it highlights how assumptions about rational self selection can fail in real educational contexts where social dynamics and perceived costs shape behavior. By situating these observations alongside existing concerns in the literature about participation bias and program evaluation, the paper argues that participation design is an underexamined factor in understanding why well intentioned educational programs often struggle to identify or develop talent. The analysis is limited by its qualitative scope and reliance on approximate figures, but it offers a grounded framework for thinking about how institutional rules influence observed outcomes even before instruction begins.

I. INTRODUCTION

Most discussions about educational and financial literacy programs begin with curriculum. If a program fails, the explanation usually points to weak content, poor delivery, or lack of student motivation. I arrived at this question from a different direction.

While organizing and participating in student-run initiatives in my school, I began to notice a pattern that did not fit these explanations. Programs that were carefully designed and well supported sometimes produced surprisingly shallow competition, while others with similar goals generated intense engagement and closely matched performance. The difference, I realized, was not effort or intent. It was who was required to show up.

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This observation became harder to ignore over time. In voluntary programs, participation was often dominated by students who had little to lose by opting in. Meanwhile, some of the most capable students stayed away, even when they clearly had the skills to perform well. In programs where participation was mandatory within a defined group, the opposite seemed to happen. Students who were initially hesitant or uncomfortable often turned out to be strong performers once the activity began.

This raised a question that is rarely addressed directly in evaluations of educational programs: do participation rules shape educational outcomes by determining whose ability becomes visible in the first place?

Rather than asking whether decision-making education or financial literacy "works," this paper asks a narrower question. How do voluntary and mandatory participation structures influence selection, competition, and the discovery of ability in school-based programs?

II. CONCEPTUAL BACKGROUND

Research in economics, education, and public policy has long recognized that participation is rarely neutral. Studies of program take up have shown that voluntary interventions often suffer from self selection, where participants differ systematically from non participants. In educational settings, this can weaken conclusions about effectiveness, as outcomes reflect who shows up rather than what is taught. At the same time, behavioral research highlights that participation carries non monetary costs. Fear of failure, social exposure, and reputational risk can deter capable individuals from opting into competitive or evaluative environments. These costs are unevenly distributed and are not necessarily correlated with ability.

This paper builds on these insights by applying them to school based decision making programs. Instead of treating participation as an indicator of motivation, it treats participation as a choice shaped by institutional design.

III. METHOD AND SCOPE

This study uses a qualitative, observational approach based on direct involvement in student led initiatives within Indian schools. The goal is not causal estimation, but mechanism identification.

Two programs conducted in similar institutional contexts are compared. Both involved decision making under pressure and comparable age groups. The primary difference between them was participation structure. Approximate participation numbers, competition density, and performance patterns are used to understand how selection operates under different rules.

IV. CASE ONE: ELIGIBILITY BASED MANDATORY PARTICIPATION

A. Deepshikha Financial Literacy Initiative

Deepshikha is a student-run initiative focused on applied financial understanding and decision-making. During one of its financial literacy programs, participation was mandatory for students who met predefined eligibility criteria related to grade level and academic standing. Prior interest in finance was not a requirement.

Approximately one thousand students were exposed to the program through written quizzes and structured group discussions. From this group, roughly one hundred to one hundred and fifty students progressed to later rounds based on performance, with around thirty reaching the final stages.

What struck me during these rounds was not just the level of competition, but where it came from. Several students who advanced were not those teachers or peers would typically expect. Some were quiet in class. Others had average academic records. A few appeared visibly nervous during the initial discussions. Yet once participation was unavoidable, these same students often outperformed peers who were more confident or outspoken.

This was not universal. A small number of students remained disengaged throughout despite being required to participate. Mandatory participation did not eliminate variation in effort. But it did change who was present and who was evaluated. Importantly, no participant dominated without challenge. Performance differences were narrower than I had seen in voluntary settings, and outcomes were less predictable.

V. CASE TWO: VOLUNTARY PARTICIPATION

A. Cubing Competition

In contrast, a cubing competition organized in the same school relied entirely on voluntary participation. Across categories, participation was approximately one hundred students, but several events attracted far fewer competitors. In the four-by-four category, participation was closer to ten students.

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What stood out was not just the small numbers, but who was missing. In the weeks leading up to the competition, I saw students practicing during breaks who never registered. When asked informally why they were not participating, the responses were consistent. Some felt they were "not good enough" to compete publicly. Others said the competition did not seem worth the effort. A few simply did not want to risk performing poorly in front of peers.

As a result, competition was uneven. In some categories, winners faced little resistance. This was not because talent was absent, but because much of it never entered the room.

Table 1. Participation Structure and Observed Competition (Approximate)

Feature	Mandatory Program (Deepshikha)	Voluntary Program (Cubing)
Approx. initial pool	~1,000 students	~100 students
Entry rule	Eligibility-based, mandatory	Opt-in
High-stakes participants	~150	~10–15
Competition density	High, closely matched	Low, uneven
Key observation	Hidden ability surfaced	Capable students opted out

VI. PARTICIPATION RULES AND SELECTION

The contrast between these two programs suggests a simple mechanism. Voluntary participation creates a filter before performance is ever observed. Students silently weigh the social and reputational costs of participation. Those with little to lose opt in. Those with more to lose often stay away. Mandatory participation removes that initial filter. It does not guarantee motivation or effort, but it changes the composition of who is present. Once participation is unavoidable, performance differences begin to reflect actual reasoning and preparation rather than willingness to self-promote.

In evaluation terms, voluntary entry introduces classic self-selection. Observed outcomes combine the effect of the program with the characteristics of those willing to participate. This makes it difficult to tell whether weak outcomes reflect poor design or simply a distorted participant pool.

VII. IMPLICATIONS

When programs fail to demonstrate impact, the explanation often points to weak curriculum or lack of student interest. This paper suggests that some failures may be misattributed. If participation rules discourage capable students from entering, programs may never reach the individuals they are intended to help. The implications extend beyond schools. Any system that relies on voluntary engagement, from training programs to policy consultations, assumes that interest and ability align. In practice, social dynamics, fear, and perceived costs often intervene.

VIII. LIMITATIONS

This analysis is based on observational evidence within a limited institutional context and uses approximate figures rather than precise measurement. It does not estimate long term effects or claim general applicability. The purpose is to identify a plausible mechanism that warrants further empirical study, not to offer definitive conclusions.

IX. CONCLUSION

This paper argues that participation rules do more than shape engagement levels; they determine *who is allowed to be visible*. Across the two cases examined, mandatory participation acted as a leveling mechanism, compelling a wide range of students to enter a competitive space regardless of confidence, social standing, or perceived ability. In contrast, voluntary participation filtered entrants not by skill alone, but by their tolerance for reputational risk. The most consequential outcome of this difference was not the number of participants, but the *composition* of the participant pool. In the mandatory setting, several high-performing students who were otherwise quiet, anxious, or socially reserved emerged as top performers—students who would likely have remained invisible under a voluntary model. Conversely, the voluntary competition primarily surfaced students who were already confident, publicly expressive, or socially insulated from the cost of failure.

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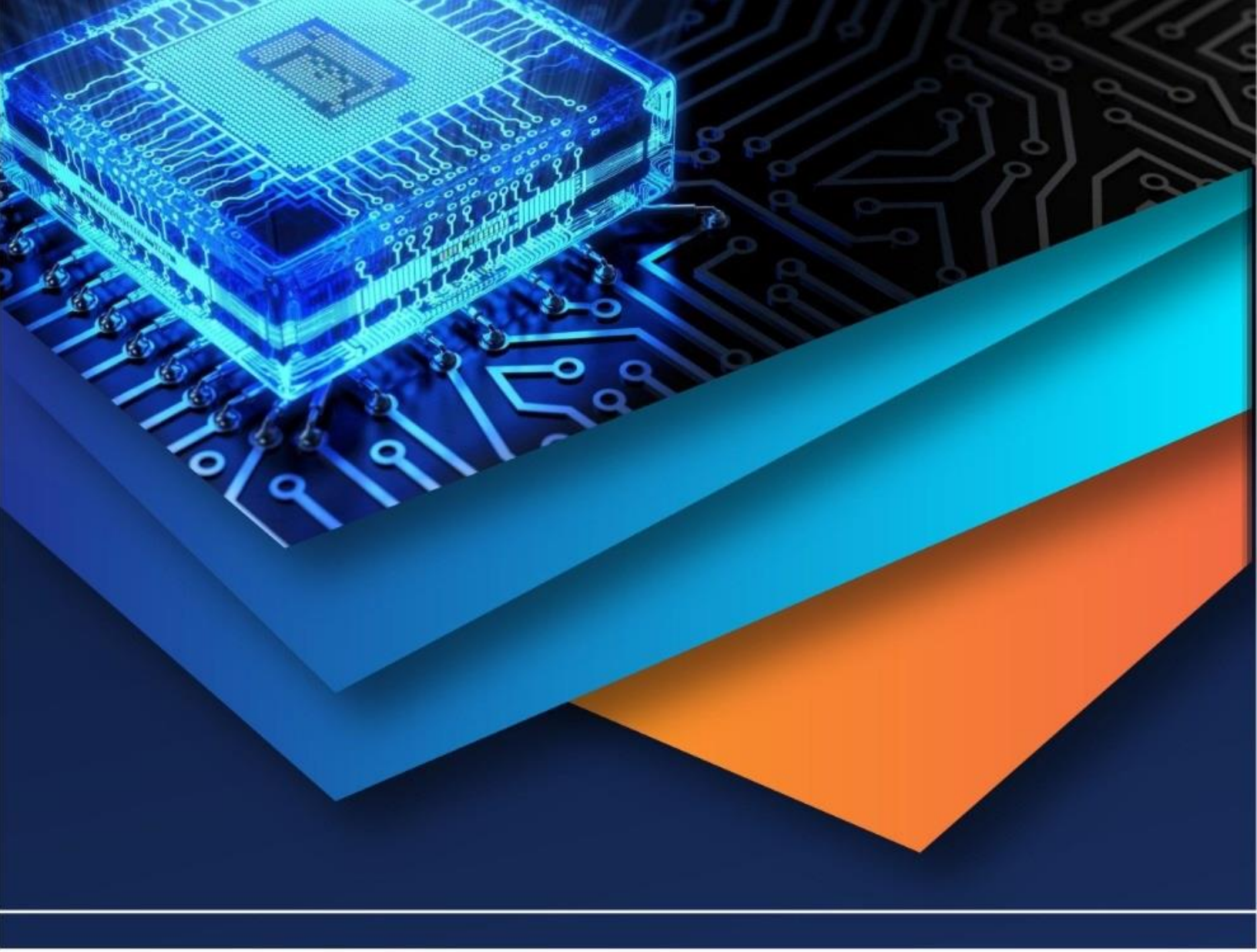
This suggests a structural asymmetry in how merit is discovered. When participation depends on willingness, institutions risk conflating confidence with competence. High-achieving students with more to lose, those whose academic identities are already publicly defined may rationally opt out to avoid the reputational damage of underperformance. As a result, voluntary systems tend to reward those least constrained by social risk rather than those with the highest latent ability.

If educational programs continue to privilege opt-in models without accounting for these non-monetary costs, they may unintentionally construct a meritocracy that selects for visibility rather than talent. Designing fair evaluative environments, therefore, requires not only measuring performance accurately, but also lowering the social barriers that prevent capable individuals from participating at all.

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