

The Digital Divide and Student Aspirations: Educational Technology and Its Effects on Young People in India

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Abstract

Educational technology companies have changed how Indian students learn. BYJU'S and Unacademy now reach millions of young people across the country. These businesses say they want to make education available to everyone, no matter where students live or what their families earn. But things do not always work out the way the advertisements suggest. Some students gain real advantages from these platforms. Others find themselves facing new kinds of difficulties. This paper examines how platforms like BYJU'S and Unacademy affect the mental health and future goals of Indian students. Using ideas about technological inequality and what makes people feel satisfied with their lives, we try to understand whether these companies are making education more fair or simply creating new ways for some students to feel left out. The research combines information about who can access digital learning with stories about how that access shapes the way young people see their own futures. What becomes clear is that students with good technology and reliable internet grow more confident and start aiming higher, while those with poor connections or shared devices deal with more worry and a growing feeling that the system is passing them by. By looking closely at India's specific situation, this study tries to show what digital learning actually does to students, not just what it promises to do.

Keywords: Ed-tech, Indian education, BYJU'S, Unacademy, online learning, digital inequality, student mental health

1. Introduction

Walk into any Indian city today, and one will see advertisements for BYJU'S on trains and buses. Open YouTube, and Unacademy videos appear before one scrolls further. These companies have become part of daily life for students across the country. Ten years ago, a teenager in a small town prepared for engineering exams using whatever books the local shop stocked. Today, that same teenager watches videos recorded in Bangalore and Mumbai, solving practice questions on a phone that fits in their pocket. The change happened fast.

During the pandemic, when schools shut down everywhere, families scrambled to find ways for children to keep studying. BYJU'S and Unacademy grew faster than anyone expected. Their user numbers climbed into the tens of millions. Parents who had never heard of these platforms before suddenly found their children spending hours on them each day.

The companies tell a story about making things equal. A girl in a village, they say, can now learn from the same teachers as a boy in South Delhi. Geography stops mattering. Money stops mattering. Only effort matters. That story sounds good. It gives people hope.

But hope is not the same as reality. Spend time in villages and small towns, and you will meet students who cannot watch these videos because the internet cuts out every few minutes. You will meet students who share one phone with three siblings, each taking turns to study. You will meet students who feel worse about themselves after seeing videos of toppers who scored 99 percent, because they wonder why they cannot do the same. This paper tries to understand what is really happening. Not what the advertisements say, but what students actually experience.

2. Why This Matters Now

India has always been a country where education decides your future. Which college you get into shapes which job you get, who you marry, where you live. The stakes are high. Families sacrifice everything for children to study.

For decades, the divide was simple. Rich kids went to good schools with good teachers. Poor kids went to government schools where teachers sometimes did not show up. Everyone understood this. It felt unfair but predictable. Now technology has entered the picture. Companies promise that a phone and an app can replace what rich kids get from expensive

coaching centers. For five hundred rupees a month, they say, your child can learn from the best faculty in India. This promise matters to millions of families. They stretch their budgets to pay for these subscriptions. They believe it will change their child's life.

But what happens when the promise does not match reality? What happens when a student in a village pays for a course but cannot stream the videos? What happens when a Dalit student watches videos of upper-caste teachers but never sees anyone like themselves on screen? What happens when a teenager spends six hours a day on an app and still fails the exam?

These questions matter because they affect real people. They affect whether young people feel hopeful or hopeless about their futures.

3. What Other Writers Have Said

People have studied the digital divide for many years. Early research focused on whether people had computers and internet connections. Later research realized that having access is not enough. You also need skills to use technology well. Someone who only knows how to scroll Instagram uses the internet differently from someone who knows how to find information, evaluate sources, and learn new things.

In India, researchers have found that caste still matters for who gets online. Dalit and Adivasi families have less access to technology. When they do get access, they often have slower connections and older devices. This is not an accident. It comes from generations of unequal education and jobs.

Other researchers have studied how students feel when they use educational technology. Some students feel motivated. They like learning at their own pace, rewatching videos they did not understand. But other students feel pressure. They compare themselves to the perfect students shown in advertisements. They worry they are not working hard enough. They stay up late studying and feel tired all the time.

Privacy is another topic that comes up in research. When students use these apps, the apps collect data about them. What videos they watch, how long they watch, which questions they get wrong. Companies use this data to improve their products. But they also use it to sell more courses. Students do not always know what happens to their information.

4. How We Did This Study

We wanted to hear from the students themselves. Not just read numbers about how many people use these apps, but understand what the experience feels like. We talked to students in three kinds of situations. First, students in cities who have their own phones, fast internet, and paid subscriptions. Second, students in smaller towns who share devices with family and mostly use free content. Third, students in villages who struggle to get online at all and depend on government programs when they need help.

We asked them questions about how often they use these platforms, whether they feel confident using technology, and how they feel about their futures. We also sat with them in groups and talked one-on-one, listening to their stories.

Some things we could not do were that the companies themselves did not share their data. We had to rely on what students told us, and students do not always say everything. They might feel embarrassed to admit they cannot afford a subscription. They might feel pressure to sound successful. We kept this in mind while listening.

5. What Students Told Us

Students with good phones and fast internet generally felt positive about these platforms. They liked being able to watch videos anytime. They felt they were learning things their school teachers could not teach. Many said the apps made them more confident about exams.

One boy in Bangalore told us he watches Unacademy videos every night before sleeping. He said the teachers explain things clearly and he can pause and rewind when something is confusing. His parents paid for a year-long subscription and he feels it was worth the money.

But students with poor connections told different stories. A girl in a village near Lucknow said she saves videos when she visits her cousin who has better internet, then watches them later at home. But the videos are large and her phone storage fills up fast. She misses live classes because her connection cuts out. She feels she is falling behind even though she studies hard.

Students who share devices face another problem. A boy in a small town in Maharashtra shares one phone with his mother and two sisters. He gets one hour in the evening to study on the app. His sisters get their own hours. None of them have enough time. The family cannot afford another phone. Many students talked about pressure. They see videos of students who scored top marks and wonder why they cannot do the same. They stay awake late at night studying.

Some said they feel tired all the time. A few said they stopped using the apps because it made them feel worse about themselves.

Caste too came up in conversations. Dalit students noticed that the teachers on these platforms are almost always upper caste. The success stories shown in advertisements are mostly upper-caste students. One Dalit student said he sometimes feels these platforms are not really for people like him. They are for others, and he is just watching from outside.

6. What These Stories Mean

Looking across all the conversations, a pattern emerges. These platforms do help some students. The ones with good technology and supportive families gain real advantages. They learn more, feel more confident, and aim higher.

But students without those things face new difficulties. They watch others move ahead while they struggle with bad connections and old phones. They feel the gap between themselves and successful students more sharply because they see those students on screen every day. The platforms that promise to close gaps end up making some gaps feel wider.

This is not because the companies are bad. The people who build BYJU'S and Unacademy probably want to help students. But good intentions are not enough. When you build a product for students with good internet and assume everyone has that, you leave millions behind. When you show only success stories, you make ordinary students feel like failures.

The caste dimension matters too. India's education system has always favored upper-caste students. These platforms, built by upper-caste entrepreneurs featuring upper-caste teachers, continue that pattern. Not because anyone planned it that way, but because that is how things work when you do not think carefully about who is being left out.

7. What Could Be Done Differently

Platforms could build lighter versions that work on slow connections. Not everyone has 4G or 5G. Not everyone can stream video without buffering. If companies want to reach all students, they need to design for the students who have the least, not the ones who have the most.

They could also think about how their content affects students mentally. Showing toppers every day might motivate some students, but it discourages others. Platforms could show more

ordinary students, more stories of people who struggled and kept going even without perfect scores.

Teachers in schools need training too. Right now many teachers just tell students to download these apps and figure things out themselves. That helps students whose families already know how to navigate technology. It leaves others behind. Teachers could learn how to guide all students, showing them not just how to use the apps but how to learn from them effectively.

Privacy is another area that needs attention. Students should know what data these apps collect and how it is used. Companies could be more open about this. Regulators could require clearer explanations.

8. What We Could Not Learn

This study has limits. We talked to a few dozen students, not thousands. Their stories may not represent everyone. Students in different parts of India might have different experiences.

The companies themselves did not share information. We do not know how they make decisions about what to build or how they think about students who cannot access their content easily. Without that information, our understanding is incomplete.

Things also change fast. By the time this paper reaches readers, the platforms may have changed. New features may have appeared. Old problems may have been fixed. Or new problems may have emerged.

9. What Someone Else Could Study in Future

Someone should follow students over several years to see what happens to them. Does using these platforms actually help them get into better colleges and find better jobs? Or does the initial boost fade over time?

Comparing India with other countries would also be useful. Other developing countries have their own education technology companies. Do similar patterns appear there? Is caste unique to India, or do other places have their own versions of the same problem?

The environmental cost matters too. Training AI models and streaming video uses energy. No one really talks about this. Someone should calculate what all this digital learning costs the planet.

10. Conclusion

This paper looked at how BYJU'S and Unacademy affect Indian students. What we found is that these platforms do not help everyone equally. Students with good technology and supportive families gain advantages. Students without those things face new kinds of difficulties. The gap between them does not disappear. In some ways, it grows wider.

The companies promise to make education fair. But promises are not the same as results. If we want education to actually become fairer, we need to think beyond just giving people access. We need to ask who gets left out and why. We need to ask how students feel, not just how many minutes they watch. We need to ask whether technology is really opening doors for everyone or just for the lucky ones.

These questions do not have easy answers. But they matter. They matter because real students sit in villages and small towns, staring at phones that buffer and buffer, wondering if they will ever catch up. They matter because real students stay awake at night worrying they are not good enough. They matter because education in India has always been about hope, and hope is too important to waste.

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