

11. Teachers in India and EdTech: A New Part of the Gig Economy?

Krishna Akhil Kumar Adavi & Aditi Surie

Abstract

This chapter provides insights into the relationship between private EdTech platforms and the nature of employment they generate from the perspective of the firm. What does a firm look for in a tutor when they bring them on to do platform-mediated educational services? In the same vein, the chapter explores the nature of employment in the educational sector in India and its overlaps and relationships to precarious work, wages, expectations, and skilling. These two threads are tied together to project and predict whether EdTech is building gig economy work like in food delivery or mobility services.

Keywords: EdTech, gig economy, women's employment, India

The past three years of the COVID-19 pandemic have seen an increase in the growth and proliferation of Indian education technology (EdTech) companies. EdTech companies build on and modify the traditional after-school tutoring sector in India. The past five years have seen a 22-fold increase in the scale of investments in the sector with companies raising \$210 million in 2017 and \$4.7 billion in 2021. 2020 and 2021 alone have seen a combined fundraising¹ amount of \$6.1 billion.²

Data from the National Sample Survey Office (NSSO) and Quarterly Employment Surveys show that four of five school teachers in India are

¹ <https://inc42.com/features/with-3-new-unicorns-indias-edtech-startups-raised-4-7-bn-in-2021/>

² This chapter builds on a blog post published on FemLab in October 2021. <https://femlab.co/2021/10/26/will-edtech-go-the-way-of-the-gig-economy/>

women.³ Market-based evaluations of the education sector estimate that there are 30 million teaching, non-teaching, and support staff in private schools and tuition institutions, making the sector one of the top five employment avenues. This statistic is framed around a lack of jobs in the pandemic economy and a lack of job-led growth in the last five years in the Indian economy (Vyas 2019). Case studies highlight that contractual and part-time lecturers form a majority of the workforce in Indian higher education, meaning that intermittent or difficult-to-retain work with a lack of social and employment protection, frames the sector (Sukumar 2020). These numbers suggest that there is a sizeable existing worker base that could take up part-time or full-time teaching opportunities mediated through platforms.

In the context of EdTech's growth, it is crucial to scrutinize the business models companies adopt since they set up the working conditions of their gig and full-time workers, thus affecting the educators who work in the sector. Will EdTech follow the path of the dominant gig companies such as Uber or Zomato? Through the pandemic, food delivery and ride-share workers have made public the difficulties of their work in the gig economy. Often, it is said that a "labour oversupply" in the Indian economy allows for wages to be driven down even in the gig economy (Vaidyanathan 2020). Considering the large number of trained educators in India, can we expect long hours of work, poor working conditions, and continuously declining payouts? If EdTech companies follow suit and adopt such business practices, what does the future of Indian education, and more importantly, Indian educators look like? These questions animate this chapter as we see a significant change in one of the most established and formal sectors of women's employment—education—and how EdTech may shape the future of their livelihoods.

Private Tutoring in India

Tutoring in India is a large service industry which supplements K–12 schooling and entrance examination preparation into courses such as engineering, medicine, and law. Tutoring is a private industry that happens at different scales: home-based tutoring for one or a batch of students, or at a coaching institution as a part of a cohort of students. Coaching institutions have

3 <https://www.indiatoday.in/education-today/featurephilia/story/why-do-we-see-more-female-teachers-in-indian-schools-1806042-2021-05-23>

established a footprint across urban and rural India, with cities such as Kota, Delhi, and Hyderabad having a large number of centres. Data from the National Sample Survey report on education shows that one in five students opted for private tuitions in 2017–18 (Sukumar 2020). Through the COVID-19 pandemic, news articles suggested that private tutoring saw an adoption of online modes of delivery, even in rural India.

Particularly in school education, research shows that as more people can afford private schools instead of public government schools where education quality is often uncertain, the reliance on tutoring declines (Sukumar 2020). Often, the same teachers work multiple jobs across private schools, public schools, and coaching centres using different methods of teaching. Their work arrangements and income levels differ across the different roles.

Dominant Models in Platform-Mediated EdTech Sector in India

The leading EdTech companies in India are Byju's (raised \$5.3 billion),⁴ Unacademy (raised \$838.5 million),⁵ and Vedantu (raised \$292.9 million).⁶ All of these companies operate in the marketplace model where they decide the platform's methods of delivering educational content, the different course offerings, and fees. Crucially, the companies take charge of how the platform is marketed to prospective parents and students, and are responsible for the growth of the customer base. Content and high-quality content generation (either in-house, or through freelance educators) is the way platforms differentiate themselves from competitors, and the quality assurance/quality control (QA/QC) of the material on the platform is a key area of focus for the companies. Consequently, companies seek out the best educators for their platform, and control the pipeline from onboarding educators, training them, deciding the terms of payment, and hours of engagement. They also work with educators to familiarize them with the required technical knowhow to use their platforms.

The EdTech sector is closely tied with India's schooling and examination calendar, and therefore, the services that customers can purchase from companies are in the form of courses (e.g., Physics Class 7) or packages (e.g.,

4 https://www.crunchbase.com/organization/byju-s/company_financials

5 https://www.crunchbase.com/organization/unacademy/company_financials

6 https://www.crunchbase.com/organization/vedantu-innovations/company_financials

Mathematics doubt clearance—10 sessions). Since tuitions supplement school learning, many tuition services in the offline world serve the need of “doubt clearance” which gives students access to open-ended feedback with a tutor, which they do not get in large private school classrooms (Bray and Lykins 2012). For companies, this means locking in educators into longer term arrangements, thereby creating a high level of importance for the educator’s credentials and availability. This makes it difficult for companies to replace educators once their course or package has begun. This is in stark contrast with sectors such as food delivery or ride-hailing where the volume of workers able to work for platforms is high, and the platforms are able to easily replace workers constantly. Ride-hailing and food delivery platforms use their rating systems to surveil and enforce punitive measures against workers’ service delivery. On a day-to-day basis, interactions between an educator and an EdTech company are far more hands-on than that of a Swiggy delivery partner or an Ola driver. This dynamic will be important to understand the platform power of EdTech companies and their treatment of educators.

Who are the EdTech Platform Workers?

Platform workers are essential for the functioning of the EdTech sector. Companies offer a range of services that involve a human component, and consequently, workers could be involved in the creation of new course material, offering doubt clearance sessions, answering questions on student forums, grading assignments, developing new assessments, and delivering live classes. Some companies engage workers to complete discrete, individual tasks and pay workers on a per-task basis, whereas others engage workers full-time to complete all the aforementioned tasks.

Educators that work in the traditional setup of at-home or neighbourhood tutoring centres are key target segments from where EdTech companies have been building up their educator base. Armed with venture capital financing, companies promise these educators better pay, greater flexibility with teaching timings, and a pan-India or even international student base that they can now teach. Particularly in cases where companies have developed their proprietary content and pedagogy, educators are put through different assessments on their subject matter expertise and soft skills, like how they present themselves, how they communicate, what their (at-home) teaching environment looks like, before being allowed to take on students through the platform.

Labouring as an EdTech Worker

Teaching on EdTech platforms is remote work that necessitates workers having access to a device to teach from—either a mobile phone, or a desktop/laptop, and a high-speed internet connection. Educators are locked in to teach for long durations of time (two-month crash courses on JEE Mathematics, or eight-month coding certifications, for example), and are asked for minimum time commitments per week. An educator could teach three hours a day, or close to forty hours a week. The more time educators commit to a platform, the higher their remuneration will be. During our interviews with senior management employees at EdTech companies between 2020–21, employees reported that they did not have a sense of how much time it took an educator to prepare for a particular class, or how much work went on outside the platform for the educators to perform well on their platform: they were only keeping a track of the hours spent by educators doing tasks on the platform. Also, employees said that they preferred to engage educators for their soft skills over their technical or subject knowledge. An Operations Manager at an after-school tutoring firm⁷ for K–12 students, says:

For us, being a star teacher is all about your actions and the mindset that you bring to the platform. So for me a star teacher would be someone who is extremely good and comfortable with the children that they teach. So that basically means that they are engaging the children and are building rapport and are very much involved in the learning outcome of the child. It is displayed through the way they are in the classroom: they are usually smiling, they don't snap at you, right, and they understand where as a child you are coming from and they display a lot of patience, perseverance and also have good communication skills (emphasis added) (Personal interview).

Employees also argued that their customer feedback was better for educators who managed to build a greater connection with the students. These aspects of educators' work on the platforms are continuously tracked by teams who look for aspects such as educators' physical appearance on the camera during teaching sessions, their attire and state of grooming, and their tone of communication with students and parents during and after teaching sessions. Internal to the company, educators are also encouraged to help

7 All names used in the chapter have been withheld to protect identity.

out junior educators within the company, contribute to the improvement of the product experience by sharing feedback with the company, and often go over the predetermined duration of class engagements to work with the students and ensure maximum student satisfaction.

How Are Women Faring as EdTech Educators?

While offline teaching in India has a substantial representation of women teachers, the move to the burgeoning online teaching segment has been slow. Some organizations in EdTech such as WhiteHat Junior (acquired by Byju's)⁸ exclusively hire only women educators, but other than such outliers, in our interviews, platform employees reported that men formed a large part of their educator base. Employees said that the women who do teach via EdTech platforms appreciate the flexibility of scheduling classes and the certainty it offers to their work schedules. These women educators come from a variety of backgrounds: former working professionals who dropped out of the workforce due to household commitments, recent college graduates who are studying for Master's admissions examinations, and school teachers looking to supplement their income. All these reasons for joining EdTech platforms mirror why educators start working in private tuition centres or run their own. The curriculum head at a mathematics and coding teaching platform explains the challenges of training and onboarding women teachers:

So initially when we give them [the test] I do see that women are busier or they have more work at home to do. *On an average if I have to compare, if we roll out a program once and I have 5 female teachers versus 5 male teachers, they [the men] complete it much faster and are waiting on the next round for us?* When are you going to roll out the next round, whereas I see women asking us can I have another week's time? I haven't been able to complete it—which boils down to that they don't have time, they have many other things to address? *When it is a test or something that they do on their own [and] if it is just on the system, they still do it? The minute we ask them to come for an evaluation, again, a lot of resistance.* Just a lack of confidence is what I can call it. All our mentors are generally female and we see to it that they are presenting [the assignment] to a female only. *Still you know there is a gender divide* (emphasis added) (Personal interview).

8 <https://qz.com/india/2041211/why-indias-byjus-acquired-whitehat-jr-great-learning-and-epic/>

Across interviews with EdTech platform employees, we find a pattern of issues that prevents firms from having a greater representation of women in their educator workforce. These issues cropped up when the expectations of the platform did not account for women's labour in their own homes. Employees provided examples such as women requesting extensions for completing the onboarding assessments, or women educators unable to take up teaching live classes early in the morning because they were tied up with household chores, or women unable to create new course content as fast as their male counterparts. In each case, we found that platforms prioritized their business objectives by sacrificing the flexibility that was advertised to workers, and this particularly hit women workers hard. A key question for platforms to consider if they want to prevent further exacerbation of the gender divide is—what ways can companies account for and compensate women for their time and work *outside* the platform?

In our interviews, platform employees did not report that women faced any issues of access to the infrastructure of devices, internet access, or any substantial differences in the digital knowhow across men and women. These observations do not fit the current evidence that Indian women report lower levels of access to digital technologies than men (Dewan 2020). We speculate that platforms have so far only tapped into the small proportion of women that have unrestricted access to these devices, and consequently are able to work online. This is an issue to keep track of for the present and the future: How diverse is the group of online educators at the moment? If companies continue to scale, will they provide infrastructure support to potential teachers that may not have access to the requisite hardware? What will the terms of that support be?

A common strategy adopted by gig companies in ride-sharing and food delivery is providing loans to potential workers to purchase cars or bikes that are essential to their ability to work for these companies. For such workers, this often means working for lower take-home incomes, making these loans a predatory practice instead of an enabling one. Both delivery and ride-sharing are characterized by a labour oversupply. As EdTech companies deploy their capital reserves to attract more offline educators to come online, one tactic to watch out for is how they onboard educators that do not have access to the requisite hardware infrastructure such as phones, laptops, cameras, and steady internet access. So far, we have little information on how long Indian EdTech platforms are able to retain educators. When ride-sharing companies were dealing with retention issues, they decided to lower barriers to sign up to work by providing predatory loans and using floating wages for work. How will EdTech companies respond to such a challenge?

The Way Forward—A Vision

A thoughtful way for EdTech firms to retain educators on their platform would include offering stability in wages, taking a more expansive view of what counts as “teaching time” by building in the costs of teaching and preparation time, and benefits of work such as insurance. In the context of women’s work, EdTech can offer work-from-home as a flexible option, as well as greater control over scheduling class times, but this mode of work enforces a fresh set of expectations around teaching and constant metricized performance tracking. India’s New Education Policy (NEP) drafted in 2020 suggests⁹ EdTech as the heart of how the future of schooling will look. Policymakers’ comments suggest that this approach will not be “teachers versus technology” [but] the solution is in “teachers and technology” (Kant 2021). The most digitally savvy early educators that teach through EdTech might be best placed to take advantage of this option, but as these opportunities are expanded to marginalized women, it is crucial that policymakers and governments incorporate training modules to alleviate existing digital divides.

Key to the vision of work on EdTech platforms is stability. Stability in the terms of payment, in the metrics that go into what constitutes good service, and in getting workers involved in deciding how their work gets structured. By doing this, platforms do not create incentives where educators are competing in a race to the bottom, and enable educators to have more visibility into the algorithmic processes that shape their work.

An interviewee working in the strategy team of an EdTech teaching platform shared:

Once their [women educators] mind is made, once they have decided something, they continue to pursue it instead of dropping out or slacking at a later stage (Personal interview).

Stability is the way platforms can address the challenges of bringing on board more women educators, providing their services, and ensuring their longevity.

9 https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_o.pdf

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About the Authors

Krishna Akhil Kumar Adavi (kaka127@utexas.edu) is a graduate student at the School of Information at the University of Texas at Austin. His research focuses on the platform economy and technology start-ups in India. Previously, he was a researcher with the Indian Institute for Human Settlements (IIHS) in Bengaluru.

Aditi Surie (asurie@iihs.ac.in) is a sociologist and researcher at the Indian Institute for Human Settlements where she has been studying the platform economy for several years. Her work unpacks the relationship between platforms, informality, labour, and employment.

