



Conversational AI for Edtech:

A Complete Guide

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Introduction

No one could have predicted where the COVID-19 pandemic would take us, but the last few months have witnessed more technological innovations than the past decade. Today, every business across verticals is finding itself augmented with this transformation and changes are happening at scale. The education sector has been at the forefront of this disruption. As schools closed temporarily and shifted online due to the pandemic, educational institutions started seeking diverse techniques to enhance student experience by implementing technological solutions.

[The World Economic Forum](#) reports that global education technology or Edtech investment marked a high growth by hitting \$18.66 billion in 2019. By 2025, the overall online education marketplace is projected to reach \$350 billion.

In a world where everything is virtual, it comes as no surprise that conversational AI-based education is the future and will play a significant role in delivering education going forward.

So, how is [conversational AI](#) shaping the future of learning?

Why does the education sector need chatbots?

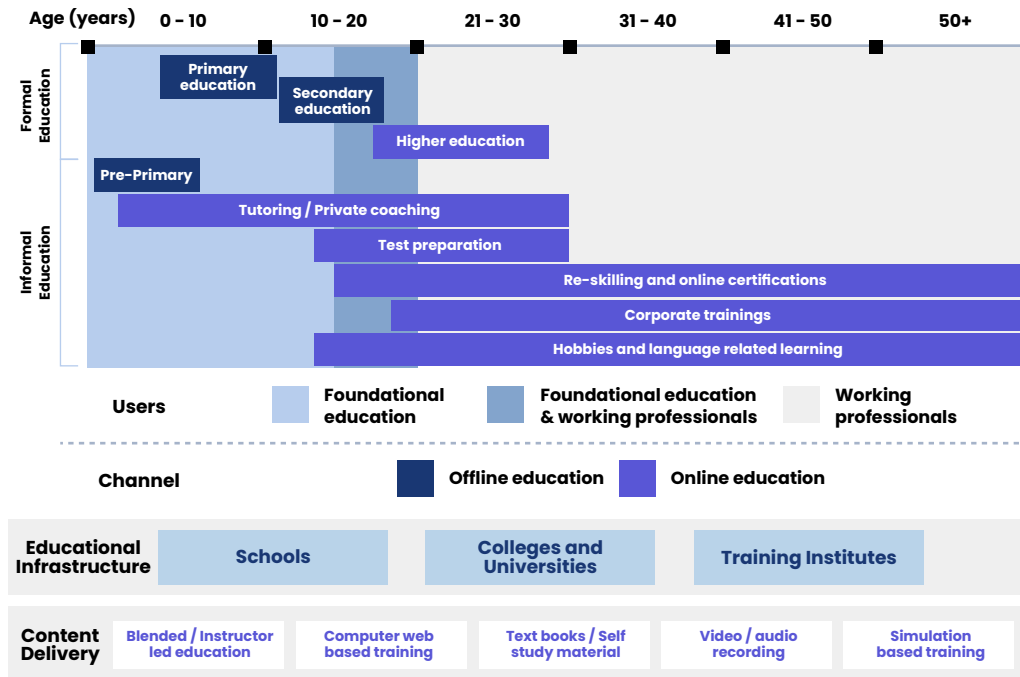
What are the benefits of Conversational AI in Edtech?

In this ebook, we will take a deeper look to understand use cases of conversational AI chatbots in the Edtech industry.



Overview Of The Education System In India

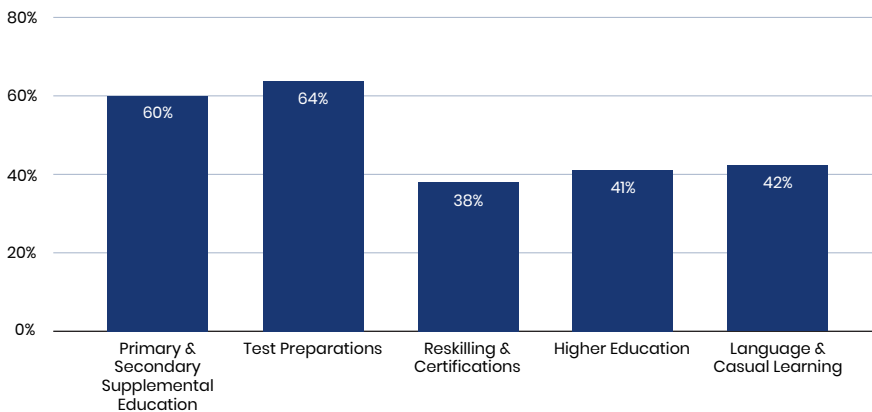
The Indian education system has evolved to a significant extent from Vedic days to today's computer age and e-learning. The education system in India is multi-layered - with [260 million students](#) enrolled in more than 1.5 million schools and 39,000 colleges catering to 27.5 million undergraduate and four million postgraduate students.



Source: KPMG in India's research & analysis 2017

In the last decade, there has been a dramatic shift in the education ecosystem as a whole and now online education and blended classes have become a norm in all levels of education. It received a significant boost due to the COVID-19 pandemic. The online education market in India is expected to grow by a staggering [50%](#) during 2021-2025 to reach \$5 billion by the FY2025.

CAGR of Online Education - Category Wise

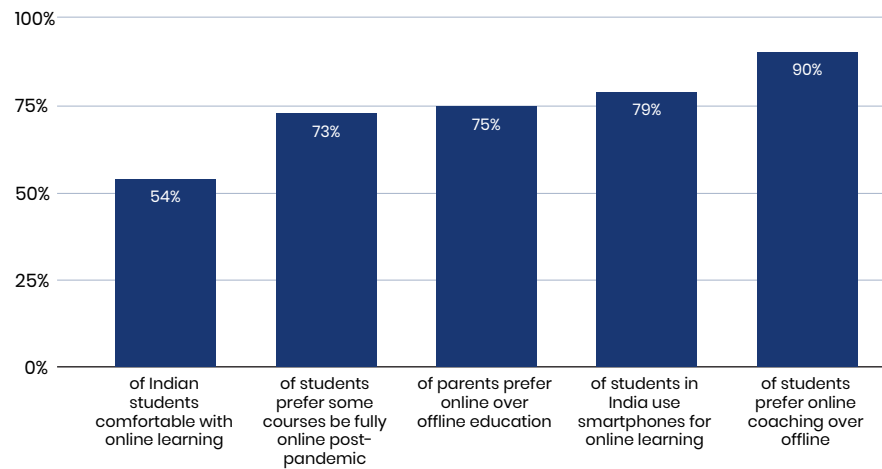


Source: KPMG

Online learning or e-learning has become an integral part of schools, colleges and even offices across the country - with the advantage that such mode of education is easily scalable. The Indian government is also letting the universities offer online degree courses - a change that could reshape the education industry in the country.

With the online higher education market in India slated to grow [10 times](#) over the next five years, Edtech has undoubtedly emerged as one of the mainstays of the post-pandemic economy for investors and practitioners alike. India has been showing strong growth in the Edtech sector, a similar trend to China. China has shown significant market potential in the Edtech sector over the last few years. The market stood at [\\$250 million](#) in FY20 and is expected to grow up to \$295 million by FY25.

E-learning is taking over offline teaching



Source: [TOI](#), [Campus Technology](#), [IVD](#), [Mint](#)

Factors driving India's e-learning boom

Rapid growth in internet connectivity in emerging economies, driven by the rising federal budgets

Improvements in internet speed due to the low cost of 4G data

Growth in smartphone penetration in tier 2-3 cities

Online education cost is comparatively lesser than traditional programmes

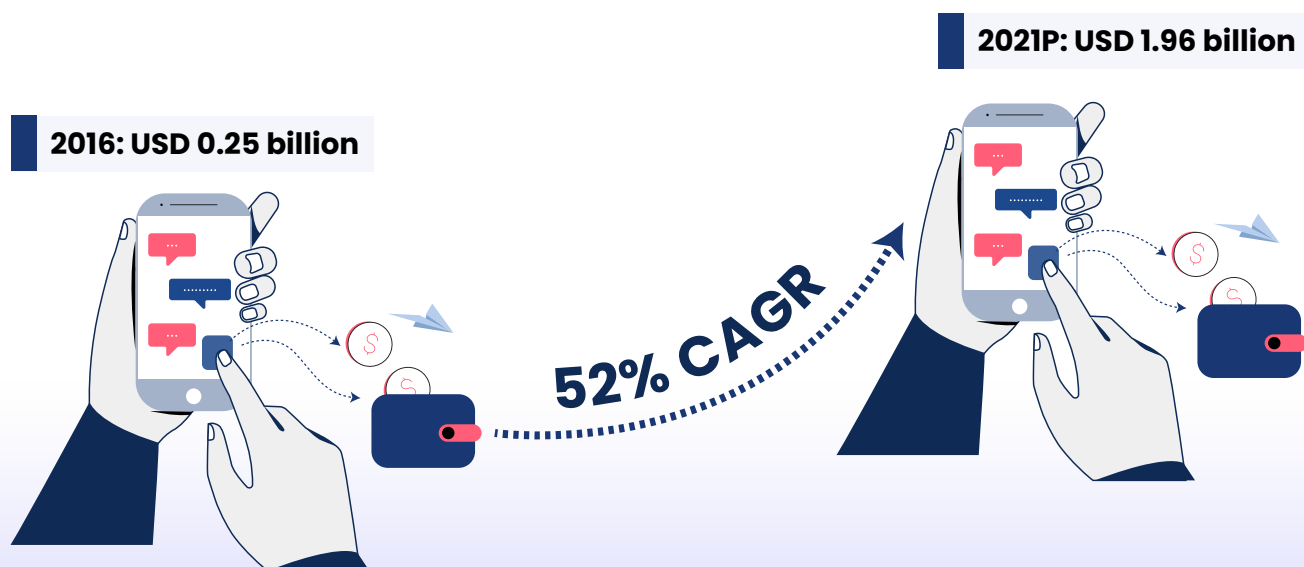
Favorable e-learning government policies such as SWAYAM and Digital India

The advent of cloud infrastructure, peer-to-peer problem solving, open content creation, and rapid expansion of the target audience

Rising demand among working professionals due to the flexibility of time

Edtech plays a pivotal role in the online education system. Initially, the platform served as an enabler between prospective students and content providers. However, in recent times, the Edtechs have increasingly played the role of content providers and curators.

The growing adoption of cloud-based solutions coupled with huge investments by major market players towards enhancing the security and reliability of cloud-based education platforms is further increasing the adoption among the end-users. According to a [KPMG report](#), online education in India is expected to grow to \$1.96 billion over the next five years.



Source: [KPMG](#)

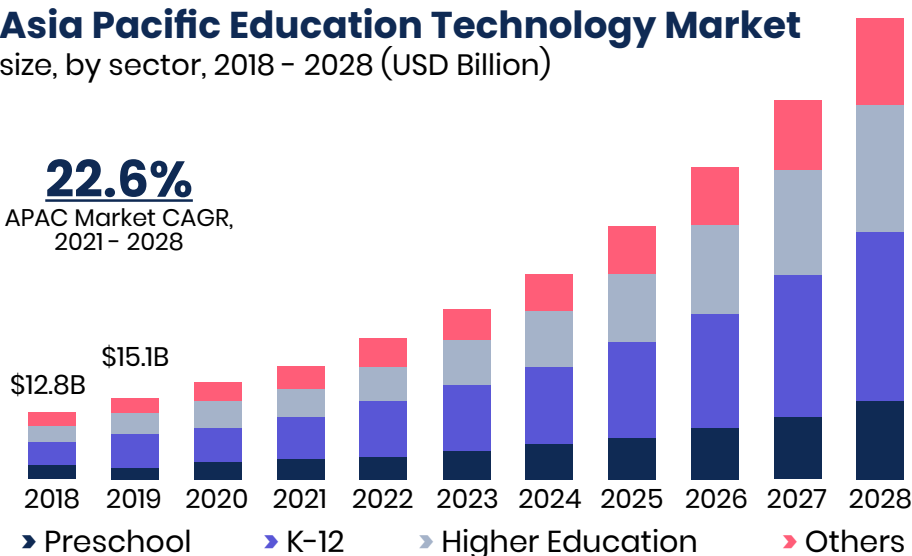
Where Does The Edtech Industry Stand In The Covid Era?

The Edtech industry was already growing exponentially before the COVID-19 pandemic struck. However, with many Governments announcing stay at home orders; schools and colleges had no choice but to opt for e-learning to a growth spurt in educational technology like never before.

The global education technology market size was valued at [\\$89.49 billion](#) in 2020 and is expected to witness a CAGR of 19.9% from 2021 to 2028. A Business Insider report suggests that by 2025, the online education market is expected to top [\\$350 billion](#).

Asia Pacific Education Technology Market size, by sector, 2018 - 2028 (USD Billion)

22.6%
APAC Market CAGR,
2021 - 2028

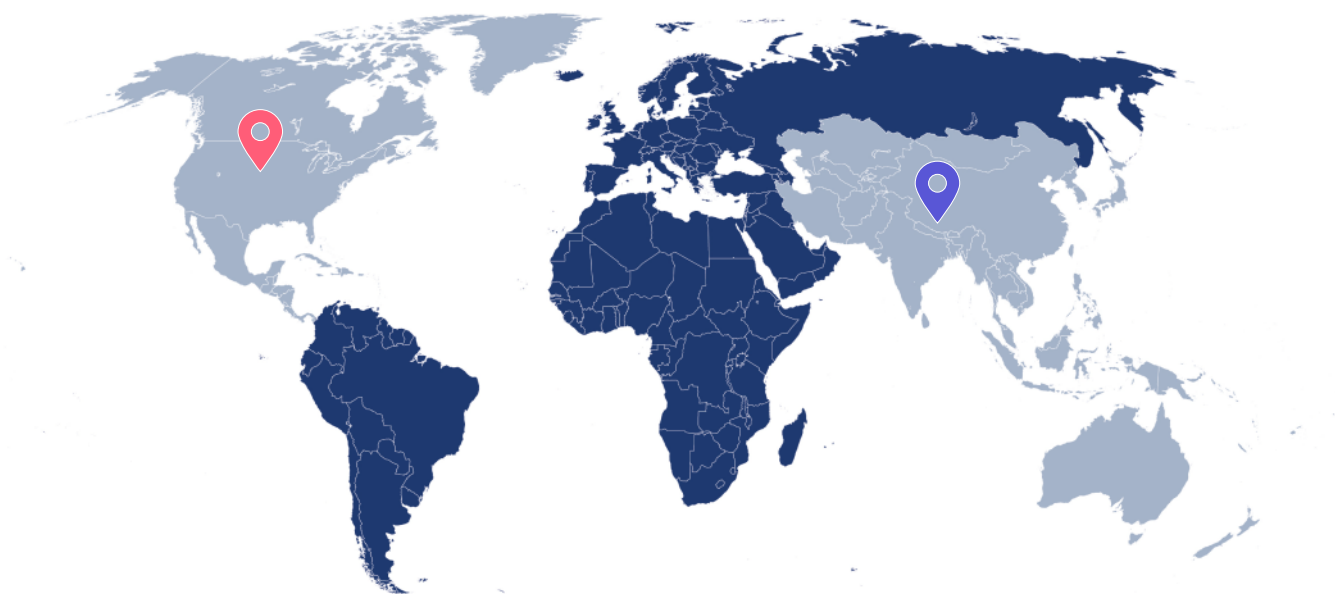


Source: www.grandviewresearch.com

Edtech solutions are expected to evolve in line with the advances in the latest technologies, such as Artificial Intelligence, Machine Learning, Augmented Reality and Virtual Reality and contribute significantly to the market growth.

Conversational tools such as chatbots are also acting as game-changers in the innovative Edtech world. The integration of chatbot solutions help offer an interactive experience to the learners. It enables learners to explore and seamlessly connect with abstract concepts, and subsequently driving student engagement.

Enhancing student engagement is emerging as a prime concern for educators today. Hence, market players respond to such concerns by introducing conversational tools and shifting from projector-based displays to touchscreen displays.



Key Insights: Region-wise

North American Market

- North America dominated the market in 2020 and held over 37% share of the global revenue.
- Education technology startup companies in the US reportedly raised funding worth approximately USD 2.2 billion in 2020

Asia Pacific Market

- EdTech and smart classroom market in APAC is expected to grow from US\$ 17,692.4 million in 2019 to US\$ 64,353.4 million by 2027; it is estimated to grow at a CAGR of 17.5% from 2020 to 2027.
- China and India are among the leading countries in terms of EdTech startups and investments since past 3-4 years, with China being a leader in terms of EdTech investments.
- Several key EdTech companies in China and India, with the valuation of >US\$ 1 billion, include VIPKid (US\$ 4.5 billion), Yuanfudao (US\$ 7.8 billion), Zuoyebang (US\$ 6.5 billion), Knowbox (US\$ 1 billion), iTutorGroup (US\$ 1 billion), 17zuoye (US\$ 1 billion), HuJiang (US\$ 1 billion), ByJu's (US\$ 10 billion), and Unacademy (US\$ 1.4 billion)

Challenges Faced By Edtech Industry

The traditional classroom is changing to include a lot of technology. With the ongoing pandemic, online classes seem the norm. There is heavy reliance on apps and websites for learning. Artificial Intelligence and chatbots are also making their debut. With the advancement in technology, educational institutions are trying to find innovative ways to boost student acquisition, improve conversations and answer student queries effectively.

However, there are many challenges. Web experiences are often not very smooth. Apps are not easy to use for all. Attention span and digital distractions are increasing for many students. And overall, the mass personalization approach is a challenge for many. This not only impacts the quality of learning for students, the ability of educational brands to acquire, nurture and retain students also gets affected. There are specific inherent challenges faced by the Edtech institutes today, like:

> **Student acquisition:**

Converting students without counseling is a significant challenge as it forces hiring more human counselors. The overall process of taking students through the AIDA (Awareness, Interest, Desire, and Action) program is quite time-consuming.

> **Query solving:**

Answering and resolving student queries is an integral yet challenging part of the entire e-learning process. There is a good amount of back and forth in communication and ongoing communication needed in real-time.

> **Continuous communication:**

There is always a need to keep the communication channels open, be it for sending notifications to students, getting their acknowledgement, or making them act on it.

> **Student retention:**

Making sure that students are retained for an extended period is another challenge, as many keep shifting from one course to another periodically, as per preference.

Decoding Conversational AI In Edtech

[Conversational AI](#) has emerged as an inseparable limb of modern-day teaching and learning methods. It allows the user and machine to interact in the human language. By using speech-based technology and messaging software in education, conversational AI has enabled a faster response rate and human-like interactions with the student, which in turn has increased students' engagement and conversation with Conversational AI.

With the help of [natural language processing](#) (NLP), conversational AI is capable of understanding the intent, determining keywords, and taking appropriate action as per the given algorithm. It enables technology to learn what the user wants and adapt accordingly, making it a worthy and appealing investment for educational institutions.

Why Does The Education Sector Need Conversational AI Chatbots?

Institutions all over the world have always grappled with the issues of enrolling prospective students around the globe, receiving a large number of queries regarding the admission process, fees, courses, scholarships, facilities, and much more. These queries are primarily repetitive and burdensome to deal with manually. Therefore, conversational AI-powered chatbots can step in and help save time and effort by providing consulting and support services to students. [Chatbots](#) can resolve the problems and, at the same time, also shorten the cycle of procedures.

Today, students are no longer receptive to traditional learning methods. They are constantly finding interactive ways to communicate and acquire knowledge. They prefer modern ways to learn and absorb information. Also, they want a personalized learning environment. Conversational AI-powered chatbots help students experience innovation in education. A recent study by [BCG](#) has pointed out that millennials prefer faster, quicker, and instant responses. According to the [Chatbot Life report](#), 37% of students use an educational chatbot to get a quick answer. It makes the use of conversational AI-powered chatbots in the education sector even more urgent to change the landscape of this industry.



The pandemic disrupted the traditional modes of education and paved the way for online education, which can be facilitated with the help of chatbots. The chatbots can help students search study material online, solve doubts, provide more clarity on complex subjects, and in short, help them break away from heavy text-based learning to more interactive learning content. Additionally, chatbots can help reduce the administrative load while facilitating the teaching process.

Impact Of Conversational AI In Edtech

In the past, education used to be simple with a teacher, blackboard and a limited number of books and students. Today education has evolved due to numerous technological advances. A student living in rural areas can easily access lessons on her mobile phone or get her queries resolved with a click of a few buttons. The pedagogical techniques such as rote learning and textbook learning, in particular, have greatly benefited from chatbot development.

The conversational AI-powered chatbots have improved communication, increased productivity and minimized uncertainty from interactions. New-age Edtech platforms are now helping to solve the next-level problems in education by using AI and chatbots as engagement tools. As students gain more access to high-speed internet and mobile devices, the use-cases of such modern technology also increase. Let's look at how conversational AI chatbots are transforming Edtech industry:

> Personalized learning experience

At present, the educational curriculum is designed to offer knowledge to the students in general.

But the real fact is that the education needs of all students are different. [Automation](#) in the education sector has enabled students to personalize and customize learning sessions. This helps the students complete the course at their own pace for better understanding.

➤ **Smart and reliable content**

Automation and education go hand in hand. Therefore, smart and reliable content designed and developed with AI has allowed the content to reach every classroom setting. When traditional books are turned into digital automated learning modules, students learn better and have efficient sessions. For instance, chatbots can understand when a student needs to repeat a lesson or move forward.

➤ **Simplify administrative workflow**

Automation in the Edtech industry enables educators to smoothen various administrative works, such as enrolling prospective students, handling queries regarding admission, fees, courses etc., and offering them more time to impart knowledge to students. Chatbots can help make the admission process easier and quicker without any loopholes. Similarly, automation in administrative tasks in customer support has improved customer experience.

➤ **Better communication and attendance**

Conversational Edtech enables teachers to create customized reports and learning progress. Likewise, chatbots also open up new ways of parent-teachers and student-teacher communication. For example, educational institutes can have an omnichannel presence on websites, mobile apps, and messaging channels like WhatsApp to share relevant information on a timely basis.

Benefits Of Conversational AI In Edtech

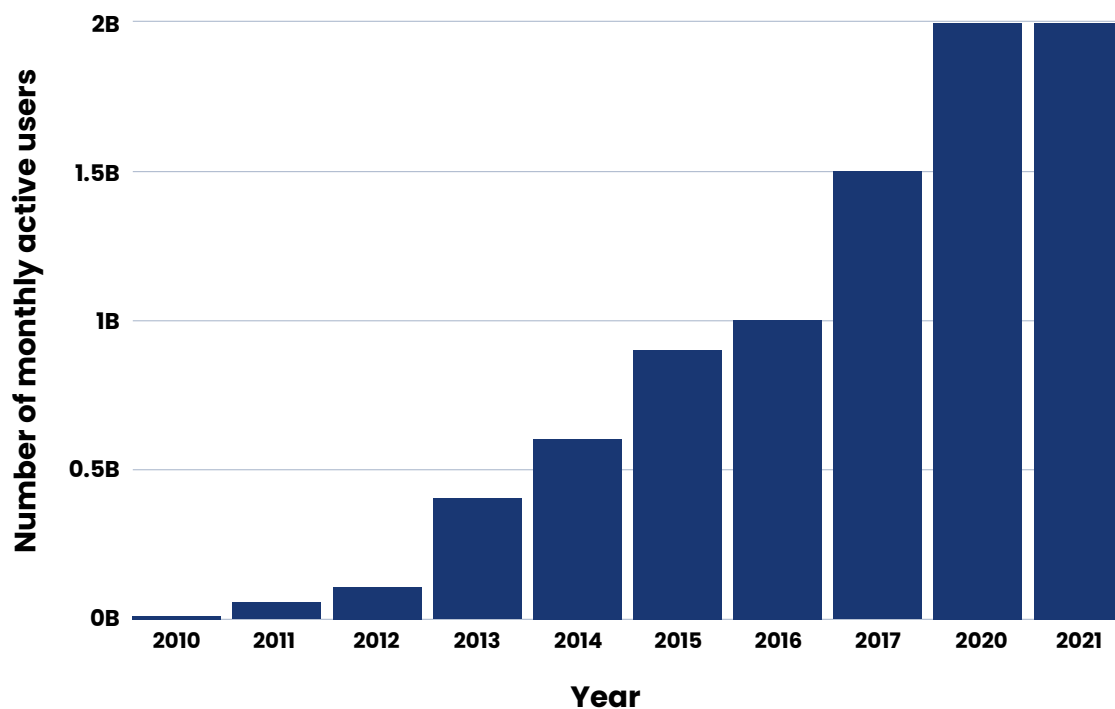
Every Edtech company aims to remain at the top of the market and improve its services. To do this, they need innovative ways to attract more students and retain them. The focus of the companies is shifting towards creating a better customer experience. They try to bring in the best possible services to their end customers. AI-based conversational interfaces ensure improved customer experience along with several other benefits.

- All parent, student and teacher engagement are done on the [messaging apps](#)
- Integrate with your existing CMS, website/app, and IT infrastructure
- Acquire new students, nudge new lessons, assessments, upsell or cross-sell courses
- Provide 24x7 assistance so that students can learn at their convenient time and engage for help if required
- Convert digital workflows on website/app such as course purchase to conversational workflows
- Control overheads by reducing staff involvement and deploying an AI-layer for intelligent conversations
- Gain a competitive edge over other educational institutes in terms of technology and student experience

WhatsApp For Edtech

Around the world, WhatsApp boasts more than [2 billion](#) active monthly users, eclipsing other popular apps like Meta Messenger, Telegram, Twitter, and Snapchat. In August 2021 alone, WhatsApp was downloaded [39 million](#) times. Available in 180 out of 195 countries and 60 languages, over 100 billion messages are sent via WhatsApp every single day. Best of all, WhatsApp is free to download and use.

WhatsApp user growth



Source: [Backlinko](#)

[WhatsApp](#) is already the default means of person-to-person communication in many countries. But all these advantages make it the perfect tool for virtual education and learning as well. Millions of students in both developed and developing countries now use WhatsApp for educational purposes – to learn remotely, connect with teachers and classmates, and enhance their knowledge and skills.

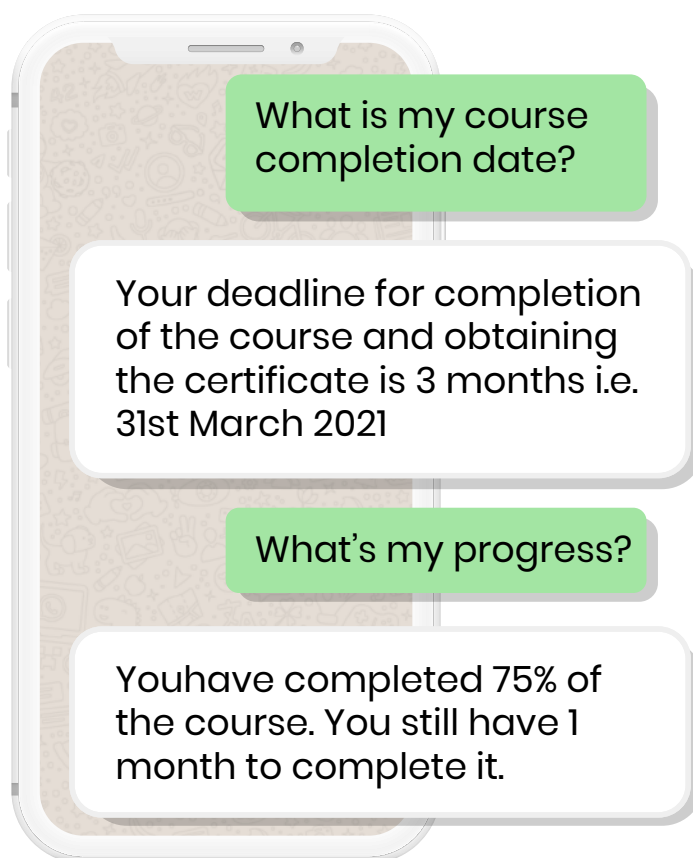


Online classes through WhatsApp Business API almost eliminate the need for face-to-face lectures, ensuring the safety of everyone involved without compromising the quality of instruction or the learning ability of students. These are vital advantages in a post-COVID world where physical classrooms and face-to-face learning are now rarer than ever before.

[WhatsApp API](#) is also a fundamental tool for teachers who only have essential smartphones without support for modern Internet-based collaboration or communication tools like Zoom or Google Meet. Through the app's user-friendly, familiar interface, they can run online classes through WhatsApp Business Account to meet their teaching goals and help students meet their learning goals. Thus, even amid technological limitations, the use of WhatsApp in education ensures that student learning continues and that schools can keep their doors open - figuratively, if not literally!

In addition to offering a highly accessible, easy-to-use, and low-connectivity platform for teachers, WhatsApp API is also an excellent tool for community-based learning. Around the world, non-profit groups leverage WhatsApp Business API to disseminate free learning resources to marginalized children. They often deploy WhatsApp content in multiple formats to provide broader and more equitable learning opportunities for children who lack learning and development resources.

Unlike traditional classroom learning, which is often one-way and reactive, [WhatsApp](#) is much more dynamic and proactive. Learners can not only listen to, watch and learn from their teachers from the safety of their own homes; they can also access numerous resources and materials in real-time to solidify their learning. Furthermore, they can complete assessments at home under the supervision of a parent or guardian, submit them to the teacher, and even discuss them via a class with WhatsApp. These benefits enable deeper, community-oriented learning that creates better results in learning retention and knowledge up-gradation.



Factors driving India's e-learning boom

A study conducted by Gartner suggests that 85% of businesses will be interacting with customers through chatbots in the near future.

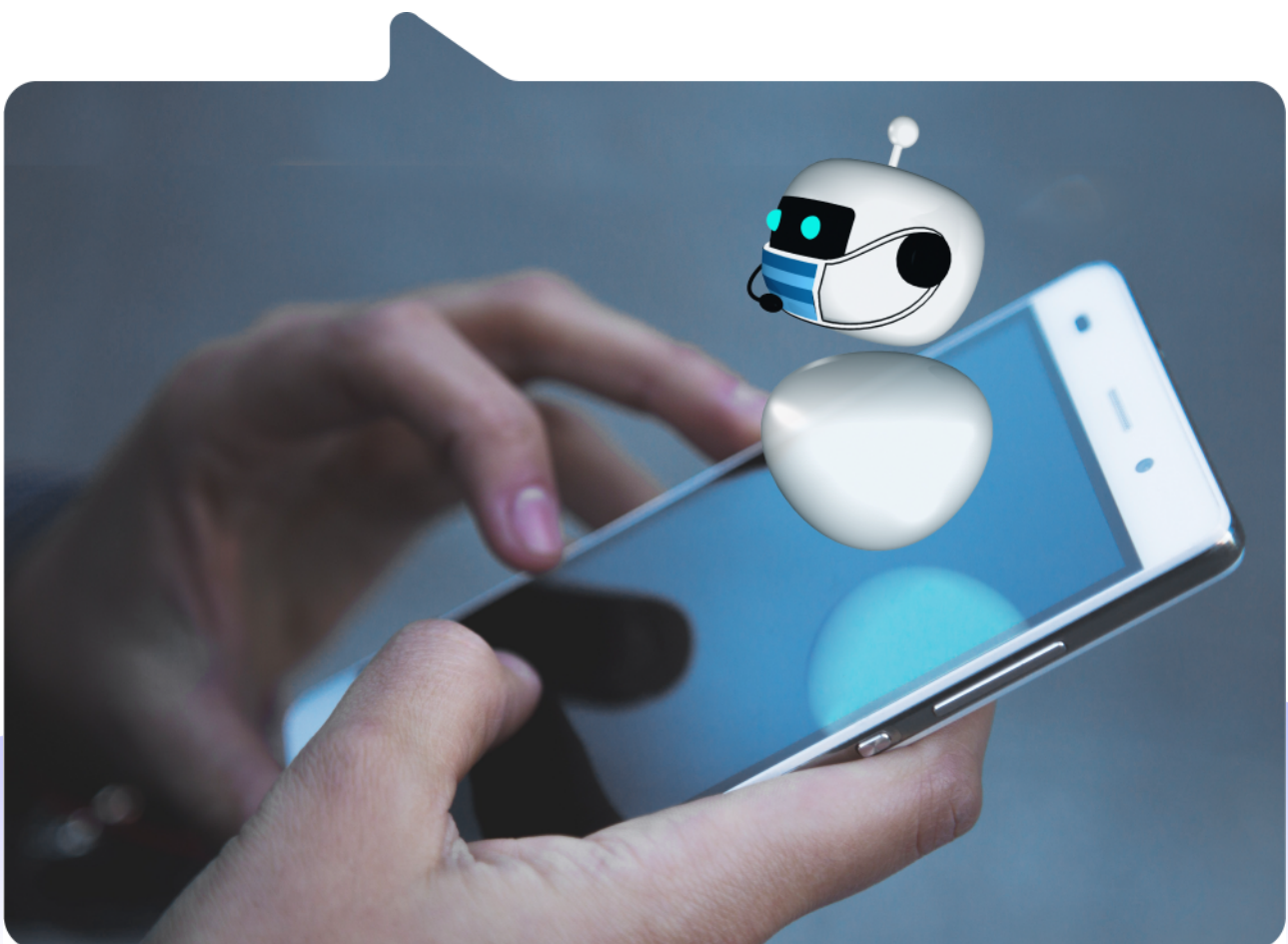
Another study by Juniper Research shows that chatbots can help Edtech players save billions of work hours through automation

Due to the pandemic, WhatsApp sees a **40% increase in usage**. Today, WhatsApp delivers roughly **100 billion messages a day**.

Let's look at some examples:

[Amit Kard](#), an educational consultant platform, provides end-to-end career advisory solutions to students who are looking to study abroad. An essential part of the student onboarding and counselling process happens over [WhatsApp chatbot](#) where mentors steer students at each stage - starting from the application stage, the mentor is always in touch with the students through WhatsApp, answering all the queries, suggesting the next steps, to the migration from home country to abroad.

[Khan Academy](#) offers a rich, personalized messaging experience for students, teachers and parents using the WhatsApp bot. Two-way conversational messaging using WhatsApp chatbots have helped with onboarding the students faster, delivering information like assignments, guides, learning tools etc., more efficiently.



Advantages Of WhatsApp Edtech Chatbots

A WhatsApp Edtech chatbot enables educational institutions to introduce automation into many processes. This not only saves time and effort for staff but also allows students to access the information they need quickly and in a low-friction format.

Student 1 wants to know the last date for applying.

Parent 1 is looking for information for a particular course or field of study.

Student 2 is thinking of dropping the subject and needs impartial, friendly guidance.

Alumna 1 wants to contribute to the university's Alumni Fund but is unsure of the process.

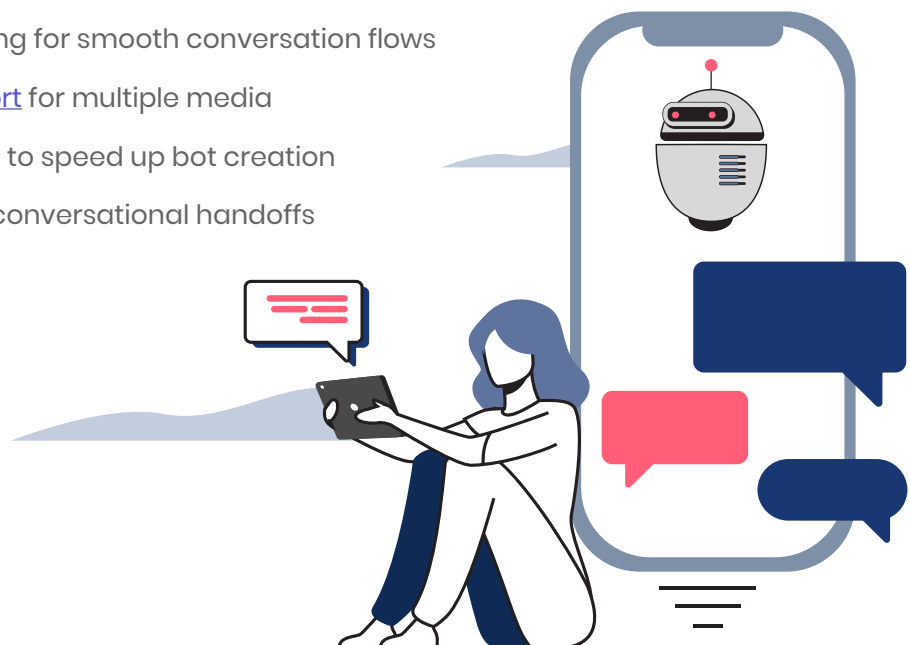
A [WhatsApp chatbot](#) can be set up to address all these needs in a simple, automated, yet personalized way.

With a tailored conversational AI-powered WhatsApp chatbot, educational institutions can:

- › Improve the quality of their administration and services
- › Increase student engagement through familiarity, convenience, and ease of use
- › Resolve issues quickly and in a way that feels natural and seamless to users
- › Tailor conversational flows for users
- › Assist prospective, current, and past students, and thus maintain solid and mutually beneficial relationships
- › Automate data collection and communications to design personalized [marketing](#) campaigns

Best of all, it's not even difficult to build a WhatsApp Edtech chatbot. With a no-code chatbot builder like Gupshup, any learning institution (school, college, university, etc.) can create a WhatsApp bot for compelling, natural, and omnichannel conversational experiences. The Gupshup bot-builder platform offers many other advantages that simplify Edtech chatbot creation and deployment:

- › Easy-to-use, drag-and-drop builder interface
- › Conditional logic triggered by user responses
- › Contextual understanding for smooth conversation flows
- › Rich answers and [support](#) for multiple media
- › Pre-designed templates to speed up bot creation
- › Smooth bot-to-human conversational handoffs



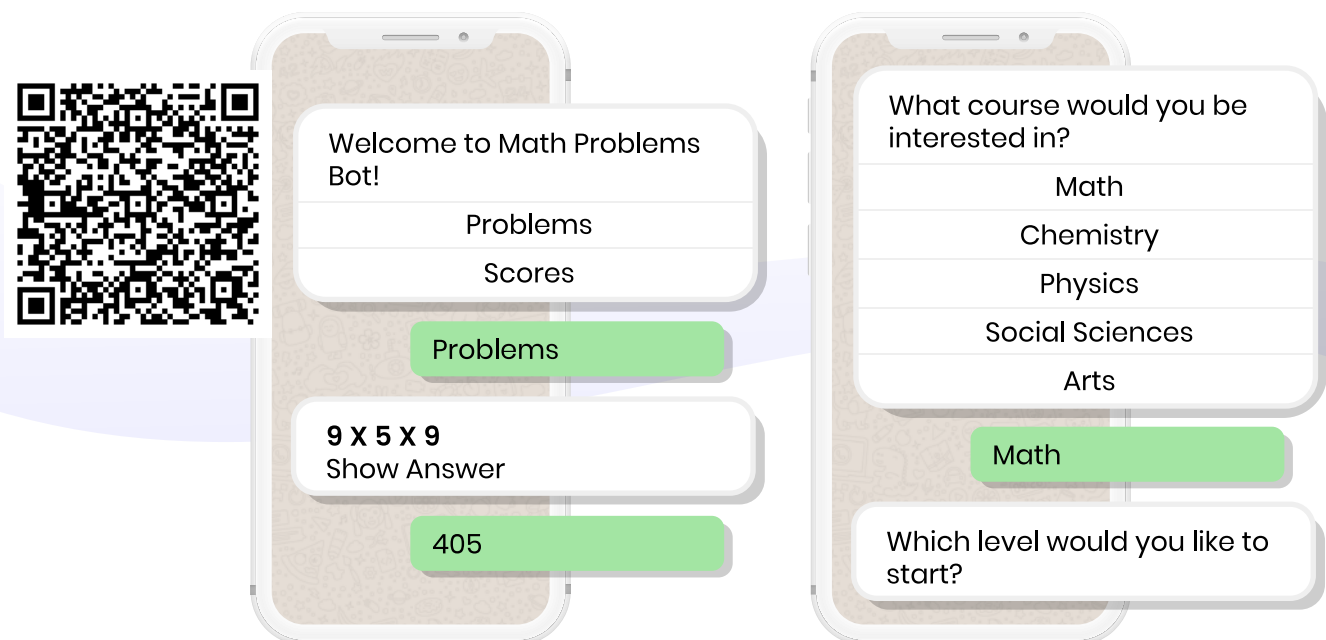
WhatsApp Edtech Chatbot: Use Cases

[WhatsApp](#) is so versatile that its usefulness goes beyond online teaching and learning. A WhatsApp-based Edtech chatbot can be used in numerous ways in the education sector, not only by students and teachers but also by marketers, administrators, alumni liaisons, registration/enrolment staff, student support staff, etc.

> Lead generation and qualification

WhatsApp provides convenience and human connections that make it perfect for one-on-one conversations to generate and qualify leads.

Instead of nurturing leads through landing pages or online ads, educational institutions can redirect them to WhatsApp to share relevant information through direct, two-way communication. Such conversations are more likely to garner access to prospects that institutions can follow up on to increase registrations and enrollment.

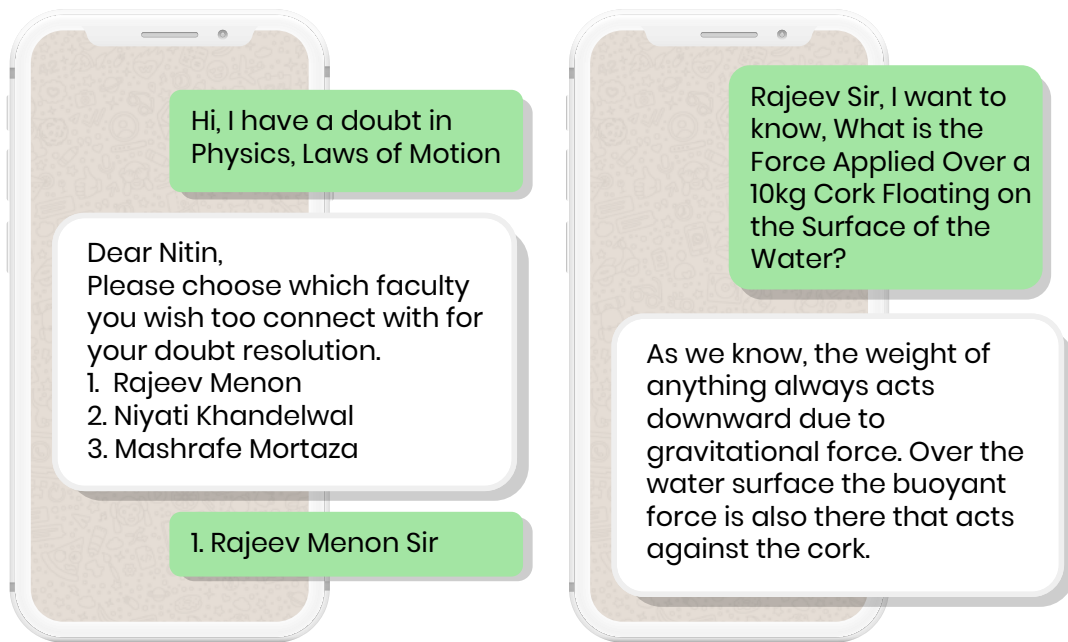


> Engagement campaigns

With a WhatsApp chatbot, institutions can keep in touch with prospects interested in a course, workshop or degree, and gently move them towards conversion. They can send regular updates, announcements/notifications, share news, and keep them interested with rich media, quizzes, games, etc. Without being too salesy or aggressive, they can keep prospects active and engaged, even if they're not quite ready to convert fully.

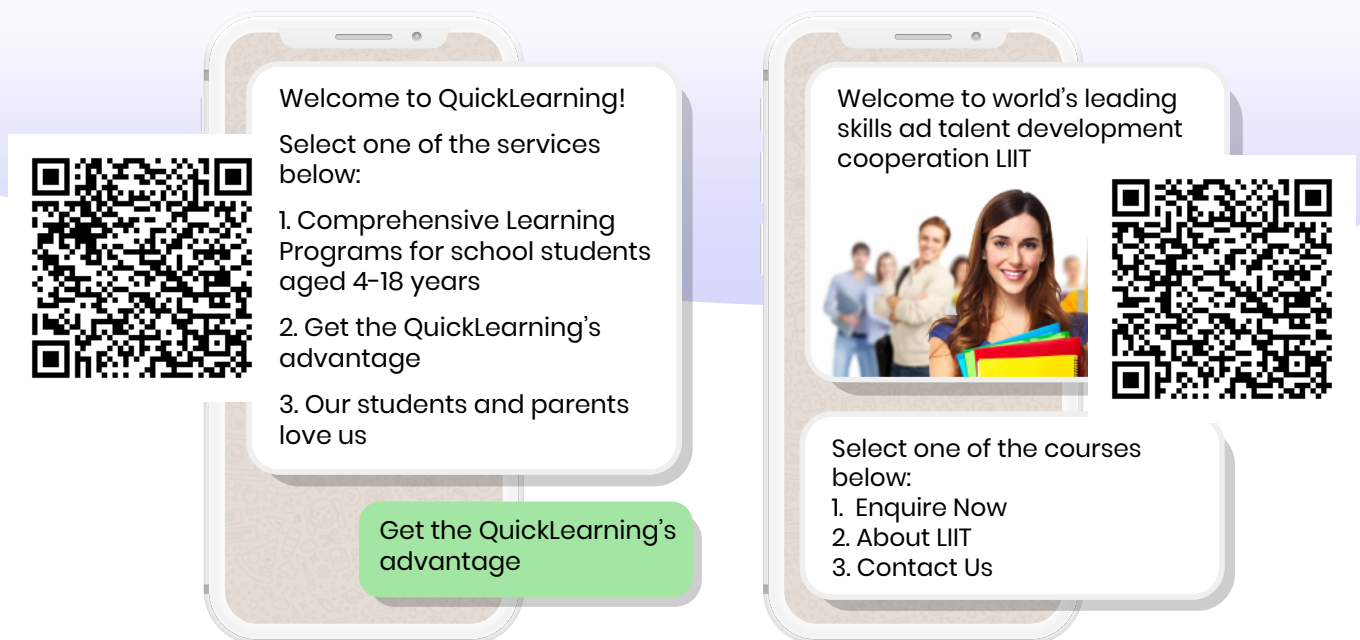
> Student retention

WhatsApp Edtech chatbots make it easier for students to reach the institute and ask questions. Staff can send regular updates and personalized messages to check in on students and update them on new events or happenings. Moreover, 24x7 availability lets students feel important and cared for, which helps create positive relationships that improve student retention and engagement.



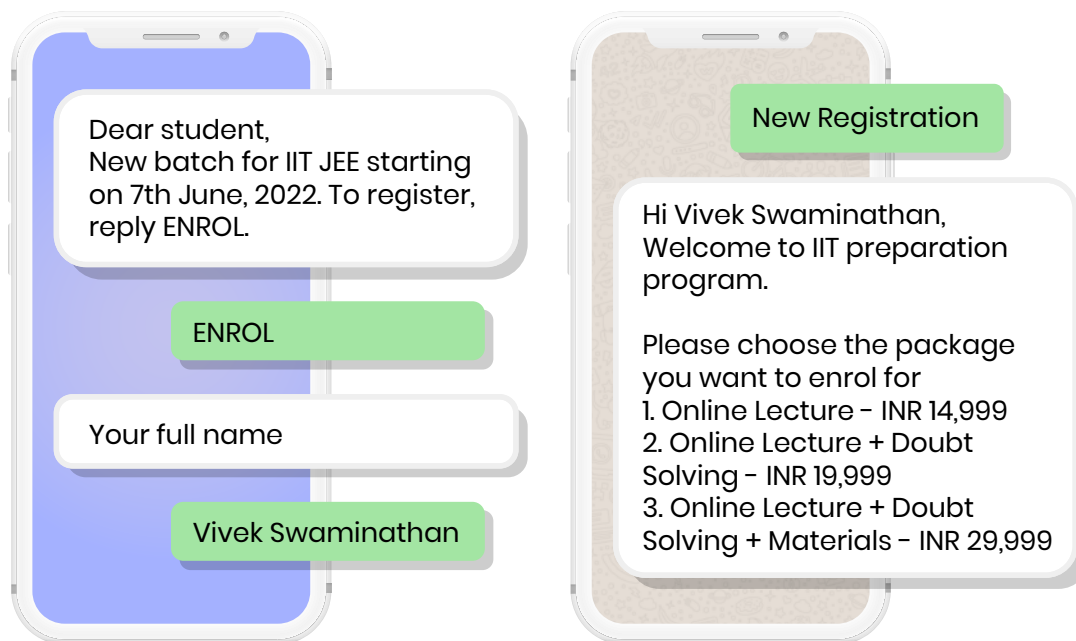
> Re-engage alumni

Once a student completes a course or obtains a degree, the institute can connect with them via a WhatsApp chatbot. They can send placement updates or information about new classes, ask them to mentor current students, and even request donations to the Alumni Fund. Some of the alumni may return as students, while others can help boost the institution's reputation via word-of-mouth referrals and feedback.



> Simplify administrative and support processes

Institutions can use WhatsApp-based Edtech chatbots to automate application processes, registrations, and enrolments. A chatbot can help students apply for a course, submit documents, and complete enrolment. It can assess applications, keep them updated on status, and even schedule face-to-face interviews or meetings to simplify the process and reduce stress for both students and staff.



Student support services can also be automated with WhatsApp. It can support students with issues and FAQs related to legal, administrative, financial, accommodation, health, etc. Providing fast and automated responses to common questions can take some of the burdens of human staff. If the queries become too complex, it can seamlessly hand over conversations to a human so that the student can continue the interaction with minimal friction.

The Final Takeaway

From conventional classroom teaching to digital-age Edtech learning, the education sector has grown leaps and bounds. Aided by conversational tools like chatbots, there is still immense potential for growth in the education technology industry. Chatbots' ability to manage multiple tasks efficiently will benefit educational institutions in more ways than ever. They are transforming the learning experience for students by coming up with intelligent and interactive tutoring methods.

[Creating a chatbot](#) for your Edtech business with an API partner like [Gupshup](#) ensures that there are minimal efforts involved in creating one and making it live within hours!

Implementing a chatbot across your preferred platform with Gupshup is quite easy, and does not require much assistance from engineering to ensure that the chatbot performs well across the tech stack you operate with. Additionally, these are not basic chatbots - you can personalize them and add advanced AI features from Gupshup's advanced conversational messaging tools.

Gupshup offers various simple [graphic interfaces](#) available for creating a chatbot for your business. Choose the one that fits your use case, and select additional customizations based on your requirements. Integrate the various [NLP](#) capabilities in your chatbot to enhance its capabilities and manage the dynamic response variations to manage small talks and guided user journeys.

The Gupshup conversational system automates lots of business use cases of the Edtech industry. Gupshup provides Edtechs with the ability to offer faster onboarding, manage and administrate day-to-day operations, support more secured transactions and provide seamless service support to customers.

Our solutions are trusted by leading educational institutions like NIIT, Matific, Khan Academy, Doubtnut, ALLEN Career Institute, Lovely Professional University, Manipal University, BYJU'S, to name a few.

If you have any questions about [Conversational AI](#) or would like to learn more about how to use it for your institution, please reach out to us, and we'll be delighted to get you started. [Initiate a conversation](#) with us to know more about Gupshup for Edtech.

#LetsGupshup

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- [WhatsApp for Education - A Complete Guide - Gupshup](#)
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