School’s in: building next-generation education platforms for India
India is at a point in its journey where its middle class is not only booming, but also experiencing an expanding school-age population, healthy economic growth rates and a growing appetite for higher living standards.\(^1\)

As a country that’s propelling itself toward global leadership in every field, special focus is being laid on creating the ability to provide higher-value services and advanced technology, while moving away from low-cost production. This paradigm shift calls for a new generation of workers and skillsets, and requires the nation to create innovative education platforms to foster the workforce of tomorrow. More than ever before, India is today identifying and focusing on the importance of education, recognising the link between high-performing education systems and economic prosperity.

India’s higher education segment is the largest in the world with approximately 20 million students and 36,000 institutions. Also, the higher education sector is expected to increase to US$ 37.8 billion by 2020. The schooling segment in India is anticipated to be around US$ 144 million by 2020 from US$ 44 million in 2011.\(^2\)

Some of the critical issues faced by the Indian education sector, especially in higher education, are listed in the graphic below:

<table>
<thead>
<tr>
<th>Quality:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Empower institutes (universities/colleges) to feature in international rankings</td>
</tr>
<tr>
<td>• Enhance quality of institutes by improving infrastructure, faculty, governance, research, and so on</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inclusion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Improve Gender Parity Index (GPI) to 1, from the existing 0.78</td>
</tr>
<tr>
<td>• Ensure that higher education is accessible to underprivileged sections of the society</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need to increase Global Enrolment Ratio (GER) in Higher Education from an existing 22 percent to 35 per cent, to be more in line with the global ratio</td>
</tr>
<tr>
<td>• Address seats vacancies versus need to increase number of seats</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitate more futuristic research in the Higher Education sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relevance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure education systems and syllabi that are relevant and in accordance with the global market needs</td>
</tr>
</tbody>
</table>
A number of Asian nations have already taken steps toward bringing these gaps and India is not far behind in its focus of using technology to create successful education ecosystems. Member nations Malaysia and Brunei have launched long-term national education blueprints with information and communications technology (ICT) as one of the foundations for improving student learning outcomes. Thailand took a similar approach and made significant progress in distributing tablet PCs to about 800,000 first-grade students in 2013. Singapore has also been actively developing its next-generation education platform, with a focus on technology and collaboration that extends across vocational education and training.

At Accenture, we believe there should be tremendous focus on facilitating cutting edge research, greater industry participation and international collaboration in the education sector. This will not only drive industrial, economic and social development in the country, but will also encourage industries to offer better and more volume of placements and internships, enabling a new generation of workers and skillsets. And all this can be achieved by tying technology closely with education and its continual development.

In this context, India has a significant advantage in its attempts to embrace technology-driven education: its large population of youth. This is a population that is willing to adopt innovations and adapt to today’s dynamically changing global market. The need of the hour is a futuristic education platform that can fuel the young minds to lead India in its journey to being a global leader.

In this article, we discuss the key steps involved in creating these platforms, including implementing student management platforms, boosting collaboration across the sector, harnessing the power of analytics, improving governance arrangements and redefining the role of education providers through global partnerships.
Thriving in the evolving education landscape

Through Accenture’s global experience in the education sector, we have identified a number of trends governments and education providers should consider when creating next-generation education platforms.

1. Implementing one-stop student management platforms

Education providers can tap on advanced technological platforms to more efficiently run their learning and administrative functions. Platforms now allow educational institutions flexibility and mobility in managing their day-to-day functions using the Software-as-a-Service model in a Cloud-based environment.

Schools can use a centrally-managed platform to allocate their faculty resources, track student financial data and enhance the productivity of teachers and faculty members by making it easier to handle common administrative tasks such as setting of timetables, tracking student attendance and assessing them.

2. Increasing collaboration across the education ecosystem

In addition to managing the day-to-day institutional functions, education providers need a way to encourage collaboration between students, teachers, parents and employers – within and outside the school environment. One way to achieve this is through the use of learning and development vaults.

These vaults can act as a central database, allowing students to access and view their academic and extracurricular records effortlessly. These records can be easily sent to prospective universities and employers during college and job applications, and offer employers the ability to conduct reference checks centrally. Furthermore, the vaults offer timeline and calendar capabilities to track student progress and offer advice for academic improvement.

3. Harnessing advanced analytics

Using analytics allows education providers to derive insights from student performance data and then devise relevant strategies to improve student outcomes.

Schools can now tap on analytical models to predict student test scores based on academic performance data, extra-curricular activities and socio-economic variables. Teachers can then work with students to examine their subject selection, goals and predicted test scores, and set agreed performance standards – all supported by on-going feedback and assistance.

Similarly, teachers can also use analytics to identify underperforming students and formulate targeted interventions to lift student performance.

4. Managing compliance within governance frameworks

Several Asian governments have realized that there is a need to uphold education standards to prevent any of their institutions from engaging in any misrepresentation and unethical practices. This has led to many educational ministries institutionalizing local and international compliant frameworks to raise the bar of education.

In Singapore, private education institutions can take part in EduTrust, a certification scheme administered by the Council for Private Education. While participation in the scheme is voluntary, EduTrust certification is a prerequisite for education institutions that wish to enrol international students. This scheme allows private education institutions to differentiate themselves as having achieved high standards managing and providing educational services.

5. Redefining education through global partnerships

Education is moving from an industry driven by local trends to one increasingly shaped by global forces. Today, education providers must take into account technology trends including a shrinking globe and Big Data. These trends are changing the nature of education providers. To succeed in the new landscape, schools cannot cling to old notions of being a self-contained environment with a fixed identity and offering. Instead, education institutions need to change roles and potentially shift from their traditional core services and identity to deliver offerings to students that focus on the best of education, technology and external services from around the world. One way to achieve this is through global alliances.

For example, the Singapore University of Technology and Design has partnered with the Massachusetts Institute of Technology, Zhejiang University in China and Singapore Management University to deliver courses combining technology, entrepreneurship, management and design. This global partnership is aimed at elevating the market share and position of the Singapore University of Technology and Design.
India recognises the link between high-performing education systems and economic prosperity. The government is placing a lot of importance in technologically-advanced education boosters and has plans to invest heavily in ICT to significantly improve knowledge-based learning. A next-generation education platform offers various benefits to stakeholders in the education ecosystem.

**Helping Students**
- Track their own learning and development progress
- Connect better with their schools and future employers

**Helping Parents**
- Receive up-to-date information about student’s progress
- Communicate easily with teachers and administrators

**Helping Employers**
- Conduct background checks more efficiently and accurately
- Communicate with potential candidates directly

**Helping Educators**
- Run their learning and administrative requirements more efficiently
- Apply analytics to devise strategies for improved student performance
- Communicate with students and parents easily
- Focus on learning and less on administrative tasks

**Helping Education Administrators**
- Streamline reporting and compliance
- Enhance productivity of teachers and staff
- Manage student financials, timetabling and student records

**Helping Education Ministries**
- Better track and monitor trends in students’ performance
- Raise the bar of education by better managing the standards of education providers
Case study: Singapore creates a next-generation platform

Education occupies a critical place in Singapore’s economy. Without natural resources at its disposal, Singapore relies on manpower to drive its economic development.

But Singapore faces important people-related challenges. Research from the National University of Singapore has shown that Singapore’s median age will rise to 55 in 2050, from 39 at present. By 2050, there will only be 1.7 people of working age for every elderly person – down from 7.7 in 2012. These shifting demographics will shrink Singapore’s access to skilled labour, and place an additional strain on social security.

To address these challenges, the Singaporean government has allocated significant resources to education. Singapore’s annual education budget was $10.6 billion in 2012 – representing 20 percent of the national budget. Over the past six years (2006–2012), the government has increased education funding at a compound annual growth rate of 62 percent.

Singapore takes a holistic approach to education that incorporates students, teachers and parents in a high-performing ecosystem. In the area of skills-based education, Singapore has invested $2.5 billion from 2010 to 2015 in its Continued Education and Training (CET) policies. The funds are focused on upgrading and retraining existing workers, and supporting CET Centres and approved training organizations.

Furthermore, the nation is harnessing cutting-edge technological innovations to enhance student learning and outcomes. For example, Singapore leverages convergent and flexible technology, including cloud computing and open-source learning as part of its core education curriculum. The focus is on equipping students with the skills to succeed in a knowledge-based global economy. This approach has paid dividends. According to the World Economic Forum’s Global Competitiveness Report 2012–13, Singapore ranked third in the world for the quality of its education system.

This focus on technology lays the foundation for a more collaborative future, where students, parents, teachers and businesses are all engaged and invested in creating the workforce of tomorrow. We see this as a useful approach for other nations around the globe.
How Accenture can help transform the education experience

The structural changes taking place in Asian economies are altering the nature of education. In India too, there is an increasing need for workers who are highly skilled, digitally savvy all-rounders. This shift is putting the focus on next-generation education platforms.

Accenture believes that this increasing focus on technology, and the way it is changing the nature of education providers, allows educational systems to go into a competitive or collaborative mode. We see greater advantages in taking a collaborative approach by using next-generation education platforms to unite education around the world.

Accenture is uniquely placed to help governments and education providers create next-generation education platforms. In Singapore, Accenture has built and developed student administration systems for 67 per cent of the government-run polytechnic and vocational institutes and successfully maintained a nation-wide Web-based school administration system in Singapore, known as the School Cockpit system.

Furthermore, we have significant experience in driving global collaborations across education ecosystems. We also have unparalleled expertise in designing global knowledge-sharing network blueprints to help private tertiary education institutions collaborate with international partners to offer joint degrees.

Accenture has developed a next-generation education platform, the Accenture Digital Campus (ADC) that can be tailored to the precise needs of your education institution.

The ADC offers a wide range of benefits, including:
- advanced analytics
- learning and development vaults
- cloud-enabled mobility
- streamlined governance and compliance
- seamless information exchange with existing platforms.

The ADC offers a wide range of benefits, including:
- advanced analytics
- learning and development vaults
- cloud-enabled mobility
- streamlined governance and compliance
- seamless information exchange with existing platforms.
Accenture Digital Campus: A World of Innovation for School Management

**Digital Campus manages:**
- Student academic & extra-curricular records
- Student financials
- Job applications and employer reference checks
- Student timetables
- Class attendance
- Performance tracking
- Compliance to local regulations

**Advanced Analytics**
Aid teachers and parents to:
- Analyze past, present and predict student’s future progress
- Modify curriculum to suit student’s performance

**ADC Exchange Services**
Offers students and parents a central location to:
- Track and View their academic and extracurricular records
- Apply for colleges and jobs centrally
- Enable employers to conduct reference checks easily

**Streamlined Government Compliance**
Helping schools and administrators:
- Streamline reporting procedures and reduce administrative workload

**Mobility Enabled**
Flexible access to all stakeholders in the education ecosystem:
- Access to cloud and mobile platforms
- Greater tools for communication and collaboration
- Enhanced productivity

**Seamless Information Exchange**
Helping schools and the government:
- Integrate enterprise, customer relationship and learning management systems
- Build modular vendor-agnostic solutions that are easily tailored to specific requirements
Notes:
5. The Expanding Education Ecosystem: A World of Choice, Jan-Martin Lowendahl and Bill Rust, Gartner, 23 February 2012.
6. ibid