Deloitte. Insights

FEATURE

Breaking the mold: The future of Indian educators

Insights from 2019 Deloitte Deans' Summit

Vikas Gupta, Ajit Kambil, Sukanya Ghosh, and Sandeepan Mondal

The workplace increasingly requires a multiskilled workforce. The Indian education system needs to transform itself, beginning with the reskilling and upskilling of educators to meet the requirements of tomorrow's workforce.

WHEN dean Danish—"Dan" to his students—started his career as an academician, he was not too familiar with the inherent issues in Indian higher education. But, as a faculty member, he gained insights about them over the years. Lately, these issues have begun to percolate into his own institution. He is particularly worried about the dearth of quality faculty. Dan's institution has long been aware of this "shortage," but had taken only ad hoc measures, such as hiring temporary professors, to manage the situation.

Dan also believes that the rate of technological transformation makes it imperative not only for the future generation of employees (today's students) to be adept at using technology but for faculty as well to be able to teach students using education technology (EdTech), such as mixed reality capabilities (encompassing virtual and augmented reality). According to him, the future will require teachers to break the current mold and reimagine their skills—the literal and the subtle, the obvious and the nuanced—in the context of changing realities.

Dan is not alone in worrying about these issues. In fact, in our recent survey of deans (see the sidebar "Understanding the Indian higher education sector" for more information on our methodology), more than eight in 10 deans (heads of educational institutions like directors or principals) worry about the lack of quality faculty in the Indian higher education system.[1] They also understand that the roles and responsibilities of educators (faculty members, deans, and directors) are becoming centered around how they can play an integral part

UNDERSTANDING THE INDIAN HIGHER EDUCATION SECTOR

In April 2019, Deloitte conducted the Deans Summit for deans, directors, principals (all will be referred to as deans in this article) of 63 top-tier institutes in India. The deans from various institutions—including business, engineering, and other undergraduate schools—deep-dived into the challenges faced by the higher education sector and discussed ways to address them. In addition to the deans' roundtable discussion, Deloitte surveyed the 63 deans, more than 900 alumni, and over 3,000 current students from these institutions. The insights gathered from a solutions lab and the survey have been captured in a series of four articles covering the following topics:

- Future of higher education
- Future skills of educators
- Future of work
- Reengaging alumni

This article focuses on the "Future skills of educators" and is a culmination of research, conversations with the deans, and a survey of different stakeholders in the Indian higher education market.

in enabling the future of work and the workforce—expanding beyond their current boundaries.

What new skills might the "Indian higher educator of tomorrow" require to be successful in a competitive marketplace? What's triggering this need to upskill and reskill the Indian educator? How can deans play a more inclusive and holistic role in driving this change? How can EdTech help solve the problem of faculty shortage?

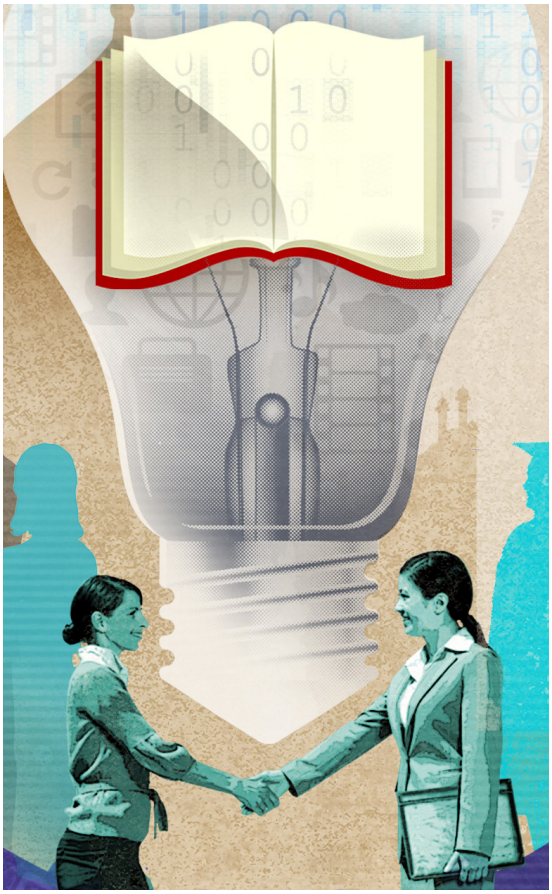
Drivers behind the skills revamp of Indian educators

Students will be entering a workforce where disruption and uncertainty are the norm and a multiskilled workforce is the top priority. Educators therefore need to revamp their own skills to adequately equip the future workforce. Primarily, three forces are driving this transformation:

1. **Students look for an "education experience":** The current set of students is veering toward science-based disciplines,[2] and they are looking for an experiential learning-based education. In a recent Deloitte survey, 64 percent of students expressed this preference.

2. **The future workforce needs to be multidisciplinary:** Convergence of multiple disciplines will play an important role in solving the world's most challenging problems, and today's students need to be equipped with more than one skill. The use of technology has now redesigned jobs into super jobs that also require more human skills such as problem-solving, communication, interpretation, and design.[3] Faculty will therefore need to be well-versed and equipped in such disciplines and skills.

3. **An acute skills gap resulting from rapid advances in technology calls for a curriculum overhaul:** Employers are finding it difficult to find job-ready professionals. For example, 48 percent of Indian employers report difficulties filling job vacancies due to talent shortages.[4] One reason is that barring a few top institutions, Indian curricula are yet to catch up with the rapidly changing technologies—big data, artificial intelligence, cloud computing, machine learning to name just a few.[5] Most students—72 percent of those surveyed—believe their faculty too needs training in the use of technology for lecture delivery. A curriculum benchmarked to global standards also seems to be on top of mind for most students.[6] It is time for Indian educators to not only disrupt the way they teach using advanced technologies, but to also play a key role in overhauling the curriculum. Efforts are evident, but the need is for a wider dissemination of advanced teaching tools and techniques.[7]



EDUCATOR 4.0

The concept of Educator 4.0 is closely intertwined with Education 4.0—a future paradigm, wherein the learning and developmental needs of students (potential employees) will be in sync with technology-driven disruptions, specifically Industry 4.0.[8] The Educator 4.0 would ideally:

- Incorporate Industry 4.0 technologies such as robotics, 3D printing, and mixed reality capabilities into their teaching methods
- Collaborate with established companies, start-ups, regulators, and alumni to harness various Industry 4.0 technologies, data, and new-age content
- Establish the blueprint for lifelong learning and development that transcends a single discipline or specialization

With technological disruption taking center stage in today's workplace and various new tools such as mixed reality capabilities giving faculty the opportunity to offer students experiential learning, Indian higher educational institutions need to learn how to incorporate technology into their methods and curricula. But that's not all; human skills such as communication, negotiation, and relationship-building play a role in career-building as well. How do institutions incorporate all these requirements into their faculty and curricula? We outline ways in which higher education can be upgraded to pave the way for an envisioned Educator 4.0 (see the sidebar, "Educator 4.0").

Solving the Indian higher educator conundrum

Based on extensive secondary research using data analytics and visualization[9] as well as the insights generated from the Deans Summit 2019 in Deloitte,[10] we have come up with four broad recommendation themes that converge on the vision of "Educator 4.0" outlined earlier.

INFLUENCE POLICY TO IMPROVE THE QUALITY OF FACULTY

Despite efforts, there has been little improvement in the quality of teaching at most Indian colleges (barring central universities or autonomous institutions).[11] The dominant constraints seem to originate more often within academic institutions than outside of them. During the lab discussions at the Deans Summit, participants said that the challenge lies not just in technology adoption, but in the very mindset of faculty in terms of openness to embracing new technology and breaking hierarchical structures that restrict collaborative work.[12]

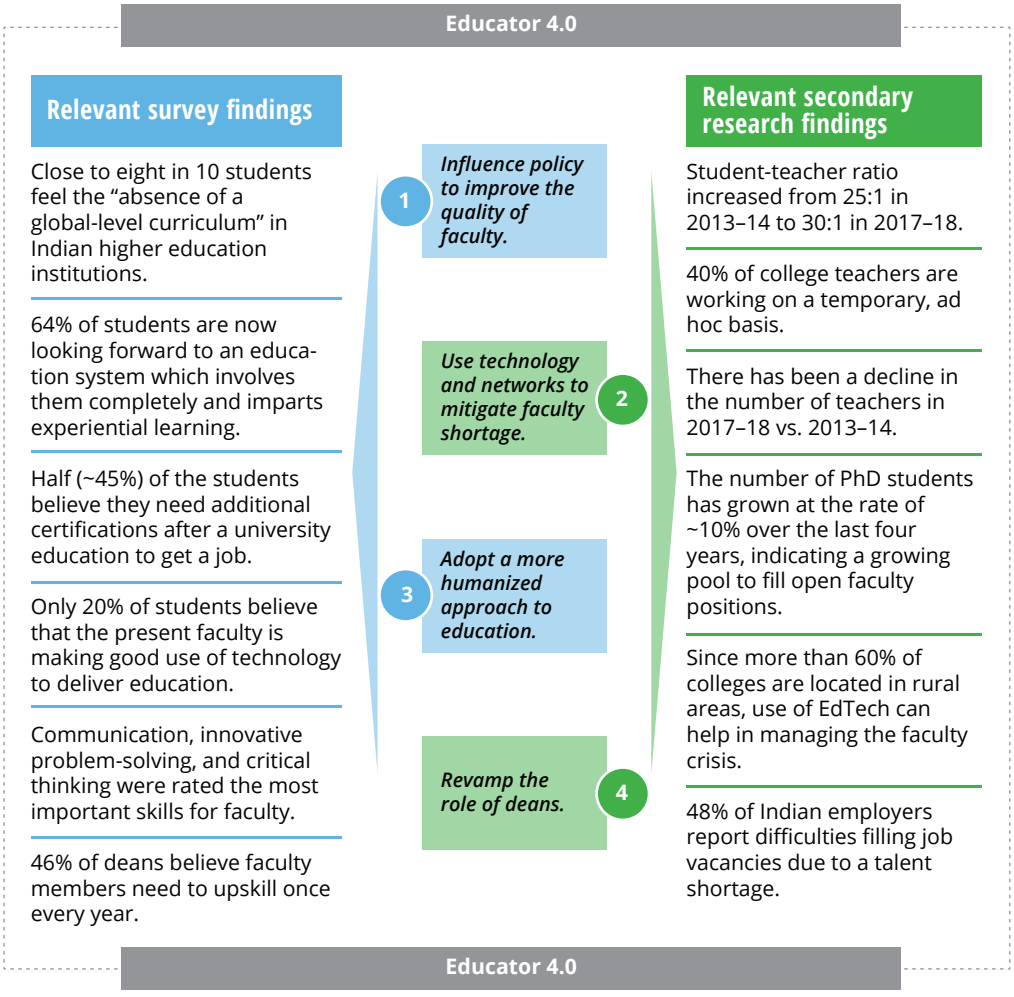
Policy-driven changes can therefore play an enabling role in breaking these barriers and reorganizing teams to make education more responsive to students' requirements. In our survey, "faculty with research orientation" and "more practical courses than theory" came out as top factors that can bring in change and improve the quality of education. As one dean at the summit said, given the asymmetric capital allocation to research in response to changes in the global markets, there is a need to influence policy and maintain a fine balance between teaching and incentivizing research.[13] Favorable policies in the form of research grants or incentives may help encourage higher educational institutions and universities to enable their faculty to go for training and enrichment. In addition, building centers of excellence (CoE) within academic institutions, establishing industry connects and interfaces, and nurturing more robust interactions over industry-sponsored research are other ways to enhance the quality of faculty.

USE TECHNOLOGY AND NETWORKS TO MITIGATE FACULTY SHORTAGE

Technology can be a key enabler for institutions trying to overcome the shortage of skilled faculty and provide training that meets the talent needs of businesses today. A course well-endowed with technological tools (tablets, educational software) can not only cater to the "individualized" needs of the student but also enhance the teaching experience for the educator. Platforms such as STRIVR that offer end-to-end learning experiences are already revolutionizing training and professional development in the United States by using virtual reality.[14] Additionally, online programs such as the Georgia Tech OMSCS course (Online Master of Science in Computer Science)—the largest master's degree program in computer science—are not only a good way to refresh one's technical abilities but are also accessible to many across the world.[15] In India, for instance, leading tech companies have already established digital education initiatives aimed at training students

FIGURE 1

Primary and secondary research findings relevant to the four recommendation themes



Sources: 2019 Deloitte Summit survey of deans, students and alumni; Ministry of Human Resource Development, Government of India, "AISHE reports (2013–14 and 2017–18)," accessed July 25, 2019; Prashant Sharma, "The curious case of India's skills gap, and what it will take to close it," YourStory.com, June 14, 2018.

on the latest Industry 4.0 technologies, as well as enhancing faculty capabilities by assisting them on course content strategy and experiential learning.[16]

Other solutions include more autonomy for faculty to pursue research opportunities with research institutes[17] and recruiting quality faculty from a growing pool of available candidates.[18]

Alumni also form a significant cog in this wheel—they are intrinsic to students building transformative relationships that matter in the long run. Our survey shows that 84 percent of alumni are willing to support their alma mater financially as well as through academic-corporate connects.[19] Quite a few reputed institutes in India involve their alumni through investments in incubation and research centers.

ADOPT A MORE HUMANIZED APPROACH TO EDUCATION

One thing that stood out in our interviews is educators calling out the necessity of helping students develop human values. With organizations moving from employee experience to human experience, soft skills and emotional intelligence are essential for building long-term careers.[20] These skills also come in handy for building lasting relationships that can be a critical foundation for students, especially in the context of the psychosocial pressures they operate within.

One challenge is to help faculty develop skills that will allow greater bonding with students and understanding their beyond-the-classroom needs. Therefore, there is an urgent need to develop and maintain a continuum of learning and development opportunities for faculty in these areas. This would involve specialized classroom-based trainings on soft skills, live, simulation-based trainings, and observation of the best practices followed in corporate offices. Microcredentials—which some niche US digital education organizations have been experimenting with and piloting—can similarly help Indian higher education faculty to acquire a range of new competencies from several digital education platforms.[21]

> **"It is not just about creating employability … Where is the life of the mind?"**
>
> — *2019 Deloitte Deans Summit participant*

REVAMP THE ROLE OF DEANS

With the changing realities of learning, there is a need to focus on the four faces of the lead educator—a prioritization based on roles, elaborated in figure 2. Deans and directors need to begin analyzing the multiple roles they currently play, prioritize focus areas, and balance these in the light of the external forces that are disrupting education today.

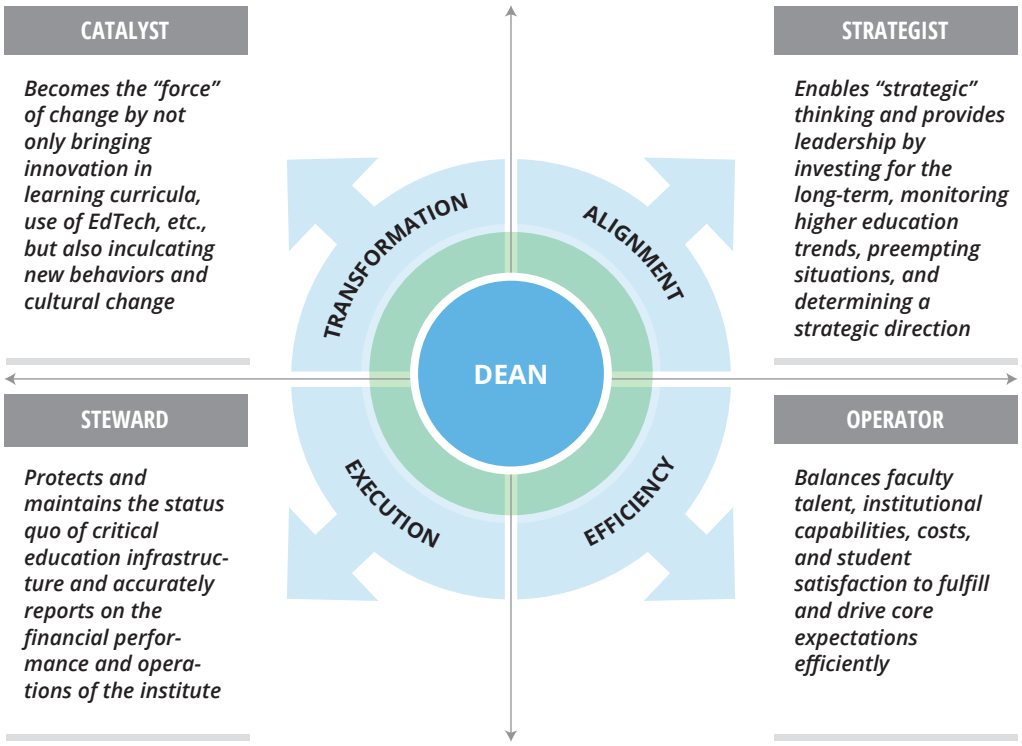
For example, Dan, the dean mentioned in the introduction, may have immersed himself in the steward and operator roles ever since he joined the institution. But changing times call for a role transformation. From spending 60–70 percent of his time focusing on tasks related to execution and efficiency, Dan may now need to pivot to the catalyst and strategist roles in line with his institution's need for a focus on transformation and alignment in the face of disruption. This means a large proportion (60–70 percent) of his time and effort should go into catalyzing behaviors and culture which lead to innovation and into enabling strategic thinking that builds long-term resilience against disruptive change.

The Indian Educator 4.0—Imbibing a multitude of skills catalyzing gradual transformation

Considering the dynamic changes affecting the future of Indian educators, the nature of

FIGURE 2

Four faces of the lead educator (dean)



Source: Deloitte analysis. This is based on Deloitte's "four faces of the CFO" framework presented in the Deloitte Insights article, *Navigating the four faces of a functional C-level executive*, May 2014.

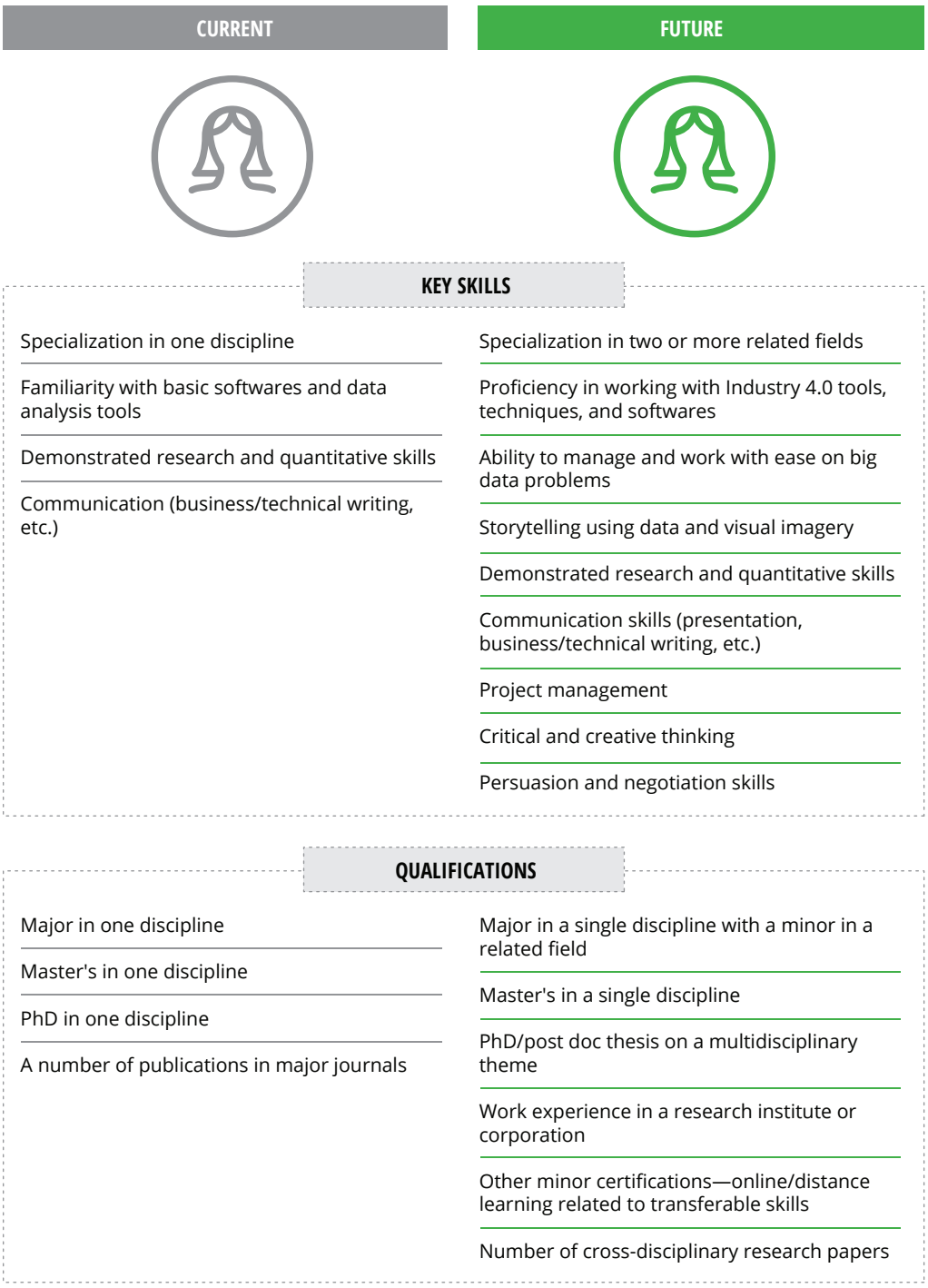
skills, education, and experience that faculty will require and the time they will need to spend on various pedagogical activities are some of the elements that are likely to undergo changes. Considering this, a generic profile of the future Indian educator will look different (see figure 3).

A cross-hybridization of skills is imminent. Our survey results point out that in addition to research and quantitative skills, a typical professor will also need to be well-versed in soft skills as well as proficient in the use of the latest tools and software. This can likely help the professor make teaching more of an experiential affair.[22] Familiarity with managing, analyzing, and weaving a story out of big data will likely be an advantage. All of this will likely translate into renewed priorities for professors with regard to day-to-day activities. Instead of spending more than 70 percent of their time on teaching and administration, they will now spend a third of their average day on research and consulting and learning and development. EdTech will play a major role in this role revamp, given that familiarity with Industry 4.0 tools, techniques, and processes will be a prerequisite.

Skills can only be acquired and honed over time through education and exposure: Professors will have a minor degree in two or more of the related disciplines, with ad hoc online courses and certifications filling the education gap. They should also have demonstrated technical writing skills in some of their cross-disciplinary research papers. This development will be in sync with

FIGURE 3

Current and future educator profiles in the Indian higher education system



Source: Deloitte analysis.

work becoming increasingly multidisciplinary. In addition, experience in research institutions or multinational corporations might also receive greater weightage in faculty selection.

Creative, critical, and strategic thinking skills will be highly valued among future educators across all major disciplines. These transferable skills will enable them to pivot their roles from pure teaching and administrative work to become a strategist or catalyst for their institution, apprising students with the realities of the modern workplace and helping them embrace the changes effortlessly.

Realizing this vision of the Indian Educator 4.0 may seem like a distant possibility now, but with steady espousal from various stakeholders in the education and business ecosystems, it is feasible.

Endnotes

1. Survey findings from the Deloitte Deans Summit 2019.
2. Students' choice of discipline at the undergraduate level is changing gradually but perceptibly. For instance, compared to 2013–14, student enrollments in arts/humanities/social science undergraduate courses grew at a subpar 1 percent in 2017–18, while enrollments in science (and technology) and commerce grew more than 3 percent.
3. Erica Volini et al., *2019 Deloitte Global Human Capital Trends*, Deloitte Insights, 2019.
4. Prashant Sharma, "The curious case of India's skills gap, and what it will take to close it," YourStory.com, June 14, 2018; In addition, almost eight in 10 deans of leading academic institutions, according to survey findings from the Deans Summit, were concerned about the employability of students graduating from the Indian higher education system.
5. Prachi Verma and Anjali Venugopalan, "IIMs set to chart out a new course in 2019," *Economic Times*, December 25, 2018.
6. Survey findings from the Deans Summit revealed that eight in 10 students feel the "absence of a global-level curriculum" in Indian higher education institutions.
7. *India Today*, "How Indian schools are starting to use cloud computing, AI, and VR," March 22, 2019.
8. Deloitte Insights, *The Fourth Industrial Revolution is here—are you ready?*, 2018.
9. The Deloitte team used a proprietary data analytics tool to scrape textual data from publicly available higher education resources/articles, and then did a cluster analysis using network visualization to come up with top recommendation themes.
10. Deloitte, "University relations," accessed July 23, 2019.
11. Mukhtar Ahmad, "What is wrong with the Indian higher education system?," University World News, February 8, 2019.
12. Findings from the Deloitte Deans Summit 2019.
13. Ibid.
14. Strivr, "Home," accessed July 23, 2019.
15. Georgia Tech College of Computing, "Current courses," accessed July 23, 2019.
16. Ayan Pramanik, "Technology to speed up large-scale education reforms in India: Analysts," *Economic Times*, February 10, 2018.
17. This will not only enhance their research skills (thus supplementing their knowledge), but also create a more stable second revenue source, making the profession more attractive.
18. The number of students who have been awarded PhD degrees has grown at a rate of 10 percent over the last four years, indicating a growing pool that can be effectively tapped to fill faculty open positions.
19. Survey findings from the Deloitte Deans Summit 2019.
20. Volini et al., *2019 Deloitte Global Human Capital Trends*.
21. Mary Jo Madda, "Bloomboard releases micro-credentials offering and 'Pinterest for Teachers,'" EdSurge, January 26, 2016.
22. According to our survey, most students want an "experiential learning" environment in their classrooms.

Acknowledgments

The authors would like to offer their special thanks to **Karthik Ramachandran**, **Anshu Mittal**, **Ramani Moses**, and **Indranil Chowdhury** for their insights, suggestions, and guidance in helping them shape this article.

They would also like to thank **Sukanya Pattnaik**, **Satish Nelanuthula**, **Jagadish Upadhyaya**, **Komal Bajwa**, **Ramesh Ramakrishnan**, and **Sakshi Arya** for their contributions to this research.

About the authors

Vikas Gupta | vikgupta@deloitte.com

Vikas Gupta is a human resources leader with more than two decades of professional experience across diverse industries in driving people strategy. He is passionate about reimagining human resources to meet the needs of Industry 4.0. His areas of interest include technology, education, and research. His expertise spans diverse industries, including manufacturing, telecom, financial services, retail, and professional services. In his current role as a managing director at Deloitte, he is responsible for helping the organization to catalyze growth by leading change and creating avenues to position the Deloitte brand both internally and externally. Connect with him on LinkedIn at: www.linkedin.com/in/vikasggupta/?originalSubdomain=in.

Ajit Kambil | akambil@deloitte.com

Ajit Kambil is the global research director of Deloitte LLP's CFO Program. He oversees the diverse research initiatives of the program in areas such as leadership, capital markets, and risk, and created CFO Insights, a biweekly publication serving more than 35,000 subscribers. Kambil also developed Deloitte's Executive Transition Lab, which helps CxOs make efficient and effective transitions into new roles. He is widely published in leading business and technology journals on varied topics.

Sukanya Ghosh | sukghosh@deloitte.com

Sukanya Ghosh is a manager and leads talent communications for Deloitte in India, focused on sharing the Deloitte talent experience, including evolving workforce, talent development, total rewards, well-being, and inclusion. Ghosh has 11 years of experience in content editing, content development, CSR, communication strategy in social sector development, communication campaign design, and filmmaking, to name a few.

Sandeepan Mondal | sanmondal@deloitte.com

Sandeepan Mondal is an assistant manager with Deloitte Services LP. In his current role, he is involved in conducting in-depth research and generating actionable insights for the chemicals and specialty materials sectors. Mondal has more than eight years of experience in thoughtware development, industry and market research, survey design, statistical methods, visualization, and content writing across the manufacturing, automotive, and chemicals industries.

Contact us

Our insights can help you take advantage of change. If you're looking for fresh ideas to address your challenges, we should talk.

Firm leadership

Vikas Gupta
Managing director | Talent | Deloitte Consulting India Private Limited
+91 40 67626969 | vikgupta@deloitte.com

Vikas Gupta is a human resources leader with more than two decades of professional experience driving people strategy across diverse industries.

Future of Work
Disruption lies ahead. Driven by accelerating connectivity, new talent models, and cognitive tools, work is changing. As robotics, AI, the gig economy and crowdsourcing grow, jobs are being reinvented, creating the "augmented workforce." We must reconsider how jobs are designed and work to adapt and learn for future growth. To learn more, visit Deloitte.com.

Deloitte.
Insights

Sign up for Deloitte Insights updates at www.deloitte.com/insights.

Follow @DeloitteInsight

Deloitte Insights contributors

Editorial: Ramani Moses, Blythe Hurley, Abrar Khan, and Nairita Gangopadhyay

Creative: Molly Woodworth and Anoop K R

Promotion: Ankana Chakraborty

Cover artwork: Stephanie Dalton Cowan

About Deloitte Insights

Deloitte Insights publishes original articles, reports and periodicals that provide insights for businesses, the public sector and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders.

Deloitte Insights is an imprint of Deloitte Development LLC.

About this publication

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Deloitte Touche Tohmatsu Limited, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

Copyright © 2019 Deloitte Development LLC. All rights reserved.
Member of Deloitte Touche Tohmatsu Limited