



# Going Cognitive in K-12

The Reinvention of Talent Management  
for K-12 Education Institutions

Powered by IBM and Oracle



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# Introduction

The K-12 Education Industry has been dealing with a nationwide teacher shortage for the past several years. Education Leaders already fatigued from dealing with ongoing teacher shortages are now having to solve for the COVID-19 pandemic and rapidly changing education conditions. Already overburdened Teachers are facing additional challenges, both in the classroom and personally, as the nation deals with evolving guidelines and changing environments that heavily impact student learning and wellbeing.

Education Leaders must rethink and optimize ways of finding, hiring, and retaining highly qualified educators in a time when fewer teachers are entering the job market and competition among districts is fierce.

Some major challenges that educators face today are:

1. Dealing with new challenges and changing guidelines in remote learning, in-class learning, and working with children affected by new levels and forms of stress as their parents struggle to successfully navigate pandemic lockdowns and job losses.
2. Teachers retiring at an increased rate and earlier than planned — in a study conducted by the California State Teachers' Retirement System, the number of retirements in the second half of 2020 increased by 26% over the same period in the previous year, and 62% of retirees surveyed claimed that they retired earlier than planned.<sup>1</sup>
3. A lack of substitute teachers to help cover classes during extended teacher absences — as reported by the Brookings Institution, some K-12 districts have less than a third of the substitute teachers they need.<sup>2</sup>

A future-oriented and holistic strategy based on the right technology can elevate your ability to successfully identify, hire, and develop top candidates despite these challenges. Now more than ever, the K-12 Institution must evolve to become an agile organization that is able to rapidly respond to change. IBM believes that the capabilities to respond to this dynamic and challenging environment are delivered through “Cognitive” reinvention. This means that the K-12 Institution undergoes a digital transformation journey fueled by data and smart processes, built on a culture of agile innovation, and delivered on secure, hybrid cloud applications and infrastructure.

# K-12 Education with Cognitive Reinvention

## Evolution of Cognitive Solutions for Administrators, Faculty, and Students

K-12 Education Institutions are undergoing a major transformation from the digital age to a new era of human experience and thoughtful design which is powered by artificial intelligence, robotic process automation, and insightful analytics. This Cognitive reinvention will help Institutions create more valuable and personalized services for students and employees. To remain competitive, these learning organizations are rapidly adopting the necessary change by adding new skills to their existing talent, discovering new talent pools, and integrating the technology capabilities needed to empower their people and processes.

While attracting, retaining, and developing its faculty, staff, and administrators is essential, the K-12 Institution must also keep pace with Cognitive solutions focused on the student. Cognitive solutions, like IBM Watson, are being used to address the critical needs of student engagement and personalization, academic discovery, and teacher advising. IBM integrates these solutions with existing systems and operations to provide Institutions and organizations with reinvented **Intelligent Workflows** that enable more efficient and confident decision-making, amplifying the value that each member of the organization is able to contribute and thus creating more meaningful and impactful experiences for teachers and students.

There are three important things for Education Leaders to know about this new era of reinvention and its impact.

1. These new systems will permeate many different parts of the economy and education ecosystems, which will both create higher service expectations among constituents and change the way young minds are taught.
2. Institutions will need to be more proactive and develop the data foundations necessary today to enable the new Cognitive systems of tomorrow. This will allow a more holistic and effective technological approach across the organization.
3. These systems will transform how outcomes are enabled. Institutions will be better equipped to improve learning outcomes and align to career needs. This will foster economic vitality and become more important within the Institution's region.

## The Shift to a Cognitive Enterprise

To meet its organizational goals in this new era of business reinvention, the Education Institution must shift to become a **Cognitive Enterprise**. This shift radically changes how Institutions and organizations create, deliver, and capture value. The Institution's capacity to enable the best possible learning outcomes for students and empower a thriving workforce to deliver those outcomes will depend on how well the organization can align and grow the layers of a new Cognitive Enterprise, as mapped out by IBM below.

<b>Market-making Business Platforms</b>	Internal strategic platforms	Internal enabling platforms	Industry platforms	Cross-industry platforms		An ecosystem of business platforms
<b>Intelligent Workflows</b>	Customer and Innovation workflows	Finance and Operations workflows	Talent workflows	Industry workflows		activated by intelligent workflows
	Artificial intelligence	Blockchain	Automation	Internet of Things	5G	made possible with exponential technologies
	Proprietary data	Licensed data	Public data			that are fueled by data
	Custom applications	Legacy applications	API enabled applications	Cloud native applications	Digital applications	using next-generation applications
	Public cloud	Private cloud	On-premise	Security		on an open and secure hybrid multicloud infrastructure
<b>Enterprise Experience and Humanity</b>	Culture	Skills	Ways of working	Experience		powered by culture of agile innovation
<b>IBM Garage</b>	Co create	Co execute	Co operate			delivered through the IBM Garage

Figure 1: The Capability Layers of the Cognitive Enterprise

To survive in a highly competitive landscape, K-12 Education Institutions must modernize their educational offerings and develop flexible learning paths to effectively define, monitor, and report on student progress. The changes in the market demand a fresh focus on how administrators, faculty, and students are engaged by these new technological innovations and the degree of personalization those stakeholders experience. Attracting and retaining highly skilled and specialized resources is critical to the long-term success of these Institutions and their ecosystems.

IBM and Oracle Cloud applications provide robust, integrated solutions for K-12 Education Institutions. The needs of administrators, faculty, students, and staff can be met with a broad and deep portfolio of applications. These applications can:



Figure 2: The Value of the Cognitive Enterprise in Education

## Talent Management in a Cognitive Enterprise

A typical employee lifecycle at a K-12 Education Institution begins by attracting the right talent into the organization. With the advancement of technology and ready-access to information, there are multiple methods for enabling a complete, seamless, and personalized employee experience. IBM and Oracle have partnered to deliver solutions with value that span across the entire employee lifecycle.

Today’s top talent expects their jobs to provide them with the same experience they enjoy in their consumer and social space.

To succeed in this level of experience, every organization needs to engage with their talent continuously throughout the employee lifecycle, actively developing and growing these individuals. This can be especially challenging in a high-demand, high turn-over rate environment such as K-12 Education. A more thorough, thoughtful, and holistic approach to talent engagement will create a healthier workforce and boost the overall success of the organization and its ecosystem.

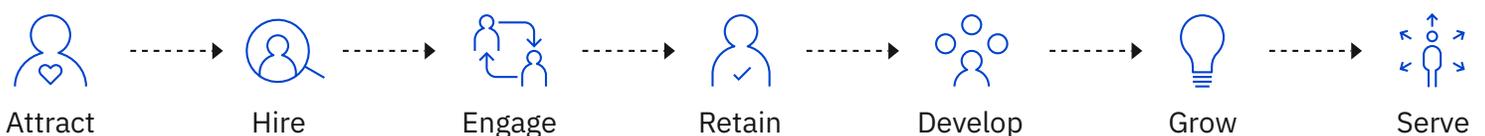


Figure 3: Typical Employee Lifecycle

## Retain Top Talent

Listen to them, survey them, make them realize by action that their opinion matters!



83% of surveyed employees said they would **participate in an employee listening program**.



Human Resources (HR) practitioners who use **multiple listening methods** rated their organizational performance and reputation 24% higher than those who do not.

Source: IBM Institute for Business Value, "Amplifying Employee Voice"

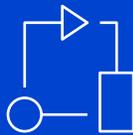
## Cloud at the Core

A flexible Cloud strategy is the pathway to enable the Cognitive Enterprise. That is why IBM specializes in hybrid Cloud offerings and services that allow Education Leaders to choose what applications fit into their architecture and how they want them deployed – on-premise or off-premise. Succeeding in this transformation will

require organizational commitment and foresight. K-12 Education Institutions will need to add more specialized HR-IT resources dedicated to designing their HR systems architecture, maintaining an HR technology roadmap, and managing the resulting new integrations and processes. The benefits of making the shift to Cloud, seen in the following image, are awaiting Institutions that can champion these new business operating models.



Lower application costs and improve ROI



Modernize and manage your applications



Adopt new ways of working and deliver innovation at scale

**Reasons to shift to the Cloud and start building your Cognitive Enterprise:**

“Our HR technology is old, difficult to use and lacking many features that provide a positive user experience.”

“We do not trust our HR data and are unable to gain insights from the data to help inform business decisions.”

“The current HR system is too costly to run and support, considering the little value we are able to derive from it.”<sup>3</sup>

**Is it time for your organization to move to the Cloud?**

Find out how and why you should start this journey today with IBM’s Cloud Impact Assessment for Oracle. We have prepared impact assessments that provide an automated, detailed analysis of what you can expect from moving your specific Oracle applications to the Cloud, including a view of the business case and return-on-investment for such a transformative move. Learn more in our Cloud Impact Assessment e-book, [here](#).

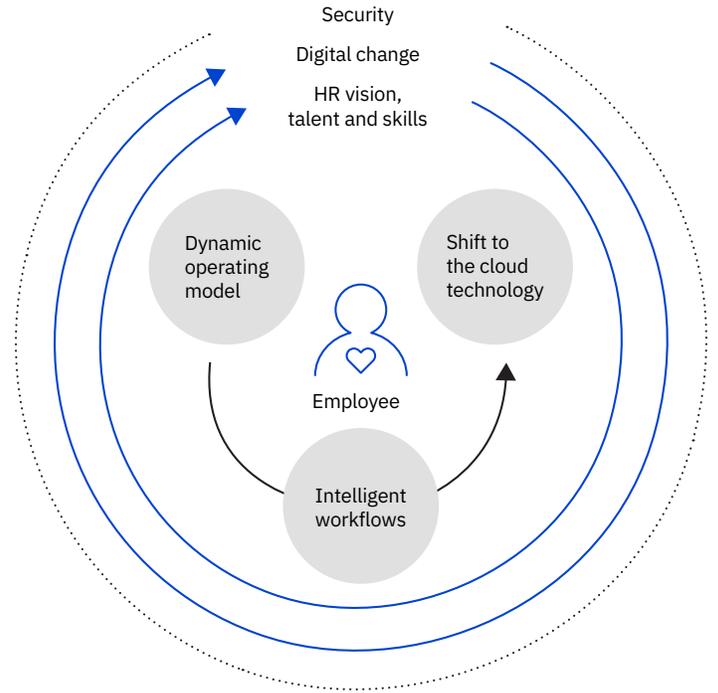


Figure 4: IBM Cloud Design to Amplify the Employee Experience

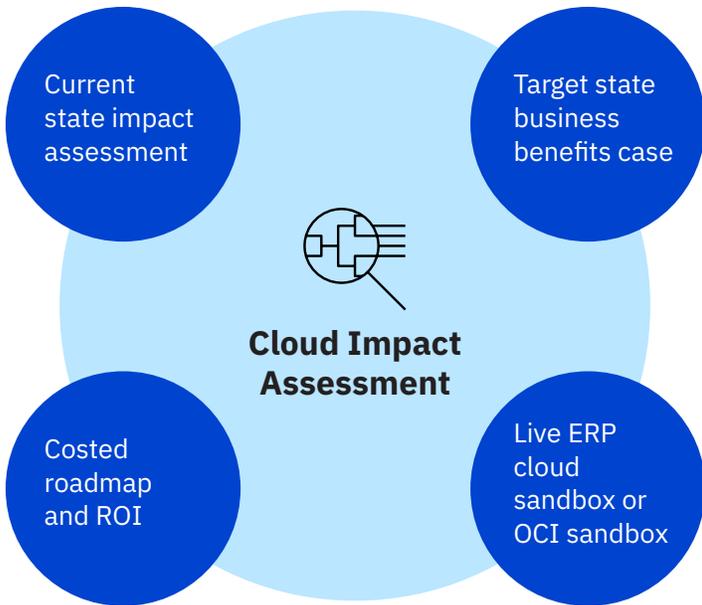


Figure 5: IBM Cloud Impact Assessment Toolkit

# Today's Challenges in Human Capital Management

## The Pandemic Effect

According to most employees, right now is the most stressful time of their career. Institutions and businesses are facing many challenges — a global health crisis, uncertain economic conditions, evolving government mandates, a growing skills gap, and changing employee expectations. The burden of these challenges is felt everyday by the workforce. Many employees are still balancing their children's schooling needs, needs of elderly relatives, and coordinating vaccination compliance. Companies with an agile and resilient workforce as their cornerstone are poised to lead the way.<sup>4</sup>

## Establishing a Virtual Connection

According to Gartner research, only 32% of employees that were hired in the past twelve months feel a sense of belonging to their organization.<sup>5</sup> The biggest challenge with the shift to a more remote workplace is not productivity as some may have thought but instead the most daunting challenge is sustaining and growing organizational culture.<sup>5</sup> Due to the mounting demands that employees face in their professional and personal lives, the virtual workplace will need to be extended until the world is healthy again and some semblance of certainty is achieved. This lack of direct connection will be felt most by the new job seekers who have never interacted with a given organization. This challenge is in direct conflict with the need to communicate intimately with every job seeker. Reimagining the onboarding process in a completely digital world should be a top priority, and software integrators like IBM hold the tools and expertise to guide Education Institutions through that reinvention.

## Maintaining a Healthy Environment

We have witnessed the damage health emergencies can do to our organizations and our communities. The challenges the recent pandemic has presented will continue and K-12 Institutions must pro-actively adopt the tools and policies which will reduce the harmful impact of such emergencies. A complete return to the workplace is not imaginable without an organizational ability to identify individuals that have been exposed to a virus and, similarly, to trace which individuals may have come into contact with infected persons.

“To effectively contain the spread of COVID-19, the public and private sectors need an effective hybrid approach that emphasizes privacy and empathy and uses technology to scale with agility.”

—Lynne A. Dunbrack

(Group Vice President, International Data Corporation Health Insights)

[IBM Services for Contact Tracing](#) offers the K-12 Institution the ability to identify and mitigate virus transmission in a way that is comfortable to its unique workforce and is intelligently powered by technology. Privacy and empathy are the major challenges of initiating such programs and IBM successfully delivers both through the decentralized [Digital Health Pass](#) technology. IBM will partner with Institutions and co-create their contact tracing system including communications programs, contact tracing dashboards, case management, mobile-apps, onboarding, training, and virtual contact centers powered by Artificial Intelligence. IBM is best-suited to help the K-12 Education Institution build, from the ground up, the strategic approach and technology it needs to withstand another health crisis.

## Privacy and Security

Data privacy and security challenges are more imperative now than ever. This is not only because the pandemic has pushed more activity online and thus created more opportunities for privacy and security failures, but also the behaviors and expectations of consumers and talent pools are evolving with the times. Employees expect interactions with their organization's technology to be on par with their experiences in their personal lives as consumers. This heightened degree of service and seamless experience brings with it heightened risk and vulnerabilities.

We are witnessing a dynamic time for state and federal regulations on data privacy and security, and Education Institutions are adding an increasing number of third-party systems that further complicate the lines of responsibility for data.<sup>6</sup> Such third-party vulnerabilities were the cause of “the largest and most sophisticated” cyber-attack in our history.<sup>7</sup> It is paramount that data privacy and security have a prominent focus in any technology strategy for a K-12 Education Institution. IBM strongly recommends working closely with a market-leading data privacy and security consultant. [Learn more and speak with a consultant today.](#)

## Talent Management Challenges in K-12 Education

The greatest challenge facing K-12 Institutions right now is simply finding and retaining high-quality teachers. The job is becoming more difficult and the other challenges we have seen this past year have only exacerbated this issue.

“There is a skills crisis about to hit us in this country, actually it’s about to hit us globally. Research has shown there are potentially 85 million jobs that will go unfilled over the next ten years because we don’t have enough people trained in some of the areas where future jobs will emerge.”

“You’re going to see more hiring based on ability to learn and willingness to learn as opposed to just a degree.”

— **Deanna Mulligan**

(Author of “Hire Purpose: How Smart Companies Can Close the Skills Gap”, former CEO of The Guardian Life Insurance Company of America, Fortune’s 2019 “50 Most Powerful Women in Business”)

Gartner listed three pressing challenges facing organizations in their recent “HR Leaders Monthly” magazine:

1. Building a connection with employees and supporting their development and wellness (mental health and psychological safety).
2. Maximizing employee performance and productivity.
3. Enabling agile and resilient workforce planning.<sup>8</sup>

All three of these challenges are escalated by the cumulative effects of the COVID-19 pandemic. Organizations must realize that employees are more than just that, and a more holistic technology investment is a critical path to deriving value from that realization. Tools like voice-of-the-employee (VoE) and learning experience platforms (LEPs) are going to form the bedrock of the new human-centric HR operation. The hybrid, flexible work practices we have adopted during the pandemic may be here to stay, so performance and productivity management must be reimagined and conducted in an empathetic way. Education Institutions need to establish platforms that can connect to the “gig economy” to supplement their hiring and allow HR operations to respond more effectively and efficiently to workforce demands. The same can be said regarding the untapped value in the internal talent marketplace. This pandemic crisis has shaken the country and the Industry, but by rising to meet those challenges K-12 Education Institutions can emerge stronger, smarter, and better prepared for the future.

# Talent Acquisition Optimization

Talent Acquisition with IBM combines business strategy with intelligent design. Our solutions and services empower K-12 Institutions to amplify human potential through the intentional use of data and technology. Education Leaders can reinvent their talent acquisition operation with data-rich, AI-powered **Intelligent Workflows** to increase quality-of-hire while reducing costs. Intelligent Workflows are predictive, automated, agile, and transparent. This

transparency keeps Education Leaders aware of the skills gap across their organizations and gives them insight into HR functions and performance, revealing opportunities to integrate new cost-controlling technologies. Cognitive talent acquisition technologies, such as those provided by IBM and Oracle, equip K-12 HR operations with the tools to get ahead of teacher shortages and quickly fill positions with top-tier talent. With this data-driven model of predictable hiring, hiring goals will remain on-track and aligned with organizational needs which elevates the impact of talent acquisition across or throughout the whole organization.

## Oracle Talent Acquisition Cloud + IBM Watson

Traditional		Intelligent Workflow AI-powered
<p><b>Passive</b> — Brand is determined by unmanaged social media chatter</p>	<p>← <b>Employment brand</b> →</p>	<p><b>Proactive</b> — Real-time insights allow strategic brand management and targeted campaigns</p>
<p><b>Random</b> — Openings are scattered across job boards in hopes of capturing the attention of relevant candidates</p>	<p>← <b>Talent sourcing</b> →</p>	<p><b>Targeted</b> — Job openings are directed to talent most likely to be interested, both active and passive candidates</p>
<p><b>Inconsistent</b> — General resume filtering and subjective interviews lead to unclear determination of candidate fit</p>	<p>← <b>Candidate selection</b> →</p>	<p><b>Predictive</b> — Best fit candidates are surfaced quickly and assessed against success profiles to ensure quality hires</p>
<p><b>Standardized</b> — Generic offers lead to back and forth negotiations or disregard candidate-specific preferences</p>	<p>← <b>Hiring and onboarding</b> →</p>	<p><b>Personalized</b> — Salary and other offer details are tailored to candidate to maximize chances of offer acceptance</p>

Figure 6: IBM and Oracle Intelligent Workflow Solutions

## IBM Watson Recruitment

IBM Watson Recruitment is helping enhance the future of talent acquisition by applying intelligent insights in to the recruiting process. IBM Watson interacts with recruiters using natural language to indicate which candidates should be high priority, and why. With the ability to learn from internal and external data, IBM Watson helps identify and recommend the best candidates—and those most likely to remain with your organization—for virtually any job. Plus, IBM Watson learns from feedback on new hires and turnover, providing ongoing support for more effective talent recruitment. The solution uses descriptive, predictive, and prescriptive analytics to support the end-to-end recruitment lifecycle.

### Using workload prioritization to help fill positions faster:

IBM Watson Recruitment helps recruiters focus their efforts on job requisitions that need the most attention, reducing overall time to fill positions and helping to ensure that recruiting pipelines move forward as quickly as possible. The solution uses supervised machine learning and a rules-based engine to allow recruiters to identify and prioritize hard-to-fill roles, and a dynamic visualization tool to help them interact with hiring data for further insights required to fulfill more complex hiring requests. These capabilities become all the more crucial against the backdrop of teacher shortages and an increasingly competitive market.

### Helping better predict candidate success in job openings:

Using historical success profiles, IBM Watson Recruitment helps you find best-fit candidates—based on skills, experience, and expertise—from thousands of resumes. This helps ensure that each requisition is filled with top-quality hires. Using supervised machine learning, predictive hiring and analytics, natural language processing and semantic text matching, the solution helps provide:

- Better candidates and job matching.
- Faster identification of top talent among candidate pools.
- Greater insight into what generates long-term, successful hires.
- The ability to harness data from multiple sources.

“One area that differentiates IBM is how Watson can be used to drive true cognitive automation across the entire talent acquisition process. The new cognitive innovation from IBM has the potential to change the face of recruiting for the future.”

—Mike Cook

(HRO & Security Research Director of HFS Research)

## Oracle and Recruiting

Shifts in the talent marketplace, including those brought about by the COVID-19 pandemic have coalesced with technology and sparked a movement that goes beyond traditional hiring practices to provide experiences that resonate with candidates.

Oracle recruiting and candidate relationship management solutions enable employers to put the candidate experience at the center of the recruiting process by leveraging innovative technologies such as chatbots and a modern, mobile-friendly User Interface (UI).

Oracle engages candidates from multiple platforms. Whether they are applying via mobile device, tablet, or computer the experience is personalized and engaging. Candidates can even “chat” with a friendly assistant that can immediately answer their questions or even help them to find matching jobs they can apply to.

The recruiter experience leverages AI to identify high quality matches allowing recruiters to quickly respond and initiate relationships with top candidates.

By expediting the candidate selection process and guiding applicants to explore additional opportunities that are a match to their skills and background, organizations ensure improved job-fits, happier hires, and less turn-over.

In addition to the personalized user experiences, Oracle enables employers to track and measure complete information about their talent across the HR spectrum. With the use of predictive analytics, recruiting teams have access to actionable, real-time data that can driving insights into hiring processes such as where hiring bottlenecks occur, successful sourcing channels, and developing relevant learning content during onboarding.

“We designed Oracle Recruiting to deliver an exceptional candidate experience, enable recruitment marketing, drive internal mobility, and leverage the latest technologies, all natively within Oracle Cloud HCM.”

—Nagaraj Nadendla

Senior Vice President of Product Development at Oracle

# Transforming the Job Seeker Experience

Job seekers may be the latest round of ambitious graduates that have yet to find out about the opportunities at a K-12 Institution, they may be the veteran employee whose value has been relied on for years and who is looking for a change to reignite their career, or they may be anywhere in the middle of their journey. IBM knows that for Education Institutions to be leaders in their industry and attract and retain top-tier talent, they must provide job seekers with the high-quality experiences that these potential hires have been conditioned into expecting through their experiences as consumers.

## Amplifying the Experience: Understanding Chatbots

A global 2017 Human Resources (HR) survey, conducted by the IBM Institute for Business Value in collaboration with the IBM Smarter Workforce Institute, found 55 percent of CHROs expected cognitive computing and artificial intelligence (AI) to be a disruptive force in HR. CEOs see the transformative impact as well; 66 percent agree that cognitive technology will drive significant value in HR within three years.

For many organizations, it is a challenge to decide where to begin the Cognitive journey. The conversational enterprise chatbot gets organizations over that hurdle. A chatbot is an automated program designed to answer user questions via text or chat interface. Chatbots today run the gamut from rudimentary, menu-driven solutions to sophisticated, cognitive-enabled tools that can interpret the nuances of human language patterns. When designed correctly, a chatbot can powerfully engage its audience by providing useful information in natural, conversational dialogue.

Chatbots amplify the digital reinvention of HR by establishing new user-centric standards for employee experience and enablement, resulting in:

- Higher levels of engagement from enhanced self-service and consumer grade, user-centric enterprise applications.
- A more agile and adaptive workforce empowered with enterprise-wide expertise.
- Modern knowledge management that centralizes information access and focuses on continuous refreshing.

The return on investment (ROI) for an enterprise chatbot is expected to be rapidly realized by reducing dependence on the HR call center. Other longer-term benefits include reduced attrition, accelerated employee development, and a higher employee net promoter score (NPS) resulting in stronger employment brand reputation in the marketplace.

Given the extent of digital engagement in everyday life, today's workforce expects to embrace comparable digital HR capabilities in the workplace. Of the 8,600 employees in the 2017 HR survey, 62 percent would choose to reuse a cognitive enabled tool like a chatbot to support personal HR decision-making. Of course, when it comes to asking for information from a chatbot or human, what matters most are the results. There are three key principles to keep in mind when deploying a chatbot for the enterprise:

- **Meet employees where they are.** To make a chatbot accessible, deploy it where employees are already working and interacting. For example, a chatbot that answers questions about travel policy obviously provides the most value when embedded in the enterprise travel site. If your organization uses an enterprise messaging platform like Slack, give your chatbot its own identity within the platform so employees can message it directly whenever they need information.
- **Get the conversation right.** Conversation design takes deliberate effort. Work with targeted users to understand their intent and verify that the chatbot is providing accurate responses. Design a personality that engages employees and encourages continued use. Humanize the experience by adding “chit-chat” greetings and salutations that are personable and return funny responses to off-topic questions.
- **Demonstrate learning.** Chatbots must reliably and consistently perform their core function. This is how trust is generated with users, and it is what builds a reputation for the chatbot that keeps people coming back. Collect employee feedback, evaluate responses, and commit to making the chatbot better. By employing AI, machine learning, and other cognitive capabilities, the chatbot can become smarter over time.

# IBM Watson Candidate Assistant

IBM Watson Candidate Assistant is an Artificial Intelligence (AI) and cognitive talent management solution that engages job seekers in personalized discussions and recommends positions that fit their skills and experiences to help them find a job in which they can thrive and grow. This builds trust and confidence at the start of the relationship with the job seeker and sets up both parties for future success by contextualizing the experience to an individual's unique profile, placing the job seeker at the center of their own journey. This modern approach, focused on the Employee Experience (EX), avoids costly hiring shortcomings, and creates a motivated, tailored workforce that is ready to return the value invested in them and to contribute to the success of your organization.

**IBM Watson Candidate Assistant has won:**

- Ventana Research 2018 Digital Innovation Award
- Human Resource Executive Top HR Product 2018

Welcome. I am here to help you explore careers with us. What types of jobs are you looking for? Here are a few examples of what I can help you search for:

- Find research jobs**
- How is the work life balance?**
- What's life like at this school district?**

I can also recommend jobs that match you. To try this you can tell me:

- Upload my resume**

What would you like to do?

Type here

Figure 7: IBM Watson Candidate Interface

Upload my resume

Ok, do you want to upload or paste your resume?

**My-Resume . pdf** uploaded

Based on your resume, it looks like you would be interested in these jobs. I also added filters for the following:

While you explore, feel free to ask me any questions you may have about our district. For example: **Tell me about career development**

You can also ask **what can you do?** at any time to see my list of capabilities.

Type here

## Jobs

Learn about job matching

CITY: All CATEGORY: Multiple TYPE: All SORT BY: Best Match

Communications X Human Resources X Project Executive X Clear

Showing 25 of 1488 total jobs

- Multiple Cities **Innovation Hub Leader** Full-Time Medium Match Explore your matching skills
- Multiple Cities **VP, Professional Services** Full-Time Medium Match Explore your matching skills
- Remote **Human Resources Co-op/Intern** Internship Medium Match Explore your matching skills

Figure 8: IBM Watson Candidate Dashboard

# Talent Development

K-12 Education Institutions are recognizing a major skills crisis looming ahead as they struggle to not only fill positions with skilled people, but also upskilling their existing workforce to ensure they remain current with the changing landscape of the modern economy. Employee wellness is another important factor in addressing the workforce shortage which we have discussed and getting the best results out of an existing workforce. The key to wellness in Education is engagement, as defined by Gallup, and higher engagement can lead to lower turnover rates, decreased absenteeism, and higher productivity from employees.<sup>9</sup> The technology platforms available to a workforce greatly affect how engaged employees can be. Modern workforce management and learning platforms offer personalized experiences that reflect and integrate with the lives of their users.

Learning delivery has evolved to digital platforms that provide consumer grade learning experiences along with the flexibility to scale. Coupled with Cognitive tools and AI, learning management delivers bite-sized content to help learn and adapt to newer technological advances in their daily tasks.

Upskilling your existing workforce is directly connected to Talent Management. As more and more Gen Y and Gen Z employees join K-12 Institutions, the need to manage talent with effective career development and succession planning becomes more essential for continued success. Allowing people to define their individual goals and track their performance provides valuable insight into current performance levels and predicting their growth in the company.

“The talent you’re seeking is right there in front of you. You just need to develop it.”

— **Deanna Mulligan**

(Author of “Hire Purpose: How Smart Companies Can Close the Skills Gap”, former CEO of The Guardian Life Insurance Company of America, Fortune’s 2019 “50 Most Powerful Women in Business”)

## Cognitive-driven and Personalized Learning

IBM encourages K-12 Education Institutions to identify the skills that are currently in the organization and then enhance and enrich the employee experience through AI-enabled methodologies that allow accurate data to drive future talent development strategies. This approach is expected to yield up to four times increase in learning consumption.<sup>10</sup> Digital credential badges keep the workforce engaged and provide visible and verifiable evidence of acquired skills. IBM has experience awarding employees with over three and half million badges.<sup>10</sup>

Employee-centric talent development platforms like [CrowdSift](#) can help K-12 Education Institutions get the most out of the talent that they already have in their buildings. This integrated experience platform uses cognitive processes to offer personalized recommendations for employees to enhance their skills. CrowdSift goes a step further and connects professionals across the organization based on common interests, allowing them to engage with each other through discussions, collaboration, and knowledge-sharing.



Figure 9: CrowdSift Cognitive Workforce Development Platform

## Oracle Journeys

People expect their experiences with technology to reflect and support their own uniqueness. Personalization and automation come together in Oracle Journeys to go beyond just managing life events and focus on supporting a great work-life experience for the employee. This is an excellent example of technology being used to empower the employee, driving engagement and improving overall workforce wellness. Oracle Journeys utilizes AI to provide guidance and support within seamless context of what is going on in the life of the user. This workforce support platform shows the user what they need when they need it.

Oracle Journeys is configured and managed by an easy-to-use API-based platform that transforms the K-12 HR team into an innovation center through a modern, intuitive, and media-rich interface. The platform transfers seamlessly into mobile and integrates with Microsoft Teams. Oracle Journeys can support an employee through finding elderly and dependent care, returning to work safely after a pandemic, managing expenses, finding gigs to grow their career, and even launching new products.

 <p>Manage expenses, reorganize the workforce, prepare for the new fiscal year</p>	 <p>Launch new products, plan for an acquisition, open a new building</p>	 <p>Find dependent and elderly care for the family, return to work safely, manage well-being</p>	 <p>Discover gigs, grow careers, get started with global work</p>
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# Stories of Success

## Finding Top Talent with IBM

A nationally acclaimed independent school district located in the heart of Texas is widely considered one of the best urban school districts in the country. Their award-winning schools have seen consistent gains in student achievement and college-ready graduates. This leading Education Institution is committed to the success of every child in their district and while they were pleased with their past successes, they knew in order to continue to stay on top and excel they needed a more efficient way to staff teachers.

This leading Education Institution was finding it difficult to continue to maintain their existing hiring levels and knew they would not be able to keep pace with the future. It is common to receive several hundred applicants on a single position: literally looking for the needle in the proverbial haystack. They recognized that their existing manual and duplicative processes needed to be automated so hiring teams could focus on strategic hiring practices.

IBM recommended a flexible Talent Acquisition Solution with a cognitive (AI) component that could streamline processes and quickly identify high quality submissions based on the school district's criteria. The solution was just what A Texas independent school district was looking for.

IBM worked with district leaders and guided them through the implementation. Taking advantage of the cognitive functionality required identifying what a successful hire looks like. Fortunately, the Texas independent school district had this data ready which greatly enhanced our ability to quickly go-live with the new functionality.

The result is this leading Education Institution has a system that enables strategic objectives by identifying and ranking highly qualified candidates, allowing recruiters to focus on those individuals rather than randomly wade through hundreds of applicants hoping to find the right ones. Quality of hire increases while time to hire decreases.

### A Nationally Acclaimed Texas Independent School District

2nd largest public school district in Texas, and 16th largest in the nation.

Over 150,000 students, over 10,000 teachers.

- Better candidate experiences led to higher Net Promoter Scores (+23 over 6 months after go-live).
- 38% increase in job acceptance with effective communication tools.
- Accelerated Time-to-Hire and improved Quality-of-Hire.

## Process Optimization with IBM and Oracle, Powering Through a Pandemic

This Texas independent school district prides itself on being a district of innovation. They exist to “inspire and equip all students to pursue futures beyond what they can imagine.” To execute this mission, this leading Education Institution knew that they had to equip themselves with the next generation of talent acquisition technology which would transform their hiring experience, amplify their human impact, and accelerate their Human Resources processes. Their market is growing quickly, and so are the demands of their end-consumers and thus the demand for hiring. With exponential growth on the horizon, the client’s talent acquisition team realized it needed to ensure its recruiting process partner could support that growth while containing costs.

What this school district needed was a true partner to work alongside them throughout the talent acquisition transformation journey. Through co-creation, co-execution, and agile methodology that integrates key decision-makers and stakeholders at every step, IBM was able to become that partner for this Education Institution. This journey started with an IBM-led assessment to identify the expected level of effort, timelines, and cost. IBM earned the district’s trust through displaying experience and knowledge, empathy, and confidence. After a six-month implementation, IBM is confident that this school district will immediately begin to realize the full value potential of the Oracle Talent Acquisition Cloud product due to the holistic approach taken from start to finish in order to create a solution that is truly designed with the entire organization in mind. The keys to success were that the project started off by setting clearly-defined expectations and that the client’s requirements and unique processes were always at center stage.

Talent Acquisition with IBM and Oracle allows this nationally acclaimed school district to achieve true operational agility and address the high variability that is inherent in a school district’s hiring process. The candidate and hiring manager experiences are improved by automated workflows, fewer person-to-person handoffs, and more user-friendly interfaces. The time that a candidate is in process was significantly reduced, and the offer process was digitized. Each recruiting team member can now access a custom dashboard with real-time insights into requisition status and workload.

Modernizing your entire hiring process and shifting to Cloud can be a daunting task during the best of times. This Education Institution powered through this transformation in the middle of a generational pandemic and a natural disaster that left many of their team members without electricity. The organization’s perseverance and determination during these trials cannot be overstated. IBM and this K-12 school district worked together through virtual collaboration to complete the implementation and train end-users on the new system. These obstacles could not have been overcome if it were not for the excellent communication during the early stages of the engagement and throughout the project. IBM seeks to build such persevering and resilient partnerships on all engagements, regardless of pandemics and disasters.

### **A Nationally Acclaimed Texas Independent School District**

8th largest public school district in Texas, and  
one of the most diverse in the nation.

Over 77,000 students, over 11,000 full-time  
employees and substitutes.

# Why IBM?

IBM is one of Oracle's largest and most experienced systems integration partners jointly helping customers for over 35 years:



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2019 Oracle Excellence Award for  
North America Oracle HCM Cloud Partner of the Year  
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Oracle Cloud Garage

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