

The Pervasive Challenge: Functional Illiteracy in North America and its Profound Impact on Business

1. Executive Summary

Functional illiteracy represents a significant, yet often underestimated, challenge across North America, profoundly affecting both individual potential and economic prosperity. This report defines functional illiteracy not merely as the inability to read or write, but as the struggle to apply literacy skills in everyday life and work, encompassing comprehension, critical thinking, and numerical abilities. Data reveals that a substantial portion of the adult population in the United States, Canada, and Mexico exhibits low functional literacy levels, translating into widespread implications for businesses. The economic burden is immense, manifested through reduced workforce productivity, increased operational costs, hindrances to innovation, compromised safety, and broader macroeconomic losses. Addressing functional illiteracy is therefore not merely a social responsibility but a critical strategic imperative for businesses seeking to enhance competitiveness, foster innovation, and ensure long-term sustainability in an increasingly complex and information-driven global economy. Proactive internal strategies coupled with external collaborations are essential to mitigate the current impacts and cultivate a more skilled and adaptable workforce.

2. Understanding Functional Illiteracy: Definitions and Measurement

Establishing a clear understanding of functional illiteracy is foundational to appreciating its widespread implications. It is distinct from general illiteracy, which denotes a complete inability to read or write. Functional illiteracy, by contrast, refers to the "lack of reading, writing, and calculating skills needed for everyday life and work". This signifies an "inability to engage in tasks requiring reading, writing, and numerical skills beyond a basic level". Individuals categorized as functionally illiterate may possess rudimentary decoding skills, allowing them to read words, but they struggle significantly with comprehension, critical thinking, and the practical application of information in real-world contexts. The concept of literacy is best understood as a "continuum", where functional illiteracy occupies the lower end. This position indicates a struggle with tasks that demand more than elementary reading abilities. It specifically refers to the "ability to understand and use written information in daily activities". The Organisation for Economic Co-operation and Development (OECD) provides a comprehensive definition, characterizing functional illiteracy as lacking the skills to "understand, evaluate, use, and engage with written texts to participate in society, achieve one's goals, and develop one's knowledge and potential". This broad definition underscores the far-reaching societal and economic consequences that extend beyond individual limitations.

Functional illiteracy often remains less visible than absolute illiteracy because individuals can frequently mask their difficulties in basic interactions. This characteristic contributes to its underestimation by businesses and policymakers. When the root cause of productivity issues, ineffective training outcomes, or safety risks is not readily apparent, it can lead to misdiagnosed problems and the implementation of ineffective solutions. Businesses may not fully recognize the extent of this challenge within their workforce, leading to a persistent drain on resources and potential liabilities that go unaddressed.

Furthermore, the definitions of functional illiteracy consistently highlight the need for skills beyond basic decoding, such as "calculating skills," "understanding and using written information," "evaluating," and "engaging with written texts". In a rapidly evolving, information-driven economy, modern jobs increasingly demand critical thinking, problem-solving, and digital proficiency, all of which are predicated on strong foundational literacy skills. An individual who struggles to understand a complex instruction manual or evaluate information for decision-making faces severe limitations in a

contemporary workplace. This suggests that the impact of functional illiteracy is not static but is, in fact, growing. As jobs become more complex and technology-driven, the gap between required skills and actual literacy levels will inevitably widen, exacerbating business challenges related to workforce adaptability, innovation, and overall competitiveness.

Measurement methodologies for functional illiteracy typically involve standardized assessments, such as the Program for the International Assessment of Adult Competencies (PIAAC). These assessments categorize literacy levels, providing a framework for understanding the statistics presented in the subsequent sections. By understanding these definitions and measurement approaches, the scale and nature of the challenge become clearer, laying the groundwork for a detailed analysis of its impact.

3. Functional Illiteracy Landscape in North America: Key Statistics and Trends

The prevalence of functional illiteracy across North America presents a significant challenge to workforce development and economic growth. Data from the United States, Canada, and Mexico reveal a substantial portion of their adult populations struggling with low literacy skills.

In the **United States**, a considerable segment of the adult population exhibits low literacy proficiency. Approximately "54% of adults in the U.S. aged 16-74 — about 130 million people — lack proficiency in literacy beyond a sixth-grade level". This broad category indicates a substantial portion of the population that would encounter difficulties with typical workplace documents, forms, or instructions. More specifically, "21% of adults in the U.S. are functionally illiterate, meaning they read at or below a fifth-grade level". This translates to "43 million adults" who are categorized at Level 1 literacy according to the National Center for Education Statistics, signifying very basic or non-existent literacy skills required for everyday tasks.

Canada faces a comparable challenge, with "48% of Canadian adults aged 16-65 having low literacy skills (Levels 1 and 2)". Within this group, "17% are at Level 1 (functionally illiterate), and 31% are at Level 2". Individuals at Level 2 can manage simple, clearly laid out texts but encounter difficulties with more complex or abstract information, highlighting a significant segment of the workforce that, while not completely unable to function, will still face considerable challenges in a modern, complex work environment demanding adaptability and continuous learning.

In **Mexico**, while significant progress has been made in reducing general illiteracy, functional illiteracy remains a pressing concern. The general illiteracy rate was reported as "4.7% in 2020" or "6.9% in 2020". However, the functional illiteracy rate is considerably higher, estimated at "25% in 2020" and "28.7% in 2015". This distinction is critical: a large portion of the population, despite possessing basic reading and writing abilities, struggles with the functional application of those skills in daily life and work.

The data presented highlights a spectrum of literacy challenges. While "functional illiteracy" (Level 1) represents the most severe impediment, "low literacy" (Levels 1 and 2, or equivalent to below a 6th-grade level) encompasses a much larger group. Policymakers and businesses must recognize this continuum. Addressing only the most severe cases (Level 1) will leave a vast segment of the workforce (Level 2) underprepared for evolving job demands. Strategic interventions need to cater to both groups, focusing on foundational skills for Level 1 and advanced comprehension and application for Level 2, to maximize workforce potential and competitiveness.

Moreover, the statistics reveal that functional illiteracy is not solely a problem for developing economies like Mexico, but a significant issue in highly developed economies such as the U.S. and Canada. While the absolute illiteracy rates differ, the functional illiteracy rates are surprisingly high across all three,

indicating a systemic challenge that transcends economic development levels. This suggests that the contributing factors to functional illiteracy are complex and are not solely tied to access to basic schooling. Factors such as educational quality, changing skill demands in the labor market, language barriers, and socio-economic disparities likely play a significant role. For businesses, this means the problem is widespread and not confined to specific regions or demographics, necessitating a broad, systemic approach to workforce development rather than isolated interventions.

The following table summarizes the functional and low literacy rates across North America, providing a comparative overview of the challenge:

Table 1: Functional and Low Literacy Rates in North America (by Country)

Country	Functional Illiteracy Rate (Level 1)	Low Literacy Rate (Levels 1 & 2 / Below 6th Grade Equivalent)	Total Adult Population Affected (approx.)	Source/Year
United States	~21% (at/below 5th grade)	~54% (below 6th grade proficiency)	130 million (for low literacy)	ProLiteracy, NCES (various years)
Canada	~17%	~48%	Not specified in snippets	Statistics Canada (various years)
Mexico	~25-28.7%	Not specified in snippets	Not specified in snippets	INEGI (2015, 2020)

4. Economic and Business Impact of Functional Illiteracy

The pervasive nature of functional illiteracy has profound and multifaceted implications for businesses, extending from direct operational costs to broader macroeconomic consequences.

4.1. Workforce Productivity and Efficiency Losses

Functional illiteracy directly impedes worker performance, leading to "reduced productivity, increased errors, and higher accident rates". Employees with low literacy skills "take longer to complete tasks and make more errors", necessitating more supervision and rework. The cumulative effect of these inefficiencies is substantial: low literacy is estimated to cost U.S. businesses an estimated "\$225 billion annually in lost productivity". This significant cost stems from a workforce that struggles to understand instructions, operate machinery, or adapt to new processes. Beyond direct productivity, low literacy is also associated with "lower wages and higher unemployment rates", indicating a less engaged and less valuable workforce overall.

The impact of errors and rework creates a compounding effect. When employees make mistakes due to a lack of comprehension, it is not simply a linear loss of productivity. Errors often necessitate rework, additional quality control checks, and can potentially lead to scrap materials or customer dissatisfaction. Each error generates a ripple effect, consuming additional resources—such as time, materials, and supervisory attention—that could otherwise be directed towards productive output. This suggests that the reported \$225 billion annual cost is likely an underestimate of the true economic burden, as it may

not fully account for the cascading costs of errors, rework, increased supervision, and the intangible cost of damaged reputation or lost customer trust due to quality issues. Businesses must consider these hidden costs when assessing the full impact of low literacy.

Furthermore, functional illiteracy acts as a significant barrier to the adoption of modern operational strategies like lean methodologies and digital transformation. These initiatives, increasingly embraced by businesses to optimize efficiency, rely heavily on clear communication, data interpretation, strict process adherence, and continuous learning. A workforce with low literacy skills will struggle with understanding complex digital interfaces, interpreting performance metrics, following detailed standard operating procedures, or actively participating in problem-solving initiatives. Consequently, businesses attempting to implement these strategies without addressing underlying literacy gaps will face slower adoption rates, higher implementation costs, and diminished returns on their investments, ultimately impacting their long-term competitiveness.

4.2. Challenges in Recruitment, Training, and Employee Retention

Functional illiteracy severely "limits the available talent pool", making it increasingly difficult for businesses to find qualified candidates for both entry-level and skilled positions. This exacerbates existing labor shortages across various industries. For employees who are hired despite literacy challenges, "training costs increase significantly" because individuals with low literacy struggle to "understand instructions, safety protocols, and operational manuals". Training programs frequently need to be simplified, extended, or repeated, consuming valuable resources and time.

The problem extends beyond initial training to long-term workforce development. Difficulty in "upskilling or reskilling the workforce" leads to higher turnover rates and an inability to adapt to evolving job roles and technological advancements. This challenge is further compounded by the increasing need for digital literacy; employees with low foundational literacy will struggle to "adapt to new technologies and digital tools", further limiting their employability and growth potential within a company.

This situation creates a vicious cycle of talent shortage and training ineffectiveness. Functional illiteracy first restricts the available talent pool, compelling businesses to hire individuals who may possess lower literacy levels. Subsequently, these new hires require more extensive and costly training, which is often less effective because they struggle to understand instructions. This often leads to higher turnover as employees cannot meet job demands or become disengaged, perpetuating the talent shortage.

Businesses find themselves caught in a cycle of high recruitment costs, inefficient training investments, and persistent skill gaps. This not only drains financial resources but also frustrates human resources departments and operational managers, diverting focus from strategic initiatives to continuous efforts to meet basic workforce needs.

The issue is amplified by the accelerating pace of digital transformation. While traditional literacy has always been important, the struggle to "adapt to new technologies and digital tools" is becoming increasingly critical. Many modern workplaces are undergoing profound digital shifts, requiring employees to interact with software, data dashboards, and digital communication platforms. Functional illiteracy in reading and comprehension directly translates into digital illiteracy, as understanding on-screen instructions, error messages, or data visualizations fundamentally relies on foundational literacy skills. This means the problem of functional illiteracy is not static; it is becoming increasingly critical. As more jobs become digitized, the pool of truly "qualified" workers shrinks even further, and the cost of upskilling (or inability to upskill) the existing workforce grows exponentially. Businesses that do not address foundational literacy will find themselves unable to fully leverage technological advancements, falling behind competitors.

4.3. Implications for Innovation and Competitiveness

A workforce that struggles with basic comprehension inherently "hinders innovation and adaptability". Employees with low literacy are less likely to engage in critical thinking, problem-solving, or creative contributions that are essential drivers of innovation. This directly impacts a company's ability to remain "competitive in the global market", as they cannot quickly adopt new processes, technologies, or business models. The "limited adoption of new technologies and processes" due to a lack of understanding means businesses cannot fully capitalize on advancements that could improve efficiency or create new market opportunities.

Innovation and competitiveness in today's dynamic markets depend significantly on an organization's ability to learn, adapt, and respond quickly to change. This requires employees at all levels to understand new information, share knowledge effectively, and contribute to continuous improvement initiatives. If a significant portion of the workforce struggles to comprehend written materials, participate meaningfully in discussions, or interpret data, the collective organizational learning capacity is severely hampered. Businesses with a high prevalence of functional illiteracy will therefore be inherently less agile and slower to innovate. They will struggle to implement new strategies, absorb market feedback, or pivot in response to disruptions, ultimately risking market share loss to more adaptable competitors. This represents a long-term strategic threat, not merely an operational inefficiency.

4.4. Impact on Customer Service and Market Engagement

Functional illiteracy can also manifest in customer-facing roles, leading to "poor communication with customers". This can result in misunderstandings, reduced customer satisfaction, and ultimately, damage to brand reputation. Furthermore, customers themselves with low literacy may encounter "difficulty understanding product information, contracts, or service agreements", creating barriers to sales and potentially leading to legal issues or disputes. This can inadvertently limit market reach for certain products or services, especially those requiring detailed understanding of terms and conditions.

The implications for brand reputation are significant. While the direct impact focuses on "poor communication" leading to "reduced customer satisfaction", the broader consequence is substantial reputational risk. In an age of instant online reviews and pervasive social media, a single negative customer experience stemming from an employee's inability to comprehend or articulate information clearly can rapidly escalate. This can foster a perception of unprofessionalism or incompetence, gradually eroding brand trust. The cost of functional illiteracy in customer-facing roles extends beyond lost sales to the intangible but critical value of brand equity. Companies may find themselves spending more on marketing and public relations to counteract negative perceptions stemming from basic communication failures, rather than investing in the foundational skills of their frontline staff.

4.5. Safety, Compliance, and Operational Risks

Functional illiteracy significantly contributes to "higher accident rates and workplace injuries" because employees may not be able to "understand safety manuals, warning labels, or regulatory compliance documents". This direct correlation between comprehension and safety poses a serious risk to employee well-being and business continuity. It also leads to "compliance issues and potential legal liabilities" as businesses struggle to ensure their workforce adheres to complex regulations and industry standards.

Specific industries are particularly vulnerable to these risks. For instance, "errors in healthcare due to misreading patient charts or medication instructions" can have life-threatening consequences. Similarly,

"safety incidents in manufacturing due to inability to follow equipment manuals" highlight critical operational risks that can lead to equipment damage, production halts, and severe injuries.

The link between functional illiteracy and safety/compliance failures is not just about operational inefficiency; it carries profound human and financial costs. Accidents lead to worker injuries, resulting in medical expenses, lost workdays, and potential disability claims. They also trigger investigations, fines, and reputational damage. Non-compliance, on the other hand, can result in legal action, severe regulatory penalties, and in extreme cases, even business closure. For businesses, especially in high-risk sectors like manufacturing or healthcare, addressing functional illiteracy is not merely a productivity concern but a critical risk management imperative. The potential costs of a single major safety incident or compliance breach can far outweigh any investment in literacy programs, making it a strategic priority for operational resilience and legal protection.

4.6. Broader Economic Costs and Societal Burden

The impact of functional illiteracy extends far beyond individual businesses, imposing a substantial burden on the national economy. The "U.S. economy loses an estimated \$2.2 trillion annually due to low literacy rates". This staggering figure encompasses not only lost productivity but also reduced tax revenue, increased healthcare costs, and higher social welfare expenditures due to unemployment and underemployment. In Canada, the cost is estimated at "\$32 billion annually". Globally, the economic cost of illiteracy is even more immense, reaching "\$1.19 trillion". These figures underscore that functional illiteracy is a systemic societal problem with profound macroeconomic consequences, directly affecting GDP growth and national competitiveness.

The massive economic costs cited demonstrate that functional illiteracy is not merely a micro-level business challenge but a macro-economic impediment. These figures represent lost human potential, reduced innovation capacity, and a less competitive national workforce. It impacts tax bases, strains social welfare systems (due to higher unemployment and increased healthcare costs), and diminishes overall economic dynamism. This frames functional illiteracy as a critical national infrastructure issue, akin to transportation networks or digital connectivity. Governments and businesses share a vested interest in improving literacy rates, as it directly contributes to a stronger economy, a more skilled workforce, and a more resilient society capable of adapting to future challenges. This shifts the perspective from a "social problem" to a fundamental "economic development" imperative.

The following table summarizes the estimated economic costs associated with functional illiteracy across various scopes:

Table 2: Estimated Economic Costs of Functional Illiteracy (North America and Global)

Region/Scope	Estimated Annual Cost	Nature of Cost	Source/Year
U.S. Businesses	\$225 billion	Lost productivity	ProLiteracy (not specified)
U.S. Economy	\$2.2 trillion	Total economic loss (lost tax revenue, healthcare, welfare)	World Literacy Foundation (2020)
Canadian Economy	\$32 billion	Total economic loss	ABC Life Literacy Canada (not specified)

Region/Scope	Estimated Annual Cost	Nature of Cost	Source/Year
Global Economy	\$1.19 trillion	Total economic loss	World Literacy Foundation (2020)

5. Strategic Imperatives for Businesses: Addressing the Challenge

Addressing functional illiteracy requires a multi-pronged approach, encompassing both internal workplace strategies and collaborative external engagements. Businesses have a strategic imperative to act, not merely to mitigate risks but to unlock significant competitive advantages.

5.1. Internal Workplace Strategies

Businesses should proactively "invest in adult literacy programs" and specifically implement "workplace literacy programs". These programs can be meticulously tailored to the specific needs of the industry and company, focusing on skills directly relevant to job tasks, safety protocols, and the use of digital tools. Such targeted training ensures that employees gain practical, applicable skills that immediately enhance their performance.

Beyond formal programs, adopting "clear, concise communication strategies" in all internal and external documents, manuals, and instructions is crucial. This involves using plain language, incorporating visual aids, and simplifying formats to ensure information is accessible to all employees, regardless of their literacy level. Furthermore, businesses can effectively "leverage technology to aid literacy development and support employees". This includes utilizing tools such as text-to-speech software, translation tools, or interactive e-learning modules that can adapt to different literacy levels, providing personalized and accessible learning experiences.

Crucially, fostering a supportive work environment is paramount. This involves cultivating a culture where employees feel comfortable acknowledging literacy challenges and seeking help without fear of stigma, judgment, or reprisal. Confidentiality and encouragement are key to successful internal literacy initiatives.

5.2. External Collaboration and Advocacy

The scale of functional illiteracy necessitates broader societal efforts. Businesses should actively "collaborate with government, educators, and non-profit organizations" to support adult literacy initiatives beyond their immediate workforce. This collaboration can take various forms, including financial contributions, sharing internal expertise in training and development, or providing opportunities for practical application of newly acquired skills through internships or mentorships.

Engaging in advocacy efforts to promote policies that support adult education and workforce development is another critical step. By recognizing functional illiteracy as a critical national economic issue, businesses can collectively influence policy changes that foster a more literate and skilled national workforce. Finally, supporting local literacy programs and community initiatives demonstrates a commitment to long-term societal well-being. A more literate community naturally translates into a stronger future workforce and a more engaged customer base, creating a virtuous cycle of development.

The call for businesses to "invest," "implement," and "collaborate" signifies a crucial shift in perspective. It moves beyond viewing functional illiteracy solely as a societal or educational system failure to recognizing it as a shared responsibility, particularly for businesses that directly bear its economic costs. This implies that a reactive approach, characterized by dealing with errors, high turnover, and productivity losses, is insufficient. Businesses must proactively engage in solutions, understanding that their investment in literacy is not merely a social good but a strategic investment in their own human capital, operational efficiency, and long-term profitability.

Indeed, there is a strategic advantage to proactive literacy investment. By implementing workplace literacy programs, leveraging technology, and fostering clear communication, businesses can not only mitigate the negative impacts of low literacy but also gain a significant competitive edge. A more literate workforce is inherently more adaptable, trainable, and capable of higher-value work, directly addressing challenges in innovation and competitiveness. Investing in literacy is therefore not just a cost, but a source of competitive advantage. Companies that prioritize improving their workforce's functional literacy are likely to see improved productivity, reduced training costs, higher retention rates, and a greater capacity for innovation, positioning them as leaders in a challenging labor market. This transforms the discussion from mere cost avoidance to strategic value creation.

6. Conclusion

Functional illiteracy represents a pervasive and deeply impactful challenge across North America, extending its reach from individual worker productivity to the broader economic health of nations. The data unequivocally demonstrates that a significant portion of the adult population struggles with the foundational literacy skills necessary for effective engagement in modern workplaces and daily life. This struggle translates into substantial economic costs for businesses, manifesting as lost productivity, increased operational expenses, hindered innovation, elevated safety risks, and compromised customer service. Beyond the enterprise level, the macroeconomic burden is staggering, costing trillions annually and impeding national competitiveness and human capital development.

Addressing functional illiteracy is not merely a philanthropic endeavor but a critical strategic imperative for businesses. It demands a proactive and integrated approach that combines internal workplace strategies—such as tailored literacy programs, clear communication, and technology integration—with active external collaboration with educators, non-profits, and government bodies. By investing in the fundamental literacy skills of their workforce, businesses can transform a significant liability into a powerful asset. A more functionally literate workforce is more adaptable, innovative, productive, and resilient, capable of leveraging new technologies and contributing to organizational growth. Prioritizing functional literacy is essential for fostering a more productive, innovative, and competitive North American economy, ensuring long-term prosperity for businesses and society alike.

Sources Read But Not Used In This Report

- risingtide.ua.edu - Statewide UA Literacy Center - The Rising Tide 2.0 - The University of Alabama
- thenationalliteracyinstitute.com - 2024-2025 Literacy Statistics
- en.wikipedia.org - Functional illiteracy - Wikipedia
- en.wikipedia.org - Literacy in Canada - Wikipedia
- conferenceboard.ca - Adults With Inadequate Literacy Skills - The Conference Board of Canada

- globaldata.com - Literacy Rate in Mexico (2010 - 2021, %) - GlobalData
- uvm.dk - The Survey of Adult Skills
- macrotrends.net - Mexico Literacy Rate | Historical Chart & Data - Macrotrends
- data.worldbank.org - Literacy rate, adult total (% of people ages 15 and above) - Mexico - World Bank Open Data
- bhhcsafetycenter.com - Seven Statistics on Literacy and Workplace Safety
- mona.uwi.edu - Untitled
- cso.ie - Programme for the International Assessment of Adult Competencies (PIAAC) 2023 - CSO
- ed.gov - U.S. Department of Education and U.S. Department of Labor Implement Workforce Development Partnership
- dol.gov - Adult Literacy and Education Initiative - U.S. Department of Labor
- en.wikipedia.org - Literacy in the United States - Wikipedia
- abtaba.com - 45 US Literacy Statistics Exposed | Above and Beyond Therapy
- greatminds.org - Case Studies | Curriculum Developers - Great Minds
- thecasecentre.org - Case collection: Harvard Business Publishing - The Case Centre
- blog.avilar.com - Why it's Important to Upskill Employees in an Uncertain Economy - The Avilar Blog
- ibm.com - AI Upskilling Strategy - IBM
- hed.nm.gov - Adult and Family Literacy | NM Higher Education Department
- hed.nm.gov - Adult Education | NM Higher Education Department
- nces.ed.gov - Commissioner's Remarks-NCES Commissioner's Statement on PIAAC 2017-November 15, 2019
- piaac.ca - Programme for the International Assessment of Adult Competencies > PUBLICATIONS > INTERNATIONAL
- bls.gov - Assessing the Impact of New Technologies on the Labor Market: Key Constructs, Gaps, and Data Collection Strategies for the Bureau of Labor Statistics
- gov.wales - The future of work: the impact of innovative technology on the workforce [HTML] - gov.wales
- einpresswire.com - Adult literacy programs strengthen B.C.'s workforce, communities - EIN Presswire
- news.gov.bc.ca - Adult literacy programs strengthen B.C.'s workforce, communities - BC Gov News
- proliteracy.org - ProLiteracy: Home

- lacnyc.org - Literacy Assistance Center - Home
- cabarruscountyeducationfoundation.org - The Business Case for Literacy: Why Investing in Early Reading Matters : News : About Us
- paper.co - More than just reading: Why low literacy has a lasting impact - Paper
- en.wikipedia.org - Instituto Nacional para la Educación de los Adultos - Wikipedia
- gocabe.org - PLAZA COMUNITARIA – CABE - California Association for Bilingual Education
- pluto-men.com - Human Error: A Persistent Challenge in Manufacturing Operations! - Plutomen
- sbtionline.com - Can You Rely on Your Management Systems when Dealing with Functional Illiteracy? | SBTI
- dyslexiaida.org - Success Stories - International Dyslexia Association
- reallygreatreading.com Really Great Reading: Home
- hrfuture.net - Eliminate The Hidden Costs Of Functional Illiteracy - HR Future
- injuryfacts.nsc.org - Work Injury Costs - Injury Facts - National Safety Council
- oecd.org - Tackling Functional Illiteracy - OECD
- conference-board.org - Responding to US Labor Shortages - The Conference Board
- gpseducation.oecd.org - Adult skills (Survey of Adult Skills, PIAAC ... - Education GPS - Mexico
- digitalcommons.pepperdine.edu - A case study of the effectiveness of the Mexican INEA (National Institute for the Education of Adults) program: trapped between - Pepperdine Digital Commons
- publications.iadb.org - Toward a National Framework of Lifelong Learning in Mexico - IADB Publications
- financialeducatorsCouncil.org - Financial Illiteracy Costs: Survey, Causes, Consequences | NFEC
- ifac.org - The Cost of Financial Illiteracy - IFAC
- adulteracyleague.org - PIAAC 2023 report reveals a shocking decline in U.S. adults' literacy skills
- gallup.com - Addressing the Barriers Blocking Employee Development - Gallup.com
- gsb.stanford.edu - Case Studies | Stanford Graduate School of Business
- aspeninstitute.org - U.S. Workers Are Falling Behind. Can They Catch Up? - Aspen Institute
- iveypublishing.ca - Ivey Publishing: Case Studies
- forbes.com - Governance And Digital Literacy In AI Adoption: A Structured Approach - Forbes
- journals.uchicago.edu - Adoption of New Information and Communications Technologies in the Workplace Today: Innovation Policy and the Economy - The University of Chicago Press: Journals

- oecd.org - PIAAC - OECD
- injuryfacts.nsc.org - Societal Costs of Unintentional Injuries - Data Details - Injury Facts - National Safety Council
- en.wikipedia.org - Reading - Wikipedia
- oecd.org - Adult literacy skills - OECD
- uis.unesco.org - Literacy skills for the world of tomorrow: further results from PISA 2000; executive summary; 2003 - UNESCO Institute for Statistics
- barbarabush.org - Via Forbes – New Study Finds the U.S. Could Be Losing \$2.2 Trillion Annually Due to Low Adult Literacy Rates
- hsrc.himmelfarb.gwu.edu - Low Health Literacy: Implications for National Health Policy
- weforum.org - The Future of Jobs Report 2025 | World Economic Forum
- readabilitymatters.org - The Cost of Low Adult Literacy in the US: \$2.2 Trillion a Year - Readability Matters
- nam.org - Regulatory Onslaught Costing Small Manufacturers More Than \$50000 Per Employee
- nam.org - Regulations Cost Small Manufacturers More Than \$50K Per Worker - NAM
- readingwritinghotline.edu.au - The impact of literacy and numeracy gaps in the workplace - Reading Writing Hotline
- oecd.org - The role of subnational governments in adult skills systems: Mexico - OECD
- rand.org - Assessing the Employment Impacts of Digital Upskilling for Low-Tech Adults
- gob.mx - INEA and IME sign an agreement to benefit more than 25000 Mexicans in the US - Gob MX
- pmc.ncbi.nlm.nih.gov - A Review about Functional Illiteracy: Definition, Cognitive, Linguistic, and Numerical Aspects
- cameron.edu - 13 Business Literacy: A Millennium Assessment in the Manufacturing Environment - Cameron University
- pmc.ncbi.nlm.nih.gov - New Federal Policy Initiatives To Boost Health Literacy Can Help The Nation Move Beyond The Cycle Of Costly 'Crisis Care' - PubMed Central
- nces.ed.gov - What PIAAC Measures
- rockinst.org - Addressing Digital Literacy and Other Reasons for Non-Adoption of Broadband
- documents1.worldbank.org - PROJECT INFORMATION DOCUMENT (PID)
- gpseducation.oecd.org - Poland - Adult skills (Survey of Adult Skills, PIAAC, 2023) - Education GPS - OECD
- uil.unesco.org - Education Model for Life and Work, Mexico - UNESCO Institute for Lifelong Learning

- worldliteracyfoundation.org - World Literacy Foundation - Changing Lives Through Literacy
- readingpartners.org - Reading Partners: Home
- goodera.com - Top Literacy Nonprofit Organizations to Support in 2025 - Goodera
- osha.gov - Business Case for Safety and Health - Overview - OSHA
- hrexecutive.com - Overcoming the hidden barrier to employee upskilling: Motivation - HR Executive
- tdi.texas.gov - The costs of not providing OSHA training - Texas Department of Insurance
- nces.ed.gov - Literacy in the Labor Force - National Center for Education Statistics (NCES)
- researchgate.net - Literacy and risk of occupational injury - ResearchGate
- allinliteracy.org - Advancing Adult Literacy: Mobilizing Business & the Beltway - ALL IN
- stjoeliteracy.com - Effects of Illiteracy on Business Literacy Lost Productivity and Profit ...
- detroitchamber.com - Upskilling Existing Staff to Address Hiring Challenges - Detroit ...
- weforum.org - Why AI literacy is crucial for responsible AI transformation | World ...