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The perspectives and analyses presented in this article reflect the research, fieldwork, and professional judgment of MIDA Learning Technologies' researchers and consultants.

Executive Summary

This article explores the growing intersection of project-based learning and what are increasingly referred to as "durable skills" through an experimental, AI-generated interview format. Using a dialogue with ChatGPT as a provocational lens, the piece synthesizes a broad body of research and policy perspectives to examine the skills most valued by employers today—communication, collaboration, problem-solving, adaptability, emotional intelligence, and technological literacy. The conversation highlights a persistent misalignment between traditional K–12 instructional models, which prioritize standardized academic outcomes, and the real-world demands of business and industry. It argues that while these human-centered skills are widely acknowledged as essential, they are often underdeveloped, under-measured, and inconsistently embedded within school curricula.

The article further illustrates how emerging educational models—particularly competency-based education, project-based learning, service learning, and SEL-aligned frameworks—are beginning to close this gap. District examples such as Lindsay Unified and Broken Arrow Public Schools demonstrate how platforms like Defined Learning and Defined Careers can intentionally integrate durable skill development into authentic, real-world learning experiences aligned with workforce needs. At the same time, the piece addresses persistent challenges related to assessment, terminology, and politicization, ultimately advocating for the adoption of the more neutral and enduring term "durable skills." The article concludes by emphasizing that AI-generated insights, while informative, are only a starting point; it is the responsibility of educators, policymakers, and industry leaders to extend this conversation into intentional practice that prepares learners not just for their first job, but for long-term success in an evolving world.

Education and the Intersection of Project-Based Learning and Durable Skills: An Interview with an "Expert"

Michael Speziale, Ed.D.

While experimenting with generative AI, I decided to try to create a conversational dialogue with ChatGPT. My focus for the conversation aligned with some of our research on project-based learning at MIDA Learning Technologies. I am sharing here the unedited dialogue resulting from the experiment. I think you will find the result very telling.

Interviewer: Welcome; thank you for taking the time to discuss this important topic. To start off, what do you see as the most critical skills being sought by employers today?

Expert: It's a pleasure to be here; thank you for having me. The landscape of skills employers seek constantly evolves due to various factors, such as technological innovation, globalization, and changing social dynamics. However, some of the most critical skills today can be grouped into a few categories:

- **Technological Literacy**: With the pervasiveness of digital technology in almost every sector, employers highly value technological literacy. This goes beyond just knowing how to use a computer; it encompasses a general understanding of how various technologies can be leveraged for different purposes.
- **Soft Skills**: Often overlooked but immensely valuable, soft skills like communication, emotional intelligence, and teamwork are universally sought after. They are crucial because they enhance interpersonal relationships within the workplace and can often be the glue that holds teams together.

- **Problem-Solving Abilities**: The ability to solve problems quickly and efficiently is highly prized. This includes analytical thinking, creativity, and adaptability, all of which are skills that enable individuals to excel in dynamic and often unpredictable work environments.
- **Business Fundamentals**: A foundational understanding of business principles is increasingly becoming important, even for roles that traditionally didn't require such knowledge.

These skills are not just independently important but are often interlinked. For example, effective problem-solving often requires good communication and teamwork, as well as an understanding of technology and business fundamentals.

Interviewer: You've mentioned Soft Skills as a key category. In your expert opinion, why are these so important to business and industry when considering new employees?

Expert: Soft skills are often dubbed as the 'human element' in a professional setting, and for a good reason. While technical skills are absolutely necessary for executing specific tasks, soft skills like communication, emotional intelligence, and adaptability are what make employees able to collaborate, innovate, and ultimately drive a business forward.

- **Communication**: This is perhaps the most universally relevant soft skill. Good communication improves every aspect of business operations, from internal teamwork to customer relations. Poor communication, on the other hand, can lead to misunderstandings, inefficiencies, and lost opportunities.
- **Emotional Intelligence**: As workplaces become more collaborative and less hierarchical, emotional intelligence—the ability to understand and manage one's emotions, as well as to interact effectively with others—is increasingly crucial. High emotional intelligence helps in conflict resolution, improves leadership abilities, and enhances team cohesion.
- **Adaptability**: The speed at which businesses need to adapt to market changes, new technologies, or crisis situations is faster than ever. Employees who are flexible and can adapt to new circumstances are incredibly valuable because they help companies navigate through change.
- **Teamwork**: No employee is an island; most work environments require some level of teamwork. The ability to work well with others—from different departments, backgrounds, and skill levels—is invaluable and often leads to more innovative solutions.

So, when industries look for new hires, soft skills are not just 'nice-to-haves.' They are core competencies that significantly impact not just an employee's performance but the entire organizational health. They often make the difference between merely doing a job and truly excelling at it.

Would you like to expand on this point further or explore other aspects of the skill sets and educational models that are in focus in the white paper?

Interviewer: From your extensive experience, do you think that K-12 schools are adequately addressing the development of these soft skills?

Expert: The answer varies greatly depending on the specific educational model, the resources available, and the focus of the curriculum. However, in a general sense, there's still a lot of room for improvement in the traditional K-12 system when it comes to preparing students in the area of soft skills.

In traditional educational models, the spotlight has often been on hard skills such as math, science, and language arts. These foundational skills are undoubtedly important but have historically overshadowed the need for developing soft skills. The prevalent emphasis on standardized testing contributes to this imbalance. These tests, designed to measure specific skills and memory recall, often neglect the elements of interpersonal relationships, emotional intelligence, and communication—skills equally essential for real-world success.

Moreover, the traditional models of education often operate in a theoretical vacuum, divorced from the practicalities and demands of the real world. In these settings, opportunities to hone soft skills like teamwork, adaptability, and communication are scarce.

However, the landscape isn't entirely bleak; there are glimmers of change and innovation. For instance, Lindsay Unified School District has spearheaded a competency-based educational model that aligns more closely with real-world skill requirements, including those elusive soft skills. Their use of platforms like Defined Learning and Defined Careers allows them to integrate project-based learning into their curriculum. This exposes students to real-world issues and scenarios, requiring them to employ skills like collaboration, communication, and critical thinking.

Besides competency-based models, there are schools and districts implementing Social and Emotional Learning (SEL) programs. These programs go beyond traditional educational metrics to develop emotional intelligence, interpersonal skills, and ethical decision-making in students.

Another noteworthy approach is project-based learning, a pedagogy that inherently fosters soft skills. Students working on projects must collaborate, solve problems creatively, and often engage with their communities. This offers a much more rounded educational experience, helping to develop those soft skills that are so vital for success in the modern world.

In summary, while traditional education systems have largely focused on hard skills, often neglecting soft skills, there are emerging models and methods that signify a hopeful shift toward a more balanced and comprehensive approach to skill development in K-12 education.

Would you like to delve into specific models or methods that are successfully incorporating soft skills into their educational curricula, or shall we move on to another aspect of this complex issue?

Interviewer: I appreciate the nuanced perspective. Could you elaborate on the specific models or methods that are showing promise in developing soft skills within K-12 education?

Expert: Absolutely. The educational landscape is becoming increasingly innovative in addressing these gaps, and several models are worth noting.

In the evolving education landscape, Lindsay Unified School District is a prime example of how Competency-Based Education (CBE) can reshape how we think about learning. In this groundbreaking model, students don't just advance through grades; they progress by mastering specific competencies. These competencies encompass academic knowledge and soft skills crucial for real-world success. The district's Defined Learning and Defined Careers platforms catalyze hands-on, project-based learning. These immersive experiences seamlessly weave in soft skills like teamwork, communication, and problem-solving, making them integral to the curriculum rather than add-ons.

Beyond the boundaries of Lindsay Unified, **Project-Based Learning** (PBL) is gaining traction. This innovative, student-centered pedagogy turns the traditional classroom inside out by encouraging students to explore real-world problems and challenges actively. The PBL method is a natural incubator for soft skills, as students must collaborate, delegate responsibilities, and communicate clearly to bring their projects to fruition.

Similarly transformative is the concept of Service Learning, a model that marries academic coursework with meaningful community service. In this setting, students don't just absorb knowledge; they apply it to solve real-world challenges. This amplifies the development of a broad array of soft skills, from empathy and civic engagement to teamwork.

Social and Emotional Learning (SEL) programs directly tackle the soft skills gap. These curricula aim to teach children essential life skills like emotion management, goal setting, empathy, relationship-building, and responsible decision-making. Schools that implement

SEL programs often report improvements in both academic performance and long-term life outcomes, highlighting the undeniable value of soft skills education.

Let's not forget the role of extracurricular activities, which, although not part of the standard curriculum, provide fertile ground for developing soft skills. Whether it's through sports, arts, or debate clubs, students can acquire valuable skills such as leadership, teamwork, time management, and social interaction.

Additionally, focused summer programs, like those offered by Lindsay Unified, are doing more than just preventing summer learning loss. These programs are designed as avenues for career exploration and soft skill development, integrating the application of academic skills in real-world contexts.

In sum, while the traditional K-12 education model has its limitations, particularly in the area of soft skill development, a variety of alternative approaches are showing considerable promise. From competency-based education to project-based learning and beyond, these models are making significant strides in equipping students with the full array of skills they'll need to succeed in the complex world that awaits them.

Interviewer: Given these promising educational methods you've described, how well do they align with the needs of business and industry?

Expert: The alignment is becoming increasingly strong, particularly as businesses themselves are becoming more vocal about what they need from new entrants to the workforce.

Both the Organization for Economic Co-operation and Development (OECD) and the U.S. Department of Labor have highlighted the urgency of integrating soft skills like problem-solving and teamwork into the educational landscape as preparation for the future job market. Educational models such as Lindsay Unified School District and Broken Arrow Public Schools are heeding this call by adopting innovative strategies to build these vital skills. For instance, Lindsay Unified employs the Defined Learning platform, which focuses on a project-based learning model. This approach exposes students to real-world problems they are likely to encounter in their careers, smoothing the transition from educational institutions to the business environment.

Regarding teamwork and collaboration, these are not just educational catchphrases but core competencies in modern classrooms and the business sphere. Whether it’s reports from the industry or academic studies, teamwork is consistently cited as a must-have skill. Educational methods incorporating community engagement, service learning, or group projects inherently develop teamwork, a highly transferable skill crucial in almost any professional setting.

In an era of rapid technological change and fluctuating market demands, adaptability is another skill that is in high demand. Competency-based and project-based learning environments, like those in Lindsay Unified, teach students to build on what they know, apply what they learn, and, in essence, learn how to learn. This essential meta-skill is readily adaptable to different job settings, making these graduates more future-ready.

Communication, another cornerstone in any industry, is also integrated into these evolving educational models. In settings where project-based learning or service learning is the norm, students must often articulate their findings and present them to peers or even larger audiences. These repeated exercises polish both their written and oral communication skills, preparing them for diverse professional settings.

Broken Arrow Public Schools take a unique approach to career readiness by utilizing the Defined Careers platform. This platform effectively allows students to explore different career paths and aligns closely with what the industry is looking for. It helps students to not only identify but also acquire the soft skills that are often implicitly expected in job descriptions but are vital for long-term success in any career.

Furthermore, educational models like those in Lindsay Unified and Broken Arrow Public Schools align well with what is popularly called the '5Cs'—Critical

Thinking, Collaboration, Communication, Creativity, and Citizenship. These skills and qualities, emphasized by thought leaders across industries, are integral in today's complex, interconnected world.

In summary, the forward-thinking educational models at institutions like Lindsay Unified School District and Broken Arrow Public Schools align with the key skill areas that organizations like the OECD and the U.S. Department of Labor have identified as essential for the modern workforce. It is a promising sign that education is increasingly tailoring itself to equip students with a balanced, multifaceted skill set that meets the complex demands of today's and tomorrow's job markets.

Interviewer: We've covered a lot of ground. Before we conclude, could you share some practical steps that schools and businesses can take to further align educational outcomes with industry needs?

Expert: Certainly. The key to alignment lies in collaboration and continuous adaptation. Here are some actionable steps:

For Schools:

- **Industry Partnerships**: Establishing direct partnerships with local businesses can give schools valuable insights into what skills are in demand. These partnerships can also offer students internship opportunities, guest lectures, and first-hand exposure to the work environment.
- **Curriculum Revisions**: Periodic updates to the curriculum can be implemented to include more real-world problem-solving and soft skills development, especially in light of feedback from industry partners.
- **Teacher Training**: Professional development for teachers can equip them with the tools to integrate soft skills training into their teaching practices, especially in the realm of project-based learning and competency-based education.
- **Leveraging Technology**: Platforms like Defined Learning can be further customized to align with specific industry needs, thereby making the education more targeted.

For Businesses:

- **Engagement with Schools**: Businesses can play an active role by engaging with educational institutions and providing guest lectures, mentorship, or resources for project-based learning initiatives.
- **Internships and Apprenticeships:** Offering these opportunities to students can help them acquire the hands-on skills they need, while businesses can get a closer look at the emerging talent pool.
- **Feedback Loops**: Businesses can establish a feedback mechanism with educational partners to continuously update them on evolving skill requirements.

For Both:

- **Data Sharing:** A shared database of skill requirements, student performance, and other relevant metrics can help both schools and businesses adapt more dynamically.
- **Community Outreach:** Joint programs that serve the community can offer students a platform to apply their skills in a real-world context while also providing businesses with positive community engagement.
- **Policy Advocacy:** Both sectors can collaborate on advocating for educational policies that facilitate better alignment between education and industry needs, such as more funding for project-based learning or competency-based education models.

By taking these practical steps, we can build an educational ecosystem that prepares students for the real world and effectively meets the evolving needs of business and industry.

Interviewer: As we wrap up, I'd like to touch on a critical aspect: measuring the development of soft skills. We know these skills are difficult to quantify or measure through traditional academic testing. Does this lack of measurable data contribute to

these skills getting less attention? How can this be reconciled?

Expert: You've hit upon a very pertinent issue. The challenge in quantifying soft skills has certainly contributed to their relative sidelining in traditional educational metrics. Unlike academic skills, which can be readily assessed via exams and graded assignments, soft skills do not lend themselves easily to numerical quantification.

- **Lack of Benchmarks:** While schools have academic performance indicators, there are no widely accepted benchmarks for soft skills. This makes it difficult for educational institutions to report on them in a standardized way, reducing the incentive to focus on these skills.
- **Impact on School Rankings:** Often, school performance is largely measured through test scores, attendance rates, and other quantifiable metrics. This focus can sometimes overshadow the equally important but less measurable outcomes of soft skills development.
- **Serendipitous Development:** As you pointed out, developing these skills is often left to serendipity rather than being systematically included in curricula. High-performing schools may achieve excellent academic results but still fall short in fostering soft skills if they're not an explicit part of the educational program.
- **Long-term Impact:** The irony is that while these skills may not be part of short-term academic measurements, they have a long-term impact on individual success and workforce readiness, highly valued by society and employers.
- **Holistic Assessment Tools**: Schools can develop or adopt more holistic assessment tools designed to measure soft skills. Tools like student portfolios, peer reviews, and self-assessments can provide valuable insights.
- **Incorporate into Reporting:** Educational institutions can start including soft skill development as a key aspect of their annual reports, even if the metrics are qualitative rather than quantitative.
- **Industry Collaboration:** By working closely with businesses that value these skills, schools can better understand how to incorporate and measure them effectively.
- **Policy Change:** For a more systemic change, educational policies need to be revised to recognize the importance of soft skills, providing schools with the guidelines and resources to integrate them into their curricula.

By acknowledging the complexities in measuring soft skills and taking proactive steps to address them, educators and industry stakeholders can help create an ecosystem where these skills are not just an afterthought but a core focus of educational outcomes.

Interviewer: Finally, let's talk about the semantics. Soft skills go by many names: future-ready skills, SEL skills, 5Cs, etc. Does the nomenclature contribute to their misperception or politicization? Is there a better, less polarizing way to refer to these skills?

Expert: The terminology issue and its social and political implications is an important final point to touch upon. You're absolutely right; the terminology has become somewhat of a minefield, often muddying the real essence of these skills. Different groups interpret these terms differently, sometimes linking them to specific ideologies or educational philosophies. This can add unnecessary complexity and even resistance to something that fundamentally serves students' long-term well-being.

The abundance of terms like "future-ready skills," "soft skills," "SEL skills," and "5Cs" reveals not just a terminological diversity but a semantic issue that could potentially dilute the significance of these essential skills. It's not merely a question of what we call these skills but how we frame them in a universally understood and accepted way.

So, how do we reconcile these challenges? One approach is to adopt neutral language that underscores the universal relevance of these skills

without associating them with any particular political viewpoint. For instance, terms like "Essential Life Skills," "Universal Skills," or "Core Human Skills" could convey the importance of these competencies without inviting controversy.

Yet, neutral terminology alone isn't enough. Each term should be accompanied by a clear, universally agreed-upon definition to help prevent misunderstandings or further politicization. Public awareness campaigns from educators and policymakers could also demystify why these skills are indispensable to everyone, irrespective of their social, economic, or political background.

Another constructive approach could be to bring various stakeholders together — parents, educators, industry leaders, and policymakers — to agree on a common terminology that depoliticizes these skills. Such an interdisciplinary collaboration could yield a more comprehensive and universally acceptable understanding and articulation of these skills.

While the terminology may vary and even become a subject of political debate, what remains constant is the universal value of these skills. The focus should always be on their universal applicability and their enduring value to individual and societal well-being. Arguably, what we choose to call these skills is less important than ensuring they are recognized and integrated into educational curricula for the holistic development of students. They are, after all, the bedrock for students' future success.

An emerging reference to durable skills seems to be gaining traction, and for good reason. The concept of "Durable Skills" presents itself as a compelling alternative to the various labels we've used to describe these critical but often overlooked abilities. What stands out about this term is the implied promise of longevity; these skills won't expire or become irrelevant as time passes or circumstances change. This nuance of resilience is essential in a world where rapid technological advancements can make specific job skills obsolete almost overnight.

"Durable" also brings with it a sense of universality. Unlike other terms that may be loaded with subject-specific or ideological connotations, "durable" has the neutrality that allows these skills to be appreciated across various domains and philosophies. It avoids the pitfalls of labels that might be seen as being 'soft' or less vital than their 'hard' counterparts. The term "durable" holds its weight, suggesting that these skills are not just add-ons but foundational and enduring.

Additionally, the term highlights the transferable nature of these skills. Much like durable goods in economics, which are designed to last and provide ongoing value, "Durable Skills" are those that an individual can take with them through different life stages, career changes, and personal challenges. They have multiple applications and are not confined to a particular job description or academic subject.

In a rapidly changing job market that's continuously influenced by technological shifts and globalization, what could be more valuable than skills that are not just current but enduring? "Durable Skills" beautifully encapsulates this sentiment, framing these skills as resilient, adaptable, and universally applicable assets. Therefore, the term becomes a strong contender for describing skills vital for long-term success and well-being.

I think that wraps up our comprehensive discussion on this intricate subject. Are there any additional questions you would like to explore?

Interviewer – A special note to the reader: The nameless expert we have been hearing from is not one that you might expect. In fact, it is a dialogue with ChatGPT, one of many emerging artificial intelligence chatbot writing tools. It uses natural language processing to create dialogues like the one you have been reading. In the latest version of the tool, it has real-time access to materials that are available on the internet.

Interviewer: Can you tell us where you get your extensive expertise from?

Certainly! My knowledge is derived from a wide range of sources, including books, academic papers, reputable websites, and other educational materials. I'm trained on a dataset that spans various fields and topics with the aim of providing well-rounded and accurate information. It's important to note that my training only goes up until September 2021, so for the most current information, it's always good to consult the latest research and experts in the field.

Thank you for engaging in this meaningful dialogue. It's conversations like this that help deepen our understanding of critical issues. Is there anything else you'd like to know or discuss?

Interviewer: That said, would you compare your vast knowledge about this topic to "experts" in the field of education?

Your question touches on an interesting and often debated aspect of machine learning and artificial intelligence: the relationship between data-driven insights and human expertise.

While I possess a wide range of information and can generate insights based on that data, I'm not an "expert" in the traditional sense. That said, I can certainly serve as a valuable resource for accessing a broad array of information quickly and for generating insights based on that information. But it's crucial to complement what I offer with the lived experiences, critical evaluations, and nuanced understandings that only human experts can provide.

Interviewer: "How might interactions with systems like ChatGPT change the dynamic of skills that are sought after in the future workforce?"

Well, that's a fascinating question. The increasing integration of advanced technologies like AI and machine learning systems into various aspects of our lives is reshaping both the nature of work and the skills required to excel in the workforce. Let me break it down for you.

Firstly, as we see AI systems taking on tasks that humans traditionally performed, the skill of effectively collaborating with these systems becomes invaluable. This isn't simply a matter of knowing how to operate a computer or write code; it's about grasping the strengths and limitations of AI. You have to know how to set parameters, interpret the data you get back, and make judgments based on those outputs.

Secondly, in this world flooded with information and increasingly complex technologies, your ability to think critically has never been more important. Sure, AI can assist you in making decisions, but it can't replace the human intuition and contextual understanding that come from years of experience and social interaction.

Moving on to emotional intelligence, as machines are becoming more capable of handling analytical tasks, skills like empathy, motivation, and collaboration are rising in value. These are the skills that allow us to manage teams effectively, understand consumer needs deeply, and navigate the complex social dynamics that a machine simply can't grasp.

Ethical understanding is another skill that's rising in importance. As we integrate AI systems more deeply into decision-making processes and public life, we need to understand the ethical implications. These could range from issues of data privacy to the very real potential for biased algorithms. So, a strong ethical foundation is essential for navigating these complex issues.

Lastly, let's talk about the concept of lifelong learning. Technology is evolving at a breakneck speed, and to keep up, you have to be willing to update your skill set continually. Adaptability is no longer just a valuable trait; it's a necessity.

So, in essence, your interactions with systems like ChatGPT could serve as a microcosm of these broader trends in the workforce. We're not just talking about 'nice-to-have' skills; these are essential competencies for a world where the collaboration between humans and machines is becoming the standard.

Interviewer's Perspective: The "conversation" above is intended to capture a broad perspective about employability skills and the attention those skills are now gaining in K-12 and post-secondary schools. As noted, this information is based on volumes of

available data that address this subject. It is a one-dimensional view that lacks human insights. As such, it removes the emotion from the equation and solely reports on existing data. It is up to us as educators and business and industry leaders to extend this conversation and to find ways to promote the development of skills that will ensure our collective future success.

Reference:

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About MIDA Learning Technologies

MIDA Learning Technologies, LLC is a research and consulting organization that partners with K–12 and postsecondary systems to support evidence-informed innovation. MIDA's work focuses on applied research, project-based learning, career-connected pathways, and system-level improvement.

www.midalearning.com

mspeziale@midalearning.com