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Confronting The Transversal Skills Crisis In Higher Education: A Critical Examination HSTO As A Case Study

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Abstract
This paper explores the integration of transversal skills into higher education curricula in response to the growing demand for communication, teamwork, and critical thinking competencies in an AI-driven world. Drawing on personal teaching experience at HSTO (Higher School of Technology in Oujda), the study examines how students in technical programs engage with tasks designed to develop these essential skills. A reflective qualitative methodology was employed, based on two classroom-based teaching interventions in which students were assigned oral presentations and written critical responses aligned with course content. Their performance was assessed through observation, informal feedback, and evaluation of task outcomes. The findings reveal a concerning trend: many students displayed limited depth in articulating ideas, struggled to explain key disciplinary concepts, and showed difficulty formulating independent solutions to complex problems. Furthermore, a significant reliance on AI-generated content emerged, raising questions about students' ability to engage in original, critical, and collaborative thinking. These observations point to a broader educational crisis, particularly in MTU-oriented programs, where transversal skills are often treated as fundamental. The study argues for a reconfiguration of teaching practices that explicitly foreground the development of transversal skills through intentional curriculum design, interdisciplinary collaboration, and revised assessment strategies. Such changes are critical to ensuring that undergraduates are not only technically competent but also equipped with the cognitive and interpersonal capabilities required to navigate an increasingly complex and automated professional landscape.

Keywords : *Transversal skills, higher education, critical thinking, MTU, AI*

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I. Introduction

The world is witnessing a rapidly advancing technology that has a great impact on education, especially with the introduction of automation and Artificial Intelligence (AI). Students are compelled to keep updated with the fast advances to meet the needs of a considerably changing job market. Hence, the question of learning and skills has become a subject of much debate within the educational sector. In other words, what stem-subjects should institutions focus on in order to meet the job market, and what skills should students acquire so as to have great chances for better careers. To put it differently, what are the "hard skills" to be given much priority in educational institutions, and what are the "transversal skills" to be acquired as a must-haves?

Despite the growing acknowledgment of their critical role in professional success, transversal skills are still frequently downplayed in numerous technical education programs. This paper delves into the specific ways in which these essential interpersonal skills—such as communication, teamwork, and critical thinking—are integrated, or often overlooked, in classroom practices. Drawing upon a teaching experience at HSTO institution, which specializes in technical education, the analysis highlights both the challenges and opportunities associated with fostering a well-rounded skill set in students. By evaluating curriculum frameworks and instructional methods, this study aims to illuminate the importance of transversal skills in preparing undergraduates for the complexities of today's workforce.

Transversal skills, frequently referred to as the essential competencies of the 21st century, encompass a diverse array of interpersonal and cognitive abilities that are vital for achieving professional success. Esteemed scholars like Dell'Aquila et al. (2017) and Bhatnagar and Bhatnagar (2012) underscore the significant impact these skills have on crucial aspects like employability, leadership, and adaptability. By fostering effective communication, emotional intelligence, teamwork, and problem-solving capabilities, individuals can navigate the complexities of the modern workplace, enhancing their potential to thrive in dynamic environments. The literature categorizes transversal skills into clusters such as the 4 Cs (communication, collaboration, critical thinking, and

creativity), IMT (information, media, and technology literacy), and FLIPS (flexibility, leadership, initiative, productivity, and social skills).

Despite the increasing recognition of their importance, many educational institutions continue to focus predominantly on hard skills—such as technical knowledge and specific professional competencies. This emphasis often comes at the expense of transversal skills, like communication, teamwork, and critical thinking, which are typically relegated to co-curricular activities or informal learning contexts. As a result, a significant skills gap emerges, particularly evident when students make the transition from academic settings to the professional world. Employers frequently cite the lack of essential interpersonal skills as a barrier to effective collaboration and overall workplace success, highlighting the urgent need for a more balanced approach to education that integrates both hard and soft skills into the curriculum.

This study adopts a reflective qualitative methodology grounded in my own teaching interventions at HSTO. The purpose was to explore how students in technical education engage with transversal skills when exposed to targeted instructional tasks. Two classroom-based activities were implemented across different programs and academic levels. For the first activity, which focused on communication and teamwork, both Civil Engineering and Business Intelligence and Artificial Intelligence students engaged in the same exercise separately. Each class was tasked with creating presentations on core disciplinary topics, which required them to collaborate, organize information, and deliver content clearly and cohesively. The second activity challenged third-year Computer Science and Business Management students with critical thinking exercise. They were required to respond to open-ended questions, either orally in a classroom setting or in writing via a digital platform, to assess their capacity to analyze, evaluate, and synthesize the course material. Student performance in both activities was analyzed using a combination of classroom observation, informal feedback, and qualitative assessment of the submitted work and in-class presentations. This reflective approach enabled an in-depth understanding of how students applied or struggled with essential transversal skills in real academic settings. The methodology provided a contextualized lens through which to examine the gap between curricular expectations and actual student performance in communication, collaboration, and critical reasoning within technical education.

Before exploring the crisis surrounding the acquisition of transversal skills, it is important to clarify two key concepts: hard skills versus soft skills. Hard skills refer to the technical abilities learned in educational institutions or online platforms. These skills demonstrate proficiency in specific subjects, such as coding, programming, budgeting, network security, and speaking foreign languages. They represent the technical knowledge or training an individual has acquired through various life experiences, including education and career. In contrast, soft skills encompass personal traits and behaviors that enable individuals to interact and collaborate effectively with others. Examples of soft skills include communication, teamwork, empathy, integrity, critical thinking, and problem-solving. These personal habits and characteristics influence how individuals work independently and with others.

II. Types Of Transversal Skills

Transversal skills or 21st Century skills are classified into three main categories, under which a bulk of twelve skills are listed. They are headed as Learning Skills, Literacy Skills, and Life Skills that all contribute to a student's future career; some researchers, on the other hand, believe that the list is not exhaustive as it may include other skills of no less importance, yet the twelve skills to be analyzed below constitute the career readiness skills.

The first category encompasses Learning Skills, encapsulated by the concept of the "four Cs." These skills focus on the mental processes that students need to adapt to and enhance a modern work environment. The four Cs are collaboration, communication, creativity, and critical thinking. Among these, critical thinking is often regarded as the most crucial skill, as it enables individuals to tackle emerging challenges effectively. Regardless of the field of interest, critical thinking is an essential quality for anyone seeking personal and professional growth. It serves as a mechanism for identifying problems and transforming them into constructive opportunities. Once students acquire this skill, they become capable of resolving issues independently, without relying on their teachers. Furthermore, they learn to critically evaluate ideas, regardless of their source, including insights offered by their teachers. This capability extends to real-life situations and the workplace as well.

The second equally important skill in this category is creativity, best described as thinking outside the box. Like the previous skill, creativity serves as a means of adaptation, enabling students to view concepts from different perspectives, which ultimately fosters innovation. This innovation is, in fact, a crucial component of overall success, whether in personal or professional realms. Developing such skills effectively challenges the often-repeated notion that "that's the way things have always been done." By cultivating this skill, students—who are future job seekers—will come to realize that methods considered optimal ten or twenty years ago must evolve.

Collaboration stands out as the third skill in this initial set, and perhaps the most challenging, as it requires working with others to reach a compromise and agreement, which can be quite difficult. The essential

quality associated with this skill is willingness; each person must be willing to sacrifice some of their own ideas and embrace those of others for the sake of better outcomes. Whether in an academic setting or a professional environment, once collaboration is mastered, it propels the group toward a greater purpose and enhanced success. In essence, collaboration involves not just connection, but also a shared effort toward a common goal.

Last but not least, communication is the pivotal element that brings together the four Cs; without the effective use of communication, the other three skills cannot stick together; it is the glue that brings all qualities together. At school, it is very crucial to learn how to convey ideas to different personalities with multiple backgrounds and beliefs; whereas at work, it is a requirement for any company to maintain profitability and eliminate confusion in the workplace.

The next category is entitled Literacy Skills abbreviated as IMT, standing for information, media and technology. As the three terms indicate, it is more concerned with digital comprehension rather than human one. Information literacy deals much with understanding facts, statistics, figures and data that students encounter online. As the burden of identifying information and misinformation becomes greater, information literacy helps in separating fact from fiction and prevents them from falling prey to myths, misconceptions and misinformation. In fact, it teaches them to identify honesty on their own.

Media literacy is the second skill in this category, and it concerns identifying publishing methods, outlets in which information is published. It helps in finding truth in the world immersed in information; in other words, it helps, namely students, in finding trustworthy sources of information and thus identifying credible sources to rely on from uncredible ones to ignore. Similarly, the third skill of technology literacy involves teaching students about the machines that play a crucial role in the Digital Age. Technological tools such as computers, mobile devices, and cloud programing have become of great importance in today's world; they are the means through which information is distributed to users all over the world. With technology literacy, students better understand what gadgets perform what task and why, which helps in removing the intimidating feeling that technology tends to have. In short, a better understanding of these tools guides us to a better future by adapting to the world more effectively.

The last category is Life Skills or FLIPS (Flexibility, Leadership, Initiative, productivity, Social skills). First, these skills have primordially to do with personal life, yet their impact on professional one is tremendous. Second, they are not easy to acquire, but the difficulty of meeting the challenge to have them is very feasible. For instance, the first skill in this category seems to be very challenging as it denotes deviating from the intended plan with precautions not to go astray. Flexibility, in fact, is based on two uncomfortable ideas: 1) your way is not always the best, and 2) you have to know and admit when you are wrong, which are not easy challenges. This can be especially though for students, as they often want to assert their identities and resist change at this stage in their lives. Ultimately, Flexibility is about how and when to change and adapt to new situations.

The second essential skill is leadership, which focuses on inspiring and motivating teams to achieve shared goals. Whether in school or work, effective leadership thrives on collaboration, allowing team members to combine their strengths for greater outcomes. This skill is crucial for career advancement, as it enhances understanding of decision-making processes and group dynamics. By developing leadership abilities, ambitious students gain the expertise needed for professional growth and are equipped to take on roles within organizations. Strong leaders not only navigate challenges but also foster a trusting and encouraging environment, essential for innovation and productivity. Mastering leadership can significantly prepare individuals to guide entire corporations toward success.

The next skill required for true success is the initiative that pushes students to be self-starters. It denotes starting projects, strategies, and plans solely, and it is an attribute that earns rewards that can vary from person to person, depending on the atmosphere where the initiative is taken. It can range from good grades to promotions. Undoubtedly, the spirit of initiative, though being one of the hardest skills to learn and practice, remains a quality that leads to success and a better career. Hand in hand goes the next skill: productivity, which can best be described as maintaining efficiency within distractions. For students, productivity means completing a task in an appropriate amount of time; from a business standpoint, it is to get more done in less time, or better termed as efficiency. Once students understand productivity strategies, they discover ways of working best while gaining an appreciation of how others work as well; hence, they become equipped with practical means to carry out ideas they determine using the previous skills as well.

The last skill in this third category is social skills that tie all the aforementioned transversal skills together. Social skills have to do with connections between people; it is, in fact, meeting and networking with others for mutual benefit. It is about building strong relationships with the people around you for the common good. It goes without saying that social media have a crucial role in building such connections and even changing the nature of human interaction. For most students, such connections are just a piece of cake as socializing comes naturally to them; however, there are still some types of social skills to be learnt in an educational setting rather than a social one, such as etiquette, manners, politeness and the like, which play a major role in today's world.

III. The Importance Of Transversal Skills

Having classified and identified 21st-century transversal skills, it is evident their paramount importance. Transversal skills are essential for everyone, as they are crucial in our daily lives and social interactions. Researchers such as Wats (2009), Robles (2012), and Russell et.al (2005) have robustly argued that many companies in the West preferentially hire candidates who possess strong transversal skills. These individuals are often prioritized by various organizations over other candidates. Dell' Aquilla et al. (2017) argue that

Soft skills are important to students, as they are linked to job performances and career development; they are crucial for employees who need to manage their interactions and emotions in order to interact effectively with customers and get engaged with the workplace missions; for management and leadership skills, as they help lead teams towards common and shared goals, accomplish organisational missions and support organisations in their future directions and visions. (p.1)

It is commonly agreed within different fields that transversal skills are necessary in promoting not only individual growth but also collective one; more importantly, they enhance the creation of new practices either in educational, vocational, or professional contexts. Nowadays, we not only look for the types of hard skills a certain person masters, but we also focus on these skills as transversal competencies. Although stem subjects are prioritized from primary school to university level at the expense of transversal skills, which are being relegated in terms of curriculum must-haves, the job market increasingly shows a need for transversal skills.

In a recent study, conducted by and published in The Guardian, the results showed that "managers want applicants to tell them a story in their CV. They want to get an understanding of the personal qualities you might bring to the table, both now and in the future … nearly two fifths of the managers surveyed said they want young people to give greater prominence to their personal achievements and real-life experiences (so-called soft skills) in job applications" (Brett, 2018). Even Fortune companies such as Google, Facebook, Wal-Mart Stores, YouTube and the like see soft skills as "characteristics of success" (Brett, 2018); however, these 'life skills' do not pertain to the job market only, but they extend to our daily life; every person should "be able to do and expected to know in order to effectively perform" (Dell' Aquilla et.al, 2017, p.3) either in a job setting or within a social sphere since transversal skills are much involved with relational dimension, be they interpersonal or intrapersonal areas. Furthermore, a study questioned the significance of transversal skills, particularly during a job interview, and found that interpersonal skills are considered most important, while technical skills rank lowest (Bhatnagar and Bhatnagar, 2012, p.6).

In another survey conducted in the US showed that almost 70 % of the interviewed rated transversal skills as very important compared with less than 50% in a previous study which shows that "there are forces at play, which are changing the face of the working environment and leading to an increasing emphasis on the deployment of soft skills at all levels of the management, irrespective of any organization." (Bhatnagar and Bhatnagar, 2012, p.6) Such studies and surveys evince the increasing demand for transversal skills to fill in the gap between managers and employees that has been so wide during the past few decades, and the urgent need to meet the expectations of employers in today's world. In fact, "the incidence and insistence of managers complaining about soft skills of their new young workers has risen steadily year after year since we began tracking it in the mid-1990s" (Tulgan, 2015, p.21); managers complain specifically about the terrible work habits, the uncritical way of thinking, the lack of self-awareness, the absence of initiative, the indifference in taking decisions, solving problems or planning etc. that are fundamental personal habits that should have been learnt somewhere and/or sometime in the students/candidates' journey through life: home, kindergarten, high school, college, graduate school etc. before stepping into professional life and building a successful career. This leads us to ponder on very pertinent questions: where and when do we acquire/learn transversal skills? How do we get them? What role(s) do teachers have in delivering transversal skills to their students?

IV. Acquiring Transversal Skills: Home, School, Community

There is no consensus as to what age transversal skills should be taught; is it at a very early age (home, kindergarten)? Or is it during the middle and high school stages when students need to hone their career readiness skills before they enter the workforce? Or is it at a later stage when undergraduate students become fully aware of the necessity of having them for better job opportunities? In fact, all of the stages are of paramount importance, and such skills should be introduced step by step and on a regular basis.

Undoubtedly, home remains the first nest where children unconsciously acquire certain skills. Thus, the role of their parents is so decisive in building a child's personality through the development of behavioral skills effectively. For instance, communication, whether verbal or nonverbal, is the pillar skill to learn at home, and it is indeed the top-ranked skill employers look for in a novice employee. If parents unconsciously put hindrances to the improvement of communication skills, a serious problem will face the kids in their lives that will not be easy to overcome. Family members have to pay attention to what is being said and also remember what is being said in order to enhance active listening and effective responding—a trait of a good communicator, much needed

in the workplace. Similarly, as much of our communication is nonverbal, families can improve their kids' abilities by practicing correct posture, proper eye contact, and a convenient way of greeting as mere examples to cite.

Other transversal skills that can be improved at an early age include personal responsibility, initiative, and self-management. Such skills, if honed from an early stage in life, would definitely prepare potential job-seekers with many qualities much desired in the workplace. Simple tasks to take charge of within the family atmosphere, such as taking care of a pet, getting ready for school, setting the table for a meal, getting dressed, resolving problems alone, or planning a picnic, can bring about considerable results not only in the short term but in the long term as well.

Nonetheless, school remains the most suitable sphere where learners get to know and practice transversal skills with much awareness than in earlier stages. To a great extent—depending on the learnt subject and the teacher's profile—students become aware of the possible application of the gained information, be it transversal skill or hard skill, for distant horizons. In fact, it is not only the way a lesson is designed or the way an activity is presented that enhances the acquisition of transversal skills in the classroom, but it also concerns a strong will stemming from the whole educational system that boosts the implementation of such skills in the curriculum. Efforts must be joined from different interveners in order to come up with fruitful results that meet the needs of the job market. Thus, great focus must be laid on life skills rather than examination techniques, which do not focus on the importance of transversal skills. I am not advocating that we should do without exams, but rather, there must be a sort of balance with more focus on what students need after graduating.

Students should be placed in real-life classroom scenarios where they can accomplish two tasks with one effort. Teachers first need to possess transversal skills before teaching them to their students. For example, how can a teacher effectively teach communication—covering writing, persuading, presenting, inspiring, and informing—if they lack the skill themselves? Transversal skills demand that teachers demonstrate certain qualities to make a lasting impact and show genuine care.

The role a teacher plays in the transition phase of the students' lives, s/he can either mark it positively or negatively; therefore, instructions (in the form of activities) need "to be transferred into real-life settings in order to prepare students for success beyond the classroom." (Bhatnagar and Bhatnagar, 2012, p.8) According to Bhatnagar and Bhatnagar, there are four steps to follow so as to achieve a desired skill: 1) learning with no concept and no ability, 2) practicing consciously with less success, 3) practicing effectively and performing well, and 4) practicing effectively and performing with less concentration (p.8).

Introducing skills like critical thinking, problem solving, collaboration, creativity and leadership, among many other ones to students will be of great benefit for graduates seeking to be amid the distinguished workforce. Such skills constitute, by no means, a replacement of hard skills; they are, to a large extent, complementary, but they, at the same time, mark the difference. In fact, Bhatnagar and Bhatnagar (2012) believe that they "serve to unlock the potential for highly effective performance in people qualified with the requisite hard skills" (p.9), and more importantly, they will increasingly take major roles any organization across all sectors; therefore, it is "necessary to start such training from the earliest years of schooling, and continue to expand them throughout all levels of education" (Bhatnagar and Bhatnagar, 2012, p.9). Thus, teachers play a very significant role in inculcating transversal skills during their teaching journey. They must be aware of the heavy burden on their shoulders, and policymakers must take the challenge to involve transversal skills as a major component and goal in the educational curriculum.

Outside the realms of family and school comes another vaster sphere not only to learn transversal skills, but also to put them into practice. Community work provides a very practical atmosphere where students or graduates face real-life situations with much room of freedom. Volunteering, for instance, is no longer an activity for retired people who have enough time on their hands; it concerns every person, namely youth who are on the verge of stepping into professional life, and joining the workforce. Voluntary work boosts soft skills to the extreme as volunteers are involved with different people, different situations, and different tasks where they face problems, obstacles, and challenges to which they have to find solutions and overcome the barriers. By volunteering, young people will gain valuable experience and have numerous opportunities to enhance their transversal skills, including communication, flexibility, adaptability, problem-solving, and creative thinking. They will meet many new people and navigate various life experiences along the way.

Joining a volunteer program will definitely boost students' personal and interpersonal skills and expertise. It will also mold the individual's personality, a key factor in being hired within such and such a firm. Voluntary work, most importantly, can be used as a steppingstone to pursue real-life passions and goals since managers look for "stories" candidates went through during their educational or vocational journey. In the survey stated above conducted by The Guardian we have seen how the majority of the surveyed managers prefer their candidates to give more prominence to their achievements and real-life experiences, and more importantly, more than quarter of the surveyed "would actually like to see this information [accomplishments] listed ahead of qualifications;" another category believe that "candidates with volunteering or community work on their CV go straight to the top of the interview pile" (Anderson, 2012).

All in all, whether at home, at school, or within an association or a non-governmental organization, learning/acquiring transversal skills is essential for the better promotion of personal and interpersonal qualities. A parent, a teacher, a friend, a mentor, a colleague, or even a stranger can play a vital role in helping young people acquire skills that will give them a much better chance of succeeding in the job search and the workplace. However, as AI tools become more widespread and are used extensively, particularly in education, a key question arises: has AI impacted transversal skills?

V. Transversal Skills In Practice: Classroom-Based Reflections From HST

To move beyond theoretical frameworks and broad claims about the transversal skills gap, this section shares findings from direct classroom experience at HSTO. The aim is to evaluate students' ability to apply key transversal skills—namely communication, teamwork, and critical thinking—through structured classroom activities. By emphasizing practical teaching interventions, this section offers grounded insights into the ongoing challenges students face in mastering these vital skills. Two case studies illustrate how students in technical education struggle to engage meaningfully with tasks designed to develop transversal skills, underscoring an urgent need for curriculum reform and pedagogical innovation.

The first case study concerns two groups from different branches that were assigned group presentations to be delivered in the classroom in front of their classmates. Both groups were second-year students with at least six years of study of English. Students were required to deliver presentations on core disciplinary topics that they had to choose on their own, as they also had the possibility to select the members of the group. This left them with much freedom either in the selection of the topic or the team to work with. The objective is to work collaboratively in small teams on an agreed core disciplinary research topic; moreover, they are required to foster clear communication, distribute equitable tasks, and show team cohesion.

The classroom observations revealed considerable challenges in most of the teams. Though few groups show mastery of the topic selected—either in explanation or discussion—the majority still struggle to coordinate their work, as many groups exhibit uneven participation—for instance, low achievers are assigned very short sections to read without any ability to discuss or explain; whereas, one or two students dominate the presentation and the discussion as well. In several instances, there is limited verbal fluency and even clarity in explaining core concepts when the professor stops them to clarify certain core concepts. There is also an overuse of visual slides, often densely packed with text, which reflects a reliance on a prepared text rather than a confident command of the subject matter.

Students frequently struggled to respond effectively to questions from their peers and instructor, revealing a lack of preparedness and critical thinking skills. These observations imply that students have limited experience with collaborative work and are not used to clearly communicating technical knowledge in a way that considers their audience. Communication and teamwork, which are crucial for future professional environments, have not been systematically integrated into their previous academic experiences. As a result, students may find themselves lacking the essential tools and frameworks needed to navigate complex team dynamics and engage in meaningful dialogues with colleagues in the workplace. Furthermore, this indicates that these students are not adequately trained to present their technical knowledge—in their core discipline, which they must bring to the job market—in a clear and persuasive manner. Some may argue that the language of study (French) differs from the language of presentation (English), complicating the delivery. In response to this, we emphasize that the focus here is on transversal skills, rather than the language used for communication.

The second case study focuses on third-year students who are assessed based on an activity designed to evaluate their critical thinking abilities. At the end of each lesson, students are given open-ended critical thinking questions related to the subject matter discussed in the classroom. This task is assigned as homework to be submitted via Google Classroom.

Most of the submitted answers were well-structured, with few or minor mistakes. The students demonstrate a lofty writing style and show a deep understanding of the subject matter. However, when asked the same questions in person, most students struggle to restate the ideas they have previously submitted on the platform. They also fail to provide their own critical thinking responses to the questions posed in the classroom. Only a small number of students are able to respond critically and recall the answers they provided online.

Our analysis of these observations indicates that students struggle to apply critical thinking skills and to develop independent ideas, leading them to rely on AI for their assigned tasks. Despite having clear guidelines and prior classroom discussions, most of the submissions are structurally similar and appear to be AI-generated. These artificial responses lack depth and original insights. In many instances, the answers seem to be produced or significantly aided by AI tools, with little evidence of personal reflection or contextual adaptation. The use of generic phrases, formulaic structures, and an uncritical acceptance of information suggest a lack of intellectual autonomy among the students.

Most students provide excuses for their use of AI-generated responses, citing reasons such as time constraints, low levels of English proficiency, and heavy homework loads. However, these are not acceptable

justifications for students who are on the verge of entering the job market. This situation highlights a significant gap in students' ability to engage in independent reasoning. The activity reveals not only a lack of analytical skills but also an increasing reliance on technological tools as a shortcut for tackling complex academic material. Instead of using AI as a support to enhance their thinking, students often rely on it to replace the thinking process altogether.

Synthesis and Implications

Collectively, these two classroom-based studies highlight a significant systemic issue within technical education: the ineffective development of transversal skills, even in structured academic environments intended to foster them. Students participating in both interventions demonstrate challenges in articulating their ideas, collaborating effectively, and reasoning independently. These shortcomings are neither isolated nor incidental; rather, they indicate a pervasive pattern across various disciplines and educational levels, suggesting a fundamental deficiency in how technical programs approach transversal skill development.

The findings highlight an urgent need for innovative pedagogical approaches in education. It is essential to recognize that transversal skills—such as communication, teamwork, and critical thinking—should not be viewed as mere complements to hard skills or allowed to develop in an ad-hoc manner. Instead, these competencies must be deliberately integrated into the curriculum, with clear alignment to course objectives. This integration involves explicitly teaching these skills and implementing rigorous assessment methods to evaluate students' progress.

Educators play a crucial role in this transformation by creating dynamic learning environments where students are encouraged to take the initiative, engage in meaningful discussions, and collaborate effectively with their peers. By creating spaces for active participation, teachers can help students critically engage with the material and with one another, thereby cultivating a well-rounded skill set that prepares them for the complexities of the modern workforce and society.

VI. Conclusion

There is no gainsaying the importance of transversal skills for success in the workplace and in people's lives in general. However, most of our university curricula lean heavily on teaching hard skills and tend to give less importance to addressing transversal skills in their instructions. Although the Moroccan Ministry of Higher Education has implemented reforms emphasizing transversal skills in academic programs to better prepare undergraduates for employment, the implementation and acquisition of these skills still lag behind those of other universities worldwide. In a research conducted by Hind Moustadraf (2021) on engineering students from four different Moroccan universities, the participants acknowledged the crucial need for these skills for the job market; however, they also stressed the lack of practical implementation in comparison to the theoretical framework provided in the universities' curricula.

Acknowledging their growing importance, the Moroccan initiatives align with global trends, ensuring students develop a balanced mix of transversal and technical competencies. As part of broader educational modernization efforts, the government seeks to enhance graduates' job prospects in an evolving workforce. By adopting the Strategic Vision 2015-2030, the ministry tends to rethink and rebuild the Moroccan educational system by launching the national plan for Accelerating the Transformation of the Higher Education, Scientific Research, and Innovation Ecosystem 2030, or summarized as Pact ESRI, mainly by integrating transversal skills into the academic curricula.

Students from various departments and branches are required to attend the Méthodologie de Travail Universitaire (MTU) module, commonly known in English as Power Skills. This essential module is designed to equip students with a comprehensive toolkit that prepares them for the competitive job market. It focuses on developing critical competencies such as effective communication, problem-solving, teamwork, and time management. Students should normally gain valuable insights and hands-on experience that enhance their employability and readiness to succeed in their chosen careers. Meanwhile, the two case studies provided above demonstrate the opposite. The activities implemented in the classroom have evidenced that the majority of students lack the necessary skills that they should have acquired while attending the MTU module. This shows a real and pressing problem; students struggle with essential skills that are increasingly in demand in today's workforce. To effectively tackle this challenge, higher education must embrace a profound transformation in both pedagogy and curriculum, placing the development of transversal skills at the heart of technical training. By doing so, universities can equip undergraduates not merely to navigate the intricate landscape of an increasingly complex and automated world, but to rise as influential leaders who can innovate and inspire change in their fields. This holistic approach will ensure that students are not only adept in their technical expertise but also possess the interpersonal and critical thinking skills necessary to thrive in a dynamic future.

In this context, students bear a significant responsibility for shaping their own intellectual integrity. As AI tools become increasingly accessible, it is essential for learners to develop an ethical framework for their use—

leveraging technology to enhance comprehension rather than substituting for the learning process. This requires fostering habits of self-reflection, originality, and responsible engagement with digital tools. Higher education institutions must not only guide students in acquiring transversal skills but also instill in them a strong commitment to academic honesty and ethical awareness, thereby preparing them to contribute meaningfully and ethically in both academic and professional spheres.

References

[1]. Anderson, J. (2014, June 30). Personality Boost: Make Your CV Shine By Giving Soft Skills The Hard Sell. The Guardian. Http://Www.Theguardian.Com/Careers/Careers-Blog/Add-Personality-Make-Cv-Shine-Give-Soft-Skills-Hard-Sell

[2]. Bhatnagar, N., & Bhatnagar, M. (2012). Effective Communication And Soft Skills: Strategies For Success. Dorling Kindersley (India). Https://Proquest.Safaribooksonline.Com/9789332501805

[3]. Bonenfant, A. (2021, January 14). Covid-19: Why Have Soft Skills Become Essential For Companies? Grenoble Ecole De Management - En. Https://En.Grenoble-Em.Com/News-Covid-19-Why-Have-Soft-Skills-Become-Essential-Companies

[4]. Brett, N. (2018, December 20). Future Graduates Will Need Creativity And Empathy, Not Just Technical Skills | Natalie Brett. The Guardian. Http://Www.Theguardian.Com/Education/2018/Dec/20/Future-Graduates-Will-Need-Creativity-And-Empathy-Not-Just-Technical-Skills

[5]. Dell'Aquila, E., Marocco, Davide, Ponticorvo, M., Di Ferdinando, A., Schembri, M., & Miglino, O. (2017). Educational Games For Soft-Skills Training In Digital Environments. Springer International Publishing. Https://Doi.Org/10.1007/978-3-319-06311-9

[6]. Fadel, C. (2008). 21st Century Skills: How Can You Prepare Students For The New Global Economy? Retrieved June 15, 2021, From Https://Www.Oecd.Org/

[7]. Going Beyond Technical Skills: Soft Skills Matter In The Workplace. (2018, October 8). [News]. Http://Www.Ilo.Org/Jakarta/Info/Public/Pr/WCMS_647297/Lang--En/Index.Htm

[8]. Khasanzyanova, Albina. (2017). How Volunteering Helps Students To Develop Soft Skills. International Review Of Education. 63. 1-17. 10.1007/S11159-017-9645-2.

[9]. Loveless, B. (2021). Teaching Soft Skills: The Complete Guide. Retrieved June 22, 2021, From Https://Www.Educationcorner.Com/Teaching-Soft-Skills-Guide.Html

[10]. Moustadraf, H. (2021). Soft Skills And Effective Communication In University Settings. Revue Soft Skills Et Didactique Des Langues, 1, 1-20.

[11]. Robles, M. M. (2012). Executive Perceptions Of The Top 10 Soft Skills Needed In Today's Workplace. Business Communication Quarterly, 75(4), 453–465.

[12]. Russell, J., Russell, B., & Tastle, W. J. (2005). Teaching Soft Skills In A Systems Development Capstone Class. Information Systems Education Journal, 3(19), 1–19

[13]. Schmitz, T. (2016, March 15). The Three Types Of Soft Skills. The Conover Company. Https://Www.Conovercompany.Com/The-Three-Types-Of-Soft-Skills/

[14]. Stauffer, B. (March 2020). What Are 21st Century Skills? Retrieved June 12, 2021, From Https://Www.Aeseducation.Com/Blog/What-Are-21st-Century-Skills

[15]. Tulgan, B. (2015). Bridging The Soft Skills Gap: How To Teach The Missing Basics To Today's Young Talent. Jossey-Bass, A Wiley Imprint.

[16]. Wats, M., & Wats, R. K. (2009). Developing Soft Skills In Students. The International Journal Of Learning, 15(12), 1-10.