



Proposal of a Disruptive Didactic Innovation for the Development of Leadership Skills Through the Arts: Skills & Art

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The need for cognitive and leadership skills requires the exploration of creative implementation models that ensure training and emphasise the value of individuals as the main asset within organisations. This research aims to introduce and validate a disruptive didactic innovation, which fosters the development of these skills through experiential communication via “Skills&Art”. The methodology used is Design Research, an emerging approach in educational research that encompasses developing and implementing a new or improved model, validating techniques, tools or models and determining conditions that facilitate successful implementation. The research was conducted in both classroom and museum settings. It consisted of a four-phase activity focused on crafting a speech that linked a skill with an artwork. A qualitative study of the speeches and a Likert self-assessment questionnaire were performed. The results demonstrate that the proposed disruptive didactic innovation Skills&Art is effective and efficient, and its self-assessed learning promotes innovation, creativity, initiative, problem-solving and analytical thinking. The novelty and contribution of this study lie in implementing these thinking skills within a single activity.

Keywords: innovation, learning, teaching experiment, soft skills, art, communication

INTRODUCTION

The term “soft skills” has gained significant prominence in recent years. Its presence in scientific and informative publications, professional training programs, job descriptions, and even casual conversations highlights the urgent need to possess these personal skills, applicable across any professional field, facilitating effective interaction with others. Unsurprisingly, they are highly sought after in the workplace, as these strengths, values or virtues foster more efficient job performance. Consequently, there has been a

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proliferation of studies, projects, and reports indicating and specifying the skills considered emerging and future-oriented in the job market, emphasising the need for training in these skills, particularly for students and future professionals. Examples include critical thinking skills and learning outcomes (Lombardi et al., 2022); (Farizi et al., 2023) and problem-solving (Pelobillo, 2022). Bureekhampun et al. (2021) posit that teachers' creativity is essential to students' educational success. Maulana et al. (2022) conclude along the same lines. Indeed, searching for creative and effective implementation models is imperative (Leite et al., 2024).

We lack a proposal that integrates skills holistically. In addition, we believe that any proposal must be creative and embody a humanistic model. By this, we mean a model that aligns with the human way of learning and developing rational, spiritual, and social dimensions (Pérez-Pérez et al., 2023). At this point, we connect skills with Art, laying the groundwork for a disruptive didactic innovation model for developing soft skills in general and the individual, in particular, aimed at comprehensive development, which we refer to as Skills&Art.

This research presents a model of innovation as a means for skills development and examines the effectiveness, efficiency, and evaluation of this innovation. The literature review on the subject and the researchers' own experience point to the Teaching Experiment as the suitable methodology for validation. It also emphasizes the potential to use engagement with Art to develop leadership skills.

The current demand for skills for effective professional performance

Since the creation of the European Higher Education Area (EHEA) with the Budapest-Vienna Declaration of March 2010, acquiring skills for lifelong learning to ensure employability, social inclusion, and active citizenship has been a key reference in education.

The definition and taxonomy of these skills have evolved significantly. In 2020, recognising disparities in skills and characteristics identified in numerous socio-emotional education frameworks by leading organisations worldwide, The European Union's Erasmus Program initiated an interesting project: LifeComp (2020). This conceptual framework provided a common understanding and shared language at the European level to support initiatives ensuring that all individuals in Europe acquire these life skills as much as possible through education, including non-formal and informal education and different levels of formal education. This project already defined that to cope with complex life situations, European citizens must continually develop skills that enable them to successfully navigate challenges arising from the numerous transitions in their professional and personal spheres and society. In other cultures, too, it has been shown that individuals need to learn to cope with uncertainty, build resilience, develop personally, establish satisfying interpersonal relationships, and learn to learn (López-Caudana et al., 2024). Becoming self-regulated, empathetic, and flexible citizens is always characterised by a social dimension. Thus, the LifeComp project defined three competency areas: Personal (resilience, flexibility), Social (empathy, collaboration, communication), and Learning to Learn (critical thinking, learning management).

In 2020, The World Economic Forum also reinforced the significance of soft skills by identifying critical skills for facing emerging and future challenges resulting from the transformation of the digital society. The document outlined the need for these skills, highlighting an obstacle faced by global companies seeking to harness the growth potential brought about by adopting new technologies, and it is precisely the lack of skills. The top ten skills are grouped into four main clusters: problem-solving, self-management, working and relating with others, and technology development. It should be noted that eight of these ten skills are human thinking skills, as opposed to two directly related to technology. This ratio is logical and highlights an aspect also reflected in the Davos Forum report mentioned above: people are organisations' primary assets, prevailing over everything else.

In any case, the skills outlined in this Forum align with the LifeComp framework, describing skills that involve self-management, a social dimension (working with people), and intellectual learning (problem-solving). We refer to these skills as thinking skills as opposed to technological skills, which are, in turn, leadership skills. There is no single definition of leadership (Kalshoven & Taylor, 2018). One of these desirable skills explicitly refers to leadership and social influence. In addition, we coincide with the approach of Cardona et al. (2019), who refer to 360 leadership- a non-hierarchical (top-down) leadership based on creating a shared purpose (Setyaningsih & Sunaryo, 2019). Thus, the relationship of influence, the basis of leadership, is not rooted in power but in the leader's moral authority (authenticity), regardless of whether the leader holds a management position. Sharma (2011) also identified being a leader as being a great person, bypassing the need to have a management position. Thus, all thinking skills can be considered leadership skills, warranting their implementation across the entire population, called to be a competent asset for society. Promoting them among young people is necessary due to the subsequent impact on leadership behaviours exhibited once they become adults in the workplace. This novel approach conceives a leader as a learner of values and a product of reflection and places leadership in ordinary people accomplishing extraordinary feats.

Research Objectives

Our initial hypothesis establishes that the leadership skills currently demanded by companies (analytical thinking, communication, problem-solving, resilience, stress tolerance and flexibility, innovation, creativity, and initiative) since they require an impact on the entirety of the individual, can be effectively cultivated through a proposal that uses art as the primary tool. This combines the effectiveness of experiential learning with a practice that impacts the cultivation and improvement of the individual.

Under this premise, the objectives we set are:

Objective 1: Present a disruptive didactic innovation based on developing leadership skills through art, Skills&Art. Objective 2: Validate the model and thus verify that the results of the didactic innovation Skills&Art can implement the skills demanded in the Davos Forum (2020), covering three competency areas in participants: personal (resilience, flexibility), social (empathy, collaboration, communication), and learning to learn (critical thinking, learning management).

METHOD

After the preliminary literature search for the design and evaluation of the didactic innovation Skills&Art, we have opted for the Teaching Experiment, a type of methodology framed within Design Research. Design Research responds to an emerging approach in Educational Research; primarily qualitative and developed within the Learning Sciences. Our examination thus operates in a multidisciplinary field that studies learning and teaching from diverse areas such as education, sociology, anthropology, and neurosciences (Confrey, 2006; Sawyer, 2006). The diverse outcomes of this approach encompass developing and implementing a new (or improved) design/development/evaluation, validating techniques, tools, or models, and determining conditions that facilitate successful implementation. This is the point we focus on to achieve our objectives.

Rinaudo & Donolo (2010) evidence the robustness of this methodology, highlighting two high-impact journals in educational research that dedicated special issues to this approach in 2003 and 2004: *Educational Researcher* (2003, vol. 32, 1) and the *Journal of the Learning Sciences* (2004, vol. 13, 1). In turn, The *Cambridge Handbook of the Learning Sciences* (Sawyer, 2006) addressed design research in the Methodological Foundations section.

We focus on the following characteristics of this methodology, as described by Molina et al. (2014), deeming them suitable for underpinning our didactic innovation proposal Skills&Art, which is based on developing leadership skills through Art. The design serves the development of broad models about how humans think, know, act, and learn (Barab & Squire, 2004). By using this methodology, students, the researcher-teacher, and the other researchers who may intervene are expected to build knowledge and cultivate personal development. The ultimate goal is to develop or validate a student learning and/or development model related to specific content. The results and guidelines can be classified into three types of products: generated knowledge, curricular products, and participants' professional development (McKenney et al., 2006).

The Teaching Experiment consists of a sequence of teaching episodes with participants, typically including a researcher-teacher, one or more students, and one or more researchers-observers (Steffe & Thompson, 2000). The researcher maintains a regular and active presence in the research context, allowing them to obtain first-hand knowledge about the implementation of the design (Fishman et al., 2004; Reinking & Bradley, 2008). According to De-Benito & Salinas (2016), it is “a type of research oriented toward didactic innovation, whose fundamental characteristic consists of the introduction of a new element to transform a situation (p. 44)”. Real-world application is considered a distinctive aspect. The execution of teaching experiments involves three phases: preparation, experimentation, and retrospective data analysis (Cobb & Gravemeijer, 2008). The relevant literature related to the research problem should support the actions. Experiment duration can vary (e.g., hours, one or several years), and the observed “setting” can range from small interview-laboratory rooms to complete classes or even broader learning environments. In our case, these conditions were met. Participants comprised a researcher-teacher, twenty business master's students, and two researcher-observers. The time allocated for preparation and

experimentation spanned several hours on two days. The experiment was set in the Thyssen Museum located in Madrid, Spain.

As De-Benito & Salinas (2016) state, the research processes carried out under the methodological approach of design research are not well-defined, so the number of stages varies among authors. However, all proposals include a definition of the problem, design, development, implementation, and evaluation. We followed the model proposed by Reeves (2006), which commences with analysing the situation and defining the problem. Next, a solution is put forward after the theoretical foundation is established. The following phase involves the implementation, followed by data collection or validation to produce documentation and design principles. These processes are carried out in different design, validation, analysis, and redesign cycles to improve the process. Figure 1 shows the Design Research process.

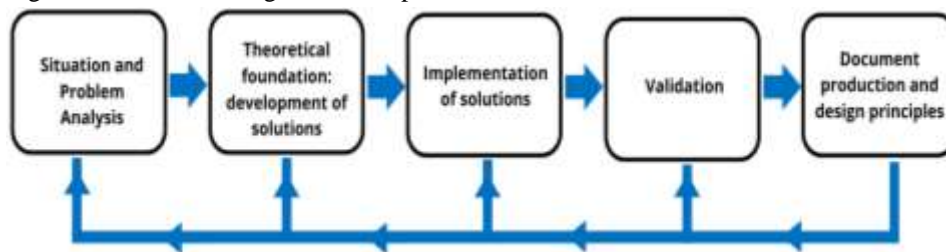


Figure 1
Design Research Process. Source: created by the authors based on Reeves (2006)

Methods, such as focus groups, interviews, questionnaires, or participant or non-participant observation, can be employed to record the information, among others (Cobb et al., 2003). In this instance, the survey technique was used, and the instrument was a questionnaire with a Likert-type scale. Below, we detail the process we have followed.

Our experiment consisted of conducting a teaching activity utilizing a tool designed by one of the authors of this article to cultivate leadership skills in a single activity through engagement with art¹. The experiment entailed the creation of a novel learning method comprising three phases encompassing several steps. In the first phase, students conducted a self-assessment and received instructions and guidelines for the activity. In the second phase, students engaged in an activity (this phase could take place either in a museum or a classroom); in the third phase, students received and provided feedback. The experiment included the participation of a researcher-professor, twenty business master students, and two researchers-observers. The qualitative sampling approach is always intentional since the analysis units are chosen for a purpose. In our case, students were selected from a master's program that prepares future managers, in which developing leadership skills is fundamental. Given the nature of the activity, a small group of 20 young people were randomly selected from classes to which the research

¹ Lucía Pérez-Pérez is the author of the tool Skills&Art: integral model for the development of leadership skills through art.

team had access. The time allotted for preparation and experimentation spanned several hours over two days. The experiment was conducted in the Thyssen Museum in Madrid, Spain.

The initial phase was conducted in the classroom, while the subsequent phases took place at the designated museum a few days later. Each participant delivered a presentation before a chosen artwork during the latter phases. Following each presentation, the remaining classmates provided two-minute feedback based on four questions (how I see you, how I hear you, something to improve and what I liked the most). These feedback messages were sent via WhatsApp to be read privately later. Upon the completion of the presentations, a meeting was held, during which the instructor provided feedback to each participant in the presence of their peers. The participants then shared their comments and opinions about the experience. This provided each participant with guidelines for further reflection and the opportunity to devise a personal development plan at the end of the process. Subsequently, an online Likert-scale survey was administered to the students, evaluating the experience across three dimensions: effectiveness, efficiency and self-assessment of skills.

Additionally, the process was replicated at another time with the researchers to experience it and personally verify its effectiveness. In this case, a previous videoconference was held where the teacher-instructor explained the process to the other researchers acting as students. Guidelines were provided concerning what they should work on and prepare for the in-person experiment. The process was repeated in the same way as described earlier, as the master's students had carried it out. This allowed the instrument and each phase to be outlined, as shown in Table 4 in the results section: Implementation of Solutions.

Table 1 outlines the general characteristics of the experimentation with the group of students and Table 2 with the research group.

Table 1

Example of the development of the experiment with masters students

Date (duration)	Total no of students	Location	Activities	Data collection
May (5 h)	20 Business school Masters degree students	Classroom	Explanation: (Personal work, development of the speech)	Student notes Researcher-teacher notes Researchers' notes
		Thyssen Bornemisza Museum	Execution: Development of the speeches Written feedback Direct <i>Feedback</i> on the Innovation	Student notes Researcher-teacher notes Researchers' notes Likert Questionnaire

Table 2

Example of the development of the experiment with the researchers

Date (duration)	Total no of students	Location	Activities	Data collection
15/ 29.3.23 (3 h)	5 researchers from the group	Classroom	Explanation: (Personal work, development of the speech)	Video recording Notes from the group's researchers Researcher-teacher notes
		Prado Museum	Execution: Development of speeches Written feedback Direct feedback Discussion	Notes from the group's researchers Teacher-researchers' notes

It was determined that decisions and data collected would be recorded at all times; hypotheses/conjectures of the research would be analysed and reviewed. Finally, a comprehensive retrospective analysis of the data will be conducted to delve into the overall process of skill development process.

A Likert-type scale was used as the measurement method to evaluate the extent of participants' agreement or disagreement with a series of statements measuring the students' assessment of the tool and self-assessment of acquired learning with Skills&Art. This scale consisted of five response options: "5 – Strongly Agree", "4 - Agree", "3 -Neither agree nor disagree", "2 - Disagree" and "1 – Strongly Disagree". The respondents selected the option that most accurately represented their opinion or perception regarding the given topic, facilitating the meaningful quantification and analysis of their responses (Table 3).

Table 3
Validation of the Skills&Art instrument using the Likert scale

Variable	Indicator	Items/Statements
Evaluation of the Skills&Art tool the student	Efficacy	The activity was highly suitable for the development of my leadership skills
		I was satisfied with the activities I engaged in
		I believe I achieved the proposed objectives adequately
		I felt satisfied with what I learned from the activity
		The practical and theoretical learning was adequate
	Efficiency	The didactic resources were used excellently
		I rate the methodology used as excellent
		The time allocated for conducting the activities was sufficient
		The feedback provided by the instructor allowed me to identify areas for improvement
Self-assessment of learning acquired with the Skills&Art tool	Analytical thinking	The speech delivered demonstrates a strong connection between the artwork and leadership skills
	Learning Strategies	I have challenged new information regarding leadership skills, making an excellent contribution
	Problem-solving	During the activity, I adeptly applied the information to achieve optimal outcomes across the three phases: appreciation, staging, and feedback
	Resilience, stress tolerance and flexibility	I did not lose composure; I felt positive, and I kept the momentum going excellently
	Innovation, creativity and initiative	I crafted a creative and innovative speech with excellent content

This study is part of a research project and has received a Positive Suitability Evaluation from our university's ethics committee, which examined the instruments and processes.

FINDINGS

The explanation of the results describes all phases of the teaching experiment.

Analysis of the Situation and Problems

The analysis of the situation and the problem at hand is synthesised in the hypothesis that posited that the leadership development skills demanded by companies today require an impact on the entirety of the individual and be effectively developed through

proposals that use art as the primary tool, as is the case with the disruptive didactic innovation: Skills&Art.

This problem or deficiency was delineated by exchanging the research teams' experiences, drawing from their extensive professional background as educators and researchers in communication, leadership, business organisation, and humanities. The lines of work that followed respond to the knowledge and study of the issues outlined in the theoretical framework: lack of skills and demand for these skills from education and the corporate sector. This led to the design of an ecosystem that encourages the implementation of skills through communicative action.

Theoretical Foundation: Development of Solutions

The theoretical foundation was primarily aimed at underpinning the development of leadership skills, using Art as the basis for the proposal.

The fact that the most demanded skills in organisations are cognitive indicates a cultural deficiency in individuals and institutions. Deficiency refers to the need for culture in its humanistic sense, that is, as the “cultivation of the soul (...) through theoretical and practical knowledge that allows individuals to humanise themselves and live with dignity as human beings” (Lorda, 2011, p.22). Consequently, we consider the relationship we have described between these competencies and traditional virtues. Given these premises, we believe art is an optimal tool for assimilating these skills. Why art? It is well known that leadership skills are not acquired through theory, lectures, or discussion groups (Sogunro, 2004); they are typically learned through practice and interaction with others (Wexley & Latham, 2002). Assimilation of these skills is greatly enhanced through experiential learning and teaching others. In this context, art is a suitable instrument for developing proposals. The use of the artistic element as a learning tool and as a way to improve organisational activity has been the subject of debate since ancient times. Various theoretical perspectives have been adopted in academia, highlighting the significance of art in organisations, its learning, and its ability to foster skills (Sköldberg et al., 2015; Taylor & Ladkin, 2009). Indeed, it is a resource with gamification elements, evokes emotions, shapes experiential learning, stimulate critical and creative thinking, and fosters imagination. The integration of arts into any thinking activity is based on this multidisciplinary approach through the tradition of experiential learning theory.

Art and culture are not just didactic instruments but an essential part of human education and the society to which one belongs (Tavira, 2007). Artistic elements allow us to question, contemplate, and dialogue with reality. The classic philosophical tradition, spanning from Aristotle to the present, has consistently maintained that beauty is alluring; as such, it affects the person, never leaving them indifferent. As intellectual wisdom, contact with art attains a higher level of perfection than mere technique (Pérez-Ilzarbe & Lázaro, 2000). These principles connect with artistic expression and are optimal for developing distinctly human skills (Eisner, 2008).

Indeed, Herman's (2016) visual intelligence methodology ensures that our way of observing the world is altered through art. Colors, lights, details, and opportunities are

seen where nothing was seen before. Order is seen and answers are found. One never sees the same again. Art encompasses everything needed to improve our observation, perception, and communicative skills. Art allows us to reorganise our worldview and change perspectives.

Implementation of Solutions: A Disruptive Didactic Innovation

As a result of the previous stages, a didactic innovation scheme titled Skills&Art was devised. This innovation addressed leadership weaknesses through art, providing an aesthetic experience by engaging with the beauty of artworks. When we refer to didactic innovation, we mean changes incorporated in the teaching-learning process involving modifications, in this case, methods and means applied by integrating art. Disruptive innovation encompasses a decisive change that alters the conventional by incorporating new actions or options that cause a rupture in schemes and integrating other branches of knowledge. This innovation has multiple advantages and is accompanied by cost reduction to improve existing practices. In the case of our proposal for disruptive didactic innovation, the challenge is to fundamentally transform the way cutting-edge leadership skills are acquired or developed. This involves creatively leveraging the broad range of possibilities in this case by humanism, knowledge, and art. It is more concerned with how these skills will be taught rather than what will be taught.

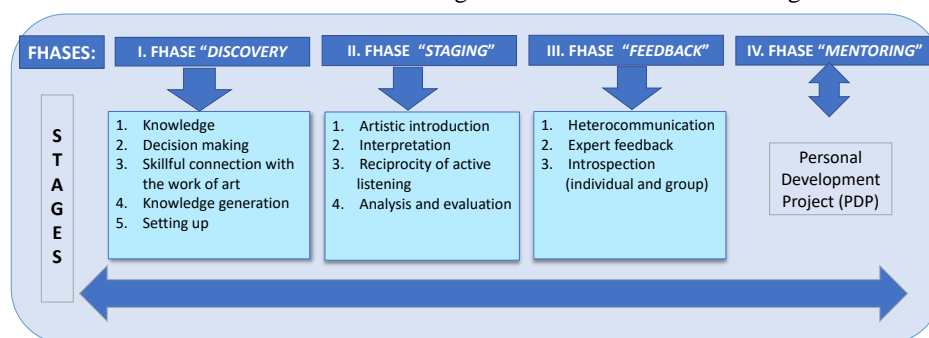


Figure 2 Phases of disruptive didactic innovation for developing leadership skills through art

The innovation aims to acquire soft skills in executives through a single activity. This consists of creating a new learning method composed of a set of phases and actions, enabling participants to work globally on leadership skills. This process concludes with an understanding of their personal goals so that a personal development plan can be created. In the first phase, "Discovery" or should-be is developed, the students will self-assess, and acquire knowledge and guidelines for implementation. In the second phase, "Staging," the student engages in the activity (this phase should take place in a museum); in the third phase, the student will receive and provide feedback; a fourth stage, "Mentoring", was added, wherein, upon completion of the innovation implementation, participants will create a personal development plan.

The following table outlines the four respective phases of the experiment, including their stages, objectives, and potential achievements.

Table 4
Phases of the disruptive didactic innovation Skills & Art

1. "Discovery" phase (explanation of implementation guidelines)			
Stages	Description	Objectives	Potential achievement
Knowledge	Detailed explanation of the activity	Know exactly what to do	Learning to learn (learning management) Social (empathy, collaboration, communication)
Decision making	A search must be made to select a leadership skill and a work of art	Have the tool to connect them	Learning to learn (critical thinking, learning management)
Connecting the skill with the work of art	Once chosen, the connection between the skill/artwork must be made	Relate to explain the skill, using the artwork as a tool	Learning to learn (critical thinking, learning management)
Actions that generate knowledge and communication	Develop a four-minute speech explaining the skill through the selected artwork	Doing research work so that it contributes to knowledge	Learning to learn (critical thinking, learning management)
Standing	Prepare the staging, how it will be communicated and rehearse it	Developing effective communication	Learning to learn (critical thinking, learning management)
2. "Staging" phase (Progression of the activity)			
Stages	Description	Objectives	Achievements
Artistic introduction	At this point, the researcher will make an introduction in the online classroom or museum	To obtain all the information on the routes and times	Learning to learn (critical thinking, learning management)
Interpretation	The participant will give their speech by showing the work of art	To practice effective communication enhanced by the artwork itself, to get out of their comfort zone	Learning to learn (learning management) Social (empathy, communication) Personal (resilience, flexibility)
Reciprocity of active listening	Participants listening to the presentation will take notes and then give effective feedback	Practice active listening	Learning to learn (learning management) Social (empathy, collaboration, communication) Personal (resilience, flexibility)
Analysis and assessment	The subjects who will give this feedback prepare their presentation according to the guidelines: how I see you, how I hear you, something to improve, and what I liked best	Prepare feedback and provide solutions	Social (empathy, collaboration, communication) Learning to learn (critical thinking, learning management)
3. "Feedback" phase			
Stages	Description	Objectives	Achievements
Hetero-communication	Feedback will be given to the speaker in writing	Have the student practice giving effective feedback	Learning to learn (critical thinking, learning management) Social (empathy, collaboration, communication)

Expert <i>Feedback</i>	The researcher leading the session will give effective verbal feedback to each of the participants	To be aware of how your presentation has been perceived by the expert, areas, and suggestions for improvement	Learning to learn (critical thinking, learning management) Social (empathy, collaboration, communication) Personal (resilience, flexibility)
Introspection	With all the information received, a subsequent exercise of introspection is required to elaborate a personal development plan	Be clear about personal leadership goals and develop a plan for personal improvement	Learning to learn (critical thinking, learning management) Personal (resilience, flexibility)
4. "Mentoring" Phase			
Stages	Description	Objectives	Achievements
Elaboration and implementation of the personal development project	We will proceed with a mentoring process to design the personal development project	Self-awareness and determining personal objectives to develop the necessary skills	Learning, unlearning, and personal construction

Results and Validation

After completing the activity with the students, a retrospective data analysis was conducted, incorporating qualitative aspects followed by quantitative ones. The qualitative data was based on the notes gathered by the researchers during both processes. In both processes, positive emotions evoked by the novelty of a proposal that connects skill development to a work of art were observed. This involved identifying attitudes exhibited in different phases, emphasising reflection, creativity, communicative ability, and stepping out of one's comfort zone- attitudes that presuppose exercising a skill.

The following is an example from a student's speech that associates resilience with a painting, demonstrating the skill of analytical thinking: *"I'm going to tell you how this painting has resonated with me beyond the colours and what it reflects. To me, it visualises something much deeper; it is a life situation from which I thought I would never emerge (student 1)"*.

In the following speech, the student explains creativity, using creative communication that employs figures such as metaphor, rhetorical questioning, or parallelisms. *In conclusion, a world devoid of creativity would be a world without each individual's unique and personal contribution. The novelty that each person is. What would the world be like without creativity? Without personal initiative? Creativity is life. No one is the same, and no contribution is repeated (student 2).*

In the quantitative analysis, surveys utilising Likert scales were employed to evaluate the activities carried out with Skills&Art across the dimensions of effectiveness, efficiency, and self-assessment of acquired leadership skills. The survey's reliability index was 0.83, according to Cronbach's Alpha. The results indicated a high or positive degree of satisfaction with a variance between 0.48 and 0.52 with an average of 4.39 and 4.13; that is, little data dispersion around the average. Based on these results, the evaluation of each studied dimension is detailed:

The first dimension assessed in the Skills&Art innovation was “effectiveness,” which was analysed through four indicators, affirming its development of leadership skills, satisfaction with the activity, achievement of the proposed objectives, and satisfaction with the acquired learning. The second dimension related to the assessment of Skills and art was “efficiency,” analysed through a set of indicators. The results confirm that efficiency is high in practical-theoretical learning, didactic resources, methodology, time employed, and feedback provided by Skills&Art. The third dimension involved the self-assessment of learning acquired through Skills&Art, which revealed that leadership skills such as innovation, creativity, initiative, problem-solving, and analytical thinking were developed, emphasising the development of resilience, stress tolerance, and flexibility.

In conclusion, unlike traditional experimental studies, the reliability of this disruptive didactic innovation does not rely on replicating the results from an instructional sequence. Instead, it is expected that researchers can adapt how rather than what to teach (Gravemeijer & Cobb, 2006). Thus, our final result responds to this consideration and is adapted to the current education and teaching context. Evaluating all activities contributed to implementing a fourth phase consisting of mentoring sessions to accompany the implementation of a personal development plan.

Document Production and Design Principles

In the final phase, once the process had been validated, we decided to structure it further, refining the wording and entering it into a software tool or application to facilitate execution and subsequently assess each experiment. Experience shows that new technologies play a crucial role in documenting work in the classroom, especially in online contexts. This also aligns with the environment where we operate and work today, especially among the younger population.

The app designed comprises several items, providing guidelines for the activity and facilitating the necessary materials for its implementation. In addition, it serves as a channel for providing feedback on a participant’s speech, sending it, and receiving feedback from peers on one’s own communicative action. Lastly, the application contains questionnaires for the self-assessment of learning and the final assessment of the activity. This way, each presenter obtains reactions to their presentation, facilitating subsequent reflection and the definition of an improvement plan.

DISCUSSION AND CONCLUSIONS

The results discussion reveals a convergence between the qualitative and quantitative data obtained during the study of the disruptive didactic innovation Skills&Art. Firstly, the qualitative analysis underscored the presence of positive emotions among the participants, indicating their receptiveness to the proposal that integrates skill development with art. The students’ testimonies reveal a profound connection between leadership skills and artworks, demonstrating their capacity for critical reflection and keen analytical skills.

The students’ speeches illustrate the richness and diversity of the experiences encountered throughout the activity. For instance, it is apparent how participants

associated abstract concepts like resilience and creativity with particular elements within the artworks, demonstrating a profound and personal understanding of these skills. These qualitative findings underscore the efficacy of Skills&Art in fostering reflection, creativity and communication, as well as challenging participants to step out of their comfort zones and explore new perspectives.

In contrast, quantitative analysis conducted via Likert-scale surveys provided a systematic assessment of the effectiveness, efficiency and self-assessment of leadership skills acquired through Skills&Art. The results revealed a high level of satisfaction and low data dispersion around the mean, indicating consistency in participants' responses.

The evaluation of the three studied dimensions—effectiveness, efficiency, and self-assessment of skills—revealed positive outcomes. Participants demonstrated significant development in leadership skills, expressed high levels of satisfaction with the activity and acquired knowledge, and demonstrated notable efficiency in the practical-theoretical learning process, use of didactic resources, methodology employed, and feedback received.

Furthermore, the discussion underscores the flexibility and adaptability of Skills&Art as a didactic innovation that does not rely on a rigid instructional sequence but rather enables researchers to tailor their teaching methods based on the current educational and teaching context. This learning process-centred approach aligns with contemporary educational trends, emphasising the importance of personalisation and flexibility in the design of educational experiences.

Finally, the production and document design phase is outlined, during which the Skills&Art process was structured and refined to facilitate its implementation and evaluation through a software application. This decision underscores the acknowledgement of the significance of emerging technologies within the educational sphere, particularly in online settings. It demonstrates a commitment to adapting to the needs and preferences of the current student population.

In summary, the discussion of the results highlights the success of Skills&Art as an effective didactic innovation for developing leadership skills through art. Both qualitative and quantitative data substantiate the effectiveness and relevance of this proposal, highlighting its capacity to stimulate critical reflection, creativity, and communication while facilitating meaningful and personalised learning within the current educational context.

Furthermore, based on the specific research objectives outlined in the introduction section, the findings of this study closely align with the established objectives. Objective 1 sought to introduce a disruptive didactic innovation centred on developing leadership skills through art, known as Skills&Art. This research has demonstrated that Skills&Art effectively incorporates art as a tool for cultivating leadership skills, as evidenced by the participants' enhanced creativity, flexibility, resilience, communication, empathy, critical thinking, and learning management skills.

Objective 2 aimed to validate and confirm that the outcomes resulting from the implementation of Skills&Art could address the skills demanded by the Davos Forum

(2020), which encompassed three competency areas: personal (resilience, flexibility), social (empathy, collaboration, communication), and learning to learn (critical thinking, learning management). The study validated the effectiveness of Skills&Art in meeting these demands, thereby demonstrating its holistic approach to skill development across various domains.

Additionally, this disruptive didactic innovation implements an innovative practice through its methodology and approach: combining art with experiential learning, personal work, and the opportunity to craft a personal development plan for leadership skills, together with giving and receiving feedback through an intuitive, user-friendly digital medium. Indeed, “staging” is an attractive experiential and playful element for participants, resulting in a profound impact that generates positive emotions. This emotional state aids, among others, in fostering introspection, and personal reflection for improvement. Furthermore, participants had the opportunity to draft a personal development plan, receive feedback and gain insight into their strengths and weaknesses in these skills.

As a novel and original contribution, we observe that the proposal surpasses other approaches that have utilised artistic expression to develop leadership skills. Firstly, this is because the proposed approach implements all the skills demanded at the World Economic Forum (2020) within a single activity, in contrast to the literature referenced in state of the art, which typically addresses only one or a couple of skills. Secondly, by using art, this model emphasises the belief that individuals not only need to acquire skills but should also cultivate themselves as human beings. This presents a challenge that aligns with communication, education and social innovation within the digital landscape. This environment is constantly evolving and expanding, sometimes overshadowing the human dimension of organisational relationships, thereby impacting the economy, culture, education, work organisation and social relations. Consequently, the activity contributes to addressing societal and corporate needs for individuals equipped with soft skills, the need for creative proposals to instil these skills, and, particularly, the need to develop thinking and communication skills.

This didactic innovation supports active citizenship and ethics in lifelong learning. Improving training in thinking skills ensures positive and lasting effects on the participating organisations and individuals involved in the organised activities. It also prioritises understanding common values, such as social, cultural, and historical heritage derived from art, as the cultural heritage of the society where the experiment is conducted. Furthermore, art prompts the exploration of existential questions because it highlights themes concerning human nature in all its complexity, often making us uncomfortable. Discomfort and uncertainty bring out the best in our brains. We mobilise an entirely new thinking process; it is disruptive. Contemplation is not merely a passive gaze but a mental process of active engagement.

We believe that this model contributes to addressing a need in an interdisciplinary manner by exploring skills that enhance an individual’s development in their professional and social context, thereby fostering societal progress.

A limitation of the study is that the tool has only been tested with Master's university students. Although it was also tested by the researchers, conducting the experiment with other demographic groups would be advisable. Additionally, conducting a gender-differentiated study is. These avenues open up new prospects and lines of research. Skills&Art is an innovative practice that can meet the needs of target groups with fewer opportunities. Although the pilot was conducted among university students- including some managers- the result aims to be transferable to other educational sectors and groups, such as the unemployed or those at risk of exclusion. We believe that the success of our proposal lies in its responsiveness to various social needs outlined as objectives in didactic projects promoted by different supranational organisations: promoting inclusion and diversity and fostering active citizenship. Skills&Art is an innovative practice that can meet the needs of target groups with fewer opportunities. In summary, future research endeavours should focus on broadening the demographic scope of participants and conducting specific analyses to improve the generalizability and applicability of Skills&Art in the development of leadership skills. Researchers can further refine and optimise Skills&Art for broader implementation and impact by addressing these limitations and exploring these research areas.

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