Creativity and Curiosity as a Tool for Sustainability

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Abstract

Aim/Purpose: This paper aims to describe a tool created to spread the Sustainable Development Goals (SDGs) by using creativity and curiosity.

Design/Methodology: Tinbergen's Four Questions were addressed providing a framework to the development of the tool.

Findings: The SDG Fortune Teller is a useful tool for instructors that can guide and ignite projects around the 2030 agenda. It was recommended to create more material for younger and older students such as kindergarten and seniors.

Conclusion: The SDG Fortune Teller was created with the idea of providing an easy and engaging tool that promotes creativity and curiosity. The goal is to turn passions into actions, by learning the agenda, selecting a goal, and working on realistic projects around the seventeen goals.

Limitation: More work needs to be done around creativity and curiosity as this field is vast and still unknown. Moreover, the tool should be translated into more languages.

Originality: The SDG Fortune Teller was inspired by the ancient art of paper folding (origami), it helps educators, and the public in general, unwrap their creativity and innovation around the SDGs.

Keywords: creativity, sustainable development goals, innovation, motivation, tool, curiosity.

Introduction

Creativity and innovation are cornerstones of human civilization, it is what makes us humans and allows us to be successful and evolve on this planet (Kluger, 2019). Curiosity and creativity allow the development and implementation of next-generation technologies, solving our current societal challenges and paving the way to the future (Lattuca et al., 2014). There is a sense of urgency from different stakeholders to embark teachers, businesspeople and leaders on a radical educational transformation process that involves creativity and innovation at its core. The need for a fairer society with the planet, people and prosperity in balance is more urgent than ever. However, for this task we need solutions from all levels, including younger generations, and cu-

riosity can be a great ally when finding solutions for a sustainable future. Paradoxically, while many instructors use the same old teaching habits and approaches, they request creative and innovative problem-solving from their students: instructors are not approaching the student's learning experience using creativity and innovation to improve student engagement (Jankowska & Atlay, 2008). And it has been proven that students' engagement and learning outcomes can increase by tapping into curiosity and creativity (Seelig, 2017). Curiosity and creativity are closely linked. Curiosity sparks exploration, openness to new ideas, asking provocative questions, seeking novelty, and developing a growth mindset. These qualities, in turn, fuel creative thinking by encouraging individuals to challenge assumptions, explore new possibilities, and find innovative solutions. Nurturing curiosity can enhance and support the development of creative thinking abilities. This paper aims to introduce a tool that was created using curiosity and creativity as an aid to help instructors, educators, and the public in general to learn more about the 2030 agenda, or sustainable development goals.

Curiosity as a fuel for learning

Curiosity has been researched and evaluated by many scholars. It is a pillar of our cognition. It is nonetheless a motivator for learning that also acts in decision-making. Despite being an integral aspect of our cognitive processes, the true biological function, mechanisms, and neural foundations of curiosity remain poorly comprehended. Nevertheless, curiosity serves as a driving force for learning, exerts influence on decisionmaking, and plays a vital role in healthy development (Kidd & Hayden, 2015). One reason for the limited understanding of curiosity is the absence of a universally accepted definition that clearly distinguishes what falls under its purview. Another obstacle is the scarcity of standardized laboratory experiments that effectively manipulate curiosity. However, recent years have witnessed a substantial surge of interest in both the neuroscience and psychology of curiosity.

Curiosity, as a psychological phenomenon and the broader desire for information, has attracted the attention of influential figures in history such as James (1913), Pavlov (1927), and Skinner (1938). Despite this historical interest, it is only recently that psychologists and neuroscientists have initiated collaborative and extensive efforts to unravel the mysteries surrounding curiosity, as demonstrated by studies conducted by Gottlieb et al. (2013), Gruber, Gelman & Ranganath (2014), and Kang et al. (2009). This paper will use the description coined by the psychologist and philosopher Willima James (1899), who refers to curiosity as the "impulse towards better cognition" or in other words the desire to understand something unknown (Kidd & Hayden, 2015). In this order of ideas, curiosity fuels the habit of asking questions, including the thought-provoking "What if?" or "Why not?" questions. These questions stimulate creative thinking by encouraging individuals to challenge existing norms, explore alternative possibilities, and delve deeper into a problem or concept. Curiosity and interest possess the potential to enhance educational practices. Both are universal phenomena and are linked to the intrinsic reward of seeking information, meaning they do not rely on external incentives to exist. However, they differ in their characteristics and impact on learning.

Curiosity, characterized by a quest for information, tends to facilitate shortterm and specific learning by closing knowledge gaps. On the other hand, interestbased information seeking triggers new inquiries that lead to an ongoing deepening and expansion of learners' knowledge and values. This highlights the distinction between the two and emphasizes the continuous development fostered by interest. This paraphrase suggests that coordinating research on curiosity and interest development can greatly benefit educational practices. Furthermore, it highlights the unique position of neuroscientific research in distinguishing between curiosity and interest (Hidi & Renninger, 2020).

From the neurological point curiosity has been study

Kang and his colleagues conducted a study using a task designed to evoke curiosity in order to evaluate the hypothesis proposed by Loewenstein in 1994 that curiosity arises from a lack of information (According & Hayden, 2015). During the study, human participants read trivia questions and rated their level of curiosity while their brain activity was measured using fMRI (Kang et al., 2009). The results showed that the participants' self-reported curiosity was associated with brain activity in the caudate nucleus and inferior frontal gyrus (IFG). According to Kidd and Hayden, (2015) these regions are known to be involved in the anticipation of various rewards, which supports Loewenstein's theory (Delgado et al., 2000, 2003, 2008; Rilling et al., 2002; De Quervain et al., 2004; King- Casas et al., 2005; Fehr & Camerer, 2007). Surprisingly, the nucleus accumbens, which is typically activated during the anticipation of rewards, did not show significant activation. When the answers to the trivia questions were revealed, brain activations were generally observed in regions associated with learning and memory, such as the parahippocampal gygrus and hippocampus (Knutson et al., 2001). Once again, it is enigmatic that the classic reward-processing structures did not show significant activation. Nonetheless, the effect of learning was particularly strong when participants' guesses were incorrect, indicating that learning was most prominent in these trials too (Kidd & Hayden, 2015).

The Sustainable Development Goals (SDG) Fortune Teller Origin

The United Nations (UN) has been actively leading efforts toward international development since their inception in 1945. However, their approach has been shattered and disjointed until the nineties when finally, three main pillars were adopted to work collectively to promote economic, social, and environmental development (Kumar, Kumar, & Vivekadhish, 2016). These three main pillars were key in the adoption of the Millennium Development Goals (MDGs) in 2001 by putting people and their needs upfront. Nevertheless, according to Ban Kin Moon the MDGs presented a variety of reasons for shortfalls in progress towards the eight goals for 15 years. The main reasons are "lack of progress to unmet commitments, inadequate resources, lack of focus, and insufficient interest in sustainable development" (Fehling et al., 2013). For others, the MDGs cannot be fully met because of how the goals were designed (Clemens, Kenny, & Moss, 2007), lack of metrics, civil society was not involved, and the agenda was only designed for developing countries.

According to the United Nations, 193 countries adopted a new set of goals in 2015. The new agenda's primary focus was based on finding balance between planet and people considering prosperity in order to achieve the peace we all want.

According to the United Nations (2015) report 193 countries gathered in the United Nations' Headquarters in September 2015 and agreed on a new set of global goals that will replace the Millennium Development Goals MDGs. A new agenda was born with a new set of goals: The Sustainable Development Goals (SDG). This new agenda will be effective for the next 15 years and it will be our road map, a new blue-print to achieve a better and more sustainable future for all of us and our upcoming generations (United Nations, 2015)

But how do the MDGs differ from the SDGs? The MDGs did not have an active role in the civil society organizations (Waage et al., 2010), another flaw was that this agenda was conceived by government heads and leaders. In addition, the MDGs had little emphasis on social justice, equity, empowerment nor human rights (Fukuda-Parr, 2010). Meanwhile the SDGs to begin with, its conception and design reflect the collective work from the beginning. Unlike the Millennium goals, the new agenda was not designed top-down, but instead the community was fully involved from the beginning in a bottom-up manner. Popular consultations were held globally,

and more than seven million people shared their priorities, challenges and what they face every day. The findings were collected using a platform - MY World 2015 (https://vote.myworld2015.org/). Similarly, to the MDGs, the new findings cover issues such as health, poverty, and education, but other elements were added such as climate, life below water, peace, justice, and partnerships were incorporated to achieve the objectives. This agenda is inclusive, and its logo represents a circular system, which reminds us that all the goals are interconnected and there is no hierarchy but rather a symbiotic relationship between the goals.

The result is an agenda that reflects the intention and commitment of 193 member countries of the UN. The promise of working collectively to forge a better future, by eradicating poverty and injustice, and instead working toward dignity for all while nurturing respect for our planet.

Another difference between the MDGs and the SDGs, is that the new agenda has instruments to assess whether the goals are being achieved. There are metrics, seventeen goals were adopted with 169 goals that serve as a guide for evaluating progress and compliance for 15 years. Unlike the MDGs, the civil society can contribute their suggestions on priorities and progress using Myworld 2030 - http://myworld2030.org/.

In addition, it is critical to understand the 2030 agenda is not just another framework for governments and nonprofits to drive growth and purpose (Da Costa, 2019) but instead, the SDGs are a critical step toward human development (Kwee, 2021) by enriching society in different fronts such as social, cultural, political, even technological, and economical around a human axis around nondiscrimination, equity, and human rights.

The private sector is a key stakeholder that could boost and accelerate the implementation of the SDGs by 2030 (Rashed, & Shah, 2021). More and more companies across the globe have incorporated the 2030 agenda as a cross-sector collaboration addressing global challenges, by meaningful partnerships and programs around the 17 SDGs (Coca Cola Company, 2022). Coca Cola, for instance, is a strategic partner to achieve the agenda, not just because of its commitment and contribution in disclosing the advancement publicly, but also it is an entity that can help with the metrics. The United Nations only has a presence in 193 countries meanwhile Coca Cola has presence and operates in two hundred countries (Coca Cola Company, 2022).

Furthermore, companies worldwide have discovered the power of sustainability by tapping into the SDGs through corporate social responsibility, environmental initiatives, and circular economy. All these areas are required to support the implementation of SDGs. Additionally, the SDGs tied well with brands, since consumers today don't just buy a product or service; but instead, they are looking for a deeper purpose, they want to build relationships with almost the whole supply chain; from manufacturers with values to producers. Users are constantly evaluating the dynamics of consumption and how it affects the environment (Lazebnikov, 2021), how responsible and ethical companies are with their vendors, clients and even workers.

According to the World Business Council, Colombia has done a decent job with the SDGs by incorporating them into the 2014-2018 National Development Plan. Additionally, it was one of the twenty countries that publicly and voluntarily shared their progress in 2016. In collaboration with the Swedish government, a virtual platform was developed to publish and communicate the objectives, developments, progress, and metrics of each goal by promoting transparency (Reyes, 2022). Furthermore, according to the World Business Council for Sustainable Development in 2018, public and private companies in the sector were pioneers by incorporating the SDGs into their internal plan. This reflects the important role of the private sector in Colombia with the SDGs and the proper compliance with the 2030 agenda. This effort was led by nineteen companies summarizing and breaking down their contribution toward sustainability, by emphasizing their goals, management, and strategies (Reyes, 2022).

The companies that were part in this sustainability initiative were: Pavco, Postobón, Seguros Bolívar, Telefónica / Movistar and Tigo UNE, Amarilo, Bavaria, Cámara de Comercio de Bogotá, Cemex, Condensa y Emgesa (Grupo Enel), Constructora Bolívar, Corona, Davivienda, Ecopetrol, ElectroHuila, Findeter, Holcim, Itaú (Reyes, 2022). (It is important to highlight the list does not have a particular order of contribution or priority).

As the years pass, the year 2030 looks closer and the agenda gets a sense of urgency. Nevertheless, according to the United Nations report in 2022, the proper progress toward the SDGs has slowed down and the pandemic has disrupted our track (The United Nations, 2020).

That is why to reach the 2030 agenda, we need not just the work of governments, and the private sector, but also NGOs and civilians working collectively. Individuals must become change-makers. They require the knowledge, skills, values, and attitudes that empower them to contribute to the sustainable development goals, and education is key providing the proper competences to do so. According to Kwee (2021), students should be better equipped with self-directed learning, critical thinking, problem-solving and future-oriented skills that drive solutions to achieve environmental integrity, economic viability, and social justice. Nonetheless, educators have not been trailblazers promoting the SDGs. It is evident the educational system is falling behind in spreading and advancing the 2030 agenda due to the lack of support, tools and training encompassing the SDGs. According to Kwee (2021), "instructors' personal beliefs are aligned with the proper incorporation of the SDGs if there is a school plan or curriculum reorientation supported by professional training with proper tools". As seen in Smith et all (2016, p.37) publication, this is even more critical when teaching and mentoring designers since design can be understood as a powerful practice that takes part in giving form to the future" (Smith et al., 2016, p.37). There is no area more fundamental to sustainability's future than design, specifically the balance between design and environment: "the story of design is the story of our relationship with the environment" (Skene & Murray, 2015, p.280).

So, if we think about our future as agents full of purpose capable of achieving environmental integrity, economic viability, and social justice it can be very convoluted and almost utopian (Keith, et all, 2019).

That is why it is imperative to provide better opportunities for Education for Sustainable Development (ESD) and social design capable of bridging the gap between theory and practice (Gaughwin & Ellice-Flint, 2021). We know instructors are pivotal agents bridging this gap by empowering students in the classrooms and properly engraving the SDGs. This knowledge will be continued, once the students are active leaders and contributors to society (Rieckmann, 2017). Nevertheless, to include the SDGs into the curriculums in ESD and social design, we cannot expect to incorporate a traditional approach but instead an interdisciplinary and holistic method (Biasutti et al., 2018) by considering the subject and students' learning outcomes (SLO) as well.

Design Process

The SDG Fortune Teller is a tool designed by Isabel Treidl, chair of education and young professionals in the Southern California, United Nations Association, to help spread the 2030 agenda. The goal was to support educators, and instructors by providing a fun and engaging framework to introduce the agenda and generate projects around the seventeen goals. The idea was evaluated locally, and later at the division level. Specifically, the tool was introduced by explaining the Millenium Development Goals and later the transition towards the Sustainable Development Goals. At a local level, 25 students from Orange County and one instructor participated in a workshop. The teacher was also introduced to the framework to use the SDG Fortune Teller (Chart 1- 4) to support their curriculum. At the Division level (Southern California),

150 students and 5 instructors participated in a workshop to introduce the tool. Instructors were given the framework to use the SDG Fortune Teller (Chart 1- 4).

5 out of 6 instructors that participated in the workshops expressed satisfaction using the tool. It was relevant and provided a clear structure when introducing sustainability in their classroom – k-12. One key finding is that the tool ignited more ideas to generate more projects around the SDGs. One recommendation after using the tool by several instructors was to develop another artefact/tool/ that suits younger students better (e.g. Kindergarten 5 – 6 years old).

The SDG Fortune Teller goal is to support instructors and educators with a simple and easy to use tool that can support their pedagogical curriculum around sustainability. That is why this tool has been translated not only into the official languages of the United Nations (English, Spanish, Russian, Arabic, French, Mandarin, and Portuguese), but also Japanese, German, Hindu, and Farsi. Currently, working on Vietnamese, Ukrainian and Hawaiian; It is key to constantly add more languages because it is believed that such a complex agenda needs collaboration in every corner of the planet (Treidl, n.d). By tapping into more languages, more collaboration can be brought onto the table. According to the American Psychological Association "collaborating across cultures and growing beyond boundaries of self-interest offers a way forward when it comes to progress on the world's big issues" (Clinton, 2019).

Methodology

To properly spread the SDG and generate actions, it is key to develop a tool that taps into curiosity and creativity. Tinbergen's Four Questions were addressed providing a framework to the development of the tool. This approach was helpful in explaining the reasons behind behavior and can be effectively applied to assess our current understanding of curiosity and sustainability by evaluating function, evolution, mechanism, and development (Kidd & Hayden, 2015). When considering the function of curiosity, it becomes evident that it plays a vital role in motivating individuals to acquire knowledge and facilitating the learning process of sustainability. From an evolutionary standpoint, it seems practical to consider curiosity as a trait that potentially enhances performance and provides advantages to individuals and entities possessing it by making it maintainable and scalable. This suggests that curiosity has developed and evolved over time, which is especially helpful for sustainability and finally, as for development, it can be inferred that curiosity is crucial for the learning process and is influenced by both external factors and internal representations of one's existing knowledge around sustainability. With these principles in mind, a tangible tool was created to promote the learning of the SDGs around engagement: The SDG Fortune Teller. As Robert Sternberg suggests the most important factor in cultivating expertise "is not some fixed prior ability, but purposeful engagement" (Dweck, 2008, p. 5). That is why, the SDG Fortune Teller's purpose is to inspire and serve as an aid not just for educators but individuals to ensure we become familiar with the 17 goals and "all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development" Teachers, instructors, docents and even presenters can access this tangible tool to teach the Sustainable Development Goals inside their classroom, workshops or any conference or event where this topic is relevant (Treidl, n.d).

The idea is simple: two SDG Fortune Tellers. SDG Fortune Teller 1 has the first eight SDGs (Figure 1) and the other one has the remaining 8 SDGs (Figure 2). Both works together, you can play with one or both. The last SDG, #17, is on the reverse side of the paper as a large picture. This is because the fortune teller works with

multiples of eight, but also because Goal 17 is Partnership for the Goals. This goal is vital, since it shows the importance of cohesive and coherent work among all governments, entities, and individuals. Finally, the reverse side of the SDG Fortune Teller (Figure 3), besides having SDG #17, has the UN SDG website as a reference resource. Teachers, educators, kids, and parents can access the website to learn more about the goals. (Figure 4) (Treidl, n.d). Find the tool Appendix A. Online https://www.una-oc.org/fortune

Figure 1. Fortune Teller 1 SDG (1-8)

Figure 2. Fortune Teller 2 SDG (9-16)



Figure 3. Fortune Teller Reverse SDG# 17









TO LEARN MORE VISIT: http://www.un.org/sustainabledev elopment/sustainabledevelopment-goals/

The SDG Fortune Teller idea is more than a colorful piece of paper that has the potential to create a fun, engaging experience that promotes the learning of the 17 SDG. It is a tool for joyfulness that increases curiosity which is the main fuel for deep learning (Perry, 2001). By tapping curiosity, students learn more and learn better (Ostroff, 2016). Curiosity has the capacity to release dopamine which makes the hippocampus function better, or in other words, activates long-term memory (Ostroff, 2016, p.5). The Fortune Teller has colors, numbers and images in a configuration that helps the user to become more familiar with the SDG and eventually learn them by heart in a natural process.

Additionally, The SDG Fortune Teller is also a metaphor for our future. Can we tell how it is going to be? Can we guess? Maybe not, but at least we all can work toward our future, a better future. That is why 193 countries agreed to work on seventeen goals for 15 years. By 2030 we expect our future will be better. At this point more than 2,000 SDG Fortune Tellers have been distributed. The SDG Fortune Teller has been in notable hands, such as the past president of the United Nations general assembly H.E. Peter Thomson from Fiji. Even Ban Ki-Moon and António Guterres have enjoyed the tool by tapping their curiosity and playfulness. The Fortune Teller has visited colleges, universities, and even Capitol Hill in Washington DC and the General Assembly in New York, promoting the SDGs and raising awareness of the 2030 agenda.

Table 1 summarizes some competences that can be developed by using the SDG Fortune Teller with projects around the 2030 agenda (Van Norren & Beehner, 2021).

Competences	Description
1. System thinking competency:	The ability to recognize and understand relationships; to analyze complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.
2. Strategic competency:	The ability to collectively develop and implement innovative actions that further sustainability at the local level and beyond.
3. Self-awareness competency:	The ability to reflect on one's own role in the local community and global society; to continually evaluate and further motivate one's actions; and to deal with one's feel- ings and desires.
4. Collaboration competency:	The abilities to learn from others; to under- stand and respect the needs, perspectives, and actions of others (empathy); to under- stand, relate to and be sensitive to others (empathic leadership); to deal with con- flicts in a group; and to facilitate collabora- tive and participatory problem solving.
5. Critical thinking	The ability to question norms, practices, and opinions; to reflect on own one's val- ues, perceptions and actions; and to take a position in the sustainability discourse.
6. Problem-solving integration	The overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive, and equitable solution options that promote sustainable development.
7. Normative competency:	Understand and reflect on the norms and values that underlie one's actions; – nego- tiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions. (UNESCO, 2017).
8. Anticipatory competency	The abilities to understand and evaluate multiple futures – possible, probable, and desirable; to create one's own visions for the future; to apply the precautionary prin- ciple; to assess the consequences of ac- tions; and to deal with risks and changes.

 Table 1. Competences for Sustainability defined by UNESCO

Source: UNESCO (2017).

Ways of Using the SDG Fortune Teller:

- 1. Introduce the transition from the MDGs to the SDGs.
- 2. The SDGs Fortune Teller tool can be downloaded at no cost https://www.ideadispenser.com/public-speaking-and-storytelling. Once the students are familiar with the agenda, they can select a specific goal(s) and work around it.
- 3. The selected goal(s) can be the foundation to develop a project at a school level with the support of teachers and educators. This is a good way of teaching research, critical thinking analysis and social responsibility skills. The most urgent mission now lies in turning knowledge into action to address the world's most serious sustainability challenges (Cheng, 2020).
- 4. Socialize the projects and achievement done in schools thanks to the Fortune Teller and SDGs projects by using social media, and videos through the power of storytelling using some hashtags: #sdgs #USAforUN #sdgfortuneteller @unasoutherncalifornia
- 5. Scale the model to other schools, neighborhoods, and other entities such as museums and institutions to advance our agenda for 2030.
- 6. Create videos and tutorials to inspire others and spread awareness of the 2030 agenda. The charts 1- 4 show the methodology adopted in some institutions in Southern California when introducing the SDGs and using the SDG Fortune Teller. The institutions use a Quarter system that has 10 weeks.

Charts 1- 4 summarize the SDG Framework to use the SDG Fortune Teller:

Chart 1. Framework to use the SDG Fortune Teller week 1-2



Chart 2. Framework to use the SDG Fortune Teller week 3-5



Chart 3. Framework to use the SDG Fortune Teller week 6-9



Chart 4. Framework to use the SDG Fortune Teller week 10



Methodology Chart

Document the results of this activity, including the institution, number of students, and age of the participants. We want to evaluate the impact. Do the students remember the SDGs? How were the outcomes of the local plan activity? Did you receive any feedback from the students, parents, or any stakeholders? Collaboration is key. Socialize with other educators who are teaching the SDGs to get a better idea of how to reach this agenda and share your students' plans as well.

Be active supporting your student's passions and guide them when they are researching and creating their plan for the two selected SDGs. Guide them to a plan that is impactful, realistic, and feasible, but also think big. Contemplate the idea of a plan that can be scaled into other classrooms locally, regionally, nationally, and even worldwide. Remember this agenda requires the work of everyone at all levels and your work is crucial and valuable to achieving the goals. It is important to note that the SDGs are not perfect, and the 2030 agenda is far from closing the gap among inequalities in the international system. However, the SDG Fortune Teller is a tool that can bring us closer to achieving the SDGs and help us realize differences and inequalities by empowering younger generations. This tool has the potential to generate awareness, remembrance, but above all concrete actions. In the United States, it has already permeated homes, sparked dialogue, and led projects around the 17 Sustainable Development Goals in Southern California. Colleges and Universities such as Santa Ana High School, Heritage High School - Orange County, West Coast College, SOKA University, Fashion Institute of Design and Merchandising and UC Irvine to name a few, have already used the SDG Fortune Teller (Figure 5).

Figure 5. SDG Fortune Teller in action



Challenges and recommendations

A challenge encountered when creating the tool was to introduce it properly; however, in 2016 the tool was presented at a large audience at the Ronald Reagan building and International Trade Center in front of more than eight hundred people during the Leadership Summit of the United Nations Association. At this point many chapter leaders of the association took the tool home and started working with the English version. Another challenge was to distribute the tool physically. Thanks to a donor in Los Angeles, it was possible to print out more than 1,000 SDG Fortune Tellers in the U.S and South America.

Another challenge has been finding more channels of communication. The idea is to be able to bring the SDG Fortune Teller to more people, by tapping into more collaborations. Likewise, Community Building is cardinal for the success and

implantation, namely creating and fostering a community around SDG Fortune Teller is crucial for long-term success. Building a fan base, engaging with players, and addressing their concerns and feedback requires consistent effort that can be an important force in promoting the game. Navigating the above requires careful planning, a solid development team, effective communication, and a willingness to adapt and learn throughout the process.

A recommendation is to find more partners that can benefit from it and believe in the importance of the agenda. In this order of ideas, the SDG Fortune Teller has been introduced to the Global Network for Sustainable Development (GNSD) during summer 2022 and by Fall 2023, the idea is to start working actively, as the goal is to teach youth about sustainability using the principle of "learning by doing". The GNSD implements its mission by creating Sustainability and Peace Clubs in schools. Members of these clubs can be involved in local community projects, as well as in the Sister Schools Project creating partnerships between schools in different countries. The plan is to create twenty such partnerships between schools in Ukraine, Poland, Nepal, India, and the USA (GNSD, n.d). The tool is now being translated into Ukrainian and Hindu; however, Bengali needs to be introduced as well considering the number of speakers which is 265 million speakers. Finally, Polish, and Nepali, also called Gorkhali will be added to the languages considering the GNSD potential partnership. Regarding curiosity and lifelong learning, some implications about the need for more research is desirable. According to Science on a grand scale is transforming into a multidisciplinary endeavor. (Uzzi, Mukherjee, Stringer, & Jones, 2013; Salas, Kozlowski, & Chen, 2017).

It is critical to improve the research methods such as using computational modeling, that is why at this point we cannot be conclusive as this this still a grey area, vast, and complex that requires collaboration and research form many disciplines such as psychologist, neurologist, and anthropologist to name a few.

Conclusion

To conclude, it is important to highlight that the SDGs are not just another framework for governments and nonprofits to drive popularity and engagement; but instead, it is critical to understand that the 2030 agenda reflects the needs of governments, private sector, NGOs, academia, and civil society's necessities in general. The SDGs are rooted in basic pillars for economic, social, political, and environmental development with a common axis around nondiscrimination, equity, and human rights. Hence, it is an ambitious and robust approach because it defines and reflects us, as evolving and complex creatures. It is easy to fall into the tendency of complaining about what is not working but yet, we forget our role about bringing solutions. To execute a plan, it is key to have both a blueprint and a map; the SDGs are exactly that. So, to address complex problems, we need a holistic approach with thorough solutions involving everyone at all levels and all corners. The path to reach the 2030 agenda has been challenging, and the pandemic added an extra layer by disrupting the advancement and slowing down progress around the seventeen goals. One sector won't be able to fulfill the agenda and reach all the goals. Synergies are important and education is strategic to not just cultivate skills in students, but to also grow mindsets and develop positive and sustainable behaviors through ESD. That is why instructors and professors are pivotal agents supporting the future designers and future generations that will lead and shape society, while protecting our planet and respecting each other.

The SDG Fortune Teller was created with the idea of providing an easy and engaging tool that promotes creativity and curiosity by fueling deep learning. The goal is to turn passions into actions, by learning the agenda, selecting a goal, and working on realistic projects around the seventeen goals. The ultimate scope is to think globally, act locally and the SDG Fortune Teller is a good start. In the U.S., the SDG Fortune Teller has permeated some schools, homes, and institutions but the 2030 agenda needs more and better channels to spread the message and engage everyone. Finally, the recommendation is to create more tools and methodologies to support the SDGs. We cannot afford another pandemic or WWIII to understand that united we achieve more, by working together we can bring the best of each other every day, and eventually will create impactful, lasting change collectively. Capitalizing on these opportunities and challenges requires a clear vision, a well-executed development plan, effective marketing strategies, and a willingness to adapt based on player feedback and industry trends.

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APPENDIX A



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