Game Based Learning (GBL): Gaming Soft skills for Corporate Readiness

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Abstract— As we are inching towards the fourth industrial revolution, companies are searching for talent who possesses domain expertise, digital literacy and industry-relevant abilities. Thus, experiential and skill-based learning are promoted under the National Educational Policy 2020. The NEP- 2020 helps to bridge the talent-skill gap, which exists at various tiers and is significant, impacting the hiring scenario in almost every sector, by equipping students with industry-specific abilities so as to prepare them to be future-ready professionals. The NEP- 2020 recognizes the importance of soft skills as fundamental life abilities such as communication, teamwork, problem solving, decision-making, analytical thinking, and flexibility, among others. Leadership skills are also instilled in pupils to assist them advance in their careers. Game-based learning has been identified as the most effective approach of teaching soft skills. The increased demand for soft skills in the workplace has compelled teachers to embrace, adapt, and expertly combine practical and hands-on methods of imparting these employable skills. According to EMSI and IBM studies, the true "skills in demand" are communication, adaptability, and learning. According to a LinkedIn survey done two years ago, 91% of organizations believe that soft skills are essential in recruiting fresh hires and promoting existing ones. According to a Harvard University study, soft skills account for 80% of job success while hard skills account for 20%. As a result, it is critical to impart these skills in the classroom through the use of unique and inventive games that encourage student participation and engagement. This qualitative study begins with a brief overview of Game-based Learning (GBL) and why it is regarded as the best technique for imparting soft skills, followed by a discussion on the top 5 in-demand soft skills that can be gamified and are critical for corporate readiness.

Keywords— NEP 2020, soft skills, game-based learning, employability, skill-based education

Introduction:

Game-based Learning:

> **"nous ne pouvonsrienêtre sans jouer à l'être"**
>
> **We cannot be anything without playing at being it.**
>
> -J. P. Sartre

Teachers constantly debate the methods and resources needed to satisfy the needs of the younger generation. They are presented with fresh concepts, expressions, and theories that seem to be the sole way to solve every educational problem. No one person or method will fully improve the teaching-learning process, and learning is not an issue that has to be fixed. Diversification, experimenting with different strategies, and assessing the results are the keys.

Incorporating Games in the Classroom:

The use of game-based learning (GBL) in the classroom is simple. However, what is GBL exactly?

Applying some gaming concepts to real-world situations in order to engage people is known as "game-based learning" (Trybus 2015).Game-based learning's intrinsic motivational psychology allows students to engage with the content in novel and enjoyable ways. Game-based

learning encompasses more than just creating games for students to play; it also involves creating educational activities that can progressively introduce ideas and guide users toward a shared goal. These ideas have gained traction in higher education as a way to get students interested in learning. Game-based learning, then, is an additional active learning technique that makes use of games to accomplish particular learning goals in terms of information, abilities, or attitudes in order to enhance student learning. In this instance, the learning happens through the game's development of problem-solving and critical thinking abilities. Games, whether digital or not, and simulators that let learners experience the material firsthand can all be used to accomplish game-based learning.

Gamification vs. Game-based Learning (GBL):

Gamification and game-based learning are similar in that they both promote participation and continuous interest in learning. It's useful to differentiate between game-based learning and gamification, though:

In order to increase enthusiasm and participation, "traditional" learning exercises can be gamified by adding elements of games, such as leader boards, badges, scores, and various other game-related aspects. Students can use a badge system to gamify an online discussion forum for a Physics course, for instance, by earning a "Ptolemy" badge after ten comments, a "Galileo" badge after twenty entries, and so on. There are parallels between game-based learning and gamification in that they both promote involvement and continuous interest in learning.

On the contrary, Game-based learning (GBL) requires constructing instructional materials that incorporate game mechanics and principles into the instructional tasks themselves. For example, students can participate in a computerized stock-trading competition in an economics course, or they can role-play as they engage in fictitious negotiations over a labor dispute in a politics course. Gamification is essentially the application of aspects of games or a game framework to pre-existing learning activities, whereas game-based learning develops learning activities that are intrinsically game-like.

Why is GBL the best method for teaching soft skills?

Learning through games has several benefits for developing and improving soft skills, such as managerial abilities. Even though there are many arguments supporting GBL's beneficial effects on learning, some people continue to doubt its efficacy. The five main benefits of learning through games:

1. **GBL allows for practice:** The greatest advantage of successful game-based learning is the incorporation of technology that facilitates the assimilation of material. Through the use of simulators, students can "do" things that they have only been "told" about on other platforms. Doing is the best way to learn anything, and this is particularly true when it comes to building interpersonal skills. Real-life situations are replicated by simulators so that we can practice safely and gain proficiency in soft skills that enhance our professional and personal development and that can only be acquired through experience rather than theory or books.

2. **Encourages strategic thinking and decision making:** Strategic thinking, Emotional Intelligence, strengthening interpersonal and analytical abilities, among other elements is all included in many complex games for soft skill learning, which helps individuals become more adept at problem-solving.

3. **GBL improves Memory:** Students can better master a skill by immersing themselves into a scenario through the use of narrative frameworks in "learning" games. By fixing mistakes and repeating particular patterns, learners learn to understand the game, advance, and receive positive feedback actually instantaneously. To put it briefly, GBL improves memorization through hands-on experience.

It has been noted that games such as role-plays aid in comprehending the perspectives of others, time management through time games, collaborative games in fostering relationships, instilling empathy, problem-solving, teamwork, and healthy competition. Games involving decision-making aid in fostering soft skills, leadership, and negotiation; competitive games foster a sense of competition amongst pupils.

Discussion

The 5 in-demand soft skills:

We are hired for our technical skills, but fired for the lack of soft skills.

> **-** Shiv Khera, founder (Qualified Learning Systems Inc. USA) & a motivational management Guru

Research from Harvard, the University of Michigan, and Boston College that focused on improving competencies in interpersonal communication and problem-solving concluded that individuals who exhibited critical soft skills enhanced productivity and retention by 12%. 85% of job effectiveness is attributed to acquiring exceptional soft

skills, according to the National Soft Skills Association. In conclusion, it is apparent that if individuals aspire to progress in their line of work and achieve the career of their choice, they must receive quality soft skills training.

Soft skills are individual characteristics and approaches to work, as opposed to hard skills, which are often job-specific and learned through education or training. Many situations call for the usage of soft talents. Thus, becoming an effective team player and possessing exceptional communication skills will help in any situation! In the commercial world, soft skills are also crucial. A research by the Hay Group found that managers who incorporate soft skills into their leadership style can increase team performance by as much as 30%. According to research by Professor Achyuta Adhvaryu, employees who receive training in problem-solving, communication, teamwork, time and stress management, and other skills perform more effectively at work.

We can infer from the aforementioned research findings that there are basically five soft skills which are in great demand which all students should possess. They are:

1. Effective communication

2. Critical thinking and problem solving

3. Teamwork and leadership

4. Emotional Intelligence

5. Time management

which is complemented by other abilities including creativity, teamwork, empathy, decision-making, flexibility, interpersonal abilities, inquisitive and ongoing education, among others?

Gaming in the classroom:

Although there are so many games to develop these skills, we will look at the most popular game for each of the 5 in-demand skills listed above.

1. Communication Skills:

Proficiency in communicating, listening, and public speaking has become more and more important. Effective communication is essential for establishing business relationships with customers, peers, supervisors, and organizational leaders.

Engaging with people from different cultures can improve your communication skills. Understanding cultural awareness can also help you work effectively in a range of situations, such as diverse countries and locations. Multinational corporations around the world strongly value an open, global perspective, which may be developed through international internships and work experience.

Game to develop the skill: Misunderstanding

The game Misunderstanding helps drive creative communication.

What you will need:

- Two or more people
- Chairs
- Various objects

How to play:

Make two individuals sit next to each other. Person A is required to talk about an object to Person B without specifically stating what it is. After then, Person B has to illustrate it using Person A's explanation.

This game works well for breaking down obstacles to communication. Additionally, it fosters the development of effective communication techniques and problem-solving abilities.

For larger teams, turn it into a contest where the winner is the team that drew the most accurate sketch in a predetermined length of time.

2. Problem Solving and Critical Thinking:

Employers now seek an individual who can analyse a challenging business scenario, come up with a workable solution, and effectively implement the same. The World Economic Forum's Future of Jobs Report lists critical thinking and problem-solving as the top talents that will be essential over the next five years.

Innovative thinking and analytical thinking are essential components of the complex problem-solving ability, which is nothing more than the capacity to make sound decisions based on many datasets from the data environment in which we live. This mental process is one that can be honed, refined and learned. Creativity, originality, and initiative are all qualities that pertain to problem solving and are extremely important.

Aiming to instruct, promote, and encourage the practise of evaluating issues and coming up with answers, problem-solving games are interactive challenges. Playing games and engaging in activities that require problem-solving can help one improve their higher-order thinking abilities, hone leadership potential, and put more emphasis on the process of learning than the final outcome.

Game to develop Problem Solving skills: Escape

What you will need:

- 1 rope
- 1 key
- A lockable room
- 5-10 puzzles or clues (depending on how much time you want to spend on the game)

How to play:

1. The objective of this exercise is to solve the clues, locate the key, and get out of a locked room in the given amount of time.

2. Disperse the key and a list of hints throughout the space.

3. Gather the group in the vacant room and "lock" the door.

4. Allow thirty to sixty minutes to figure out the hints scattered across the room to locate the key.

2.1 Critical thinking skills:

An individual must possess a set of skills for making decisions, solving problems, thinking critically, and acting quickly. Having the ability to think critically is crucial in every aspect of life since it allows one to better understand themselves, steer clear of constricting or limiting notions, and concentrate more on their positive traits. Games are brain-training activities that can improve cognitive skills by helping to acquire critical life skills. Focus, memory, and concentration can all be enhanced with brain exercises. In order to engage in critical thinking, one must carefully consider a situation, formulate the problem logically, and use value judgment to come up with a solution.

Any career can benefit from having critical thinking abilities since they enable logical and objective thought. As digitization and artificial intelligence take over the world, critical thinking abilities might help humans remain relevant in their jobs. But developing critical thinking and reasoning skills is difficult. Consequently, a number of organizations advocate for the use of brain games to enhance critical thinking skills and increase cognitive capacity.

Game to develop the skill: Minefield

How to play the game:

What you will need:

- An empty room or hallway
- Blindfolds
- A collection of common office items

Instructions:

1. Arrange the objects (boxes, chairs, water bottles, bags, etc.) in the room so that there isn't a direct route between the two ends.

2. Split your group up into pairs, and then blindfold one team member.

3. From one end of the room to the other, the other player must voice guide that person, avoiding "mines."

4. The non-blindfolded spouse is not allowed to touch the other.

5. To increase the difficulty of the exercise, assign pairings to each other at the same time. This will force teams to strategically interact with one another.

3.   Teamwork and Leadership:

Teamwork:

A plethora of emerging technologies continue to trigger rapid changes in industry and in the workplace. To meet these standards, successful people need to be able to work well with others and be adaptable.

Effective teamwork, leveraging the distinctive competencies of everyone involved, managing discontent, and adapting to rapidly evolving work environments will all be essential within the work place of the future.

Game to develop Team work/Team Building: Human Knot

How to play the game:

Preparation:

To form a human knot, players begin in a circle and join hands with two other members of the group. They must then work together to try to untangle themselves avoiding disrupting the chain of hands in order to try to untangle the "human knot."

Space Required: Small indoors or outdoors.

Group Size: 8 to 12 ideally (at least 4 participants to play)

Total Time: 20-30 minutes

- 5 minutes to brief and set up
- 10-20 minutes to achieve outcome
- 5 minutes to review and debrief

Instructions:

1.   Get the group to form a circle.

2. Instruct them to raise their right hand in the air before grabbing the hand of a person on the other side of the circle. 3. Next, do the same with the left hand, being sure to take a different hand.

4. Ensure that everybody holds the hands of two distinct individuals and with an individual on each side of them.

5. They have to attempt to detangle themselves in order to create a circle without disrupting the chain of hands. Give yourself a set amount of time to finish this task, usually ten to twenty minutes.

6. To prevent injury, encourage individuals to take their time. Instruct the group to avoid pushing or tugging on one another and to watch for participants as they move by one another. Keep an eye on them during the challenge and stop them if necessary.

7. They have to begin anew if the chain of hands breaks at any time.

3.1 Leadership:

Good leadership is about bringing out the best in others and ensuring their success. And if you one believes that leadership qualities are just required at the top of the corporate ladder, one must think again. Factors such as remote teams, rising diversity, the gig economy, and more flexible organisational structures indicate that leadership abilities will be essential for everyone, whether they are in charge of a project, a team, or an entire department.

Game to develop the skill: Spot the Secret Leader

How to play the game:

A simple game that doesn't require anything more than a group of 6-7 people.

First, place the pupils in a circle at arm's length from each other. This is an easy arrangement. Next, designate a student to serve as a Spotter by moving to the center of the circle.

While everyone else selects a Secret Leader, ask the Spotter to close his eyes.

Following that, the Secret Leader must gently make movements and gestures that the remaining participants must mimic, including lifting an arm, resting on a leg, dancing, etc.

The Spotter makes three attempts to identify the Secret Leader throughout this period. The Secret Leader wins if the Spotter performs inadequately on all three occasions. The Spotter selects a replacement in the middle, regardless of the winner.

4.   Emotional Intelligence:

Improving emotional intelligence is the first step in creating a happy and healthy workplace. When groups are more aligned and have clear communication skills, teams feel appreciated and supported. The benefits of noticing and dealing with our emotions are enormous, resulting in less conflict and a greater understanding of one another.

Game to develop the skill: Nine Dimensions Team Building Activity

How to play the game:

Aligning our own self-awareness with that of our team is paramount to building Emotional Intelligence. Through candidly evaluating our strengths and identifying areas for improvement, we can be open and honest with our teammates and collaborate to build a more cohesive team.

The Nine Dimensions exercise asks us to score our skills in nine areas that are crucial to our workplace and interpersonal relationships. To indicate how well they are performing in each area, participants select colored dots.

A team conversation is held after the exercise to find out how everyone thinks about the skills and whether or not we all agree. It aims to determine where individuals can benefit from assistance and how individuals might flourish. Developing improved abilities in both individual and group can be facilitated by this understanding.

5.   Time Management:

Working from home, working full-time in an office, running your own business, or working for an organisation all require the ability to manage your time successfully. Keep in mind that time management is about working smarter, not harder. Extra hours aren't required for folks who are excellent time managers. They understand when they are most productive and use this time effectively, allocating their less productive hours to other duties.

Developing excellent time management skills is also beneficial to your mental health. When you can efficiently manage your time, you may achieve a better work/life balance and make place in your life for the things that are most important to you.

Game to develop the skill: The Blind Polygon

How to play the game:

The Blind Polygon is an excellent activity when working in new groups or projects. Multiple smaller groups and a single leader are needed.

Step 1: Give the squad a length of rope and blindfold each participant.

Step 2: Teams fold or modify the rope into a rectangle or other shape that the leader specifies.

Step 3: A time restriction should be established by the team leader.

Step 4: Everyone must always be in contact with the rope, and no one may take off the blindfold.

Step 5: Allow the groupings to take some time to form.

Step 6: After the allotted time has passed, let the groups to examine their shapes before beginning again.

Conclusion

Gaming - A Game changing perspective:

"If you want a job, have technical skills. If you want a career, have people skills."

This study has sought to demonstrate how games can be used as a creative learning tool to cope with challenging situations and develop soft skills that are necessary. Soft skills are personal qualities that enhance a person's performance at work, relationships, and career prospects. Since games have the ability to teach us concepts and abilities at any given moment, they provide us the freedom to fall short with relatively little implications on society or ourselves. Playing alone can teach us just as much as playing with other people. Nevertheless, it has been shown that games are natural settings for developing important skills.

REFERENCES

[1] A.K. Mathur. (n.d.). Journal - IJET |- Research Trend. Retrieved September 10, 2022, from https://researchtrend.net/ijet/pdf/16-F-758.pdf

[2] Bholane, Kishore Prakash. "National Education Policy 2020: A Catalyst for Skill Based Education." Mar. 2023, Accessed Apr. 2024.

[3] David Priestley. 2014. *Human knot team building challenge | Group teamwork exercise*. Team Building Activities, Challenges | Venture Team Building. Retrieved September 16, 2022, from https://ventureteambuilding.co.uk/human-knot/#.YyXMnnZBy3A

[4] *Developing leadership skills through games*. (n.d.). The Learning Counsel. https://thelearningcounsel.com/article/developing-leadership-skills-through-games

[5] Falciani, I. 2022. *Game-based learning > what is, GBL vs Gamification, types, benefits*. Europass Teacher Academy. https://www.teacheracademy.eu/blog/game-based-learning/

[6] *Gamification and game-based learning*. (2022, April 4). Centre for Teaching Excellence. https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/educational-technologies/all/gamification-and-game-based-learning

[7] Leah. 2019. 7 *fun communication games that increase understanding*. Userlike Live Chat. Retrieved September 15, 2022, from https://www.userlike.com/en/blog/communication-games

[8] Liam McIvor Martin. 2021. *Top 10 time management activities and games for productivity*. Biz 3.0. Retrieved September 14, 2022, from https://biz30.timedoctor.com/time-management-activities/

[9] Maria Jose Sousa, & Alvaro Rocha. 2017. *Game Based Learning Contexts for Soft Skills Development*. ResearchGate. https://www.researchgate.net/publication/315862573_Game_Based_Learning_Contexts_for_Soft_Skills_Development.

[10] Trybus, Jessica. 2015. "Game-Based Learning: What it is, Why it Works, and Where it's Going." New Media Institute. Accessed April 6. http://www.newmedia.org /game-based-learning--what-it-is-why-it -works-and-where-its-going.html.

[11] *25 emotional intelligence activities for happy and productive teams*. (2022, June 13). SessionLab. https://www.sessionlab.com/blog/emotional-intelligence-activities/

[12] *15 team building problem solving activities*. (2022, September 15). Teamland - All-in-One Team Building Events & Gifts. https://www.teamland.com/post/team-building-problem-solving-activities

[13] https://hr.economictimes.indiatimes.com/news/workplace-4-0/5-soft-skills-needed-in-2022-and-why-do-they-matter-in-the-workplace/89649862.

[14] https://astrialibrary.com/5-soft-skills-to-learn-in-2022/.

[15] https://www.forbes.com/sites/bernardmarr/2022/08/22/the-top-10-most-in-demand-skills-for-the-next-10-years/?sh=4dea661f17be.

[16] ---. "Student Anxiety in the Wake of the COVID-19 Pandemic." Academia Mental Health and Well-Being, vol. 1, no. 2, Academia.edu Journals, 2024, doi: 10.20935/MHealthWellB7294.