Introduction (Why&What)

Games and Gamification .

How to deliver the content in right way.

If the delivery fail what is the typical reaction. Who to blame.

Wrong reasons lead to failure

- They are cool/awesome/fun/ neat

- Everyone is doing it

- The learning will be effortless(stealth learning)

- Everyone loves games/gamification/simulation

- It is easy to design them

Fun

Fun + learning

Ex. Paid time off

 Skipping work.

 Strike at university

 Even studies shows

Focus on Learning development.

Every one is doing it

What work well in your competitors organizations would not work well with yours.

Focus on your objective and goals.

ILE are popular because they are matching a specific learning needs.

Don't ride the bandwagon just to be there .

Stealth Learning

No stealth learning. The learner should know about the process.

Game will solidify the knowledge

Child and hot stove example.

Target to generalize learning

Every one loves them

Not everyone likes to play games.

Take decision based on a culture

Don't be disappointed quickly

It is easy to design them

A lot to do (weighting knowledge by points, interactive, motivate users)

What you expect (graphics, characters, story boarding, flow charts , coding)

Right reasons lead to success

- Creating Interactivity in learning delivery

- Overcoming disengagement

- Providing opportunities for deep thought and reflection

- Positively change behavior

- Authentic practice

Creating Interactivity in learning delivery

Classical view is not efficient in deep learning.

Need to learn by doing

Need for Games and Gamification

Overcoming disengagement

49 % Actively disengaged

18% disengaged

33% Engaged

DLA as a case study

Providing opportunities for deep thought and reflection

Abstraction advantages

- It helps the player manage the conceptual space being experienced

- Cause and effect can be clearly identified

- Extraneous factors are removed

- Time required to grasp concept is reduced

Positively change behavior

Many studies have proven that pro social games have a positive effect on players.

- Stanford university 30 males and 30 females (superhero vs normal passenger)
- Another study on a game "Darfur is dying"

Authentic practice

Close to the actual situation as possible.

In many fields simulations are used to train employees how to behave in real life .

- Nurses in hospitals (life and death)

- Nuclear power

- Sales person

What is Game ?

"A game is a system in which player(s) involve in an abstract challenge, defined by rules, interactivity, and feedback, that results in a quantifiable outcome often causing an emotional reaction."

System: a set of interconnected elements occur within the "space" of the game.

Players: games involve a person interacting with game content or with other players. The person playing the game is the player.

Abstract: games typically involve an abstraction of reality and typically take place in a narrowly defined "game space".

Challenge: games challenge players to achieve goals and outcomes that are not simple or straightforward.

Rules: the rules of the game define the game. They define the sequence of play, the winning state, and what is "fair" and what is "not fair" within the boundaries of the game environment.

Interactivity: games involve interaction. Players interact with one another, with the game system, and with the content presented during the game.

Feedback: within a game, feedback is typically instant, direct, and clear.

Quantifiable outcome: games are designed so that the winning state in concrete. There is no ambiguity.

Emotional reaction: games typically involve emotion.

What is Gamification ?

"Gamification: is using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.

Game-Based: it is a game.

Mechanics: include levels, earning badges, point systems, scores, and time constraints, etc.

Aesthetics: engaging graphics or a well-designed experienced. User interface is an essential element.

Game thinking: most important element. It is the idea of thinking about an everyday experience (e.g. running, teaching, working) and converting it into an activity that has elements of competition, cooperation, exploration and storytelling.

Engage: an explicit goal is to gain a person's attention and to involve him/her in the process you have created.

People: the individuals who will be engaged in the created process and who will be motivated to take action.

Motivate action: is a process that energizes and gives direction, purpose or meaning to behavior and actions.

Promote learning: many gamification elements are based on educational psychology.

Solve problems: due to cooperative and competitive nature of games.

What Gamification is not?

Badges, Points, and Rewards: the real power of game-based thinking is in the other elements of games: engagement, storytelling, visualization of characters, and problem solving.

Trivialization of Learning: gamified learning can, and is, difficult, challenging, and stressful.

New: the elements of gamification are not new. e.g. military

Perfect for every learning situation: many situations for which gamification will not work.

Easy to create: it is not easy to create a game that is both fun to play and instructional.

What is a serious Game?

A serious game is an experience designed using game mechanics and game thinking to educate individuals in a specific content domain.

Some examples:

1) Stairs vs. escalator.

2) Frequent flyer program.

3) Sales simulation.

• Each activity has an intrinsic (جوهري) goal (reach top of steps, fly for free, learn to sell/buy better).

• Each has extrinsic (خارجي) elements (music, points, animation).

• Each has a clear end point (top of stairs, a free flight, sales game ends).

• Each is designed specifically to promote a serious outcome (taking stairs for health, sell more airline tickets, sell more product).

The creation of a serious game falls under the process of gamification.

Examples on Gamification?

Marriott hotel social game:
https://www.youtube.com/watch?v=ULOwlkiRM18

Microsoft Flight Simulator(1982-Present): Flight Simulator

Areeb's World: Areeb's World is a MMORPG (Massively Multiplayer Online Role-Playing Game) game, that based on math and science curriculum in Saudi Arabia.

http://areebworld.com/