



<Introducing **Case Method 2.0** with **3DHive.mobi**>

<Playware Studios>



Singapore Company incorporated in 2005

Focused in education technology innovation



## Innovation Projects



Centre for Learning Innovation  
Fostering and promoting innovation  
in teaching and learning



COTF Live!  
classroom of the future

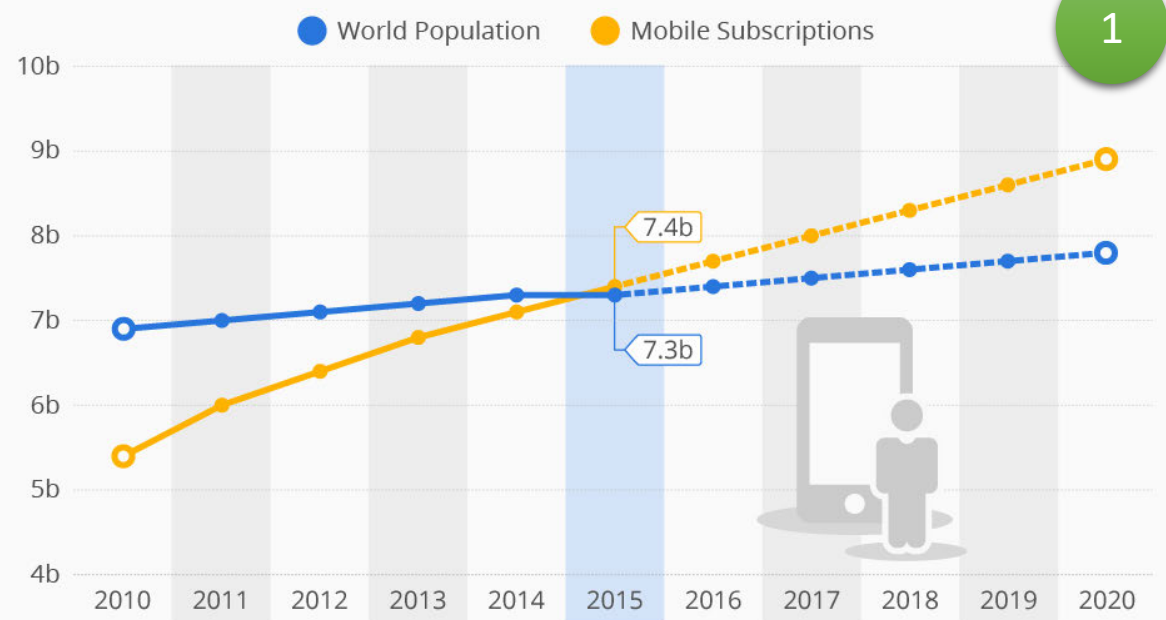


# Why Mobile Learning Games?

In 3 quick charts:

## Mobile Subscriptions to Outnumber the World's Population

World population vs. estimated number of worldwide mobile subscriptions



1

## TIME ONLINE ON MOBILE, BY AGE

Number of hours per day typically spent online on a mobile

2



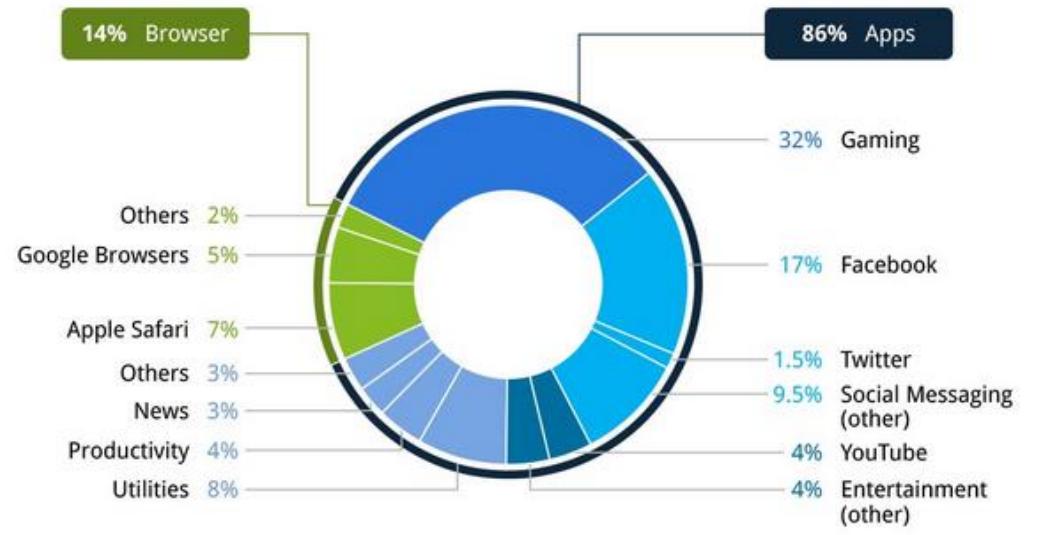
Question: Roughly how many hours do you spend online on mobile during a typical day?  
 // Base: Internet Users Aged 16-64 // Source: GlobalWebindex Q3 2015

## Tech Chart of the Day

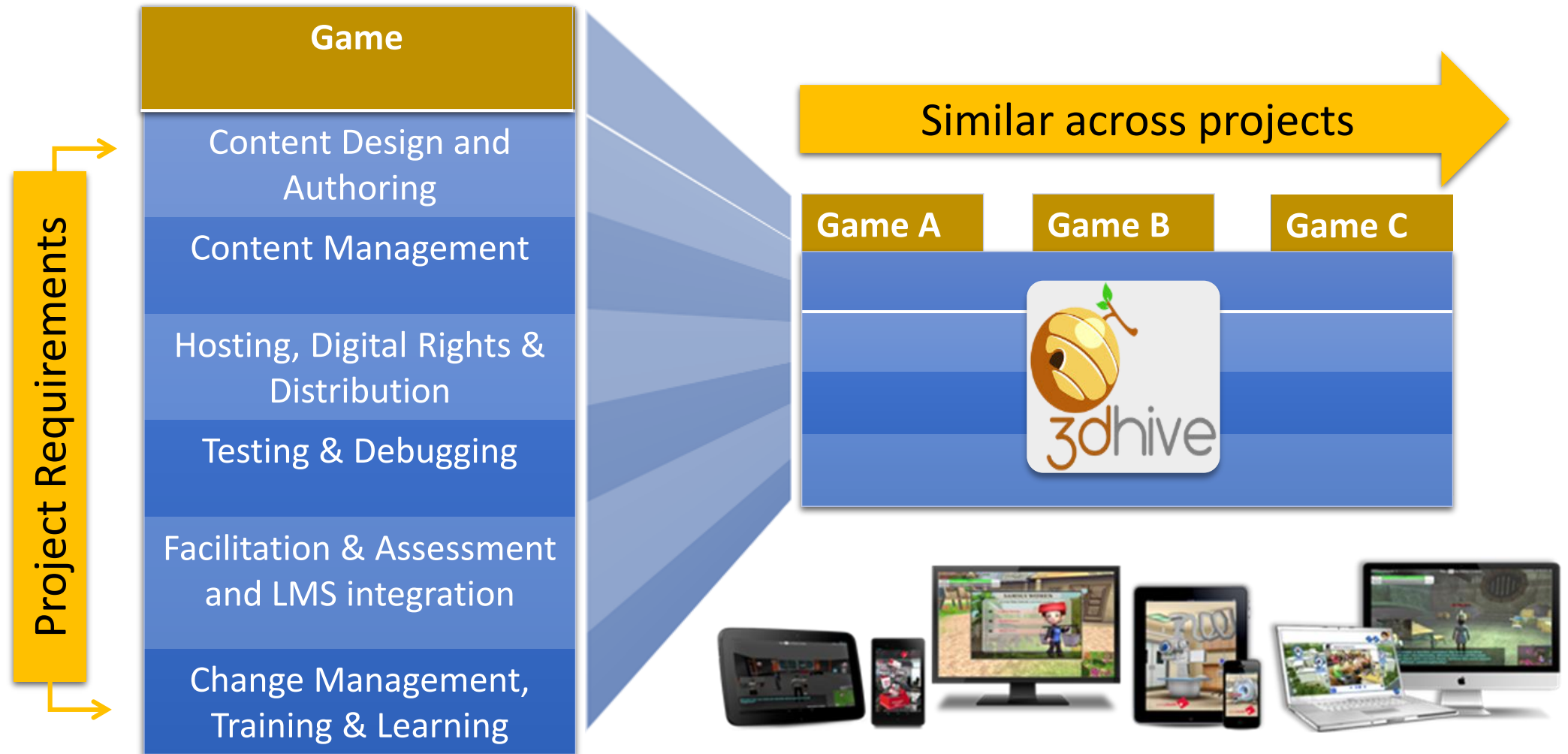
3

### The Mobile Experience Is All About Apps

% of time spent on iOS and Android devices



# Complete Platform for Mobile Learning Games





# Patented & Award Winning Technology

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204. (WO2013019162) METHOD AND SYSTEM FOR HOSTING TRANSIENT VIRTUAL WORLDS THAT CAN BE CREATED, HOSTED AND TERMINATED REMOTELY AND AUTOMATICALLY

PCT Biblio. Data Description Claims National Phase Notices Drawings Documents

Note: Text based on automatic Optical Character Recognition processes. Please use the PDF version for legal matters

Machine translation (true)

Method and System for Hosting Transient Virtual Worlds that can be Created, Hosted and Terminated Remotely and Automatically

BACKGROUND

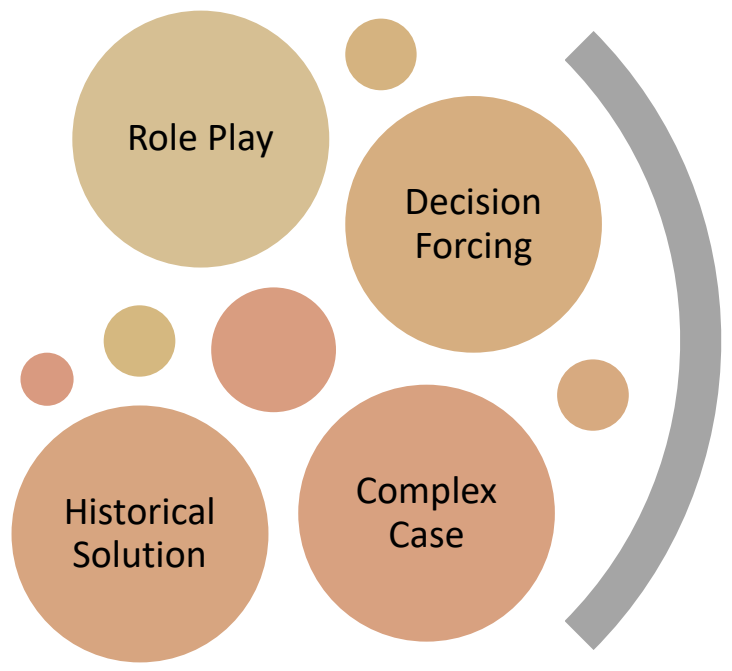
Technical Field

Embodiments of the invention relate to providing a method and system for presenting users with the ability to host a virtual world, such as in a game based environment for teaching and learning, which is suitable for "pay-as-you go" service.

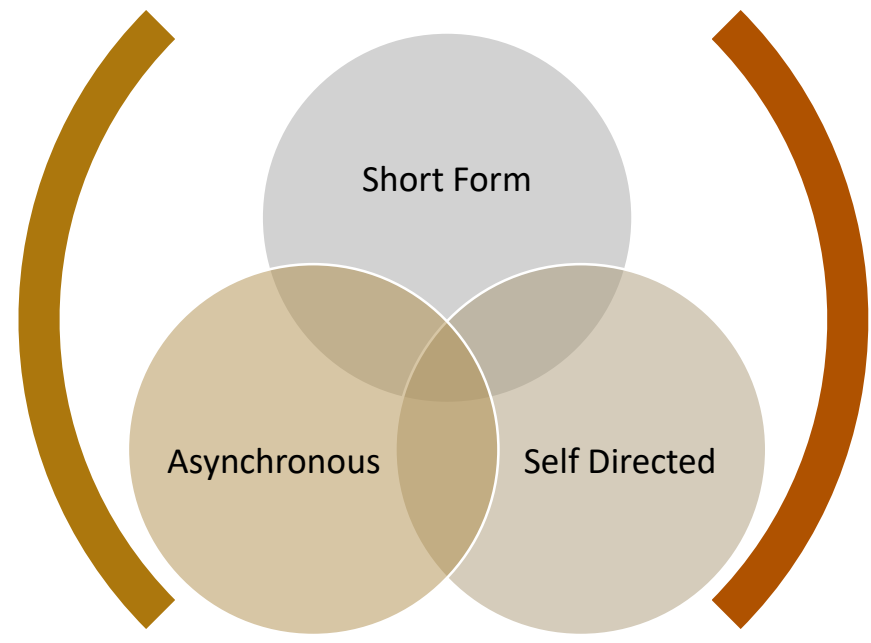




# A new way to learn



## Case Method



## M-Learning





# Authentic Practice




**3D Locations**  
Observation,  
Environmental &  
Visuospatial context


**3D Props**  
Tools, Tasks, Procedures  
and Information sources

**Player Character**  
Role, Goals and  
Responsibility


**Non-Player-Characters**  
Relationships, Rules and  
Behaviour



Sensory  
Modules



Situation  
Processing



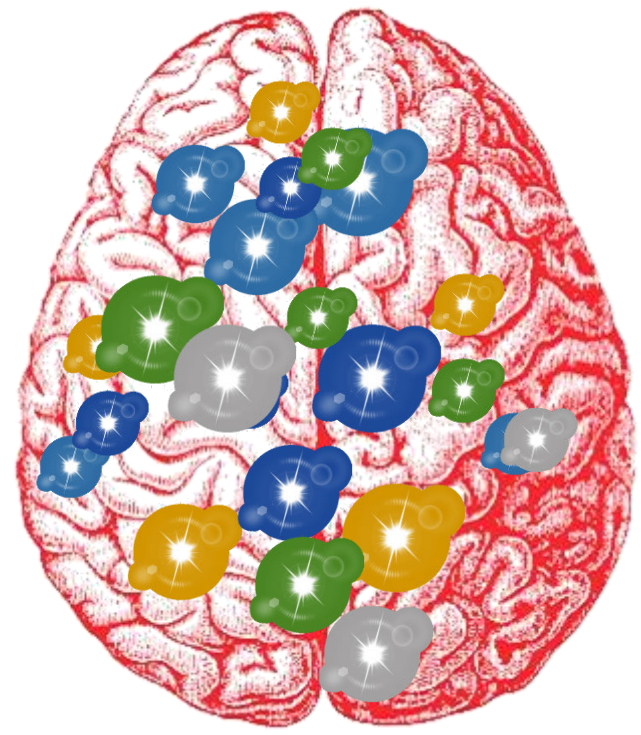
Model  
Processing



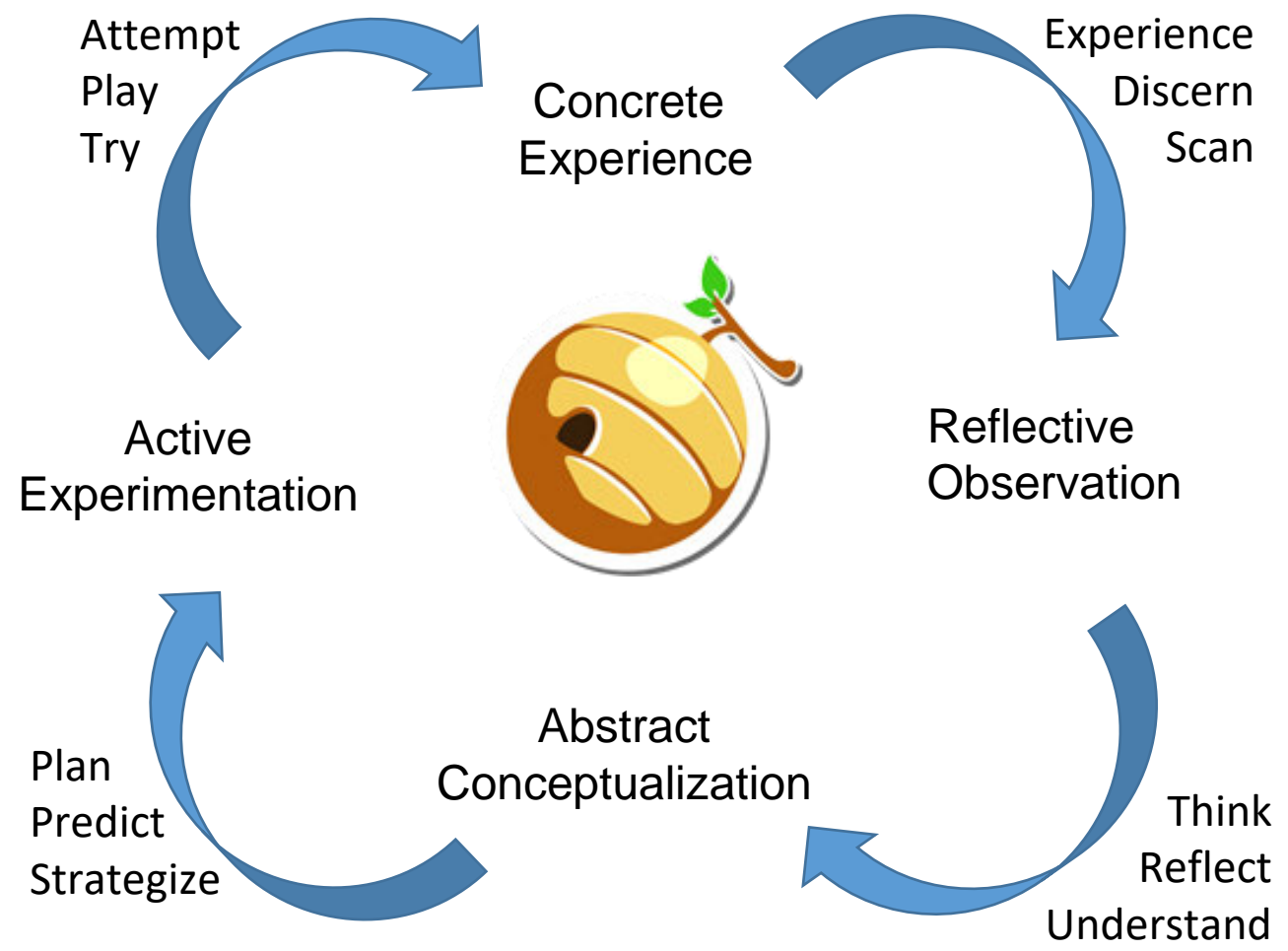
Action  
Processing



# How learning happens in games



- Dopamine
- Cortisol
- Norepinephrine
- Serotonin
- Oxytocin



## Kolb's Learning Cycle





# Simple & Fast distribution





# Voluntary Staff Engagement

Average duration

17

Minutes

Per Session.

Played more than

18,000

Times in one year.



**More** than  
95% Nursing Staff  
**Participated**



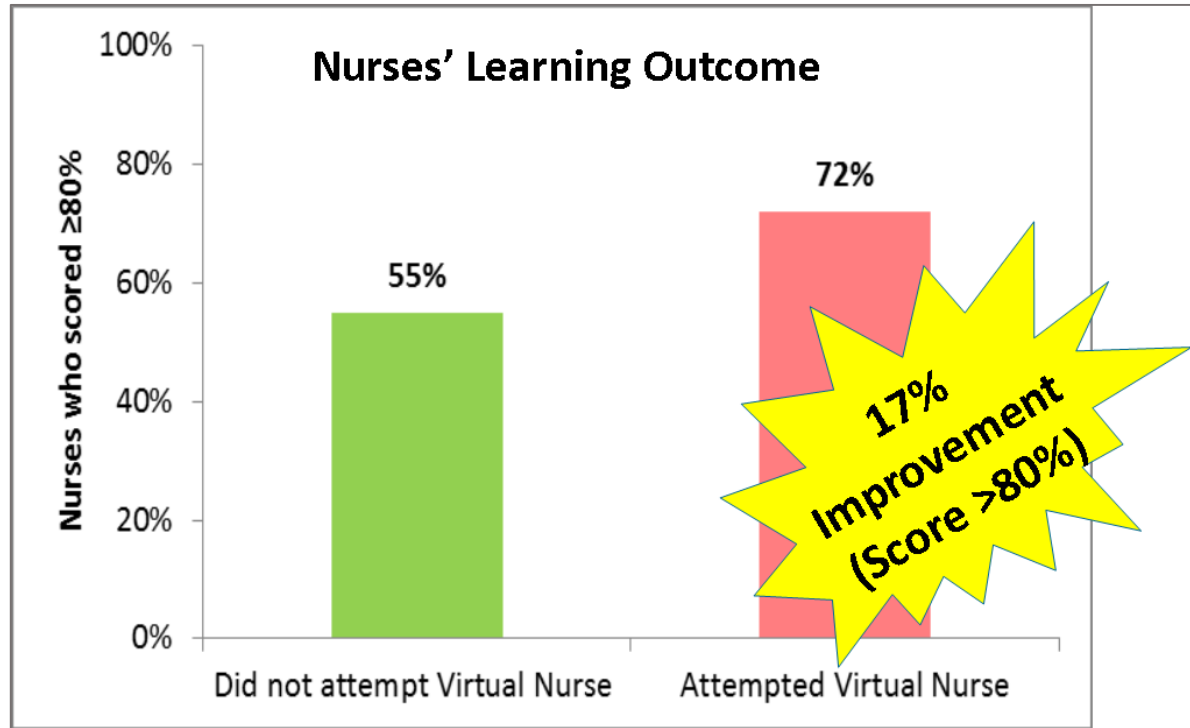
Case Study

JurongHealth  
Alexandra Hospital





# Improved Learning Outcomes





# Greater Confidence & Knowledge



**Safe administration of blood transfusion**

**2 Weeks**

Between Practice and Performance Testing

**3 Statistical Methods**

Independent t-test, paired t-test and ANCOVA

**Research Method**

Clustered, randomized controlled trial

**Post-test knowledge**  
Significant improvement  
( $p < 0.001$ )

**103**  
Nursing  
Students

**Confidence**  
Significant improvement  
( $p < 0.001$ )



**Case Study**

Alice Lee Centre for Nursing Studies  
Yong Loo Lin School of Medicine





# 3DHive.Mobi

3DHive breaks it down so that you can build your own games easily.

# Asset Library

Bring your stories to life with 3DHive





Populate your story from 3DHive's huge cast of interesting and believable 2D & 3D Characters





Build context to tools and tasks with 3DHive's massive range of props and equipment







Situate your story in 3DHive's beautiful and immersive 3D locations and environments



# Interactive Elements

Build engagement with 3DHive






# Interactive Elements

Move around and explore the 3D worlds to find interesting things, characters or places



# 3D Navigation

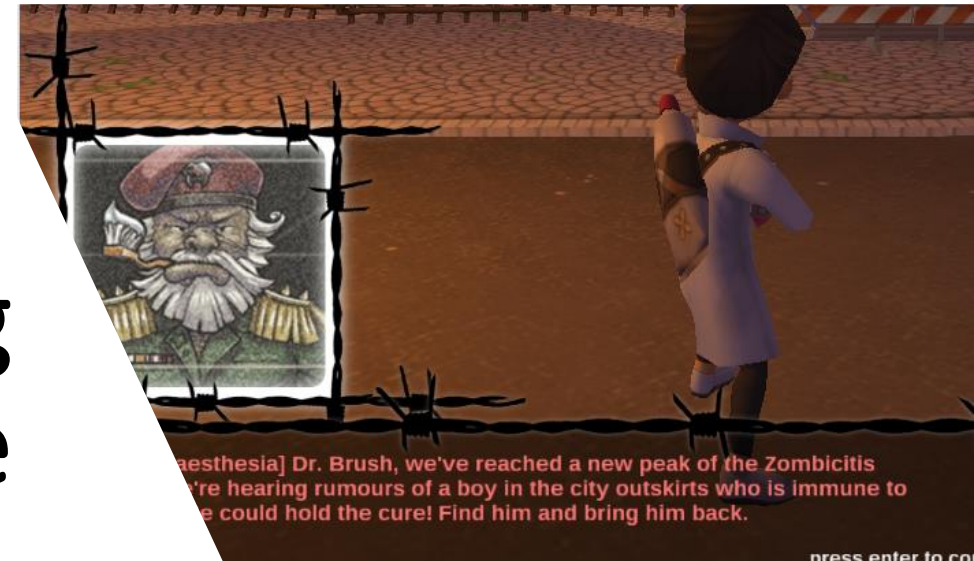


# Interactive Elements

Converse with characters  
and make decisions



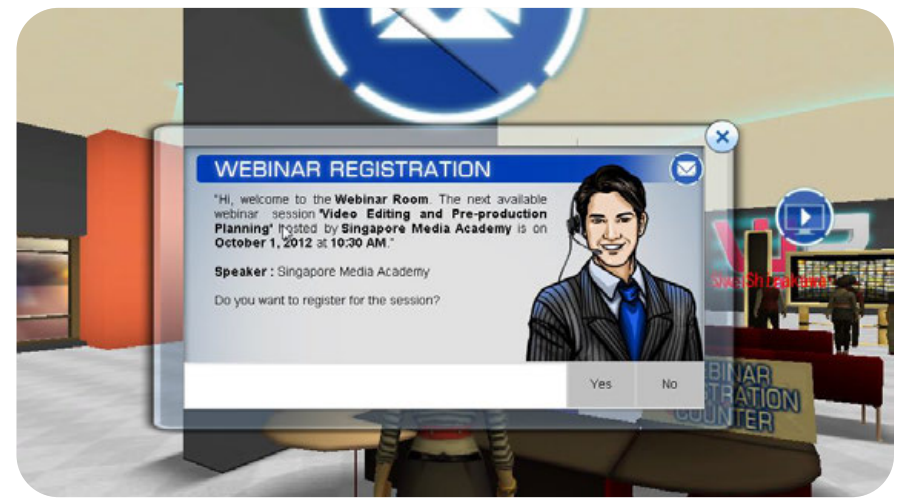
# Branching Dialogue



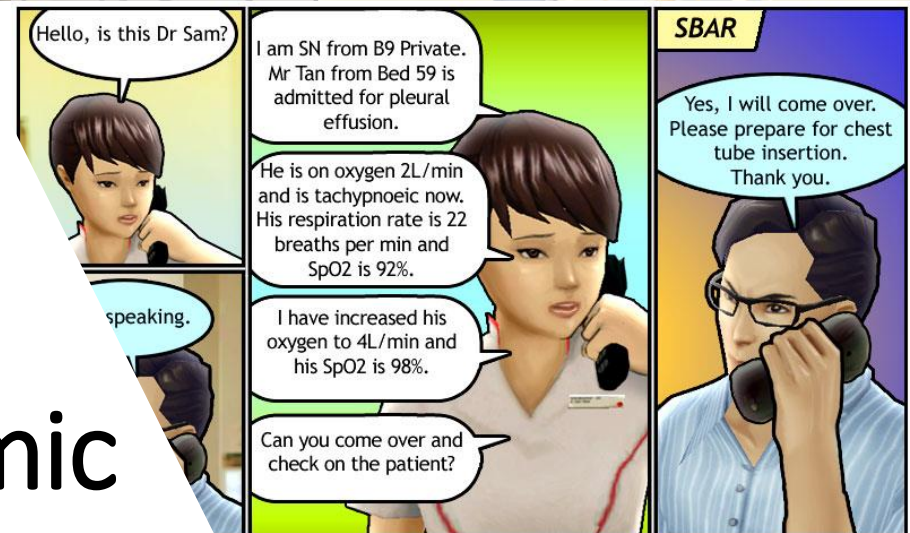



# Interactive Elements

Discover information and see the story unfold



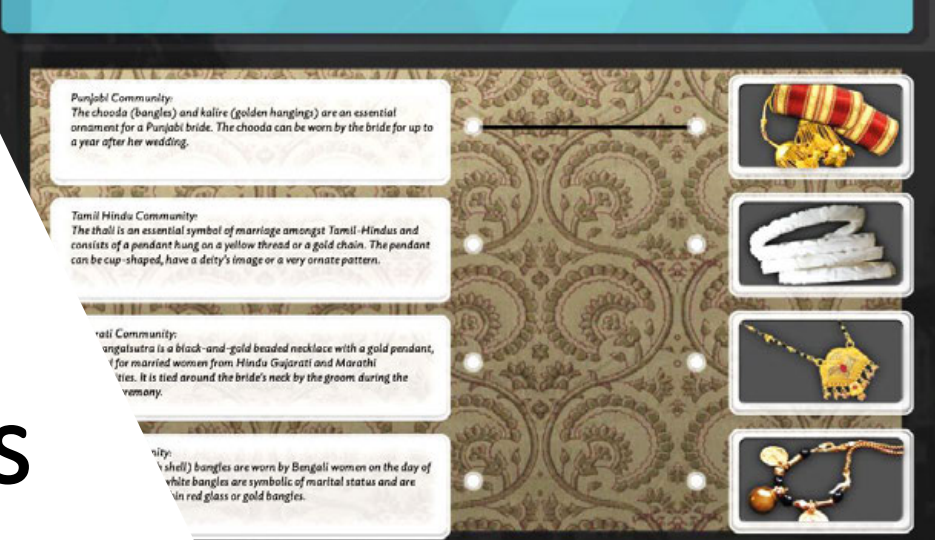
# Popup Info-Comic





# Interactive Elements

Demonstrate skills and Solve engaging puzzles to get rewarded

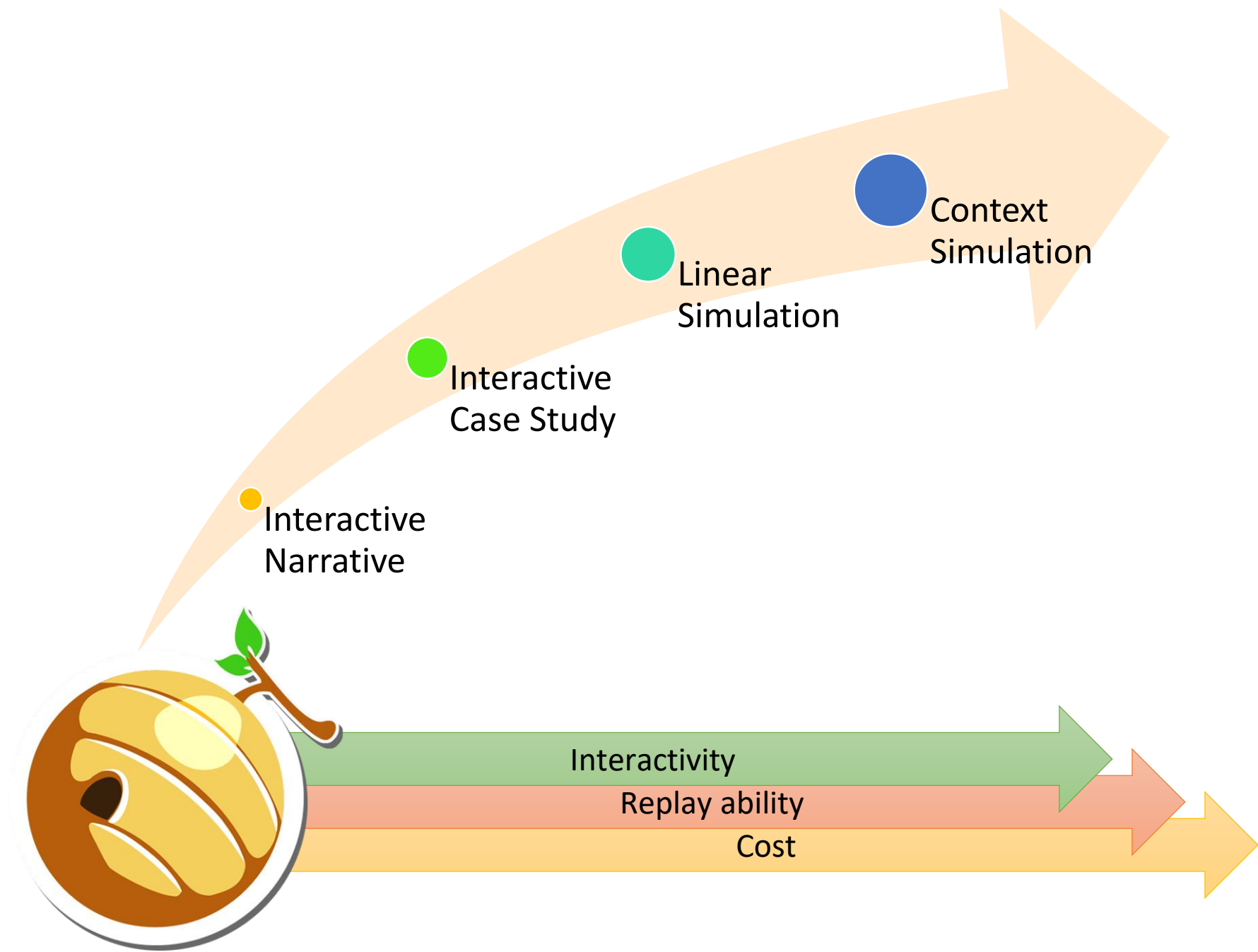


# Mini-Games

# Levels of Interactivity

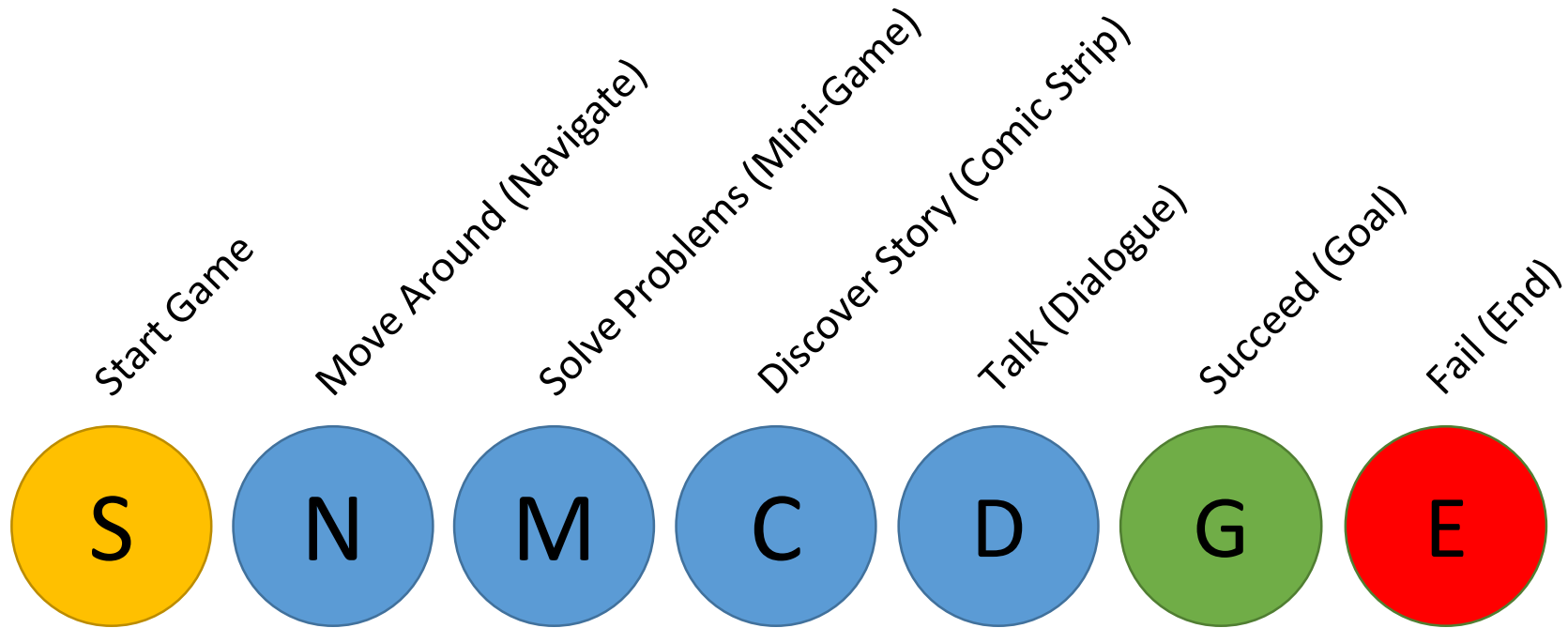
It all comes together to make magic







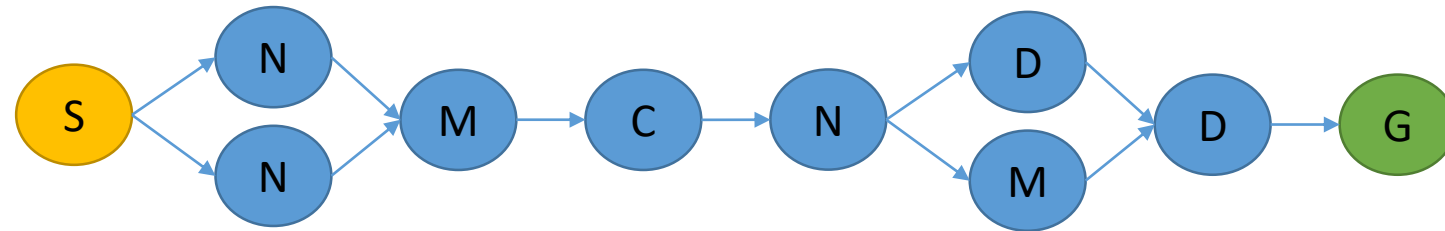
# Game Elements (Recap)



**Legend:**

 Game Start,  Navigation,  Mini-game,  Comic Strip,  Dialogue,  End,  Goal

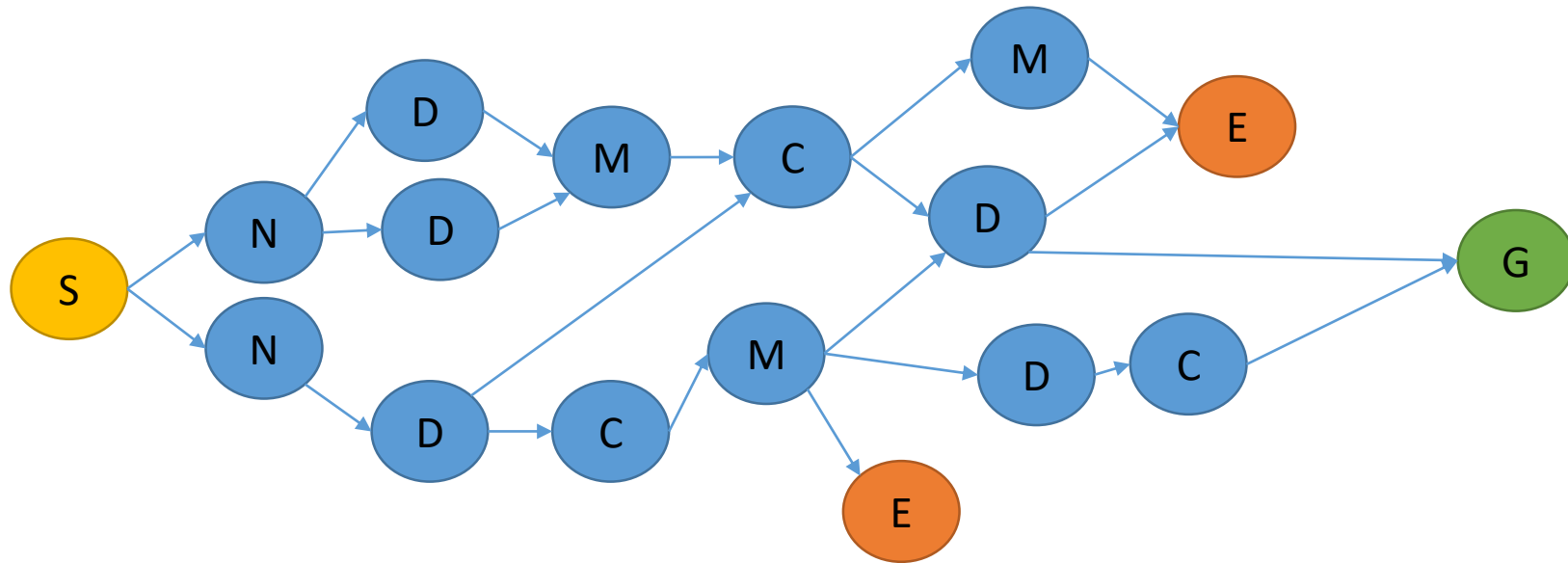
# Narrative Driven Learning



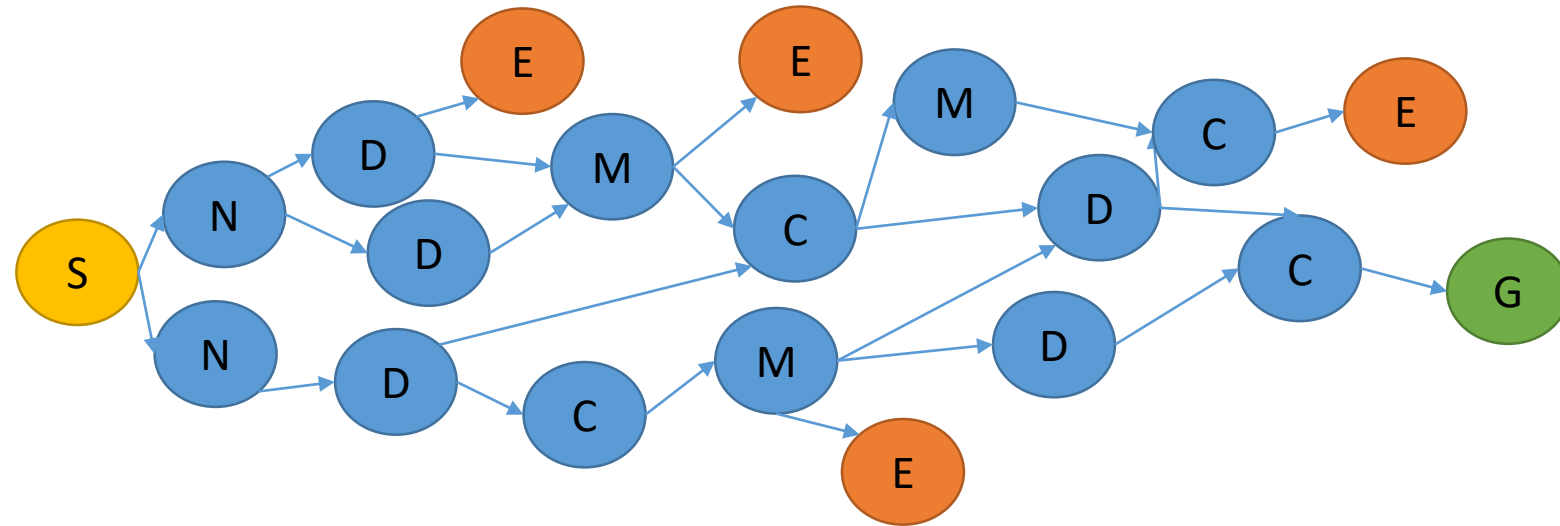
**Legend:**

**S** Game Start, **N** Navigation, **M** Mini-game, **C** Comic Strip, **D** Dialogue, **E** End, **G** Goal

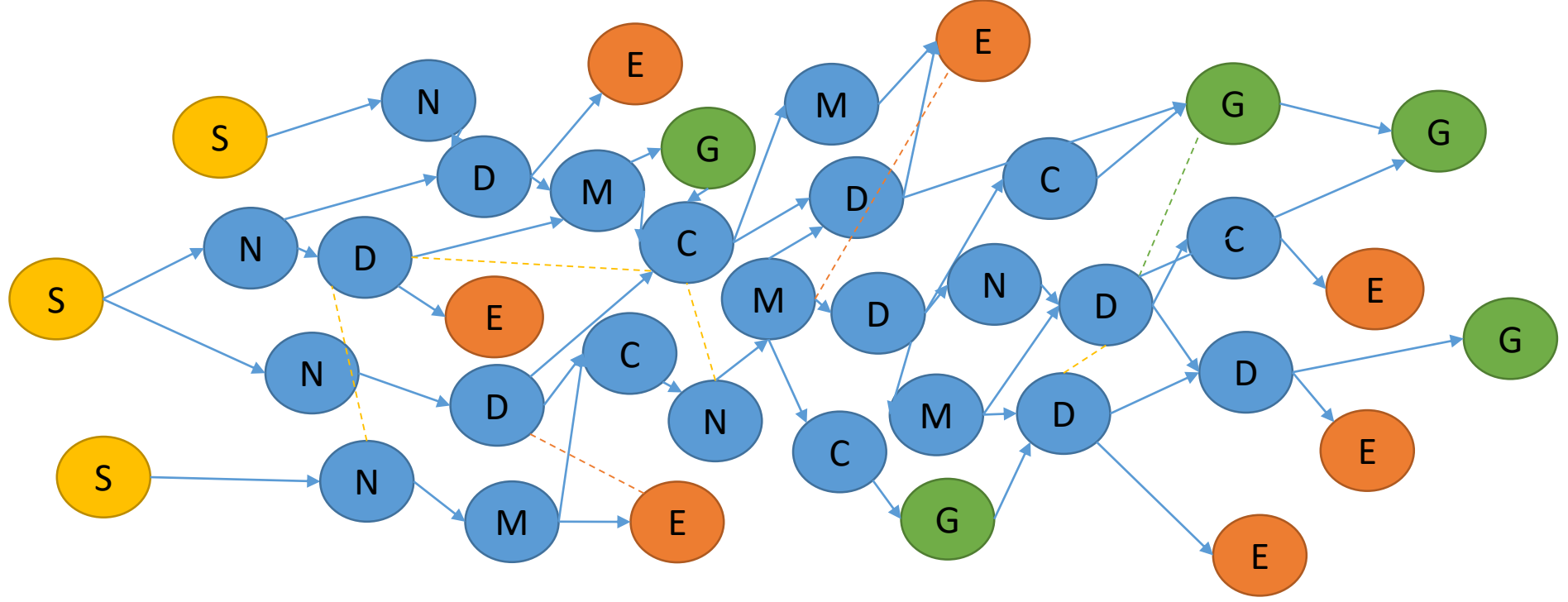
# Interactive Case Study



# Linear Simulation








# Context Simulation





# Comparison

	Narrative Driven Learning	Interactive Case Study	Linear Simulation	Context Simulation
	10-15 minutes	5-10 minutes	5-10 minutes	>30 minutes
	2 to 3 times	4 to 8 times	>20 times	>100 times
	1 Objective	1 Objective	1 Objective	Multiple Objectives
	No Failure Condition	Few Failure Conditions	Many Failure Conditions	Many Failure Conditions
	Single Loop Learning	Double Loop Learning	Double Loop Learning	Kolb's Learning Cycle



Thank You

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