

# Computer Games in Education

Bill MacKenty  
Director of Technology  
The American School of Warsaw  
[www.mackenty.org](http://www.mackenty.org)

During your Main Phase 1 or 2, when the total Level of a Tuner Monster and 1 or more Non-Tuner Monster(s) you control is equal to the Level of a Synchro Monster in your Extra Deck, you can perform a Synchro Summon. These Tuner Monster and the non-Tuner Monster(s) will be called the Synchro Material Monsters.

In order to Synchro Summon a Synchro Monster from your Extra Deck (under normal conditions), you must declare the action and send the Synchro Material Monsters to the Graveyard. After sending the monsters from your side of the field to the Graveyard, you then take the Synchro Monster from your Extra Deck and place it in face-up Attack Position or Defense Position on your side of the field.

Why do our kids understand  
this?

But not math?

Play is the natural path to learning

This is our WHY

- Instructional design matters
- 3 different categories of computer games
- 3 different views of learning with games

# Instructional Design

- Formal learning in schools occurs in deliberate space
  - Informal learning
  - Affinity spaces
- There is nothing different about using games in schools for learning

# 3 types of games

- **COTS** – Civilization V, Spore, Eve Online
- **Serious Games** – health, politics, poverty, waste, real-estate
- **Edutainment games** – reader rabbit, math blaster

7 New Amsterdam Warehouse

1%



2





YOU ARE HERE

3 structures  
to rebuild.

New Medical Supplies  
have arrived. You can  
seek medical attention by  
visiting the clinic now.


10000 [TAKE ACTION] GO

HELP

BRIDGE AND  
WATER

Food Supply

Jaja  
Age 12



$14 + 8 = \underline{\quad}$

28

24

22

2

# Making Games

- Building or modding a computer game is time consuming, arduous and **worth it**.
- Depth translates to breadth.
- Quality / tools are getting better (<http://unity3d.com/>)

# 3 different views

- James Gee: games are natural learning systems
- David Williamson Shaffer: epistemological frame
- Me: as part of an instructional activity – reflect on content in a new way.