

**BMMS: Mobile Media and Social IT
Education**



**Campbell (2006):
Perceptions of Mobile Phones in College Classrooms**

Related to cell phone etiquette.

NEGATIVES



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Related to cell phone etiquette.

NEGATIVES

Distraction:

- Ringing
- Playing games

Cheating:

- SMS



**Campbell (2006):
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POSITIVES:

- Tutoring
- Access Internet resources
- Connecting students, instructors, and parents
- Pervasive learning / m-learning

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POLICIES:

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Influence policies and perceptions of cell phones:

- Ownership, degree of use, experience

Age:

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Influence policies and perceptions of cell phones:
-Ownership, degree of use, experience

Age:
-Younger people are less concerned about cheating / more tolerant for ringing

Gender:

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**Campbell (2006):
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Influence policies and perceptions of cell phones:
-Ownership, degree of use, experience

Age:
-Younger people are less concerned about cheating / more tolerant for ringing

Gender:
- Females are less tolerant for ringing

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Did perceptions of cell phone change since 2004/2005?

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<http://www.surveymonkey.com/s/VM3KZ86>

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**Campbell (2006):
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Classrooms vs. other public places (restaurants, transportation)

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Limitations of the study

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How can mobile phones AID learning?

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Delacruz et. al. (2009)

Role of Games (including LBMGs) in Education:

- Engage students in:
 - critical thinking
 - problem solving
 - communication
 - collaboration

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Delacruz et. al. (2009)

Advantages of using LBMGs in education (over traditional games):

- No longer tether learners to a platform
- Mobility, interaction, location (movement in physical space is central to game play)
- Physical context as part of learning (situated learning)
- Use location-specific information
- Assessment of student behavior might be built into the game (tracking)

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Delacruz et. al. (2009)

Classification of Educational LBMGs:

- Participatory Simulations (PS)
- Augmented Reality Games (ARGs)
- Hybrid Reality Games (HRGs)

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Participatory Simulations (PS)

Definition:

- Students have active role in the simulation (influence its outcome)
- Students interact with each other depending on their relative distance to one another
- PS vs. microworlds (= computer based simulations of complex systems)
- Physical environment = primary play space

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Participatory Simulations (PS):
[Virus](#) (MIT Teacher's Education Program)

The screenshot displays three windows from the 'Virus' simulation. The first two windows, titled 'Virus', show 'People you have met' with a character icon and a 'Meet' button. The third window, 'Virus - Set Preferences', contains various settings: 'Partners' (0), 'Multiple Meetings' (checked), 'Gears lock' (checked), 'Immune' (checked), 'Immune Carrier' (unchecked), 'Incubation Time (min): 2', 'Infection (sec): 10', 'PI Additional Time (sec): 100', 'Infection Virus' (checked), 'Immune Recovery time (min): 0', 'Game Mode' (set to 'Infectious'), and 'Game Mode' (set to 'E').

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Participatory Simulations (PS):

[Virus](#) (Thinking Tags)



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Participatory Simulations (PS):

[Savannah](#) (FutureLab, UK – 2003)



Augmented Reality Games (ARGs)

Definition:

- Place dependent
- Simulated information on mobile devices + real world environment
- Primary space = physical space (augmented with digital information)

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Augmented Reality Games (ARGs):

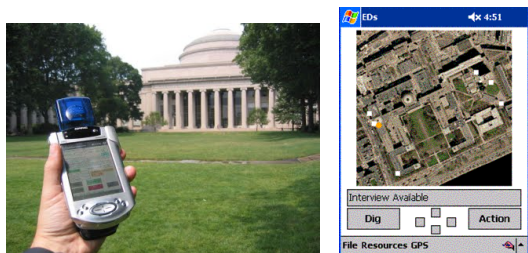
[Ambient Wood](#) (Equator Project, UK – 2002)



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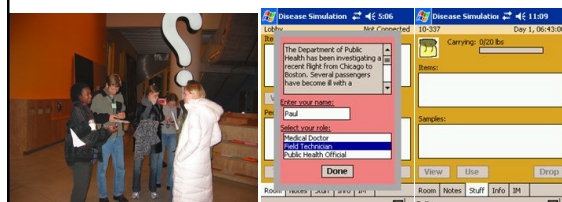
Augmented Reality Games (ARGs):

[Environmental Detectives](#) (MIT Education Arcade, 2003)



Augmented Reality Games (ARGs):

[Outbreak @ MIT](#) (MIT Education Arcade, 2003)



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Hybrid Reality Games (HRGs)

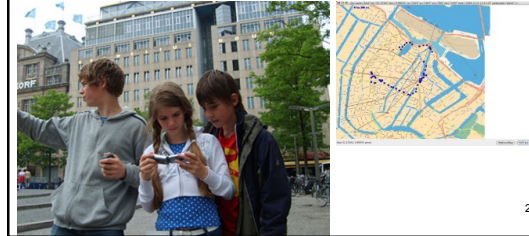
Definition:

- Play space = physical + digital
- Information spread through both environments

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Hybrid Reality Games (HRGs):

Frequency 1550 (Waag Society, The Netherlands -- 2005)



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Location-based Mobile Games / HRGs:

Educational affordances

1. **Critical Thinking / problem solving**
2. **Communication / collaboration**

1. How can LBMGs facilitate critical thinking / problem solving?

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Location-based Mobile Games / HRGs:

Q: How can LBMGs facilitate critical thinking / problem solving?

- a) Enable exploration of abstract ideas without real-world consequences
(examine emergent patterns, make sense of data, generate text hypothesis, solve problems)
- b) Problematize situation (understand cause/effect relationships)
- c) Allow exploration of the problem space in different capacities
(First and 3rd person perspective, role-play)

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Location-based Mobile Games / HRGs:

Educational affordances

1. **Critical Thinking / problem solving**
2. **Communication / collaboration**

2. How do LBMGs successfully include communication and collaboration into game design?

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Location-based Mobile Games / HRGs:

2. How do LBMGs successfully include communication and collaboration into game design?

- a) Assign players distinct roles (players must work together)
- b) Place-specific information
- c) Distributed information

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