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Faculty Summit 2010

Cutting Edge Education Update

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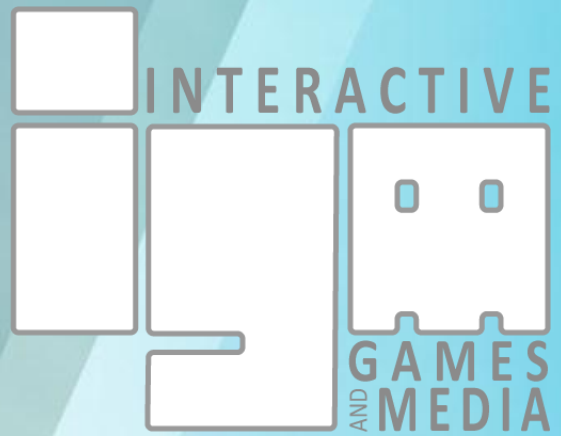

Hi, I'm Andy, and I Make Games.

Andy approximately 1978-1981.

Changing Role of Media-Centric Computing

"Computing" as traditionally defined has cultural differences with Millennials: Not seen as "creative" (what could be more creative?!?)

Decline in interest in traditional computing, explosion of interest in games, new media, and "design" (broadly defined)

Relevance of concrete skills and applicability to the everyday, to expression, to message, and to social impact

Interactive Games & Media at RIT

- Staggering growth curve – currently we serve approximately 650 undergraduates and 30-35 graduate students, with a faculty of 21, of which no more than any two have their degrees in the same field.

Highest growth curve of any department on the campus. We admit roughly 12% of application pool in a highly competitive process.

So what's really going on?

- Student motivation and outcomes, perceived alignment with goals, open and transparent display of academic intent. "Authentic?"
- But… our students profess an interest in creating games & media without any understanding of the process knowledge to do so. Likewise, our incoming students are not media-illiterate, but they are what we might refer to as "media narrow"
- A lot of bright, energetic, capable young people "thinking" that they want to do this, and some of them are right.

A funny thing happened along the way…

- I became a department chair for our new department, and so my research is dead, and I have no social life.
- But… I have access to systems and processes I never had before, and a dialog with a student body, in addition to individual students.
- Plus, a couple of interesting experiences, including:
  - Picture the Impossible – E. Lawley, E. Oyzon, J. Pietruch, a class, the Democrat & Chronicle, and a sizeable player base in Rochester, N.Y.
  - M.U.P.P.E.T.S. and the tale of upper-division/lower-division student engagement.
  - Student engagement in our own social media systems, and the extension of social media systems in, across, and outside of campus.

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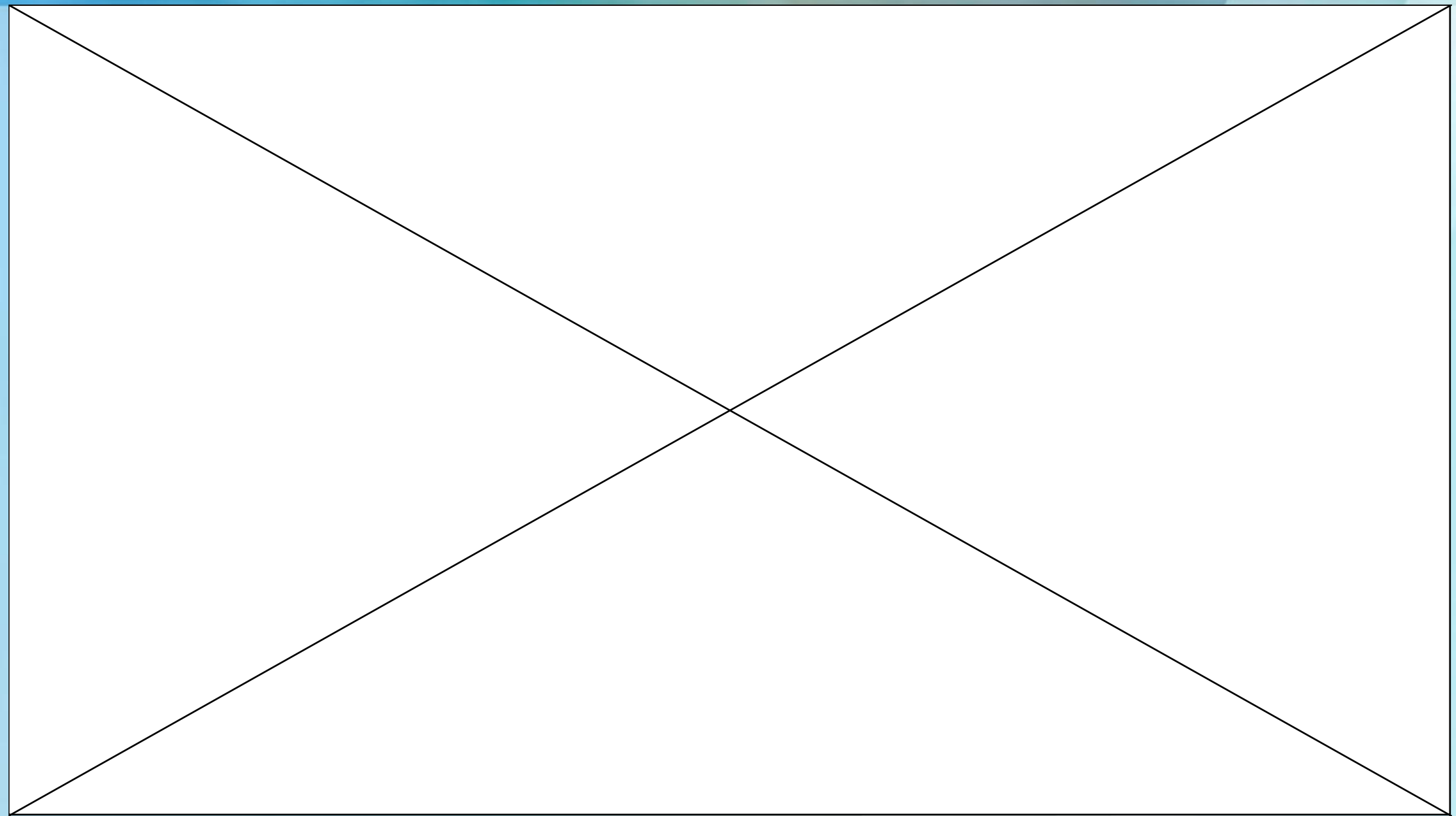
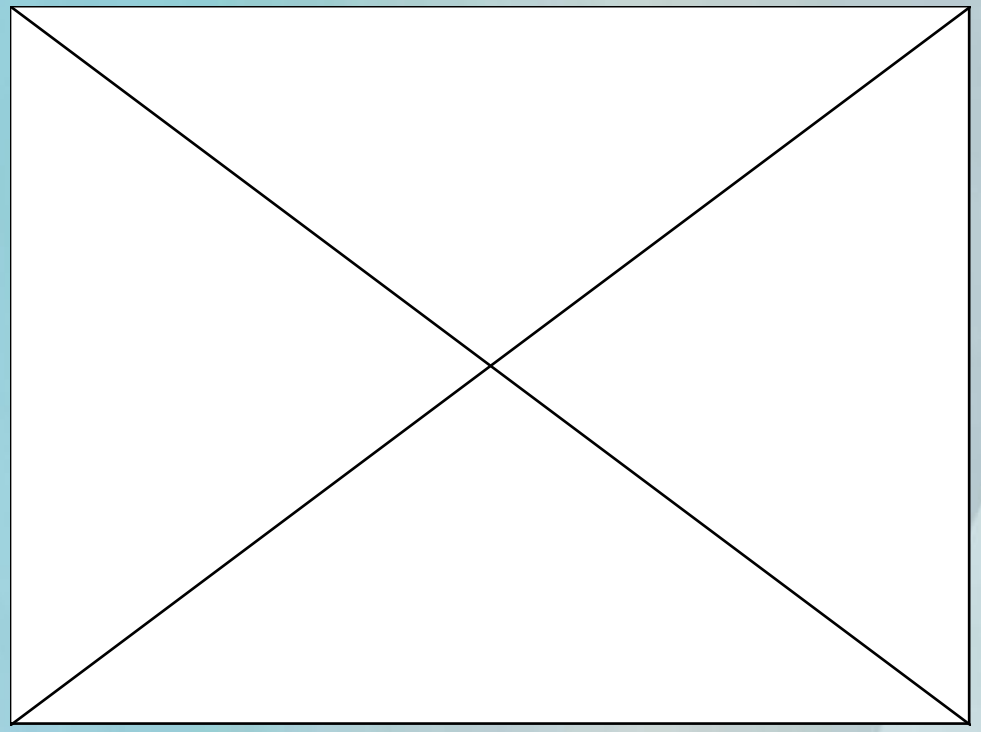
Picture the Impossible and the "MomD" Picture the Impossible Week 7 Game Task Submission

video

Picture the Impossible



“MomD PTI Video”



Facebook and Twitter and X-BOX Live and RIT

- Our lives could wind up as records. Wonderful point by my co-presenter in his presentation at DICE, along with “No one expected Facebook”
- Campus is a closed system… but it isn’t. But it is.
- Off-campus social software systems can have large-scale consequences on-campus. Facebook is obvious. 4-square was interesting.

So the IGM faculty got to thinking

- College is, in certain respects, a game, but not in others. This is not un-noticed by our students. It is also reflected in their own tools and playthings that they create as members of the community. (WiiCourseReg, IGM_Quest_Guide, etc.) – Relation to "authentic experience" of Constructivist learning theory?

- Undergraduate students are particularly concerned with the concepts of time-on-task and on a "record" of activities, often with private and public impacts.

- Our particular students are studying game-design, which is a meta-reflection and analysis of a lot of these topics

So the faculty got to thinking

- What if we created a system where students could “play” a game/earn achievements by doing various tasks in relationship to the program/campus/student body?

- A lot of people are talking about this right now in various circles: are “achievement systems” worthwhile, are they an effective educational strategy, etc.

- **VERY BIG DANGERS ALL OVER THE PLACE.**
- Is this even worth trying?

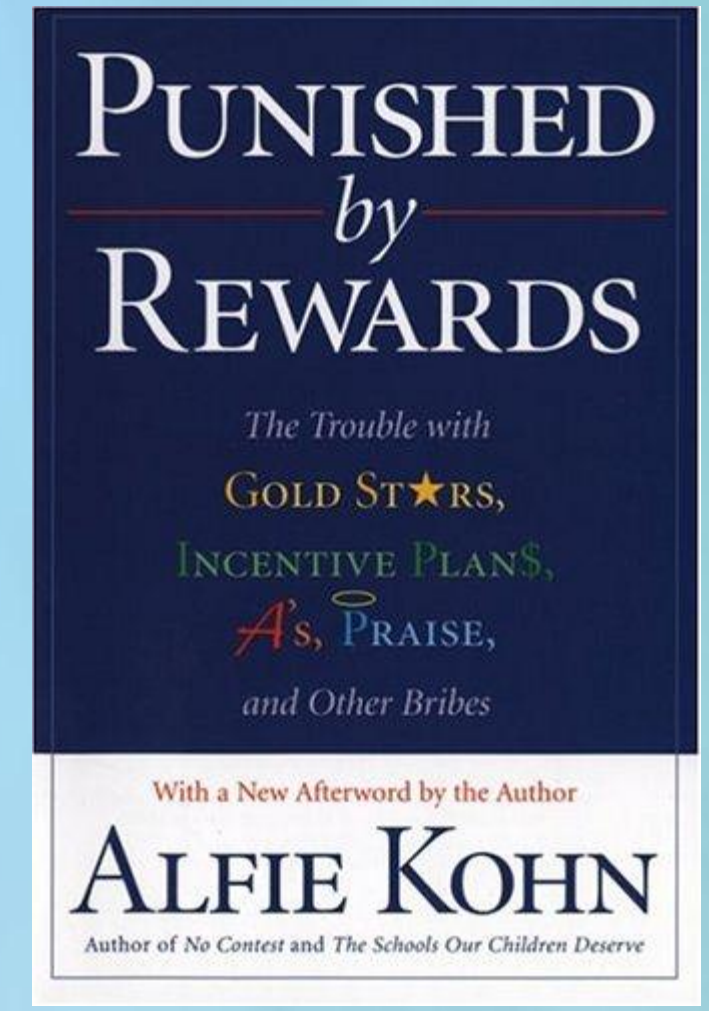
Some concern: 14 lessons from Kongregate

- Why is this hard, and why is that fun?
- “Grindy” achievements suck unless they overlap with natural behavior
- Multi-player is really hard and unpredictable
- Players will optimize on the rule-set
- Achievements should be within the players control
- Acknowledge difficulty level
- Make sure the subject matter is worth it
- What happens to “unattainable achievement” flow? (pretend player dies ex.)
- Don’t let unattainable state to exist
- Insultingly easy or massive quantity is an influence on perception
- Don’t use achievement to force the player down a path in an open-ended game
- Don’t make timed achievements for puzzles that can be memorized
- “Secret” achievements are dumb
- “The player doesn’t have to earn the achievement” is not an excuse

Greg McClanahan

http://www.gamasutra.com/blogs/GregMcClanahan/20091202/3709/Achievement_Design_101.php

Interesting book, and a lot of concern



"Punished by Rewards: The trouble with Gold Stars, Incentive Plans, A's, Praise, and Other Bribes" by **Alfie Kohn**.

Concern not just for this experiment, but also for the general way in which we evaluate students (the faculty are almost unanimous in the refutation of grades as a reasonable measure, but institutional and societal pressures are very real)

In contrast

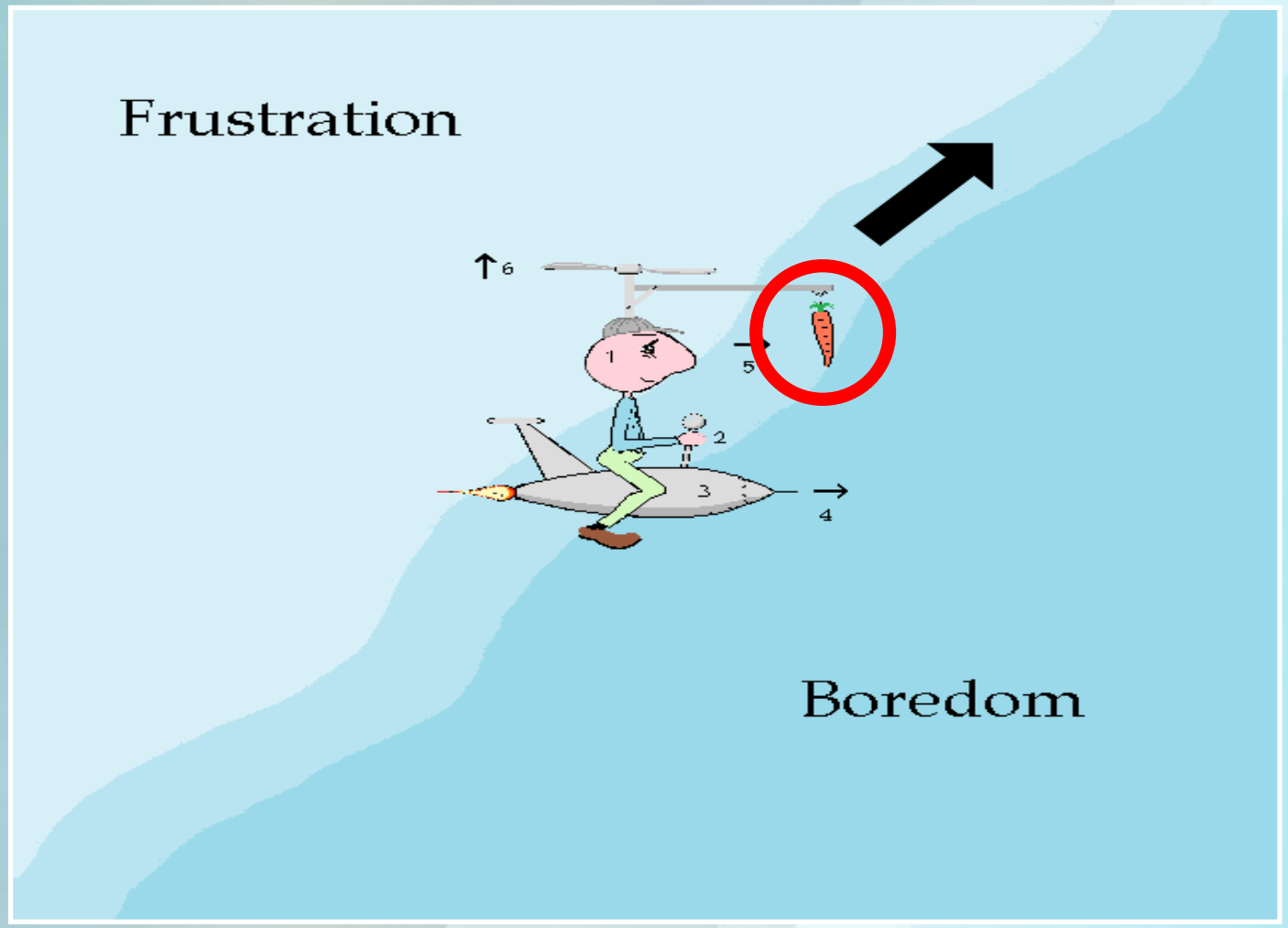
- The notion of “designing rewards” in games is often multi-faceted: there are virtually-tangible types such as items, currency, levels, etc. And there exists the possibility for less-tangible “rewards” such as narrative rewards, emotional rewards, new “things” or “areas”, “completeness”, etc.

Chris Bateman

http://onlyagame.typepad.com/only_a_game/2005/08/designing_rewar.html

Travel along Maximal Flow surface *(Csíkszentmihályi)*:

Games for Learning Institute



Flow as Game Addiction

- In an irony of ironies, the element that is often misrepresented as "responsible for game addiction" is the very same element that is portrayed as a powerful catalyst for learning, and which forms the basis for scientific inquiry (curiosity and challenge)

- Human beings are "happy" solving challenges and *feeling rewarded*. But what do we mean by reward in this context?

Some agreed upon directions

- We should adhere to everything we understand to be best practice both as educators and game designers
- Nothing we do should impact any of the actual curriculum – this experiment is divorced from core academics.
- Students should be involved in the design of whatever we do, and engage with it as research (there should be meta-discussion and both qualitative and quantitative analysis of whatever we eventually attempt)
- Anything we do should be optional, and the default of any system or experience is to opt out, without consequence.

Some support

- We know that campus is essentially a giant technology system, and users/roles, etc. are both possible and plausible, with concerns over privacy and behavior (Who wants to play WoW next year with RealID?!?) Support from RIT technology services and various stakeholders.
- Support from Academic Affairs
- Support of departmental staff and faculty (and some students)
- Maybe some interest from our friends and colleagues in both academia and the corporate world

Lots of questions, very few answers…

What will we learn over the next year?

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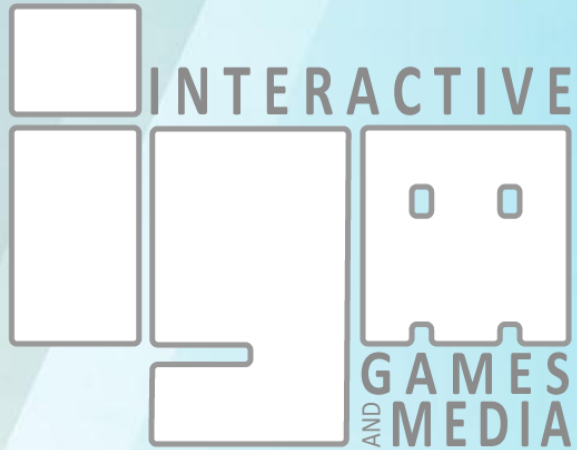

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