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ATEC 6300
Biassociation Paper
November 14, 2012

The Gamification of UTD

A new business and marketing model is emerging among companies called gamification. Simply put, gamification is using game elements in traditionally non-game environments. With few exceptions, universities are already playing games though not very well. The game is "pay us money and study hard". Winners of the game get good grades. Consistent winners may be awarded a degree. Very little of what happens along the way would be considered fun though.

Aside from the lack of fun, the current university model has a number of challenges and opportunities for improving the value of the experience. Most interested parties realize that free online courses from Ivy League schools are now available. Traditionally, the value of an education was considered to be in the content provided. If that's now free and on-demand, we need better reasons to encourage enrollment in the face of rising costs.

If the content is less of the value, then perhaps a greater value are the relationships formed. Unfortunately though, most college students haven't developed networking skills and fall back on the same strategies as self-employed people and less experienced sales people. They hand out business cards and rely on formal structures like infrequent parties, social activities and group projects.

Trying to network without the developed skill is a challenging way to get to know someone in a professionally useful way. Knowing someone socially or from class is not the same as knowing someone's professional capabilities and interests.

Along with networking is the notion of interdisciplinary studies. In this day and age – especially relevant in a paper on biassociation – interdisciplinary studies should not be a department but a core value. Every subject and every student can benefit from exposure to new ideas from other disciplines.

Thus far, interdisciplinary studies are generally limited to highly structured partnerships between two departments – in our case art and technology (i.e. computer science). As far as I know, our department has limited to no ties to the other schools such as management, government policy, criminal justice, GIS, or education. And even then, once the new department is formed, there is little additional collaboration between the new department and the forming departments.

Dr. Linehan rightly pointed out that as soon as students graduate, they are wished well and escorted out of any formal involvement. Consider if companies behaved in a similar manner – they hired new employees, spent 4-8 years training them, and then when they finally became valuable intellectual assets, they wished them well and sent them on their way. That is what most universities do. It makes one question calling universities learning communities. A learning community ought to retain ties to its own intellectual capital beyond occasionally hiring its own graduates.

Instead we could take a lesson from the Marines. The Marines say, "Once a Marine, Always a Marine." Part of that ethic comes from the shared experience of more elite military training and action. What if a gamified system could increase the value of the UTD brand to the degree that students identified strongly with the experience on a lifelong basis? While military members may have reunions or veteran appreciation events, why not do one better and form a network that allows the developed intellectual capital to stay engaged with the community?

Additional challenges are in finding out about events available on campus. Personally I have attended several concerts and plays that were free to students. When I mention these events to my fellow students, none of them had heard of them. Evidently the Computer Science Department sends out emails regarding academic talks – but only to its students about its own talks. As a new arts and humanities student, most of the emails I get are for conference paper submissions and the occasional faculty job posting – neither of which I have any interest in at this time.

Advising is another challenge in a university that grows 4-5% each year as UTD does and in the US in general. As an undergraduate, I didn't have a good grasp of what I wanted to do and was allowed to drop out of an honors engineering program without any comment from anyone and change to communication studies. My main reasoning at the time was that I didn't enjoy the advanced chemistry courses I was in and the communication classes looked like more fun. In hindsight, I realize if anyone would have taken me aside and talked to me, I probably would have changed to mechanical engineering, computer science or architecture. Any of those would have likely been a better career choice than communication at least initially.

At UTD, my advising experience was that we have one graduate advisor to advise 300+ graduate students. From my observation, he also appears to be acting as an admissions officer. When I visited him over the summer he was buried behind a few stacks of incomplete applications. And after getting advised, I found that he wasn't familiar with many of the courses in the department. Given the work load including teaching, that's understandable.

The point is that student advising in the US needs help. My understanding from talking to international students is that in some other countries, you are advised holistically. The advisor is concerned about your outside work and family experiences and is someone to consider your overall experience and goals. While I'm not certain that gamification can change the state of advising, a better networked learning community would certainly help alleviate some of those growing pains.

Finally, increasing the value of the network of intellectual capital at UTD would likely lead to additional funding opportunities for the university. Gamification could have a synergistic effect that supports the goal of achieving Tier One status.

In this paper I propose to outline a design framework for the gamification of the University of Texas at Dallas specifically and the university experience in general. The following design framework is outlined in Kevin Werbach's book on gamification, For the Win. The outline includes the business objectives, delineation of target behaviors, description of players, devising the activity loops, remembering the fun and deploying the appropriate tools.

In any design process it is advisable to consider examples. So far, Rochester Institute of Technology (RIT) is the only university I know of currently implementing a system of gamification. They have been using their system for about a year now though it has only been implemented in their department of Interactive Games and Media with funding from Microsoft.

Some of the following information is from the small amount of information that is publicly available on RIT's website and will be noted as such. Another primary source is the forum, StackOverflow.com which is a community-driven Q&A site that uses some gamification elements.

Business Objectives

The business objective for gamifying UTD would be to increase the value of the university experience. The improvement could be measured through metrics including increasing retention and graduation rates, increasing collaboration and increasing the diversity of the university experience.

RIT's stated purpose is to "help undergraduate college students to navigate the barriers to academic and social success." While that seems like the purpose of any university, it's unclear how exactly that translates to any measurable business objective. Perhaps they have other unpublished objectives elsewhere.

With an enrollment approaching 20,000 students, UTD currently has a 41% four year graduation rate for undergraduates who make up 61% of the enrollment. There is an 83% retention rate for freshmen. Those stats are from UTD's website and accountability profile.

The value of the experience would be increased with higher graduation rates. A gamified system would provide more opportunities for fun which would make the experience more engaging and enjoyable and therefore more likely to be completed. The system would help provide more social support and could help students more easily track their own progress and increase motivation to continue on.

The value of the experience would be increased by increasing collaboration. It's been said that the value of a network is exponentially proportional to its size. A gamified system could set up more formal opportunities to network in person and on a dedicated forum similar to StackOverflow.com. Stack Overflow is one of a series of Stack Exchange sites.

Participating in a site like Stack Overflow gives you reputation points based on how active and how helpful you are. With reputation points, players would have measurements to know which other players are excelling in which areas and might share similar interests and goals.

At this time, the only interaction most alumni have with their alma mater is to receive solicitations requesting donations from the alumni association. A gamified system could provide for ongoing alumni collaboration with current students for mentoring, employment or other networking opportunities.

As a learning community, it benefits everyone to have easy access to information about ongoing research – opportunities, needs, etc. A gamified system could incentivize more attendance at open lectures, thesis and capstone project presentations or simply the sharing of ideas. Interest groups such as those found through Meetup.com would be a potential way for students to learn about topics and contribute to the ongoing discussion.

Another networking issue is that everyone in the learning community at UTD would stand to benefit from cross pollination between the computer science department, the arts and technology department and the school of management. It seems that the little that is happening at

the moment – especially between management and the others – doesn't serve the community as it could. Programmers, designers and entrepreneurs need to collaborate to be successful.

And finally, the value of the experience would be increased by broadening the diversity of experiences. A gamified system can incentivize the activities might not otherwise engage in such as cultural events, sporting events, academic talks, helping other students, volunteering or developing their communication or leadership skills.

To recap the business objectives, they are to increase the value of the university experience through increasing retention, collaboration and diversity.

Target Behaviors

There are several categories of behaviors I have identified thus far. While there is some overlap between them, they are Creative, Communication, Leadership, Involvement and Academics. RIT has broken down their achievement points into categories of Create, Learn, Socialize and Explore. My categories are more closely aligned with big picture life skills to reinforce the value proposition of education.

While most universities focus on academics, many would agree that an education without the other categories would be incomplete. Most employers look for candidates with the other categories – communication and leadership especially. The list below spells out some of the target behaviors in each category. An implemented system might evolve to include other categories.

Creative: these are artifacts students are creating throughout their studies and on their own. This category could be summed up as create, publish and document.

- Create business plans/models
- Publish photography
- Publish blog articles
- Publish websites
- Publish videos
- Publish in peer reviewed journals
- Create models, sculpture, etc.
- Create screenplays or theater scripts
- Create dances or other physical performances
- Create presentations
- Create programs
- Create apps
- Create electronic devices
- Create chemical compounds
- Create with Nano technology
- Create quests or achievements for the system
- Create games
- Create simulators to be used in the system or for other courses
- Document a trip or vacation

Communication: this may be the most important skill a player can develop though there are rarely any classes on practicing it.

- Communicating through the forum (similar to Stack Overflow)
- Knowing when to communicate via phone vs. texting, email, etc.
- Giving peer feedback on performances or projects
- Speaking authentically, skillfully and tactfully
- Communicating a concept or idea
- Communicating cross-culturally
- Speaking at a conference
- Meeting people inside and outside your own department and culture
- Networking with those with similar or dissimilar interests
- Networking with potential business partners, teammates or group work partners
- Making recruiting visits at local secondary schools or community colleges
- Brainstorming ideas with other players
- Accepting an award
- Conducting a briefing
- Communicating with an advisor or mentor
- Presenting a thesis, project or research project
- Promoting a new event to the community
- Writing papers
- Form a student organization
- Organize an event

Leadership: virtually every school says this is important but virtually no school is teaching it in a way to develop the practice of it.

- Helping other players in person or on the forum
- Mentoring or coaching other players
- Mentoring or coaching children or young adults
- Leading a student organization
- Soliciting a 360 degree review
- Leading quests or achievements within the system
- Winning an award or funding for yourself or the university

Involvement: participating and giving back.

- Participating in the forum
- Participating in student organizations as a member
- Participating in sports as either a player or spectator
- Volunteering with a non-profit or community group
- Attending cultural events
- Attending student government events
- Alumni posting recommendations or jobs
- Reviewing or recommending another player on their profile

Academics: this is why the players are there but the system can still improve on it.

- Tutoring another player

- Increasing overall pass rates for courses
- Tracking player progress toward degree completion
- Attending academic talks
- Meeting faculty or industry experts
- Gathering more complete player feedback
- Completing and presenting independent studies
- Completing outside studies such as Coursera or Edx courses
- Networking similar research interests
- Augmenting lectures with simulators

Description of Players

One of the foundational principles of any game is that it must be voluntary. Any student may opt to play or not play without penalty. Perhaps some would decide to join later once they see the value in action. The most enthusiastic players are likely to be full-time traditional undergraduates. Players living on campus would be targeted specifically. Secondarily would be all other students – graduate and undergraduate alike. Finally, alumni, faculty and staff would be encouraged to participate in ways relevant to their respective positions.

The 2012 UTD enrollment figures are now available. This year's enrollment topped 19,727 students. Of those, 1545 are first time freshmen and 2306 are new graduate students. Seventy-three percent are full-time students, 61% are undergraduates and 23% live on campus. That's a substantial potential player base. Even 10% of on-campus participation would be significant.

Bartle's Theory of Characters says there are four player types: Achievers, Explorers, Socializers and Killers. The first three are fairly self-explanatory. The Killers are the players that like to compete directly with other players with the outcome being that they win and the other player loses. In a gamified system, there would be little opportunity for Killers to express themselves. They may choose to play as one of the other types.

Dr. Amy Jo Kim ("internationally recognized expert in online social architecture" – shufflebrain.com) points out that Bartle's types lack the function of self-expression. She describes players along axes of acting or interacting and with respect to content or players. Those acting on content are expressing. Those acting on players are competing. Those interacting with content are exploring. And those interacting with players are collaborating.

It will be helpful to consider these functions as we develop a gamified system. If retention and collaboration are values, the system should only encourage competition among teams.

Devise Activity Loops

Activity loops basically address how players progress. RIT has broken their activity loops into 4 point achievements. Players receive 4 points total for every achievement broken down into their respective four categories of create, learn, socialize and explore. Some of the achievements are also grouped into quests.

After discovering the url naming convention used, I was able to view the posted achievements and quests. Most of the achievements fall into filling out your profile, attending sporting events, academic talks, meeting and friending different people, meeting faculty, creating an

artistic artifact, visiting a nearby café, attending a social event, attending a department sponsored event or giving feedback on the system. Toward the end of the semester they organize a flash mob. They have achievements around encouraging a certain pass rate for introductory courses.

Admittedly (per their blog) interest tends to fizzle out by mid-semester. While they have yet to published their system details, I wasn't able to find out whether the accumulation of points served any purpose beyond keeping a running tally. I didn't see any awards or recognition based on points. There didn't seem to be any functionality for advanced or returning players.

While I initially thought RIT might make a good model for gamification of the university experience, I'm more inclined to model StackOverflow.com. The latter is a crowdsourced programming help forum. What makes Stack Overflow different is the system they use to rate questions, answers and user profiles. Their game elements have a closer alignment with the proposed business objectives.

The basic concept is that the forum allows users to vote question and answers up or down. Those who answer questions get reputation points. Players could use their reputation points to give urgency to their help request just like bounties work on Stack Overflow. Bounties are for when your question has not received adequate attention and you want to incentivize attention to it. Users can also pay unsolicited bounties for especially good answers.

There are also different badges to encourage users to participate. Casual users can easily earn some of the lower level bronze badges. Mid-level silver badges require some effort. Top-level gold badges are rare and reserved for the top contributors so that users don't get bored with easy goals.

Some of the badges that might translate directly to a UTD gamified system are listed below. They are listed in alphabetical order and if you go to the site, you'll see that virtually all the badges could be applicable.

Bronze badges:
- Altruist – first bounty you manually awarded on another person's question
- Analytical – visited every section of the FAQ
- Announcer – shared a link to a question that was visited by 25 unique IP addresses
- Autobiographer – completed all user profile fields
- Benefactor – first bounty you manually awarded on your own question
- Citizen Patrol – flagged first post (for inappropriateness, etc.)
- Commentator – left 10 comments
- Critic – first vote down
- Disciplined – deleted own post with score of 3 or higher
- Editor – first edit
- Excavator – edited first post that was inactive for 6 months

Silver badges:
- Archaeologist – edited 100 posts that were inactive for 6 months
- Booster – shared a link to a question that was visited by 300 unique IP addresses
- Civic Duty – voted 300 or more times
- Deputy – raised 80 helpful flags
- Enlightened – first to answer and accepted with at least 10 up-votes

- Enthusiast – visited the site each day for 30 consecutive days
- Epic – Earned 200 daily reputation 50 times
- Favorite Question – question favorite by 25 users
- Good Answer – answer score of 25 or more

Gold badges:
- Copy Editor – edited 500 posts
- Famous Question – asked a question with 10,000 views
- Fanatic – visited the site each day for 100 consecutive days
- Great Question – question score of 100 or more
- Legendary – earned 200 daily reputation points 150 times
- Marshal – raised 500 helpful flags
- Publicist – shared a link to a question that was visited by 1000 unique IP addresses

Another issue is the relevance of the achievements. At RIT, you can only visit so many events, professors and cafes before you've maxed out what you can do. And all achievements are weighted equally – 4 points though in different categories. Some of those achievements wouldn't necessarily be fun or enriching in and of themselves.

RIT wrote on their blog that they initially implemented a system based on leveling up though no details were given. Care must be given that the game elements included are appropriate to the objectives. Some gamification systems are less effective because they slap on the classic and often overdone points, badges and leaderboards systems without a sense of how those elements will affect the ecology of the system.

I also considered the leveling system of World of Warcraft. I wondered whether the different classes and races could be mapped onto skills or majors within the university system. My wife pointed out that it would probably be better to avoid symbolism that's not immediately recognizable. Players would otherwise have to remember which classes corresponded to which majors and departments. It could feel a little contrived. Not using conventions such as those also heads off any potential argument between departments about who gets to be the warrior class.

That brings us to my specific activity loop recommendations. The reputation points and badges of Stack Overflow seem like the most elegant solution. Each user on his profile has displayed his number of reputation points, badges, questions asked and answered and other personal bio info. It's simple and easy to understand.

Reputation points can be the total number representing accomplishment in the system. Within those points are all the badges, events and help given that those points represent in each category. An accomplished public speaker may have the same level of reputation points as an accomplished athlete. What would distinguish them would be the badges awarded on their profile.

Players progress by earning badges and reputation points. Reputation points can be earned from participating on the forum in the same manner as Stack Overflow. They can also be earned in their respective categories from events similar to the ones mentioned in the target behaviors above. Events would have relative points. Playing in a game would receive more points than watching a game for example. See Figure 1 for an example of a user icon from a question asked. It shows reputation points, total badges and acceptance rate for answered questions.

Figure 1

Certain levels of reputation points could earn additional privileges such as the ability to create badges, achievements and quests. Higher level players could be eligible to mentor other players, act as moderators on the forum or earn privileges such as coffee with a high level administrator. Points could also be used to gain priority access to certain events.

Players who accumulate the most points in any given week could be featured on a leaderboard. Player rated artistic artifacts could receive points based on their rating.

Figure 1

Players could also complete events not listed in the achievement list. For example, if there were a museum out of state that a player visited and documented (through photography, a written report, etc.) then they could receive points for that too. A peer review system that also awarded points for use could act as a peer review and approval system.

Alumni would maintain the points and badges they accumulated while enrolled and maintain access to the system and forum afterward. If they wanted to continue to post artistic artifacts, business plans, etc. they could continue accumulating points. They could also gain points for mentoring or posting job opportunities. Alumni could use their points toward priority access to networking opportunities, events or job fairs. In this way, the university maintains connections with its graduates.

The points above primarily pertain to the business objective of increasing retention (through a community supported Q&A) and increasing the diversity of experience though awarding points and badges for attending all the various events the university offers. The biggest opportunity for value creation lies in the last objective of increasing the value of the collaborative network.

There are several different models for collaboration. What most universities do now is the default and arguably the worst way to go about it. Students generally only meet people through their classes or social clubs and often not well at that. Fraternal organizations often fill that gap.

Let's review several different modalities of networking. In classes you might or might not talk to those sitting around you before or after class. From observation, most people don't beyond those sitting immediately adjacent to them. From our secondary education we learned that when class was over you got up and moved on to the next task. Socializing was discouraged. Advancement came from grades and tests. In the professional world, networking is as important if not more so than any skills acquired.

Student organizations suffer the same challenges as classes. Very few students are adept enough at networking to make a point to get to know many other members in a way that creates value for those involved. Social clubs and parties fair little better.

In the professional world there are additional opportunities. There are professional networking organizations which are often little better than business card exchanges. More groups are going to speed networking which is an adaptation of speed dating. In this context speed networking could be arranged for different topics – networking entrepreneurs with design student and software engineers. Business development students could network with city planning students and simulator design students. The list could go on.

Going back to the source – dating as a study of forming collaborative relationships is worth a look. One site in particular – okcupid.com distinguishes itself through a long series of questions and relative importance ratings. The more questions you fill out, the better it is able to match you with individuals who meet your criteria. Having a similar system set up to match similar academic or professional interests could increase the value of the network.

A big question would be how to use such a network. There could be incentives to meet a certain number of individuals with similar interests in a week. Online speed networking events could be scheduled for certain topics. Invitation-only events could be arranged. We would likely see a number of emergent behaviors with such a network.

Finally we can consider social networking sites such as LinkedIn.com. This basically started as a hybrid Facebook for professionals and often looked like an online resume. The intention was to encourage connecting through business professionals. Personally, I have been on the site for several years and have 219 connections but have never used the site beyond doing research on individuals or companies I would be doing an interview with.

Remember the Fun

The purpose of this section is to take a step back from the game elements described thus far and evaluate whether the underlying content is worthwhile. Here we must ask whether the experience would be fun without the external rewards.

Again, the business objectives are to increase the overall value through retention, collaboration and diversity.

Retention isn't fun in and of itself. It's a byproduct of creating value within the system. It can also be a byproduct of having fun. It is a valid measure of the overall value along with other metrics such as graduation rates, employment rates, assessment scores, etc. It's not a game element but it informs how well the game is being played.

Collaboration can be lots of fun and rewarding in and of itself. The challenge is knowing how to do it and how to maintain it. While Facebook isn't a good replacement for face to face collaboration, it works well for long distance relationship maintenance at a low level with a higher quantity of contacts. It covers a level of relationship that was absent before.

Consider the experience of a Meetup group that I attended regularly in Austin. It's based on Internet marketing. Their general format is to meet once a month starting around 7pm. People trickle in, start networking and the presentation starts around 8pm. After the presentation, some people stay around and talk while others leave immediately.

My experience was that since I was not good at networking, I would mostly come for the presentation and talk to a couple of people. I kept thinking that I probably wasn't meeting the people that I ought to be and wasn't presenting myself in a way that conveyed the value I could provide the people that I did meet. Between us we would have interesting conversations but still not learn enough to make it significantly valuable.

Recently that Meetup group added a speed networking component. Similar to speed dating, the group is broken up into two types (once it was product owners vs. affiliate marketers) and each

pair up is given 3-5 minutes to get to know each other and find out whether they have something to offer or could work together in the future.

The point is that networking can be enhanced with a degree of structure at the appropriate times. In addition to the activities listed above, speed networking could help players improve their communication skills, pitch an idea, make new friends or get new ideas. Speed networking is fun. Giving away reputation points would serve to encourage players who are more timid in social situations which is something the university would want to promote anyway.

Documenting your own growth and development is fun too. Seeing a growing body of aesthetic artifacts growing into a solid portfolio is fun. Becoming more comfortable in social situations or developing greater fluency in communicating is fun. Meeting new people and getting new ideas is not only fun but it's why most players will have come to the university in the first place.

Collaboration and helping people are fun. Improving yourself and increasing your chances for future success may be one of the most fun and rewarding activities of all. These are all things the players do anyway. Coming to the university was part of that process. Giving more structure to help accomplish those goals and have fun doing it will be worthwhile and increase the value of the experience.

Deploy Appropriate Tools

The final section is on how such a gamified system would be implemented. RIT uses an app and QR codes to document progress. For the students and faculty who are not mobile enabled, there would be the fallback of using computers in the lab. Event sponsors could print out a QR code. Or they could scan student IDs.

Players who achieve a certain level of reputation could be authorized to have an event organizer level of access to the system. They could create events and QR codes to encourage attendance.

For events that weren't prearranged, players could enter their documentation into a peer review system. Other players could verify that from the paper or photos, the credit is due or state why not. Perhaps reputation points could be given to peer reviewers to encourage that participation.

For the retention objective, a system could be set up such as the technology tree seen in many real time strategy games. Courses, prerequisites and progress would be easy to visualize. Friends of players could see each other's progress, encourage each other, register for courses together and discover new courses in other departments together.

For the collaboration objective, several technologies would be needed. Stack Overflow is part of the network of Stack Exchange community run Q&A sites. So far it seems to be the most innovative way for members of a community surrounding a topic to help each other. At this time, it's not open to being branded for UTD for example.

More likely UTD would want to create its own proprietary system that included the functionality of Stack Exchange. Within the system we would need a general forum. Forums are

good for mass conversation but not as good for finding specific information. Also, most don't reward participation and end up being a big time waste for the users.

Alternately, players could get benefit from having an area to rate professors and courses. This currently happens outside the UTD system anyway in a way that's difficult for administrators to track. Bringing it in-house would likely improve the quality of the feedback. As a student at UT Austin in the 90s, they would put butcher paper on long tables outside and allow students to write anything they wanted regarding courses or professors. Other students could read or write comments.

Additionally for collaboration the area still needing research for implementation is how to optimize the network within the community. Several modalities of networking were mentioned previously. Stack Exchange, forums, speed networking, event scheduling, dating sites and point tracking all have existing models. What we currently lack is a way to visualize the network.

What I'm imagining is a web of nodes where players are filtered and visually represented based on relevant search criteria. Different criterion could be established such as research interests. A profile could be tagged with the interest, skill in it, how important it is, what level it's being studied (undergrad, grad, professional, post-doc), etc. Additional criterion could be common contacts as LinkedIn displays or mutual friends as Facebook displays.

The search results could resemble the scene in one X-Men movie where Professor X is trying to find all the mutants with a machine. They pop up in a 3D network and shine as blue lights. Instead, results could be colored and given relative sizes based on importance of search criteria. The results could be explored in 3D space (on a screen with the current technology). Clicking a node would display some of the relevant stats.

This type of search feature could operate in the background of the rest of the gamified system. It would be yet one more way to encourage networking and access to the system would be of great value to all involved parties. It would be present in the sidebar in the way that the suggested friends section is on the Facebook and LinkedIn sidebars. Ideally, players could initiate contact with other players directly through the search results depending on the other player's privacy settings.

As a further collaborative point, reputation points earned through the UTD version of Stack Exchange and through events could be paid to other players as a virtual "Like" as on Facebook. If a player asks an especially good question in class, other players could open up their app and send that player one of their own reputation points. That would encourage better discussion in class which aids collaboration afterward.

Finally for the increase in the diversity of experiences, there would need to be a centralized events calendar. As it stands, virtually all events are given equal priority and most go unnoticed by the average student. A centralized events calendar could filter all the events regardless of their source – administrator, department, student organization, professor or individual student.

Events could be color coded to indicate the source or relative point value. Players with higher reputations would be able to get their event listed higher up in the results similar to the bounty payments mentioned before.

The events calendar could be sorted by department, topic, point level, academic level, etc. Players could sign up to receive notifications via text, email (individual or digest), or show on their homepage when their filtered events become available. Perhaps players could potentially also spend reputation points to override usual filters. At the very least, top level administrators might have that power on occasion. At the same time, administrators should also play by some of the rules too and not abuse the reputation point system.

Privacy will be a concern. Player profiles could be set the same way that Facebook does. They could make their profiles available publicly, university-wide, for network-matches, for friends or keep it private. Again, for this to work well the entire system needs to be voluntary.

Part of the advantage of making the system have a public option would be for existing alumni. Previous graduates of UTD could be involved as mentors, future employers, etc. Some of the best job candidates will stand out through their participation in the gamified system.

Implementation of the system would likely best be done through several interdisciplinary graduate courses. Rather than seek outside funding, have graduate students build up the system. Arts and Technology students could lead the design. Computer science students could lead building the infrastructure. Management students could lead the promotion. The app would be simple enough to build. The server space would be the main other expense. Given the benefits, the costs would be small by comparison. The value of the network and resultant collaboration would likely lead to new funding opportunities.

Summary

More companies and institutions are moving toward gamification. It makes sense given the game nature of grades that we currently have. With the rise of free on-demand online education, universities need to look to their next value proposition. The university experience needs to step it up a notch.

I have presented a preliminary plan to bridge that gap for UTD. The overall business objective is the increase the value of the university experience. We do that through increasing retention, increasing collaboration opportunities and increasing the diversity of experiences that students participate in.