

A Wicked Problem Project

PART A - Description of Need or Opportunity

The educational need or opportunity:

The lack of communication and overuse of social networks at work and specially when working in teams is a problem. Or... is it an opportunity? Large teams tend to miss-communicate or rather not communicate very effectively when working on projects that involve multiple teams within an organization. However, when it comes social networks more and more professionals seem to be willing to share information using the innovative tools provided by social networking sites such as Facebook, Twitter, Google Buzz, etc. So why not take advantage of that and use a social networking tool for internal communication purposes. A tool that can be easily used for this purpose is Twitter. When [groups](#) (Lists) and [hashtags](#) are used Twitter can be a powerful and easy to use communication tool.

Technology-Integration Strategy:

I firmly believe that Twitter can help alleviate the communication barriers that are generated when a group of people focuses too much on the task at hand that forgets to share important information with others. Sometimes is as simple as communicating the current status of a single task to coworkers. I have noticed that often times the problem is not the delivery of a report at the end of each milestone or a final report. Instead, the problem is that the small details are not communicated to the team or teams involved in the project. Group members make the assumption that others don't need to be aware of every little detail or change. However, if the team is to be a cohesive and successful team, every detail is important, no matter how small or insignificant it may seem. Twitter is a free web based solution that can be access from any computer on campus. In addition, a Twitter app can easily be deployed to mobile devices such as smart phones, iPods, laptops, and iPads.

Logistics of solution:

The scope of this solution depends on the size of the group and the number of projects at hand. For instance, in a group of 25 individuals working on 10 different projects at any given time the tool could be used on a daily bases by most of those employees. In our case in particular I would like to start by implementing the solution within my team, the Customer Support team. The Customer Support team is composed of approximately 10 full time employees and four temporary or student employees. If the solution proves to be successful, then I would like to implement it within the entire IT department. We are a group of approximately 45 employees. Those 45 employees are divided into five teams of approximately nine people each. The idea is to create a private group in Twitter and use an specific hashtag that allows us to easily identify the tweets that are related to our IT department and the specific topic or project name. All members of the department would need to "follow" the group and the group would need to follow all members in the Twitter group. This way every one in the group would get a live feed of every one's tweets and everyone would be able to tweet.

Short Term Implementation Plan (during this class):

Twitter will be implemented for the benefit of the employees in the IT department at GRCC. For the next six weeks I would like to get a “buy in” from the rest of the department as well as approval from our CIO if needed. Once the majority of the employees are on board I will proceed with the creation of the group and identification of proper hashtags. Next, I will start the deployment of the mobile app to all smart devices within my team, the Customer Support team. After the customer support team has tested the solution with at least one project or task the other teams will be asked to join. The Media, Infrastructure, Academic Applications, and Administrative Applications teams will be set up next. With everyone following the group and being followed by the group and tweeting regularly, the benefits will begin to show. All IT members will be able to access Twitter from their computer as well as their mobile devices.

Long Term Implementation Plan (after this class is over):

If the implementation of this project is successful within my team and within the department as a whole I would expand it to allow everyone at the college to follow the group. Anyone with a Twitter account who wishes to follow the group would be able to see the live feed communication thread. At large, this is specially beneficial to staff and students who depend on information systems being up at all times. Everyone will be able to know when there is an issue as well as when a solution to the issue has been identified as soon as the technician, engineer, or analyst knows and tweet about it. At this point the delay between the time a problem occurs and the time staff and students are notified ranges between 15 minutes to an hour. Twitter would make that time drop to two or three minutes at the most.

Indications of Success:

One of the main indications of success would be having everyone tweeting regularly. Another indicator of success would be a growing number of followers. The ultimate indicator of success would be to have every student and staff receiving technology updates ranging from a simple change to the website to the roll out of a new version of a new Learning Management System.

PART B - Application of TPACK

In part A of the Wicked Problem Project I drafted a proposal to implement Twitter as an internal communication tool the IT department at GRCC could leverage. While the draft is fairly clear in stating the point of the project; it needed some kind of explanation of the academic benefits as well. Therefore, I would like to explain how Technology, Pedagogy, Content, and Knowledge (TPACK) play an important role in the implementation of this project. Specifically, we are going to look at the Technological Pedagogical Knowledge (TPK), Technological Content Knowledge (TCK), and Pedagogical Content Knowledge (PCK) relationships of the TPACK theory and how they relate to this project.

Technological Pedagogical Knowledge

In this project Twitter will be used to support teaching the importance of communication among individuals or groups of individuals. There are a couple of pedagogical levels within this project. One is teaching the technology itself and another one is the conceptualization of communicating in a timely, accurate, and concise manner. In addition, the technology used will allow for the collection, compilation, organization, and distribution of information pertaining to a specific project, assignment, or topic. Twitter is the perfect tool to exemplify how to use technology to support teaching within the context of this project.

Technological Content Knowledge

Twitter has the potential to turn a common communication problem into a feasible solution. This solution makes it feasible for members of teams working towards a shared goal to successfully and seamlessly communicate with their colleagues. Communication has always been a barrier successful teams have struggled to overcome. Often times the problem is simply identifying the degree of granularity each project or team needs to use when communicating with their teammates, teachers, superiors, or customers. What makes it particularly challenging is that people need different levels of granularity depending on their roles. For instance, an engineer may want to know the technical details of each task in a project. The CIO, on the other hand, will care more about the scope, cost, and time of the project. Twitter can solve this problem if team members use it to communicate all types of information. With a 140 character limit per tweet, team members would be lured into communicating timely and detailed information. At the same time, the 140 character limit will force communication to be always relevant and fact focused.

Pedagogical Content Knowledge

The pedagogical principles of Twitter lists, hashtags, and search capabilities will make the communication problem more intellectually accessible. The user or student will explore and learn the power of being able to apply data mining to the tweets contributed by all members of the team. With the built in filtering capabilities offered by the use of hashtags within a list learning to find past tweets and compiling them into meaningful sets of information will almost be an inherent feature of using Twitter as a communication tool. There is also a positive connotation associated with social networking. Therefore, users will not see this as reporting but rather as sharing information with their peers.

Part C - Implementation

As part of my Wicked Problem Project I implemented Twitter as an internal communication tool for my team at work. The results of the initial phase were pleasantly interesting for the most part. In this [podcast](#) I am going to report the surprises, unexpected bumps, and what went well.

- **Surprises**

One of the surprises I ran into during the implementation of this project was the level of

acceptance it had among my IT colleagues. I am glad my boss and coworkers were as willing and enthusiastic about piloting this project as I was.

- **Unexpected bumps in the road (What you would revise)**

One unexpected bump I ran into is was scope creep. If I could start over I would revise is the scope of the project. I would have liked to have a better idea of what a feasible scope for a project like this should be. As I was embarking in the planning and design phases of this project I felt I didn't do as good of a job in determining an accurate scope.

- **Delights (What went well)**

While the project was a bit of a challenge to sell at first; once I explained the details, most of my team members seemed to be on board with it. The project was easier to sell to my co workers mainly because most of my team members were already using Twitter. I was delighted to find out that most people had been using Twitter for quite some time.

- **Pictures and/or vignettes**

Here is a 30 second silent [video](#) of the team's implementation of Twitter. This is only phase one.

Part D -Findings and Implications:

Upon completion of this phase of my Wicked Problem Project I have drawn a few conclusions. I'll give you a brief summary of what my project is all about. My original goal was to improve internal communication within my IT department. My solution was to use Twitter to get everyone motivated to share information about tasks, projects, and activities. Implementing this project was a bit more of a challenge than I expected. This project is composed of four parts A, B, C and D. For more details about the history of the project please review parts A, B, or C. Although the scope of the project grew unexpectedly, I learned a number of things. I will expand on this conclusions below.

Formative: Did the project get implemented as planned?

My project has not been implemented as planned mainly because it is taking longer than I expected to get everyone in my IT team to actively participate. I am afraid the project will carry on well beyond the scope of this class. I also feel confident that it will be implemented and adopted by at least 80% of the members in the IT department. I have been constantly reviewing and customizing the original draft to incorporate suggestions made my coworkers and the instructors and classmates of the class this projected originated from.

Summative: Evidence of success in addressing the problem of practice

I definitely feel that the results produced by the implementation of Twitter as an internal communication tool thus far are solid evidence that the project has been and will continue to be successful. People are Tweeting about their daily tasks, process, and project updates on a regular bases. further more, we are using the "live" Twitter feed to stay up to date with what's

going with the IT personnel on on campus.

How would you approach another project of this type differently given what you've learned here?

It seems to soon to be able to reflect upon the results of the project, especially since this is an ongoing project. I feel that we are still in the collection of information and testing phase in the scope of the full implementation of the project. However, One thing I would definitely change is way I went about communicating the original idea. I waited too long and communicated my idea too slow to the group. I feel that a more aggressive communication plan would improve the results and generate more interest from the target group.

What are the lessons learned that others might benefit from knowing about?

One of the main things I would change is the language on the initial proposal for the project. I would tailored it to more closely match the expectations of my target audience. I addition, I would identify at least two champions within the group and have them promote the idea before sharing the project proposal to the whole group.

In what ways will you endeavor to do the same project again, and what will you change or not do

I would not follow the same logical order when communicating my intentions to the rest of my team. One thing I learned is that it is very important to have a champion or two; someone who is well known and liked by everyone. If the project can be "sold" to the champion, then the champion can sale the project to everyone else. Another thing I would do different is the type and amount of communication. I would communicate more aggressively and in more meaningful ways than just sending the proposal out to the target audience.

Research which supports strategies

Four ways companies use Twitter for business

<http://www.readriteweb.com/enterprise/2009/03/4-ways-companies-use-twitter-for-business.php>

The Business Value of Twitter

http://advice.cio.com/abby_lundberg/the_business_value_of_twitter

Twitter in Higher Education 2009: Usage Habits and Trends of Today's College Faculty

<http://www.facultyfocus.com/free-reports/twitter-in-higher-education-usage-habits-and-trends-of-todays-college-faculty/>

Considering Twittering: One Agency Successfully Makes use of the New Communication Tool

<http://www.calea.org/calea-update-magazine/issue-101/considering-twittering-one-agency-successfully-makes-use-new-communi>

Why You Should Use Twitter Style Communication on Your Projects

<http://www.basdebaar.com/why-you-should-use-twitter-style-communication-on-your-project-1347.html>