

Castle Research Project Master Plan

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Teaching Objective

I teach because I want to instill in others a sense of purpose, responsibility, and personal integrity. Teaching the Human Relations class is a wonderful opportunity to explore these concepts with students. A large part of what students learn is soft skills training. Therefore I want to have a sense of which soft skills students already believe they have at the beginning of the class and then whether they believe they have grown in those soft skills throughout the semester.

Action research

It is important to learn if students not only know but understand and can use the class concepts. I wanted to begin with a base line of how students rate their soft skills and then see how they rate their skills at the end of the semester. In order to learn something new, we must use information and skills learned in the past, then build upon that information and skill (Bransford, J. D., *How People Learn: Brain, Mind, Experience and School*. 2000).

Learners who rate themselves can be correlated with external measures of their learning and correlated with the instructor's ratings. Research findings say student ratings are 1) statistically reliable (they have internal stability and are consistent over time), 2) are more statistically reliable than colleague ratings and 3) are not easily or automatically manipulated by grades. (Kathleen M. Cashin, *Core Knowledge Curriculum*, 1995)

Learners who have the opportunity to actively contribute and then participate in the course say they learn more. More over, learner contributions can lead to improved course design. I would be able to measure my teaching effectiveness and then be able to identify the areas where I am strongest and weakest. (Motschnig-Pitrik, R., *Participatory Action Research in a Blended Learning Course on Project Management Soft Skills*, Frontiers in Education Conference, 36th Annual Volume , Issue , 27-31 Oct. 2006 Page(s):1 – 6).

Dweck's theory states that learning to master a skill is not just tied to intelligence but to learner confidence levels. I combined classroom practice with lots of immediate feedback in order to encourage learners to try different techniques and build increased confidence levels. I focused on learner goals and not just theory. (Ames, C. (1992). *Classrooms: Goals, structures, and student Motivation*.)

I thought the self-assessment would also assist me and my academic program as I evaluated my teaching strategies following the semester. I wanted to be able to make adjustments during the semester based upon the early student assessments of their strengths and weaknesses. I could spend more time focusing as areas of weakness or lack of understanding and less time on areas of strength. This would increase student learning and development. I hoped it would also lead to improved student success in the future as I gathered more learner before and after assessments. (Gustafson & Branch, *Revisoning Models of Instructional Development*, 1997).

Mapping my Project Idea:

Research Question:		
<p>[A1]Problem/Occasion: At the end of the course, I want to learn if students have improved their skills that correlate with course objectives. There is a 45 question self assessment that is part of the course. This assessment covers all the course objectives. Students take it at the beginning of the course and again at the end. The current self assessment is a quantitative measure only.</p>	<p>[B1] Need/Intervention: I'd like to redesign the assessment and group the 45 questions into no more than 8 objectives. The questions will remain the same but themed around the 8 course objectives The redesign will promote clarity, succinctness and better utilization of the current assessment information. Then I'd like to add a written self assessment of how the learner sees his or her strengths and areas the learner believes can be improved. At the end of the course, the student would once again complete the assessment questionnaire and essay.</p>	<p>[C1]Outcome Indicator: I'm hoping that I can see if there are any areas that show overall student improvements and areas that show little or no improvement. I may need to work on my teaching strategies to improve areas showing little or no improvement.</p>
<p>[A2]Reason for Problem: Because there are 45 points, it is a cumbersome tool that I don't know how to make relevant. I am not developing a new assessment, only refining it to get more relevant information for me. There isn't any qualitative assessment. I think that would provide a richer assessment.</p>	<p>[B2] Why Plan will Work: There will be both a quantitative and qualitative element to the self-assessment. In addition, there are now 8 elements based on course objectives to evaluate rather than 45, providing easier comparative relevance and clarity.</p>	<p>[C2] Why Indicator Will Change: This may not take into account individual student differences such as the mix of non-traditional vs. traditional students. It may not take into account that some students may overrate themselves initially and then learn their skills levels were actually lower than they believed at the beginning. The qualitative evidence will be important here.</p>
<p>[A3] I want to measure the baseline skills students believe they have when they begin this class and then the skills they believe they have at the end of the class. I want to include their opinion of their skill levels.</p>	<p>[B3] The time frame measurement is present to future status: Their status when they begin the course and their status when they end the course. The measurement I will use is a self-assessment questionnaire with two parts: quantitative and qualitative. The qualitative should provide additional evidence to support their quantitative measures.</p>	<p>[C3] After both assessments have been completed, I will look at the ratings of the students to identify whether 60% of the students show improvement of 1 point higher in 4 out of the 8 areas on the last assessment when compared to the first assessment.</p>

Framing my Question(s):

Students come to the class with a range of soft skills applicable to the workplace. The best judge of their skill levels is the student. How does the student assess their skill levels? A self-assessment tool was used to collect baseline data.



Over the next 18 weeks, the student was exposed to activities, ideas, and concepts that they could implement to explore and improve their soft skills. Learners were able to practice skills in the classroom setting.



When the class ended, it was important to assess whether or not the student improved their soft skill levels. The self-assessment tool was once again used to collect this data. That data was compared to the data taken during the first class.



After collecting the data, I made adjustments to my curriculum for the Spring semester.

Questions I considered:

1. *What was your purpose?*
My purpose was to get a good baseline of the soft skill levels of the students in my class and then evaluate whether or not their skill levels changed over the course.
2. *What did you want to know, and why?*
I wanted to know if, after the course is complete, learners think there has been any improvement in their skill levels.
3. *What was the educational intervention or activity that you used in your study?*
There is a 45 question self assessment completed during the first week and then again at the end of the course. The assessment covers all course objectives. It is used by all instructors and was developed by the textbook authors.
4. *What were your assumptions and assertions?*
Research indicates that self assessments provide a lot of reliable information. I kept the quantitative assessment exactly as it was written. I was assuming that the original self-assessment was a good instrument since it has been endorsed by the department. I added a narrative (qualitative) self assessment to provide me expanded understanding.
5. *What was your point of view or philosophy?*
The quantitative self assessment scale was reorganized around the course objectives. For example, the course objective, Use effective verbal and non-verbal communication skills, has 5 self-assessment questions that specifically address that objective. The narrative self assessment gives the learner the opportunity to explain what they believe their communication strengths are and what they want to work on improving. By grouping the questions according to 8 course objectives, this narrows down the evaluation to a much more manageable number. The narrative fills in the blanks not addressed by the straightforward questions with a number answer.
6. *What evidence was necessary to answer your questions?*
A comparison between the students perceptions at the beginning of the class and then at the end gave me relevant information about which course objectives have been understood and learned and which ones have not. It was necessary for students to complete both qualitative and quantitative assessments at the beginning and the end of class.
7. *What instruments did you use to collect this evidence?*
There is a 45 question self assessment grouped by 8 course objectives and a narrative self assessment identifying what areas the student believes are his or her strengths and areas for growth.
8. *What were the implications of your research plan?*
The results told me what areas the students believe they were more competent in and what areas they believe showed no improvement. I used it for my professional evaluation of the course and what areas I needed to improve or change teaching strategies.

Measures or Assessments I used:

The time frame measurement is present to future status: their status when they began the course and their status when they ended the course.

I wanted to measure the baseline skills students believe they had when they began this class and then the skills they believe they had at the end of the class. There were 8 Course Objectives: *1. Use Effective verbal and non-verbal communication skills, 2. Demonstrate a positive attitude, 3. Improve communication through style-flexing, 4. Understand my values and make good ethical decisions, 5. Use motivation strategies to enhance work flow and improve relationships, 6. Build trusting relationships to enhance team performance, 7. Use effective conflict management strategies, 8. Respect others' differences and appreciate diversity.* Each objective had from 3 specific questions to 9 specific questions. The learner rated the questions from 1 to 5. Each objective was totaled resulting in 8 category (course objectives) totals. The qualitative self-assessment provided the learners opinion on their strengths and what they believed they needed to improve.

During the last week of class, the learner again completed the self-assessment. Each objective was totaled, again getting 8 category (course objectives) totals. The before and after ratings were recorded and then compared. I looked at the category ratings of the learners to identify whether 60% of the students showed improvement of 1 point higher in 4 out of the 8 areas on the last assessment when compared to the first assessment.

The measurement I used was a questionnaire with two parts: quantitative and qualitative. I hoped the qualitative self-assessment would provide additional evidence to support or refute their quantitative measures. I thought the qualitative evidence was a necessary addition in order to provide a more complete picture of the learner. An assumption I made was it was possible that some students would rate themselves higher on the initial self-assessment only to realize their skill level wasn't as high as they originally believed. For example, some learners believed they were good team players only to realize they were too hesitant or aggressive and needed to refine their skill. As they learned new or different skills, they realized that their original rating was too high. I thought the qualitative self-assessment would help explain those changes.

I wanted to use the research to determine if there were changes I needed to make to the curriculum (more time or less time practicing that skill) following review of this data. Before the rewrite, I could not discern anything specific from the data from the 45-questionnaire because it was too broad. It did provide me with data showing if the individual learner believed he or she improved in each of the 45 questions since there were before and after ratings. However, it did not provide big picture feedback. With the re-design, there were now 8 categories, making the final results more specific.

Since some of the instructors for Human Relations use this assessment, I hoped the re-design would be more helpful and give more specific information to all instructors. Not only would we have a measure of the individual's perception of their skill levels before and after the class but we also would have measures of whether or not the course objectives were met.

Other Resources that I can use:

I contacted several faculty and department members regarding this re-design and gathered their feedback as I went along. The coordinator of Human Relations adjunct faculty, Marilee Feldman, was available for discussion as I gathered feedback for the re-design.

Research Analysis:

Within the first two Human Relations classes, I gave all students a pre assessment to complete rating their perception of their skill level in each of the eight course objectives. They assigned a 1 to 5 rating to 65 questions grouped by course objective.

During the final class, they were again asked to complete an assessment rating their perception of their skill level in each of the eight course objectives. They did not see their pre assessments.

1 class member was eliminated because one or more of the pre or post assessments were not complete.

4 class members were eliminated because they did not complete a pre assessment during the first two classes or were not present at the last class.

19 students completed both of the pre and post assessments. 1 student showed a decline in 5 areas when the pre assessment was compared to the post assessment. There was nothing in the qualitative that indicates why there would be such a decrease. Comments were consistent from the pre assessment and the post assessment. 4 students show no statistical change (1 point) in any category. 3 students show a statistical change of 1 point in one category. 1 student shows a statistical change of 1 point in two categories. 3 students show a statistical change in 1 point in three categories and 8 students show a statistical change of 1 point or more in 4 or more categories.

<u>Name</u>	<u>Pre-test</u>	<u>Post-test</u>	<u>Point difference</u>	<u>Post-assessment specifics</u>
0001	207/225	168/225	-39	Decrease in communication, attitude, motivation, conflict mgmt, building trust
0002	154/225	145/225	-8	No statistical changes
0003	156/225	158/225	+2	No statistical changes
0004	190/225	193/225	+3	No statistical changes
0005	179/225	185/225	+6	1 Statistical change in communication
0006	139/225	147/225	+8	1 Statistical change in building trust
0007	184/225	194/225	+10	3 Statistical changes in attitude, motivation, Stress mgmt.
0008	192/225	203/225	+12	3 Statistical changes in attitude, motivation, Communication skills
0009	153/225	168/225	+15	4 Statistical changes in attitude, Communication skills,

0010	157/225	172/225	+15	Motivation, conflict mgmt 4 Statistical change in attitude, ethics, motivation, building trust
0011	170/225	186/225	+16	3 Statistical change in communication, motivation, stress mgmt, style flex
0012	191/225	209/225	+18	2 Statistical changes in communication, ethics
0013	149/225	170/225	+21	4 Statistical changes in conflict mgmt, attitude, stress mgmt, communication skills
0014	193/225	215/225	+22	4 Statistical changes in communication skills, positive attitude, motivation, building trust
0015	200/225	223/225	+23	1 statistical change in building trust; minor changes in every other category
0016	165/225	189/225	+24	4 Statistical changes in attitude, building trust, communication, motivation
0017	160/225	187/225	+27	5 Statistical changes in attitude, motivation, conflict mgmt, diversity, stress mgmt
0018	156/225	186/225	+30	4 Statistical changes in communication, motivation, building trust, stress mgmt.
0019	159/225	209/225	+50	6 Statistical changes in communication, motivation, conflict mgmt, attitude, building trust, stress mgmt,

I compared the actual results to what was projected: did 60% of the students show improvement of one point higher in four out of the eight areas on the last assessment when compared to the first assessment? They did not. 42% or eight students showed one point improvement in four or more areas out of eight areas. Another 16% or three students showed improvement in three areas out of eight areas. 5% or one student showed improvement in two areas out of eight areas and 15% or three students showed improvement in one area. Overall, 15 students or 75% showed improvement in one or more areas.

Based on these results, I went back and analyzed whether my objective of 60% improvement in 4 out of 8 objectives is too lofty. To improve one point requires a 20% increase in scores. If the scores are in the lower level of one, two, or three, then a 20% increase may be possible in several areas. If the scores are in the higher levels of three or four, a 20% increase in scores may be too lofty. The post assessment did not ask whether the student thought his or her scores would be higher or lower than the scores on the pre assessment.

On the other side was one student who showed marked decrease in the post assessment. Her qualitative comments were positive and did not give any insight into why they declined so dramatically. If there had been questions on the post assessment asking if the student thought scores would be higher or lower than previous scores, I may have been able to glean some insight.

Since this is the first round, the only changes I would make in the instrument is change the questions in the post assessment to include comments on whether or not the student thinks there has been an increase in their category scores and why or why not. Generally, the qualitative comments did not give much useful information. However, having the student perception of whether there will be an increase or decrease in scores would be useful. I will keep the goal of 60% of students showing improvement of one point or more in four out of eight categories. After the next round, there will be more data to analyze. At that time, analyzing whether or not a 20% increase is a realistic expectation can be determined.

The most valuable information I received from this analysis is analyzing which course goals I am best at presenting. The following course objectives showed the most improvement: Use Effective verbal and non-verbal communication skills, Demonstrate a positive attitude, Values and Ethics, Use motivation strategies to enhance work flow and improve relationships, building trusting relationships to enhance team performance, and stress management.

The two course objectives that need improvement are: Flexing communication styles and conflict management. I am in the process of evaluating my course materials to see what I can do to improve the materials in these two areas.

Conclusion:

78% of the students (15) in the Human Relations class rated themselves as having made improvement of one point (20%) in one or more course objectives. 5% (1) rated themselves as have declined in skill levels. 17% (3) rated themselves as the same as at the beginning of the class. This did not make the 60% improvement of one point (20%) in four out of eight course objectives. Only 42% made that goal.

More data is needed to determine whether the 60% improvement of one point (20%) in one or more course objectives is realistic. I plan to repeat the pre and post assessment process in the fall. I will eliminate the qualitative portion of the pre assessment and add qualitative questions about perceptions of whether or not students think their scores will be higher or lower than before the class began. I will then compare those results.

Because of the results of this research, I am reviewing the material for course objectives, flexing communication styles and conflict management.

This report will be sent to the Human Relations course Coordinator, Marilee Feldman for her review and Ken Riha, Department Head.

