

# 2013

Lehman College, CUNY

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**Retention and Assessment Efforts in Distance Learning:**  
Strategies and Rationales for Implementing Cooperative  
Instructional Techniques in the Hybrid Classroom  
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*Note to our audience: While a format that allots a half hour to present poses a challenge to me in the attempt to do justice with these topics, it will be assumed that the intended audience of faculty, administrators and instructional designers will use these concepts as broad strokes from which they may outline a path for their own professional development. Resources and links that are mentioned throughout the presentation will be made available as downloadable pdf files.*

## **Retention and Assessment Efforts in Distance Learning**

**This presentation offers strategies and rationales for implementing cooperative instructional techniques for a hybrid model classroom that can move a class from followers to collaborators.**

Because we are in an increasingly competitive global economy, the jobs and industries of today and the future require skills that have been long-overlooked or seldom measured in classrooms. Faculty are known to be comfortable measuring and testing content knowledge like multiple choice tests, short answer questions or academic papers, but while this approach is seen as adequate to assess factual knowledge and basic skills, these measures often overlook critical and creative thinking, and problem solving – those higher order skills most prized by business and industry. Because offering every student an education that connects them to the opportunities and jobs of tomorrow is a critical mission, many educators are beginning to see *hybrid learning* as a way to employ the same strategies and tools that businesses use to collaborate and transfer information across cultures, borders and time zones. Those educators who choose to adopt this style of delivery are connecting the real world to the classroom when their students are asked to use the same methods of constructing and contributing to knowledge.

### **What is Hybrid?**

Lehman College is one of 24 institutions that make up the City University of New York (CUNY), the largest urban university in the United States. CUNY defines a hybrid/blended course as between 33 and 67% of the classroom meetings in which delivery can be split between online and face-to-face. A hybrid course by its design reduces face-to-face classroom ‘seat time’ so that online technologies can be used for instruction and communication outside the classroom. Instructors create assignments that make use of online activities to replace some of the classroom work and facilitate student’s understanding by dividing the online portion into learning modules – often they convert their lectures into multiple mini-lessons of short duration that would have been made in person. This act of dividing the learning between modalities results in a hybrid course.

To this end, Lehman College and CUNY have goals to enhance strategies for online teaching and learning, conserve and improve classroom utilization space and scalability. Hybrid is seen as a way to meet the diverse and growing needs of an ever-changing population by recognizing the undeniable benefits of this style of online learning to the University and its students. CUNY has instituted grant funds to support faculty through the conversion process from onsite to hybrid courses at Lehman College and other colleges within its 24 campus university system to see to it that there are significant and educationally sound e-learning opportunities that apply career-ready

assessments equal to, if not more rigorous than traditional on-site courses that incorporate traditional lecture and testing methods.

Our success and our students' well-being increasingly depend on making sure that they are not just book smart (testing) or skilled (as in drill and practice) because prospective employers are also looking for their expressions of creativity. They seek employees with strong language and people-skills, and technological prowess, are interested in whether they can recognize patterns and trends, look for those who will work well in teams with others of differing backgrounds.

The [White House Initiative on Educational Excellence](#) reports that in 2011, just 13 percent of Latinos had a bachelor's degree, and only 4 percent have completed graduate or professional degree programs. As of 2011 Lehman College's Hispanic enrollment nears 50% of its undergraduate population and 47% of its transfer students are Hispanic, so Lehman has a great opportunity to serve a student population that has been traditionally under-represented in higher education.

In many respects, Lehman College students are also the so-called "non-traditional" learners who skew older and are juggling jobs and family -often at the expense of their schooling. Our students use their off-hours to study part-time while they work full-time or part-time. It becomes our obligation to ensure that we help to meet the needs of a population with such competing constraints. Online and hybrid learning presents a compelling prospect for these working young adults who are seeking to complete their bachelor's degree, earn a professional certificate, or obtain a graduate or professional degree.

The goal is that these online and hybrid classes at Lehman College will not only be more useful for the convenience of our students (therefore having the effect of encouraging new students and increasing retention of existing students), but that our faculty technology workshops will also promote development and the implementation of effective assessments that apply and measure the skills most needed by business and industry.

### **The Redesign**

A hybrid class is "not" just written material that is moved online and it's "not" homework. To be successful, a hybrid course requires careful course redesign stemming from pedagogical strategies involving a thoughtful revamp of an existing syllabus: assessing objectives and learning goals and encouraging goal setting by constructing a rigorous online environment. The SUNY Learning Network (Frederickson et al. 2000) found in its study of Asynchronous Learning Networks that demographics, age and gender are not the best predictors of student success but that pedagogical engagements are more important. Interaction with the teacher is seen as the most significant contributor to perceived learning so the online teacher presence is vitally important in this equation.

Often this redesign process involves the identification of 'authentic problems' within the discipline that require inquiry and investigation. The problems are identified by the instructor and through intentional planning with the instructional technologist, the proper tool(s) can be chosen to fit the learning problem. In this way, the tool is secondary to the goal and it facilitates the goal at the same time.

### **Community Building**

The next step involves 'community building,' the act of creating a learning environment that

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fosters interaction, dialogue, and mentoring where the various roles of participants in this ‘community’ are defined and the projects are designed to suit the nature of different learners and different learning styles. A mix of independent study, research- independent and collaborative, and activities can be accomplished during the online portion. Self motivation is a skill to be developed, it’s not always present in the student so key to the mix of learning activities is keeping the student engaged and responsible for his/her own learning through goal setting which I’ve covered this in greater depth in the section on collaboration and have provided materials alongside this presentation to foster group work.

### **Technology Solutions**

Next, the way the technology can work or doesn’t work is the process by which the technology solutions are assessed. We look for ease of use, its potential for social interaction and collaboration and for its structural value (too often the process of learning the technology can be frustrating and time consuming- the trick is in building in the process of learning with the learning goals so the tool becomes the facilitator for the learning and not just technology for its own sake). As authors Mishra, Koehler, and Zhao write in their book, *Faculty Development by Design*, course redevelopment is “often messy and complex”: it’s “not a linear movement toward a specific goal, but rather a zig-zag, iterative process in which goals and plans are in a constant state of negotiation.” Here is the opportunity for dialog between the instructor and the technologist to have the most promise: the instructor opens up to the newness of the experience and begins to trust that the forethought and collaboration between the designers will help keep the constraints and limitations to a minimum. Whatever the case may be, there is a fairly constant interplay between content, pedagogy and technology- and seeing teaching, not as a problem (or failure) but seeing *in our teaching* a set of problems worth pursuing best practices with technology– working collaboratively as an ongoing intellectual focus.

### **Who’s Active in this Equation?**

The work spent ahead of time allows faculty to shift away from their role as “active faculty” to develop “active students”, we encourage them to see knowledge, not as a “transfer process” but as a creative progression where students are the “creators of knowledge”, and shift the responsibility for learning from “individuals” to “the cooperative”. Our faculty members are “course developers” and “creators of learning environments”, and the “tell-read-test” approach becomes a “problem-based active learning” approach.

### **Community as Learners**

Convenient and flexible course schedules are particularly important for our students who are often working, need remedial classes, or can only take classes part-time, but the shift from conventional classroom education to distance learning and even hybrid/blended learning poses challenges of community building to instructors and learners, particularly when they have been taught in the traditional modality. When students with their own individual needs are expected to meet with other learners at asynchronous times, teamwork conducted in a virtual setting can appear as an artificial ‘imposition’. Many professors are challenged by online teaching and they often wonder how they will be able to ‘take the pulse of’ the room to see whether students are following the material, are bored, confused, or to even determine whether they are present. With Web 2.0 tools like Wikis, young people already have an affinity to collaborative media, because many people, young and old are already part of this process, and more and more students are recognizing that the sum of their collective contribution is greater than what one student might have done independently.

The following three exemplary practices that illustrate techniques that can take your hybrid class *From the Teacher-as-Lecturer Model (Talking 'at') to one where Students are Contributors of their own Learning (Teacher/Moderator and Student/active participant)*.

### **The Flipped Classroom**

When developing hybrid classes it's important to pay close attention to the ways in which online work connects with and supports the face-to-face interactions and vice-versa. Those who take part in 'flipping' their class by recording mini lectures and placing them alongside activities that can be completed online and brought back to the classroom see the technique as a way to promote active classrooms through active study practices. The flipped class approach to hybrid education reverses the student and faculty roles of the traditional learning environment by moving homework into the classroom and allowing students watch lectures and relevant pre-recorded content and annotate at home. Teachers are happy to free up what they now see as even more precious classroom time by recording videos of their lectures. The process of assigning these lectures and available online resources for homework, and having students produce evidence of their learning by bringing their products to class, leaves class time to review difficult problem sets, discuss the real world applications of concepts and offer targeted assistance to students. The *Chronicle of Higher Ed* quotes professor Andrew Martin who teaches an evolutionary biology class at the University of Colorado at Boulder: "Students are effectively educating each other," he says of the din that overtakes his room. "It means they're in control, and not me." While this kind of student-centered structure is not new, the comments also bring in some interesting points about context and learning styles on both sides: <http://chronicle.com/article/How-Flipping-the-Classroom/130857/>

The following are resources devoted to the concept of flipped classrooms as is currently in use in higher education which includes a link to the CUNY Academic Commons,

<http://hybrid.common.gc.cuny.edu/teaching/additional-resources/flipping-the-classroom/>  
<http://www.knewton.com/flipped-classroom/>  
<http://hybrid.common.gc.cuny.edu>

[YouTube video on flipping the class using Camtasia Studio \(chemistry\).](#)

### **Implementing Interactive Activities to Build Community:**

Building on the strengths of the flipped classroom mode, backwards instruction also takes into account the audience, that is, from the viewpoint of the student's experience and organizes the subject matter around the use of intriguing questions with a special significance given to high-level intellectual questions and activities. In their book [Understanding by Design](#), Grant Wiggins and Jay McTighe call the process of designing courses around learning goals "the backward design process."

***For more on Backward Design see the pdf that accompanies this presentation***

A three-stage design would look something like this:

1. Identify and prioritize the results you'd like your students to achieve by the end of the course

2. Determine acceptable evidence for having achieved those results
3. Plan the learning experiences

While the goals expressed here seem simply expressed in 3 easy steps, the process requires a great deal of thought:

The Chronicle of Higher Education [Prof Hacker blog poses Backward Design](#) this way:

“Imagine a set of three concentric rings. The outer ring represents knowledge “worth being familiar with” for students. The middle ring encapsulates knowledge and skills “important to know and do.” Finally, the smallest ring, the inner ring, represents “enduring understanding”—the fundamental ideas you want to students to remember days and months and years later, even after they’ve forgotten the details of the course.” (Prof Hacker Blog, Chronicle of Higher Education).

To help filter the “worth being familiar with” from the “important” and “enduring understanding,” Wiggins and McTighe suggest **four criteria**:

1. “To what extent does the idea, topic, or process represent a ‘big idea’ having enduring value beyond the classroom?”
2. “To what extent does the idea, topic, or process reside at the heart of the discipline?”
3. “To what extent does the idea, topic, or process require uncoverage?”
4. “To what extent does the idea, topic, or process offer potential for engaging students?”

This method of syllabus design contributes to a comfortable learning environment by stressing the role of student as inquirer and problem solver and utilizes an open ended trusting environment to illustrate that questions still raise additional questions.

### **Technology Tools: Clickers in the Classroom**

With intentional planning, it is possible to begin building community in a large hybrid classroom on the first day. There are sharing exercises available in the following slides and at the end of this presentation that encourage students to interact with one another (positive interdependence) to set the tone for active learning. When you include large group discussion in your lecture during the first day of class, you set a precedent for future discussions and interactions. Faculty can facilitate productive discussions by using “[Clickers](#)”, positive reinforcement and establishing a collegial environment. These YouTube videos will touch on the ways in which this simple easy to learn tool can help overcome the physical challenges of managing large class discussions:

YouTube Video: Dr. Corly Brooke: [Welcoming Students on the first day](#)

YouTube Video: Dr. Corly Brooke: [Managing a Discussion in a Large Class](#)

University of Colorado @ Boulder: [How to Use Clickers Effectively](#)

### **Group Work vs. Team Work: Cooperative Learning Groups in the Hybrid Classroom**

Since we know that today’s learners are more engaged with the computer instead of other learners, it’s easy to imagine however misguided their assumption, that there is a lack a natural social outlet- this sense can lead to feelings of isolation in an online class. Because isolation is a

major contributor to attrition (Morgan & Tam, 1999), one potential strategy for reducing dropout rates is for hybrid and online instructors to encourage the students to support each other and feel part of a community. The task is to structure the course design so learners have mechanisms to connect with each other and form community.

Using students as their own resource, encouraging them to form an online ‘tipline,’ providing community building exercises to facilitate group work and manage their own group discussion forums, scaffolding for students how to expand a discussion, are all ways to develop students’ team building skills. A team has “*A small number of people with complementary skills who are committed to a common purpose, performance goals, and a common approach for which they hold themselves mutually accountable*”.

***(Refer to the pdf document that accompanies this presentation for more on combating low motivation in underperforming populations.)***

James Richardson Assistant Professor at LaGuardia Community College and the Program Coordinator for the New Media Technology program writes that an important aspect for designing a plan to combat low motivation in underperforming African American and Hispanic students is to create a curriculum developed within the confines of a supportive and nurturing environment. This nurturing classroom environment is needed to offset the lack of self-esteem and confidence that is usually inherent within those who trend towards amotivational behavior. In short, these students need to regain confidence in their ability to succeed if they are to shift toward extrinsic motivation from their current behaviors.

Jillian Abbott of Queensborough Community College writes that “creating engaging, interactive, online learning models may be a good first step to improving classroom success and possibly student learning outcomes” (Abbot, 2012)

*(The documents that accompany this presentation include Groupwork and cooperative grouping exercises and methods for alternative assessments using peer assessment.)*

## **Conclusion:**

The tasks and assessments commonly used by faculty may not be assessing what we think they are assessing -they may actually be assessing lower-level competencies and therefore do not assess actual outcomes.

The activities and literacies listed in the following two slides provide assessments equal to or greater than drill and testing ‘grade dependent’ assessments and when they are used in the context of learning goals can measure student performance with greater vigor. Multiple choice tests, short answer questions and academic papers are anxiety inducing and usually do not serve our urban mostly Hispanic population well. However, open-ended online discussions, authoring and collaboration tools like blogs and wikis that are socially constructed can serve important formative and diagnostic functions. Through them, learners can create knowledge and present their understandings on the basis of what they feel they already know and believe (Bransford et al, 2000). Learning in a hybrid setting can also mitigate feelings of isolation so often spoken about with respect to fully online learning because students are a part of a community that they engage with in both face to face and online settings- more of a real-world experience. Most  
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important for this population, information gathered from these blended-format exercises formatively establish a baseline for students' prior learning so preconceptions can be challenged through in-person and online open-ended discussions. For the in-person days, faculty can use tools like clickers to measure the effect of home-based assignments, and these responses illuminate student understanding and 'mis'-understandings and help faculty to determine how much and what material their students are retaining. These open-ended platforms, multimedia software and tools provide information on student achievement, and changing conceptions provide key information to the instructor about what specific activities and methods worked.

This kind of feedback loop allows teaching and learning activities to align the goals of the course with the specific needs of the learners and offers us a window into learning. (Black and Wiliam 1998a). Throughout this presentation I hope you have discovered innovative strategies, models, and resources that can help you plan for and design an effective hybrid course or program that incorporate instructional technologies with learning goals to suit today's demands for skills that are progressive and measureable. Whether you are a professor beginning on your path to online teaching, an instructional designer adding to your toolbox, or an administrator planning a program, new literacies as described in this presentation can optimize retention of Hispanic students in online courses. Collaborative learning environments can utilize strategic methodologies to foster critical thinking – the skills recognized as most useful to business and industry today.

## **Alternative assessment strategies to assess student assignments and activities:**

essays (submitted by email or discussion posting)

**reports**

**research projects**

**case studies**

**online threaded discussions** (students answer assigned questions and comment on others' posts)

**self-assessment** (via instant feedback quizzes and tests)

**presentations** (student production of PowerPoint **presentations** or Web pages)

**video projects**

**podcasts**

**writing** (chapter summaries, literature reviews and other writing)

**group projects**

**collaborative writing**

**Blogs** (students record and reflect on class activities, questions, and outcomes online. Blogs can also be used as online/electronic journals. Blog examples: [edublogs](#), [Motime](#), [Blogger](#), [LiveJournal](#), Blackboard Blogs)

**e-portfolios** (assess students online deliverables)

**student peer review**

## The New Literacies: Skills gained through collaborative environments

- Play — the capacity to experiment with one’s surroundings as a form of problem-solving
- Performance — the ability to adopt alternative identities for the purpose of improvisation and discovery  
[http://www.bismarcktribune.com/lifestyles/fashion-and-style/article\\_3b246c1a-f68e-11de-a889-001cc4c03286.html](http://www.bismarcktribune.com/lifestyles/fashion-and-style/article_3b246c1a-f68e-11de-a889-001cc4c03286.html)
- Simulation — the ability to interpret and construct dynamic models of real-world processes
- Appropriation — the ability to meaningfully sample and remix media content
- Multitasking — the ability to scan one’s environment and shift focus as needed to salient details.
- Distributed Cognition — the ability to interact meaningfully with tools that expand mental capacities
- Collective Intelligence — the ability to pool knowledge and compare notes with others toward a common goal
- Judgment — the ability to evaluate the reliability and credibility of different information sources
- Trans-media Navigation — the ability to follow the flow of stories and information across multiple modalities
- Networking — the ability to search for, synthesize, and disseminate information
- Negotiation — the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

Our didactic in-person and online workshops for our faculty hybrid training program can meet the needs of our students by:

- Assisting faculty and instructors in developing these effective practices to convert traditional on-ground courses to a hybrid/blended model of instruction.
- Helping instructors learn the way they will teach in order to navigate the hybrid course conversion process with pedagogically and culturally germane methods that recognize and encourage development of the skills recognized by businesses as important to an employee’s success.
- Outlining effective practices which synchronize content and learning objectives with Web 2.0 teaching resources and rich media to enhance critical thinking, communication, collaboration and creative problem solving skills.
- Connecting faculty with concepts of student-centered learning to form relational connections to the material by co-creating spaces where students can “lead and learn” through the discipline and by developing syllabi that speak to the “concerns, interests, goals, and needs of their students.”\*

\* Fusco, D. (2012) What Will Youth Work Look Like in 2013?

## **Resources mentioned:**

(Google 'flipped classrooms') <http://www.edutopia.org/blog/flipped-classroom-ramsey-musallam>

<http://www.youtube.com/watch?v=WwsIBPj8GgI> (Eric Mazur)

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Team Work <http://www.scribd.com/doc/95035136/Technical-Reports>

<http://www.scribd.com/doc/96652040/Team-Dynamics>

Hispanics "Winning the Future: Improving Education for the Latino Community [April 2011](#)

[http://www.washingtonpost.com/local/education/colleges-looking-beyond-the-](http://www.washingtonpost.com/local/education/colleges-looking-beyond-the-lecture/2012/02/03/gIQA7iUaGR_story.html)

[lecture/2012/02/03/gIQA7iUaGR\\_story.html](http://www.washingtonpost.com/local/education/colleges-looking-beyond-the-lecture/2012/02/03/gIQA7iUaGR_story.html)

<http://www.knewton.com/flipped-classroom/>

[http://en.wikipedia.org/wiki/Flip\\_teaching](http://en.wikipedia.org/wiki/Flip_teaching)

Abbott, J. (2012) Best Practices: Using Popular Media for Active Learning: Engaging Students Outside of the Classroom, HETS Journal. Retrieved on December 17, 2012

<http://www.hets.org/journal/articles/83-best-practices-using-popular-media-for-active-learning-engaging-students-outside-of-the-classroom>

Black, P. & Wiliam, D. (1998a). Assessment and classroom learning. Assessment in Education. Vol.5, pp.7-73.

Bransford, J., Brown, A.L., Cocking, R.R., Donovan, M.S. & Pellegrino, J.W. (eds). (2000). How People Learn, Brain, Mind, Experience, and School. Expanded Edition, National Research Council, National Academy Press, Washington.

Frederickson et al. (2000) SUNY Learning Network. Student satisfaction and perceived learning with online courses: Principles and examples from the SUNY Learning Network. *Journal of Asynchronous Learning Networks*. 4(2).

Mishra, P., Koehler, M.J., Zhao, Y. (eds). Faculty Development by Design, IAP, Inc.

Richardson, J. (2011) Motivating at Risk African Americans and Hispanics Through the Study of New Media Technology, HETS Journal. Retrieved on December 16, 2012

<http://www.hets.org/journal/articles/60-motivating-at-risk-african-americans-and-hispanics-through-the-study-of-new-media-technology>

Experiment comparing introductory Statistics taught in hybrid and face-to-face versions at 6 city universities:

<http://www.sr.ithaka.org/research-publications/interactive-learning-online-public-universities-evidence-randomized-trials>

## **Commentary**

"Tapping Technology to Keep Lid on Tuition," The Wall Street Journal, July 19, 2012

"Findings Give Boost to Online Classes," Boston Globe, May 22, 2012

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"First Do No Harm: New Evidence on Online Learning in Higher Education," Brookings, May 22, 2012

"Online Classes Cut Costs and Human Contact," Boston Globe, May 27, 2012

"Score One for the Robo-Tutors," Inside Higher Ed, May 22, 2012

"Study Shows Promise and Challenges of 'Hybrid' Courses," Chronicle of Higher Education. May 22, 2012

"Study: Students Learn Just As Well Online...Maybe Faster," Radio Boston, May 24, 2012

### **Related Research & Publications**

Barriers to Adoption of Online Learning Systems in U.S. Higher Education

Current Status of Research on Online Learning in Postsecondary Education

Sloan Consortium: [Changing Course: Ten Years of Tracking Online Education in the United States](http://sloanconsortium.org/publications/survey/changing_course_2012) [http://sloanconsortium.org/publications/survey/changing\\_course\\_2012](http://sloanconsortium.org/publications/survey/changing_course_2012)

[Sloan Consortium Infographic](#)