THE BEACON

The Quarterly Newsletter of the Center for Teaching and Learning

Volume 4 Number 1 January 2009

Upcoming Events

2/12/09 from 12:00 to 1:00 p.m. in the Chancellor's Dining Room, Dr. Paul Davis from the Audiology Department of the College of Allied Health and Nursing will present on his research as part of the Faculty Research Development series.

4/24/09 Dr. Franklin Medio will offer a half day workshop on improving communication with clinical students. The session is being offered twice, once in the morning and once in the afternoon. Location will be announced.

RSVP to Kathleen Hagen at (954) 262-1235 or khagen@nova.edu.

Recommended Readings
Kathleen Hagen

I'd like to recommend an article titled "Learning With 'Clickers' Gets Better After Peer Discussions" from *The Wired Campus* section of *The Chronicle of Higher Education* posted on January 7, 2009. It can be found at http://chronicle.com/wiredcampus/article/3540/peer-discussion-improves-learning-with-clickers. The article summarizes a study which appears in the January 2, 2009 issue of *Science**. Also mentioned in the article is another study on clickers** which has some best practice tips for teaching with clickers and a section answering a question often posed by faculty

COLLEGE TEACHING: AN ALTERNATIVE MODEL

Paul Abplanalp, Ph.D., O.D.
Associate Dean for Academic Affairs, College of Optometry

In spite of lip service to the contrary, it is scholarly activity that gets the strokes that count in academic life, not teaching. Our entire system is geared toward this end. For example, we evaluate research activity by counting publications. And it works, because there is a pervasive system of external reviews and evaluations connected with the research enterprise. Every paper in a refereed journal is read and approved by two external reviewers, and the same arrangement prevails for research grant applications. The scholarly aspect of faculty development is subject to extremely intensive and extensive expert scrutiny provided at virtually no cost.

While we may single out scholars as individuals when we award them promotion and tenure, they seldom work alone, particularly in the sciences. For example, the principal investigator on a grant often hires a small corps of assistants, technicians and colleagues to help her do the work. Credit for the work is reflected in the by-lines of publications, but the PI is in charge. She hires the technicians, selects the colleagues, directs the investigation, and distributes rewards as she sees fit.

It is surprising that the teaching that takes place side-by-side with this research is only marginally similar in its organization. Typically, one individual instructor is responsible for directing all the elements of teaching a course, including their delivery. One person gives the lectures, prepares and grades examinations, requires reading lists, provides tutorial assistance, and conducts recitation sections.

Does this mode of delivery make any difference, and if it did, how would we know? In fact, there is a well-paid, highly visible group of teachers on many college campuses who operate in much the same manner as respected, well-established researchers do. Members of this group enjoy significant autonomy, they command a staff of specialists, they are judged by external criteria, and they are held to strict outcome measures - often with very harsh consequences. They aren't called professor; they are called coach. Technically, they are part of the academy, but they are held apart from (and usually above) the rest of us. They are teachers in many ways, but thirst for knowledge is not what drives them. Let us examine carefully how coaches are set apart from the rest of academe.

Many major college athletic programs, especially basketball and football. are subjected to harsh criticism. They achieve this ignoble distinction in many ways including recruiting violations, pathetically low graduation rates, and even outright cheating. The monumental inadequacy of the education of many star athletes is nowhere more obvious than the abominable butchery of the English language that they regularly commit when they become sports announcers. When a listener can comprehend enough of their savagely mispronounced words to detect the presence of a sentence in their utterances, it is unusual to observe two of them in a row which are, in fact, grammatically correct.

This is a bittersweet irony: the coaches who make great athletes of these individuals do so by the application of educational methods which are, demonstrably,

From the Director's Corner

Kaye Robertson   HPD Library Director

RESEARCH—That's the buzzword you hear all around campus these days. Gary Margules, the Vice President for Research, is a storehouse of information about current biomedical research. A new research building will soon be under construction. Plans for NSU's future are filled with plans for research. What is the HPD Library's role in all this?

First and foremost is direct assistance to you, the researcher. Our librarians can help you complete a literature search on the focus of your research, collecting all relevant studies, trials, journal articles, etc., to get you started on your project. They are experts at searching the biomedical literature and can save you many hours of frustrated searching on your own. Contact them at the beginning of your project for maximum assistance and support.

Finding those reports, studies, dissertations, journal articles, etc., once you have located the citations, can often be frustrating and time consuming. Call on the experts at our library to help you locate those obscure materials from whatever corner of the world they can be found in. Our Interlibrary Loan Department is part of a world-wide network of libraries which are committed to helping each other by sharing resources. The whole philosophy guiding these libraries is the free flow of information throughout the world, regardless of location. Take advantage of this wealth of information, starting right here in our own library.

Organizing your findings can be key to making your project successful. NSU provides EndNote, ProCite and Reference Manager, which are all software programs that can help you organize all your citations and keep track of your sources. Our reference librarians will help you learn the program and utilize it for the greatest benefit.

Providing print and online resources to you is a major part of the Library's focus. We will purchase books and journals that you request. We will find relevant materials for you. We will try to keep you informed about new publications and websites that fall into your area of interest. We will show you how to set up "alerts" for notification by email of new articles published on your topic. By alerting us to your needs, we can help make your job easier.

Two websites have recently come to our attention which may help you in your research by providing contacts with other researchers. Check these out:

Community of Science—
http://www.nova.edu/ogc/cos.html–
COS is a leading global resource for hard-to-find information critical to scientific research and other projects across all

---

College Teaching *continued*

remarkably effective. It is tragic that the rest of academe does not, apparently, do a good job with the rest of their education. It may be instructive to examine the role of coaches as teachers - what do they do that the rest of us do not?

The perception that researchers, not teachers, reap the rewards in academe is probably correct (McKeachie, 1991; Cochran, 1992). Most schools utilize anonymous student ratings, exclusively, to assess the quality of teaching, and a few engage in the curious practice of identifying "outstanding" teachers in their midst, only to provide them with token rewards. Neither of these procedures tells moderately skilled teachers what they should do for self-improvement. Indeed, there appear to be no schools which enjoy a favorable reputation among the professorate of effectively evaluating quality teaching and structuring their reward system based on this outcome.

For an institution to be expected to provide substantial and meaningful rewards to good teachers, a reliable, widely accepted tool for measuring the quality of teaching in the first place is required. What properties would such instruments possess? We could not mimic the manner in which we evaluate research output by simply counting publications, because the fundamental unit is missing. There is no teaching analog to a research publication. As long as anonymous student evaluations are all that we do, it will remain difficult to convince the professorate to embrace it (Cashin, 1995).

Once again, what properties must our metric have? Teaching does not take place unless somebody learns, so we would be well advised to cease to evaluate only the perception of teaching quality and begin to evaluate outcomes. Let's examine coaches not as athletes or trainers of athletes, but as teachers, and compare their role with that played out by other teachers in academe.

There can be little doubt that coaches teach; they teach young people with various levels of talent to play a game - to perform a specific task as part of a team. They are also expected to lead and inspire their charges, although it is frequently not clear what, exactly, they are inspired to do.

Coaches are evaluated - ruthlessly - by the quality of performance of their players. Particular players may have so much innate talent that their performance has little to do with a coach's teaching skill, but few people are willing to accept that argument for an entire team. If a team performs poorly, it must have been badly coached.

The most magnificent thing about the evaluation of a coach's performance is the elegance of the grading instrument, viz., his won/lost record. It is only an indirect measure of a coach's teaching skill, that may occasionally be misleading, but it is strikingly simple to determine, it is a matter of public record, and even a Dean can figure out what it means without a factor analysis. More importantly, the coach knows what it means, too, and he knows exactly what he has to do to get a favorable rating.

Coaches live a very precarious existence. Their professional careers are judged entirely by the current season. They cannot bank their previous won/lost records. To the extent that there is a point in their careers that is analogous to a tenure decision, *it occurs at the end of every season.* We treat them rather harshly. Yet, it is a rare event for a coaching vacancy to go unfilled for a lack of candidates. How does this come about?

Coaches are the only group of people in academe that are evaluated on the basis of their teaching. If coaches teach well, their players become winners. Such coaches receive rewards; others get fired (without a whisper of protest from the AAUP). The stakes are high, and we evaluate the efficacy of this teaching based on the performance of the students (players). Only a

Regarding Statistical Seminars . .
Kathleen Hagen

In December 2008 Dr. Gabriel Suciu of the Statistical Consulting Center concluded a series of six lectures on statistical considerations for clinical trials. The lectures were hosted by the Office of Educational Development in conjunction with the Statistical Consulting Center, and were offered free of charge to any interested HPD faculty member. The evaluation sheets for those presentations showed a wide range of feelings toward the subject matter. For some faculty members, the material presented was so familiar it seemed basic, and they were bored. For other faculty members, the statistical material was too advanced, and they were able to get little from it. For many faculty members, it was just right.

Both on evaluation sheets and impromptu hallway and elevator meetings, many HPD faculty have expressed a hope that members of the Statistical Consulting Center will one day provide a series of lectures on basic statistical concepts. After a long conversation with the Chair of the Statistical Consulting Center, I understand why that hope will not be fulfilled.

1.) The lunch/presentation format which is used for our faculty development sessions is not conducive to a sustained course of study. Faculty are not obligated to attend all sessions and HPD faculty have a wide range of statistical skills. Some faculty who need the beginning steps might not be able to attend the earlier sessions and would be lost at the later sessions. Faculty who might not need the earlier sessions would be bored and impatient until the sessions became more advanced.

2.) The study of statistics, similar to the study of any great academic discipline, is the work of a lifetime. Even the rudiments cannot be mastered in a few 45-minute sessions.

3.) Faculty who wish to achieve a better statistical foundation for their research would be better served taking a class in statistics. NSU offers several and will pay for the class.

4.) The members of the Statistical Consulting Center already teach or have taught beginning statistics courses. Adding another one for no additional compensation would be a strain on already packed schedules.

Stan Cohen, Ed.D.
Vice Provost, HPD

Stan's Soap Box

A DOZEN WAYS TO GET STUDENTS ACTIVELY INVOLVED IN LEARNING

1. Break into small groups. Give a specific assignment with expectations and a deadline.
2. Have students participate in selecting a textbook. Ask them to scan a half dozen books and rank order their priority with reasons for accepting or rejecting.
3. Using 3x5 cards ask students to write and submit test item questions on several lectures with the understanding that you will amend and use some of these on their exams. (Generally they will submit tougher questions than what you write.)
4. Ask students at random to prepare a case study and present to the class in lecture format.
5. Pause at times with your lecture and throw out a verbal question. If you pick students at random to answer, you may get increased attention.
6. When planning your lectures prepare to include some higher level conceptual questions. Use them verbally and wait at least 17 seconds for student responses. When several students respond with a variety of answers, ask the group how many agree or disagree and why.
7. Give students a written research assignment for your next scheduled meeting with them. Collect these and give them feedback. They do not have to be graded.
8. If you have audience response systems ("clickers") available, ask lots of short questions and check responses. This is a great way to get feedback on what is getting across in your presentation. This is a neat way to increase student involvement in learning.
9. Have students role play as patients with different personalities. Identify their chief complaint especially those that have emotional illnesses.
10. Ask for volunteers to prepare and give a lecture on some content area that they might have a special interest in. Give extra credit for good work.
11. Survey students for information about possible professional health areas their parents might have expertise in and might be willing to share with our students. We have had some excellent sessions using this resource.
12. Ask students to visit at least one community agency dealing with health care such as hospice, county health departments, the morgue, paramedics in fire houses, visiting home nurses, a hospital emergency ward, a veterans trauma and rehab center. Ask for a short written summary of their experience.

Recommended Readings *continued*

(and me), "What (if anything) makes using clickers more effective than simply asking students to raise their hands in response to questions?"

*Smith, M. K., Wood, W. B., Adams, W. K., Wieman, C., Knight, J. K., Guild, N., et al. (2009, January 2). Why peer discussion improves student performance on in-class concept questions. *Science, 323* (5910), 122-124.

**Caldwell, J. E. (2007). Clickers in the large classroom: Current research and best practice tips. *CBE Life Sciences Education, 6*(1), 9-20.

Another good read from the *Chronicle* describes the merits of well-programmed avatars in virtual classrooms, pointing to several of the advantages that avatars enjoy over flesh and blood instructors.

Giving all students good eye contact is not possible in a large classroom; having all students sit in the "sweet spot" (usually near the front and center of the room) is physically impossible in a real class, but both can be done in a virtual classroom. Recent advances in computing are allowing instructor avatars to mimic nonverbal behavior of students, which has been shown to improve students' attention and compliance with instructions. The full article can be found online through the NSU library's subscription to *The Chronicle of Higher Education*. You may also want to check out Stanford University's website on the research it is conducting with avatars at http://vhil.stanford.edu/

*Bailenson, J. (2008, April 4). Why digital avatars make the best teachers. *The Chronicle of Higher Education* [Information Technology section], *54*(30), B27.

College Teaching *continued*

fool would propose that we reward coaches based on an anonymous poll of their players - yet we do this constantly with other teachers. Only a fool would expect a coach to work with no influence over who his players will be - yet we do this constantly with other teachers. Only a fool would expect a coach to work with assistants that somebody else picks for him - yet we do this constantly with other teachers.

Coaches operate within a dramatically different organizational pattern than the rest of academe. Within a particular discipline *i.e.* a specific sport, there is one **head coach,** who exerts an astonishing degree of autonomy over his operation.

First, he gets to pick his assistants who are selected because they possess certain specific coaching skills, and they apply these at the direction of the head coach. Their promotions do not depend upon the judgment of a group of peers; instead, they depend upon the judgment of the head coach, and he typically applies the same harsh standards that will, in turn, be brought to bear upon him at the end of the season.

Second, the coach not only gets to pick his players, he can discard them for non-performance, and, when he does this, they remain discarded. There is no endless line of administrative appeals culminating with the threat of legal action. The parent institution supports this arrangement by providing generous financial allowance to subsidize recruitment activities. Nobody else in academe is treated this way. And the stunning climax: the institution actually pays these recruits a salary. Oh, they may call it a grant-in-aid to get around NCAA regulations, but it is a salary by any other name.

Third, and it is not clear how, when or why this happens, student athletes actually seem to have an interest in pleasing their coaches by mastering what they are taught. The rest of us are much more likely to hear complaints about the relevance of our discipline than we are to encounter students who wish to please us - no matter how well we teach. If a player fails to master the skills that make him a part of the team, it is typically the player who gets the major burden of the blame. The rest of us are commonly taken to task for the poor performance of our students; it is our fault, somehow, that they did not master the material. Once again, if we examine how coaches operate, the reason for this discrepancy becomes clear.

Coaches spend an inordinate amount of time, assisted by an array of technology that dwarfs anything else in academe, on the diagnosis of their players' skills. Players are meticulously examined at an extraordinary level of resolution. They are then given one-on-one instruction at the hands of an individual assistant coach who specializes in the very skills that players need to hone. They are not passed along until their skills reach an acceptable level, and, if they don't do so in a reasonable period of time, they are sacked.

There is a very interesting, but rather subtle, distinction between good coaches and the others. When a player is subjected to a diagnosis of his skills, somebody tells him what he does wrong, but, for good coaches, that is a singular event. After that initial confrontation, the best coaches spend all their time telling their players what they <u>should</u> be doing, rather than what they should <u>not</u> be doing. Watch any mediocre little league baseball coach. They <u>all</u> have one characteristic in common; they can be heard shouting out to specific players things like "don't drop it, don't drop it..." and what happens? Yep! The kid drops it. Sometimes it **is** the coach's fault!

Coaches consult continuously with their cadre of assistant coaches. A player is moved along to the next level at the earliest possible moment. Players constantly hone the cutting edge of their repertoire of skills. Everybody involved, coaches, players and the emergent team, engage in a constant exchange of diagnostic and reinforcing information - and it works! What is amazing is that these players apparently do not demand the same kind of teaching/learning performance elsewhere in their academic careers. Perhaps that is just as well; we couldn't deliver if they did.

Increasingly, and absurdly, college students are viewed less as "learners" and more as "consumers", and society as a whole is less inclined to demand that individuals accept responsibility for their own actions. It is only a matter of time before the professorate winds up being judged in the same manner as coaches - by the performance of our students - but without the administrative tools that coaches possess.

References

Cashin W. E. 1995. <u>Student Ratings of Teaching: The Research Revised.</u> Idea Paper No. 32, Center for Faculty Evaluation and Development, Kansas State University.

Cochran, L. H. 1992. <u>Publish or Perish: The Wrong Issue.</u> Youngstown, OH: Stepup Inc.

McKeachie, W.J. In Seldin, P. 1991. <u>The Teaching Portfolio</u> Boston, MA: Anker Publishing .

Director's Corner *continued*

disciplines. The Office of Grants and Contracts provides access to this resource which includes funding information, access to other scientists who are involved in research and a place for you to share your research interests. The site is free from any campus computer.

 Florida Expertnet is a similar type of resource, with emphasis on what scientists are doing throughout Florida. At www.expertnet.org, you will find a statewide portal of applied research expertise in Florida's universities. It is designed to provide quick and easy access to university-based resources and expertise to assist in practical solutions for business, industry and government. This is a fairly recent offering from the Florida Board of Governors in conjunction with The Clearinghouse for Applied Research and Public Service.

 If you have questions about anything in this article, please contact a librarian at HPD Library. Call x23106 and ask to be connected to a librarian. We are at your service.