

## President's Teaching Scholars Program

"Learning by being able to say what you know. Listening to students explain."

March 7, 2008

Benson Earth Sciences Building, CU-Boulder

Retreat Notes

Scholars in attendance: Gene Abrams, Don Kleier, Jim Palmer, Brian Argrow, Michael Eisenberg, Bill Briggs, Jim Curry, Jim Burkhart, Alex Cruz, Mike Cummings, J.J. Cohen, Harvey Segur, Klaus Timmerhaus, John Falconer, Shelby Wolf, Clayton Lewis, Marty Bickman, Dennis Van Gerven, Ed Rivers, Douglas Burger, Nort Steuben, Dan Barth, Mike Grant.

Also attending were President Hank Brown; Mary Ann Shea, PTSP director; and Michael Poliakoff, vice president for academic affairs and research.

### **I. Introduction**

Shea welcomed the Scholars to the retreat and introduced Brown, noting that he had attended every PTSP retreat during his tenure as president except for one. Shea presented Brown with a gift on behalf of the Scholars: an audio book of *A Team of Rivals*, about Abraham Lincoln's advisers.

Brown: It is clear that Lincoln was a masochist. Modern presidents don't bring in people to tell them what to do.

Among other gifts from scholars, Lewis gave Brown an autographed "virtual book, in appreciation of your dedication to your alma mater and to this wonderful university."

Brown: I want to thank all of you for the wonderful work you do for the University. I take great pleasure in this group. They tell me the University has lowered its standards enough that I will be allowed to teach here. I have talked with the political science department to do a program delivered in Washington D.C., and I will be involved in a leadership program on the campuses as a coordinator and to raise funds. I also hope the Denver and Colorado Springs campuses will be open to the Washington seminar for alumni. It revolves around the art in the Capitol and we look at the 12 largest paintings, including the event with Lincoln depicted on the cover of *A Team of Rivals*. It involves a trip to Washington, visits to the House and Senate and viewing the paintings.

Over the last few days, I have still been harassing the Legislature to get adequate revenue increases in tuition to pay mandated costs. We have a 5.8 percent increase for classified staff, and we want enough to give similar raises to faculty and exempt professionals.

I think that is where I came in. Again, my thanks for the wonderful work you do; the knowledge you impart doesn't always receive recognition.

Burkhart: President Brown, you are leaving behind as a part of your legacy a wonderful man who has worked closely with us and worked on reinvigorating the P&T process and that is Michael Poliakoff. He's been great.

Poliakoff: Thank you. But I really thought I should have been paying tuition this past year, I have learned so much from Hank.

Burkhart: President Brown, you might be able to sit down in the regular stands with us at football games; you'd find we don't get beer down there.

Brown: Since it's not part of my retirement agreement, indeed I will be down in the stands with you. It was one of the sins I committed as president to put restrictions on beer and alcohol. I recently had to call Pete Coors to tell him we were suspending beer sales in the Events Center.

Kleier: On a more serious note, when we first all met, you said you were going to appeal to the people in the state about what a great university this is. What is the progress on that?

Brown: We have made some progress from a minus number to about even. It is at that spot because the citizens are not really ready to vote taxes for us.

One of the things that is in the works that I leave undone is taking a look at revising what we mean by service at the University. We don't clearly define what is recognized as service. We don't reward faculty for exceptional service. My hope is that what will be included are efforts of those who reach out to the state and community and they will be recognized and rewarded for that. With the budget, we have a long way to go. The Boulder campus compared to its peers gets only 29.5 percent of the average. It is the lowest state funding of AAUs in the nation. Western State College is funded at 81 percent of its peers. It can be changed; we need to mobilize our faculty and recognize and reward them.

Grant: It has always been a puzzle why this university is better respected nationally and internationally than it is in the state. What role do you think the CCHE will have in this?

Brown: David Skaggs is director of higher education and the CCHE. I think he will have much more discretion in how he does his job. But CU has been shortchanged in the reallocation of money. If it were made evenhanded, we still wouldn't have that much money. I know [incoming President] Bruce Benson is working on that with Gov. Ritter and a proposal to use severance taxes.

Shea: This is President Brown's last official day in the job, and we thank him for making the effort to come to this retreat.

The Scholars introduced themselves and Shea introduced the PTSP office staff, thanking them for their efforts to make the retreat possible.

## II. Open Discussion

Shea: When I told Clayton Lewis that President Brown had to leave early and would not be here for the full hour and a half, Clayton said the group rarely has an hour that is unscheduled at your retreats. So this is an opportunity to talk about anything of interest.

Rivers: I gave President Brown a request related to restoration of the painting of Bruce Benson in this building. The painting was vandalized and the United Government of Graduate Students voted to pay \$5,000 of their travel funds to restore it. So I wanted to ask that Brown's office reimburse the UGGS for that expense, which they should not have to bear. He said just now that he would take care of it. Since I was a key person in trying to block Benson's nomination as president, I didn't think I should bring my request up in the general discussion.

Barth: When I became a Teaching Scholar, I told you that one of my goals was to create an undergraduate neuroscience program. We have worked with Dean Todd Gleeson, and he assured us that we did not need a separate building or department to get started. We expect to be on board with the program by 2009. We might be crushed by our own success because we may have as many as 400-500 majors. It is completely separate from the psychology program. And it guarantees that we faculty will have to take our gloves off and teach harder. It will be enormous work for the department. My colleague, Jerry Rudy, can take a lot of the credit.

Cummings: I know that a number of us are in an awkward position because we went public in our opposition to President Benson. I think we should talk about that.

Palmer: I agree. I will be the first faculty member to introduce Benson at a large public forum at the Conference on World Affairs.

Cummings: I would be willing to go talk to Benson and to say, "I opposed you." We have a warm feeling toward President Brown. But frankly, I don't think he made that much use of us as a resource, especially in the outreach area. I took a proposal for a "Youth Power" program to Brown. It could be a project like that that I take to Benson. That might be a good way to connect with the incoming president. He said he would work with those who support him and with those who opposed him.

Shea: I suggest you rewrite your proposal and e-mail it to us.

Lewis: I don't think we should go in with a proposal. We should ask President Benson what he would like us to do.

Cummings: I agree, but we could also send him something concrete to consider.

Burkhart: I don't think we should kiss and make up. I was not one of the signers of the letter, but I wouldn't go apologize.

Van Gerven: I have thought a lot about it and I agree. The president is bigger than this man, bigger than us. I wouldn't apologize for why I was in opposition. I took a position and I would take it again and would oppose the nomination until the end. That doesn't mean I don't support the office of the president.

Rivers: I agree with Dennis.

Lewis: Does anyone know what Benson knows about the President's Teaching Scholars Program? I don't think we know if he knows we exist.

Poliakoff: Since President Benson has shown such support for education, I think he'd be very interested in this organization. I think he is as the Greeks say a person of great soul. He is a very good listener and I think he would be supportive of the President's Teaching Scholars playing a role.

Shea: What would be a time or place for the Scholars to meet with President Benson? Should the Scholars meet with him individually or in groups?

Poliakoff: What will be difficult is getting on his schedule. The first thing he will be dealing with is the budget at the Legislature. Once that is done, it would be good to look for a venue for the Scholars to meet with him.

Lewis: President Benson must be aware of the opposition to his appointment. This would give him an opportunity to take advantage of being with the faculty. If he is interested in how to reach faculty, participating with this group is a good way. He might find working with the President's Teaching Scholars very valuable.

Poliakoff: No doubt he will be eager to do that.

Rivers: I have something I would like to bring up with him. A while back the Teaching Scholars tried to get a Distinguished Teaching Chair program off the ground.

Grant: We submitted that idea to three chancellors and three presidents. We were always met with a yawn at worst, and the idea is not just for the Boulder campus. I'd like to revive the proposal also. Benson has expressed great support for teachers. Our problem was fundraising and that's his forte. Another problem we had was that presidents have not cared that much about teaching. I would like to work with Benson on that topic.

Cummings: As I remember it, the Distinguished Teaching Chair was meant to be a rotating chair and that was what made it very attractive to me.

Rivers: It could be someone not at CU and not even an academic. It could be the Dalai Lama, for example.

Timmerhaus: How much is needed to establish a chair?

Grant: It takes \$2.5 million to endow a chair.

Shea: Pass the proposal on to all of us again, please.

Grant: If we go out and deliberately hire an outstanding teacher, we raise the quality of teachers across the board. I still support this idea.

Lewis: One thing I saw with President Brown was a devolution of the system; he didn't support systemwide groups. He wants the campuses to be separate. If President Benson feels that way, it will have an effect on this group and we might not get a systemwide chair position.

Rivers: Does anyone have thoughts on whether we ask for one for each campus or for a chair that revolves among the campuses of the system?

Barth: Are chairs defined specifically to a campus or the whole university?

Grant: Either way.

Poliakoff: I want to clarify. We are not talking about a scholar in pedagogy but an excellent teacher in any field.

Palmer: I don't think we ruled out pedagogy as a field, however.

Curry: Do the Scholars have money to contribute?

Rivers: Yes. At the start a number of us contributed and we had a total of \$5,000.

Lewis: People on the Boulder campus may know that the division of continuing education runs a program that brings distinguished teachers to campus. Continuing ed runs as a cash cow but can spend its money on other programs. The division might want to do something like we are proposing; they have shown a dedication to teaching.

Shea: Is there a vice president in development who could work with the PTSP on this?

Poliakoff: I met with the Foundation people as the capital campaign gets under way. The way the Teaching Scholars could be a catalyst for teaching is a conversation worth having. What would be the purpose of this endowment? Is it independent of the program?

Rivers: It could be independent. But part of it would be purely symbolic, a statement that the University values teaching. I think that has still to be proved. The only mention of the PTSP in the proposal is in the first sentence. The original proposal was to integrate this program with the PTSP and for the teaching chair to meet with members of the public during office hours. But it can be reinvented. I can't think of anything better that Benson could do to show support for teaching. He is on record about his favorite teachers. This proposal is being handed on a golden platter to him; \$2.5 million is chicken feed.

Timmerhaus: The program would have a stronger position if it is tied to the PTSP and it gives visibility to the President's Teaching Scholars.

Van Gerven: As part of it, we could award membership in this group to the teaching chair.

Abrams: There must be models for a teaching chair at other places.

Van Gerven: Supporting teaching is like wrapping yourself in the flag during a campaign.

Briggs: I don't think the PTSP is funded in perpetuity. But with a new project like this, we can make the case for the PTSP again. We have to ask is there any doubt we will continue or do we have to make our case again?

Shea: Vice President Poliakoff is attuned to the PTSP budget. We can talk as a group about what plans the PTSP has. He would like the program to be more public and emblematic of good teaching.

Poliakoff: As a classicist, I love the word "guild." It gives the picture of masters and apprentices. But the term is problematic because it could mean the program looks inward. We need to look at the evangelical, missionary, outreach role of the group. We

could explore ways in which you would use your talents on the campuses to build the best practices for teaching, whether that is through the macro level of a conference or through mentoring. The PTSP could become a high-profile engine of great teaching.

Rivers: Where does the PTSP budget come from?

Poliakoff: It is from system administration level funds. And it's no secret we always face an uphill battle with funding. The mandatory costs are enormously high.

Cummings: Was there a recent issue that we could not afford to use the Stanley Hotel for our retreats?

Shea: Vice President Poliakoff looked closely at the budget and he is convinced that the money spent on the retreats is reasonable. The Stanley Hotel's bid was the lowest.

Poliakoff: I was glad you took the time to research other venues. Austerity is a good thing. The case was made that the Stanley Hotel venue was cost-effective.

Shea: Something else in the budget is to increase the number of Scholars who are appointed each year and to include that in the budget request. This year we will be selecting three, if not more, new Scholars.

Barth: On an issue tangential to the budget: I have been chairing my department's personnel committee and I put in a request that if we find a good teacher to nominate that person for the PTSP as well. It's a way to find faculty who need to be recognized by their department as Teaching Scholars. There is no official procedure to encourage departments to nominate faculty for the PTSP.

Wolf: We will be looking at this nomination issue later this afternoon.

Eisenberg: I would like to address it now because I cannot stay for the afternoon. If you look at the current dossiers, they are extraordinarily strong and very thorough. It is painful to turn any one of these people down. That is a good argument for increasing the number of Scholars. After people go through this process, we then have to turn them down.

Briggs: I don't think it is a secret that the amount of work is a disincentive to apply. I know of a woman who was nominated and then turned down. She said it would take too much to submit the application a second time. I'm not suggesting a change but just pointing out the situation faculty face. Another way would be there is no application and we as Teaching Scholars go out and select the new Scholars.

Shea: We want to bring all this ideas up this afternoon and then the committee can work with them. It is a rare occasion when we have a large enough group of Scholars here to discuss this issue.

Barth: One idea: the Boulder Faculty Assembly combs through applications for their teaching award. Maybe we can combine with the BFA. The PTSP could coordinate with the [UCB, UCD, HSC, UCCS] campus faculty groups and tap some of the nominees and receive suggestions for who to tap as Teaching Scholars.

Timmerhaus: This need to pick from a large numbers of applications happens everywhere. The National Academy of Engineering gets 500 applications for 60 awards.

Grant: Regarding campus teaching awards, the PTSP requires the applicant to have been nominated for their respective teaching award.

Shea: Those who cannot be here this afternoon, e-mail Shelby Wolf with your ideas.

Shea then asked for a moment of silence in honor of the students killed or injured in the past year at college campuses. Eight students at a seminary in Jerusalem had died the day before the retreat.

### **III. Formative Assessment: Improved Understanding through Orals**

Facilitators: Harvey Segur and Instructor Mary Nelson, UCB Applied Mathematics

Students: Dominic Di Marco, Julie Ratcliff, Carly Smith, Andrew Dean, Jordan Bakke

Segur: We could call this a look at the perils of first semester calculus. Forty percent of all college students take a one-semester course in calculus and of those, 40 percent nationwide fail the course. The applied math department has made efforts to address the problem. We give an assessment exam with 30 questions on trigonometry and algebra in the first week of class. It is a good way of telling who is in trouble, who is not in trouble and who is going to be in trouble.

To help the students who might be in trouble, we created a course in 2003 to spread the one-semester course over two semesters. Students are put in the class on an as-needed basis. Mary Nelson created and developed voluntary, ungraded one-hour oral sessions to give students an opportunity to answer questions on material for upcoming exams. Most students taking the two-semester class are at risk of failing. However, Mary discovered and wrote about in her Ph.D. thesis, that students from that class pass second semester calculus at the same rate as all students in the one-semester class.

So, we began the “Great Orals Experiment” in 2006–07 for all calculus classes. One thing I can say for sure is there’s a lot of logistics to make it work. I know that Gene Abrams is doing this at UCCS and Brian Argrow at Boulder and others are doing it with their engineering classes.

Falconer: Do you have data on pass rates of those who fail the one-semester class and retake it second semester?

Segur: The spring semester of first semester calculus is the most difficult to teach because students come to class with a chip on their shoulders because they failed once.

Cruz: Do you have data on what the major is of the students who failed?

Nelson: We do know that a student’s major does not have an effect on their failure rate. We do have some A&S majors.

Segur: However, our students in applied math are pretty much restricted to engineering students.

Nelson then started an orals session with the five students, who are all currently enrolled in a calculus II class and preparing for the mid-term the next week. The students stood at the board and worked on problems. Nelson asked them to explain their work and their reasoning and pushed them to be clear about what they were doing with each problem. When the session was concluded, the Scholars raised a number of questions.

Palmer: I have a question for the students. When you are in a group of five, do you get the sense there is a lot of peer teaching going on, that you learn a lot from each other?

Di Marco: It is more effective. We can use the same language about problems and the instructor can then argue with us and we can bounce ideas off each other.

Smith: I really like the format. You can get a problem explained and then you can go on to another knowing what to do.

Grant: Is this always the same group or does it vary?

Nelson: It varies. There are five slots only for each oral. The instructor arranges the room and time. These happen to be students who were available for the 10-11 a.m. hour today.

Cruz: All of these students seem to be of high ability. How does it work with students of varying abilities?

Nelson: The sessions are totally voluntary, totally ungraded. Harvey and I believe it is important to work with every student. They are not coming because they will get extra credit; they are coming to learn something. When we have students who do poorly on the exam, the first thing I ask is, "Did you do an oral?"

Cohen: Do you need the instructor there?

Dean: She directs us and has the problems

Ratcliff: Sometimes we disagree and in cases where we don't know how to do the problem, we need the instructor.

Dean: The instructor can show us how to break the problem down.

Burger: Where do the facilitators come from?

Nelson: All of our instructors are required to do four orals and all of our teaching assistants do two. We have some excellent undergraduates who can do one oral also. We also ask the research assistants and teaching assistants from other classes to help out, and the department pays them to conduct the orals.

Burger: Do you get some facilitators who are not as adept as others?

Smith: Definitely. There is a range of people but all help you out.

Nelson: Usually I do one colloquium per year about the orals. For anyone who is helping us, we do a mock oral and have the facilitators watch how it is done. We show them how to give the students prompts and follow-up questions. We have found the

TA's start running their recitations like this and that's very helpful. For the students, it's worth three hours of studying to go to a one-hour oral.

Kleier: If you are going to an oral, do you bone up on the topic?

Dean: I didn't study before this session, but now I know what to study for the exam.

Ratcliff: It is a great assessment tool.

Dean: I can read the book, but doing this helps it make sense.

Di Marco: It's like test style; it's conceptual and you have to know it. And you know what to expect on the test.

Burkhart: Do you know people who don't do the oral sessions? Why don't they?

Di Marco: There are different reasons, but they see I am doing better on the tests.

Burkhart: It brings back memories of working at the chalk board as a kid.

Dean: But we aren't standing in front of the whole class.

Palmer: Do you feel competitive or nervous?

Ratcliff: If I am in with a group of students I don't know. But I get more relaxed working the problems and we end up all working together to solve the problems.

Nelson: I get 50 percent of my students doing the orals; other instructors get 30 percent to 40 percent.

Briggs: Do these sessions change how you study calculus, the book, etc.? Do they displace anything else you do to study?

Dean: This is on top of the other things I do to study.

Ratcliff: It changed my style so that I want to work with a group.

Di Marco: They have helped me know what I need to study and then I go back to the book.

Briggs: Do your oral groups form study groups? Do you hit it off?

Dean: My study groups form more at office hours.

Smith: I never use a study group outside of orals.

Palmer: How would these orals work with clickers? This seems more inter-dynamic.

Nelson: I have never used clickers. Clickers take time to develop the questions. Students get the answers wrong for entirely different reasons. With clickers, they don't find out what they really need to do.

Falconer: That's true with five students, but with 150 students clickers might be used.

Curry: How many have used clickers? (All of the students raise their hands.)

Ratcliff: I don't like clickers. I think they are annoying.

Dean: My physics teacher used clickers and the questions were well-formatted.

Smith: I see students nodding off in classes where they use clickers.

Dean: But a good clicker question can bring me back to attention.

Poliakoff: How widespread is this practice of orals at the CU campuses?

Nelson: We just started using it for calculus I and II. Aerospace would like to use it more but it takes resources.

Kleier: Are seven students better than five, five better than three?

Nelson: Five is better than three. I can pick the person having the most problems and regroup the students to help each other. I can also talk them through the problems. I can ask, "What do you know that will help you solve the problems." The students make it clear to us that they help each other. We started with three students and said others could come and take notes. But we found five really works well. If someone doesn't show to fill the five, others can come to the board.

Falconer: Is this course graded on the curve? Doesn't that discourage cooperation?

Nelson: Students help each other out during office hours too. The orals are only done before the mid-term exams, and some classes do it for the final.

Argrow: Have you looked at what it is that separates this from recitations?

Nelson: Recitations have 20-plus students, attendance is taken and quizzes are given. And the students earn credit.

Curry: Recitation is a review of the most recent set of lectures. It has a different flow from reviewing and discussing problems.

Steuben: Does it have to be that way? Might you be able to merge the orals with recitations?

Curry: We could change that, but we are not quite there yet.

Argrow: What if this could creep into the way you deliver calculus I?

Curry: It is a matter of size right now.

Abrams: Do the students think that might work?

Ratliff: It might work. I am taking a calculus work group also. But the problem with recitation is there is one TA and 20 students.

Nelson: The bigger classes are not as likely to flood into orals. Students would leave.

Burkhart: Our calculus is often taught without a recitation. The professor lectures three times a week.

Curry: That is the model at West Point. The professor lectures five days a week with 20 students.

Nelson then showed a series of slides with graphs showing the results of her study of the effectiveness of the oral sessions. The results show dramatic improvement in the passing rate for students considered at risk from the assessment test.

Nelson: The treatment group of at-risk students did a standard deviation better on the test than the non-at-risk regular class. One thing I can tell you is that those who take the two-semester course don't get discouraged. They learn they can learn the material and they pass. You can imagine a student who failed three of four classes the first semester might go home to community college.

When we asked the students what they thought made the difference, they said things like, “We didn’t want to disappoint you. You were doing all this extra stuff for us.” They know they are getting extra help and they appreciate it. They have to do their part because we are working hard to do our part. For years our failure rate for calculus I wavered at 30 percent to 33 percent. Last semester the failure rate was below 20 percent.

Cummings: This has applications outside of math. These orals are extremely like what I do with my small groups. I have 20 to 30 students, no TA and I wander around to the small groups.

Abrams: Our experiment at UCCS is not a year old. I would like to comment on two things. First, I asked my class on Tuesday what was the most effective thing about orals, and they said it forced them to study for the exam 48 hours before the test, because it clarified what they needed to study. Second, there is some sense of peer pressure and some don’t show up because they weren’t prepared and didn’t want to look stupid. I asked them would they show up if I was not the one running the session, and some said they would blow it off. A lot of this is about pleasing the instructor.

Nelson: My students fill my orals up, but there is a social reason we can’t factor. I looked at the students who go to review session and they didn’t do better on the tests. But if they did the orals, they did better on the tests.

Steuben: Are the lectures different from class to class?

Nelson: Yes, everyone does their own thing, but there is a course outline.

Steuben: Students taking the orals and Mary’s class would have more interface time than just going to the straight lecture.

Grant: I think students perceive that an effort is being made to help them succeed.

Nelson: I mentored some new instructors. Students told me that this new instructor hates the students. “We asked for help and she said, no.” She had to pick up her kids but didn’t tell the students. If she had said she wants to help but she can’t, it would improve the perception one is doing more and cares.

Cruz: Do women and minorities get more information about the orals than others?

Nelson: Some students in the summer programs are advised to take the course and sometimes the ROTC students have been identified for taking the orals.

Rivers: Thanks for your presentation; it was fascinating. I want to ask what makes an easy grader in applied math?

Nelson: I might decide to give extra credit for something. I am looking at the process the students use.

Curry: The way we structure calculus in applied math, we have a grading party after the first exam. The problems are parceled out to different instructors. You, Ed, would grade one problem but not all the problems.

Nelson: We set up a rubric. You get two points if you get to this stage, and so on. It is a pretty strict rubric; otherwise the students would say it wasn’t fair.

Shea: I recommend a book by Eleanor Duckworth, “*The Having of Wonderful Ideas*” & *Other Essays on Teaching and Learning*. Duckworth writes, “to elicit and

understand someone else's explanation — to join me in practicing teaching by listening rather than by explaining." You are an example of that! Thanks very much!

#### **IV. Tour of Benson Earth Sciences Building**

Guide: Professor Mary Kraus, chair, UCB geological sciences

During the lunch break, a group of the Scholars toured the building with Professor Kraus.

#### **V. A New PTSP Retreat Tradition: Discussion of Research on Teaching and Learning**

Facilitator: John Falconer, UCB chemical and biological engineering

Falconer led a discussion of a paper by William A. Perry, "Different Worlds in the Same Classroom: Students' Evolution in Their Vision of Knowledge and Their Expectations of Teachers," *On Teaching and Learning*, Vol. 1 (1985): 1-17.

Falconer: I am wondering what your thoughts are on this topic. One comment I have on the question of levels of development is that I've had students say, "You don't answer my questions, you just ask more questions." There is a progression in their understanding. Some are at the highest levels, but the point is students go through this progression. Their different worlds affect how students respond.

Cummings: It reminds me of an article we read years ago on "women's ways of knowing." I was shocked; my students fell into these categories of development. When someone is in the anti-authority stage, they believe if the authority is saying it, it must be wrong. Students are coming to class with different levels of thinking. I tell them there is no one way to think about certain topics, especially in political science, but they say to me, "Tell me the answer."

Falconer: I especially see that with my Asian students.

Rivers: This is an issue in teaching critical writing skills to students from different cultures. Asian students, for example, feel it is almost discourteous to argue. I am not able to come up with a solution for it; we are essentially asking them to set aside their culture. I have never set the same value on argumentativeness as some in my department, so I am sympathetic to the students, especially the Asian students, because I had difficulty with it too.

Cohen: At one of our Café Scientifique sessions, a man from Japan commented it would be impossible to have a similar Café in Japan because its format is too democratic. There might be an older person who also wanted to talk and should be deferred to and the person speaking would not know that.

Falconer: Students also believe if they work hard they should get a higher grade. One told me, "I was doing so well until the exam."

Burkhart: One of the things we run into at UCCS because of the religious contingent in town is a lot of students are respectful but don't buy into the paradigm. It reminded me of my own history as a seminarian. I remember a former physics student

who finally got enough courage to disagree with me about intelligent design. In physics it is difficult to use that paradigm to replace one that is scientifically sound.

Bickman: There's stage of development but also cultural stages. I think Perry's argument is sound and there are two ways to respond. You can take them where they are and teach to that level. You give into it and go with it. I think that is a mistake. You might have difficulties but you don't want to teach to that lower level because you need to teach what knowledge is and how knowledge is made.

Falconer: I have been teaching freshman chemistry and I get negative FCQs. I'm used to teaching upper-level students.

Bickman: With literature it is about different perceptions of reality and where we are. I can't say this is exactly what Moby Dick is about.

Cummings: I am better with students who think critically, and I am not so good with those who can't. Do some of you think you are good with level 1 or 2 students, those who say you're right, you're wrong?

Steuben: I think part of it is gearing your questions to the level of the person you are talking to. If I have a superstar law student, I will ask tougher questions — Why do you think Justice Holmes was thinking of with this? — but with someone else I might not get much above a simple questions such as, What is the name of the case? We are trying to get them to be critical thinkers or get to the point where they know the questions to ask, to the point they know that a question is coming and they prepare an answer before class.

Timmerhaus: If when addressing a question in class I address the lower level, I bore the upper-level students. If I address the upper level, I have lost the lower-level students.

Steuben: You address the answer to the person you are talking to, to the one who asked the question. Sooner or later in the mix of the class, everyone gets a shot. You say, "Hey, I want you to be here; try it, ask a question."

Falconer: In law school, students are at level four or five.

Steuben: Some come in still looking for you to tell them the answer. Others you just want to graduate quickly.

Segur: Perry was condescending. If the idea is true, some can be at level 1 on one topic and a level 3 on another.

Falconer: I have an example of asking students to be skeptical with no data. I asked them if they believe aliens landed on Earth. One student asked if I meant in this century or earlier. And half the group answered yes – aliens had landed on Earth — but they had no data.

Rivers: Where does that fit with religious beliefs? One person's religion is another's mythology.

Argrow: There are religions that say aliens landed on Earth.

Cummings: I have students who substitute religious dogma for political logic. I say it's interesting but it's not political science.

Kleier: I found Perry's concept interesting. I have older students and I have them for four years. Some students in the first semester get it right away, like in *2001 A Space Odyssey* the computer Hal's higher centers. But some get into the loop like Hal droning "Daisy, Daisy," and you can't get them out of the Daisy stage. Some in class get to a certain ceiling and they cannot get the material. So we try to apply energy to them to get them out. We used to kick them out of the program, but I want to apply the energy. The scientist in me wants to heat things up.

Falconer: I see this with our graduate students. Early on they will come in to show me the results of an experiment and they ask for the next experiment. Then at some point they have already anticipated the next step.

Cohen: There is data on the use of MRI to see changes in the brain. When I went to medical school, I was told the brain is fully developed at age two years because it is fully myelinated at two. Now we know it is developing until age 35. In one of my classes, the students were on a blog. The undergraduates would believe everything they read but the older students would question. You can't blame the freshmen for not knowing because they aren't at the next level yet.

Wolf: I see my students who are post-BA have more willingness to bump up against things, but they do it politely.

Cohen: It's about blood flow to the brain.

Abrams: We could just forget about the SAT and ACT and just measure the right part of the brain and let them in if it is developed.

Lewis: I have seen it suggested recently that the development of the brain is culturally and environmentally determined.

Wolf: But rather than lower expectations, we should raise them up.

Rivers: I have a way to work with different levels. I have been doing a lot of e-mail with my students. I have communicated with all of my students at length. I'm on e-mail pretty much all the time. Some topics are purely on the technical level; some are on a fairly high theoretical level. I have found this to make a profound difference in my teaching. It is a way of supplementing the personal contact I have with my students in class.

Cohen: Do you make those e-mails available to other students in the class? In my class I just put all the questions on the web site as FAQs.

Rivers: Sometimes the communications are on a very personal level. For example, we are reading *Lolita* this semester and one student is having a very personal reaction to the novel that should not be shared. I started out as an enemy of e-mail but now find it very effective.

Cummings: I thought of something that works with students of different levels. In my intro to political science class the final is to make three policy recommendations to state, local, and national governments. You need to persuade by evidence and logic. The result is they come to understand the difference between "I believe" and "I need to persuade you." Some students seem to make progress; they have to go beyond "This is how I feel" or "This is what my minister says" or "This is what Dad says."

Argrow: Regarding skepticism, I know in this age we have “truthiness,” and there is all sorts of information. When they are first asked a question, they go to Wikipedia. But they need to separate “truthiness” from real knowledge and where they should go to find real knowledge. Maybe Wikipedia will become more acceptable; I just looked up about the Dalai Lama on Wikipedia. But students need to be able to parse and distill out of it what is “truthiness” and what is knowledge.

Lewis: I refer my students to Wikipedia all the time.

Rivers: I tell my students Wikipedia can be a good starting place.

Lewis: Wikipedia has canons of practice. Writers must meet certain criteria for citations. So your suggestion to use it as a starting point is a good one.

Falconer: In physics, one professor told me that half the papers published in his field turn out to be wrong.

Shea: We will continue this Retreat tradition of discussing a research article that we are asked to read prior to each retreat.

## **VI. Reports: Call for Nominations**

Facilitator: Shelby Wolf, UCB education

Shea: A principle of mine has been to get as much information as possible from the Teaching Scholars on issues. Shelby will start a discussion on what does it mean to be a President’s Teaching Scholar.

Wolf: At our last retreat, Jim Palmer wondered could many of us be selected as Teaching Scholars again if we went through the process now. In my field of children’s literature, there is the Caldecott Medal. Randolph Caldecott illustrated a series of nursery rhyme books for children. We wonder would Caldecott win the Caldecott today?

Let’s look at the President’s Call for Nominations 2008. Instead of talking about the philosophy behind the program, let’s look at page 2 on preparing the candidate’s dossier. One of the things that struck me was the number of letters required from faculty colleagues.

Rivers: We could strike the line in parentheses: (May include endorsement from the dean and/or chair). I would be very democratic about this.

Shea: We also need to think of this as a systemwide call for nominations.

Lewis: When I have looked over the dossiers, the student letters make me really excited about the person.

Cohen: Regarding the letters from colleagues, I am stopped by the line “substantial research in the discipline.” We want to make the point that we will be considering both teaching and research valuable.

Also the first point is: A curriculum vitae, including tenure status. Is this the only place tenure status is discussed? In that way we are restricting it only to people who are tenured. We have many faculty at the HSC who are not tenured.

Rivers: We also have some excellent instructors who have great careers at CU. I can name some of them who are very active in research as well. It is not unheard of for

non-tenure-track instructors to be distinguished teachers as well as distinguished researchers.

Cummings: I see that three of these 10 points in the dossier relate to research or scholarship. Maybe we are sending a wrong message. I think we are now saying we want both teaching and research.

Lewis: I think we also want this group to not just be recognized as outstanding faculty but to be influential. I think we cannot be influential if we are weak scholars.

Wolf: It seems we need this combination to attain the status we would like to have.

Cummings: When the program started it was a way to recognize teachers and scholars. We have to be both.

Cohen: At the HSC, many distinguished scholars don't ask for tenure; they don't need the free speech protections. Those are a little antiquated anyway. The School of Pharmacy has eliminated all tenure tracks.

Kleier: In the School of Dentistry, we have clinical faculty who are not on the tenure track. That being said, clinical people rarely do research. It has been changing. When I entered, everyone was tenure-track; now most people are clinical track. There may be a time when 85 percent of the HSC faculty won't be tenure-track.

The group agreed to discuss further the reference to tenure status.

Rivers: Regarding the requirement to show evidence of having been nominated for or received a teaching award, the BFA has been granting its teaching award to instructors.

Palmer: I just put together a nomination for the BFA teaching award. There were five letters from students, five letters from outside scholars and a four-page nominating letter I wrote. From the chair what I got was a three-fourths page letter. It was a very impressive dossier; the only thing missing was a long letter from the chair. So in some way a letter from the dean might be disadvantageous.

Lewis: Our asking for the person to have tenure was our way of adding to the gravitas of the award. Here's my question: An instructor can be a great teacher and do research, but are they to be influential? Can they influence anybody? We might say nobody is influential in that way.

Cohen: Personally I would want someone who comes to the group and participates,

Rivers: Wouldn't they become influential as part of the group?

Shea: Regarding the letter from a dean, in the past sometimes the dean drove the process of nominating a candidate. What we have today is better than any other call for nominations we have had in the past. Just last week I had a conversation with a Teaching Scholars who said to me, "This is not an award; it is a job with expectations and we need to make those expectations clear." There are a myriad of reasons why people are here today or not here today, nevertheless it does take a commitment of time, effort, service, and participation. We could have a third part to the dossier, which would be a conversation with the person about these expectations.

Lewis: There could be a probationary year. What we would be looking for is did the person make efforts toward their project.

Rivers: I always include my teaching innovations as part of my responsibilities as a Teaching Scholar.

Palmer: There have been people who have accepted this award and then walked away.

Timmerhaus: It is an award with responsibilities. We need to make that clear.

Cohen: It is a lifelong appointment, but with a catch. Jack Nolte left 12 years ago but is still on the list. Can you ever get off?

Cummings: I say, so what? I can think of people who don't come to the retreat. In a way it's nice that it is voluntary that we come here. In Australia, if you don't vote you get fined. I am not sure it is necessary to enforce responsibilities on distinguished awardees.

Lewis: I think there is a point to this. Some people know Teaching Scholars who are not involved; some know Teaching Scholars who are involved. It gives the wrong impression to people.

Rivers: Being named a President's Teaching Scholar is listed as an award on the FERPA.

Wolf: I move it to my service line.

Kleier: Clayton, I understand your concern. The downside of getting someone off the group for not participating outweighs what we are trying to do. If in the interview the person says they will do things with the guild and then never comes and someone else was turned down because that person got the spot, that's the downside.

Lewis: You're in until someone kicks you out or you're in for a probation period. Anyone going through a probation period believes he or she will do it and in the interview they may believe it.

Timmerhaus: Perhaps if after the probation period they are not participating, move them to honorary membership and now we can bring in someone else.

Palmer: First, regarding the number of letters, change the wording to "up to three" letters from faculty colleagues. Second, regarding the self statement, we could have the person describe in that statement how he or she will contribute to the President's Teaching Scholar Program. The guidelines clearly state the expectations and indicate the person will have a commitment to the program.

Rivers: I would have trouble kicking someone off.

Palmer: It would be an act of bad faith after writing a self-statement about one's commitment, to not participate. But I don't think we can dismiss or fire someone.

Rivers: The idea of a lifetime designation or title is important. By bestowing an award that recognizes teaching and research, the University did a lot to restore my faith in the University. For me, the fact that it cannot be taken away was a large part of it. I would rather we use moral suasion to get the others to participate.

Wolf: That raises the idea we had to call the Teaching Scholars who don't come and encourage them to participate.

Cummings: I don't want the additional responsibility of following up on people.

Lewis: In looking over the dossier, we could see if the person is already spending time doing the things we want in the program. If the aspiration is that this is more than a recognition of past accomplishment, if they haven't been doing these things already, why would we think they will now?

## **VII. Reports: Defining the President's Teaching and Learning Collaborative**

Shea: CU is part of a three-year commitment to the CASTL program. President Brown wrote a letter in support of our acceptance and gave some modest funding. We are in the second cohort of the program. In one year, we have several publications from the collaborative in peer-reviewed publications. I want to be sure that you all understand that this is a *University* collaborative, open to all faculty.

## **VIII. Conference on Learning and Teaching**

Facilitator: Clayton Lewis, UCB computer science

Shea: We have been discussing the idea of a CU conference on learning and teaching, which would be sponsored by the PTSP. Would you endorse this sort of conference?

Lewis: There is some background on this. First, the University used to have a Teaching with Technology Conference. It was a successful gathering and was not just a CU event. The conference brought a lot of people together to talk about education and using technology in the classroom. It was eliminated two years ago because of funding. Many of us thought it was an effective program. Vice President Poliakoff wants us to be more proactive, move visible. We need to see if others are planning similar events.

Shea: A Teaching with Technology conference is now planned for Aug. 12<sup>th</sup> and 13<sup>th</sup> at UCB in the new Alliance for Teaching Learning and Society building.

Rivers: Will there be a process for submitting papers?

Shea: Yes.

Lewis: I thought there might be a role for the Teaching Scholars to step into this conference. But the question arises, Would there be a different conference this group would like to do? It could be during another part of the year and specifically on teaching and learning.

Cohen: When the Teaching with Technology conference went away three years ago, I thought there was a big need for it. The title is a little dated. It might be a chance to reinvent "teaching with technology." There's a lot more to teach than just the use of technology. I suggest we sit down with the new conference folks. They have a lock on the perfect time for it in August. That is also a great time to work with new faculty.

Shea: I am part of the conference committee but we are not to specifics yet. Vice President Poliakoff is supporting the Teaching with Technology conference. He also wants to support the PTSP in sponsoring a teaching and learning conference.

Timmerhaus: We need to see if we would be duplicating efforts.

Kleier: Were you seeing the teaching and learning conference as separate from the other?

Lewis: Whatever we do we need to be visible in what we do.

Kleier: We need to know what Vice President Poliakoff would like us to do and if he says he wants this and if he has the money. We need a chance to meet with the new president. I hope he won't write us out of his checkbook.

Cummings: There are good connections between teaching with technology and the scholarship of teaching and learning.

Lewis: Jim Burkhart and Gene Abrams provided input about an event at UCCS. They taught a class and had 45 minutes of discussion. Basically people didn't come. It was close to what Poliakoff says he wants but it didn't work with full support of all the campus administration.

Shea: I believe Vice President Poliakoff will facilitate programs but does not want to take the lead in directing the group. He really wants to hear your answer of what would work.

Rivers: Maybe Teaching Scholars could be facilitators, lead panels at the Teaching with Technology conference. I'd be delighted to lead a panel.

Lewis: I have a hunch that teaching with technology is too narrow and that maybe we could organize a "fringe" conference and offer other events.

Palmer: When we talk about teaching with technology, I think of this morning with the students. There was no "technology," just chalk on the board.

Shea: There could be a teaching and learning conference within a year.

I hear three options: one, the Teaching Scholars are part of the Teaching with Technology Conference in August; two, the PTSP sponsors a separate teaching and learning conference within a year; and three, we sponsor a "fringe" event on teaching and learning at the August conference.

Cohen: I think there is some logic in hooking up with the August conference. They have the infrastructure.

Shea: A committee of President's Teaching Scholars needs to meet with Deb Keyek-Franssen, director of the August conference. Five scholars volunteered, Shea will schedule the meeting.

Lewis: That should be our action plan.

## **IX: Conclusion**

Shea: I want to thank all of you for coming. The fall 2008 retreat will be Saturday, Oct. 11, and Sunday, Oct. 12, at the Stanley Hotel in Estes Park.