

MEETING NOTES

Critical Thinking Advisory Group

May 6, 2016

9:10 – 10:00 pm; Bldg. 1-301

Membership

Mary Pedersen, Bruno Giberti, Katie Tool (Academic Programs and Planning), Melinda Raju (ITS), Amy Wiley (CLA), Robin Aimee-Maura Parent (CTLT), Kaila Bussert (Library), Brenda Helmbrecht (GE), Katherine O'Clair (Library), Neal MacDougall (CAFES), Dawn Janke (Writing Rhetoric Center), Anya Goodman (CSM), Russell Alan White (Library), Rebekah Oulton (CENG), Debra Valencia-Laver (CLA), Adriana Popescu (Library), Tim Archie (Student Affairs), Patrick O'Sullivan (CTLT), Greg Starzyk (CAED), Linda Vanasupa (CENG), Jack Phelan (Assessment); Matt Luskey (CTLT)

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#### MEETING NOTES

1. Approve meeting notes from 2/26/16
  - a. Meeting notes are approved.
2. Discussion: What is the charge of the Critical Thinking Advisory Group?
  - a. Formation of Sub-committees around Goals (see below)
  - b. Leadership Issue: Seeking a Co-chair
    - i. Jack Phelan introduces the necessity of leadership in the Critical Thinking Advisory Group committee.
3. Discussion: Long-term Calendar
  - a. New assessment cycle for Critical Thinking begins next year (with the formation of a new Learning Community)
  - b. Preparing for quarterly meetings with set agenda
4. Looking Ahead:
  - a. What do we hope to accomplish next year?
    - i. Mary Pederson introduces the current problems with CT and raises question on how the committee can work effectively to make an impact, what can be a model to solve the problems. How assessment feedback can be utilized to come up with effective results.
    - ii. The problems as stated by Mary P., it is expected that students are thinking critically and departments, for example the Engineering department are convinced that CT is embedded in the curriculum, everything that is taught or exercised is a part of CT. But what was found, it was not intentionally focused CT because the department was not challenging the students to think critically. In order to motivate the students to think critically requires teachers to be critical thinkers. There is an absence of critical thinking in the faculty.
    - iii. Linda Vanasupa asks, What is the model? Systemic condition is an option. Faculty is already set up, so the problem is somewhere else.
    - iv. (Dawn Janke) Does it require a label, what the students are thinking critically?

- v. (Robin Parent) Inside the institutional structure of Cal Poly the faculty are not involved enough in thinking about diversity and inclusivity, not thinking about CT. We have to break that meta, thinking outside a pedagogical framework takes time.
- vi. (Mary P.) We should not think about it in a grandiose way. We should think about baby steps. We should look into how we can make our faculty better critical thinkers.
- vii. (Dawn J.) The theory is that faculty attention is in the wrong place. If we think about our first meeting, we were looking at students assignments, where do the CT is taking place. Now it's time to assess the faculty. Let's take a look what the gaps are in the CT in faculty, what the barriers are, if we can make a thorough investigation with faculty and understand how to impose that to the curriculum. It's the faculty that we need to reinforce to do CT.
- viii. (Robin P.) A good option can be mid-term chat, that is a wonderful option opportunity for the faculty to come and chat, but who signs up for that? A common excuse is, "I have a lot of things going on", so how do we engage them?
- ix. (Linda V.) We can start with a motivational analysis. We have to understand that what we are talking about is strategic. We should look at why something is happening in the first place, we need to go upstream to find out what's happening.
- x. (Mary P.) We can look downstream at the students and understand what is happening down here, or we can go upstream and look at the faculty.
- xi. (Linda V.) There is something happening that is creating a lack of diversity, we can go round and round and won't be able to find out what that is, until we go upstream where we might be able to figure out what's happening. There is something somewhere which is creating the problem. It might be about difference of opinion, something about the productivity and trying to make things run efficiently, we are scaling down everything and making similar patterns for everything.
- xii. The committee discusses the option of engaging program review. Committee's next engagement will be on diversity and inclusivity. Committee also agrees that a broad conversation about Sustain did not occur.
- xiii. Committee agrees that the boundaries between the faculty, between departments, between programs ought to be removed. Linda V refers to engagement of students being crucial. Until the boundaries are removed, no progress can be attained. She suggests there can be a conversation that can take place about what it means to be a 'Poly student'. Students have complained that, "We come here to learn by doing, but instead we learn by learning, from lectures." Linda V. thinks this is one source of the problem. The committee agrees that this is a huge challenge. And only forming taskforces will not help resolve this issue.
- xiv. Jack P. adds from his personal experience, his findings that CT cannot be implied, it must be made explicit in the classroom. It must be enculturated into various components of a lecture, in socratic questioning, woven into PowerPoint presentations, articulated in course rubrics and assignment descriptions. CT should not only be embedded in rubrics, but the rubrics must be discussed with the students. He expresses his sympathy for students who receive course materials from four professors a quarter and scramble to decipher what the professors' expectations are and how to receive a good grade in the class. Likewise, new professors complete their doctoral work and enter the classroom with strong discipline expertise, but no real foundation in effective pedagogy or guidance in eliciting CT from students.
- xv. Dawn J. proposes CT to be coagulated with faculty review. The members of the Committee express concerns that the option is a forceful proposition. Linda points to a previous meeting where the subject of discussion was quantitative reflection, where she proposed a similar idea, which other members of the committee were not comfortable with. As she describes, "Nobody

feels comfortable when someone starts to look at you.” She proposes an alternative, which she terms as ‘introducing care on the system’. She defines it as nurturing the people who are trying to produce. (Robin P.) adds that it is possible to ‘introduce care’ through review. She proposes that that by framing and shifting, the screen of fear can be removed.

- xvi. Mary urges that faculty can be trained thoughtfully within a limited amount of time. She asserts from her experience in CAFES, “We had a very supportive peer mentoring / evaluating system 10 years, ago. It was a good example. It was not senior faculty evaluating junior faculty. Rather the faculty had the freedom to pair up with anyone. So the model is there, we need to get the right propeller(?)” Answering a question from one of the committee members, she adds that the model came to an end due to change in leadership. Committee members added that if needed the colleges can design their own version of it. Some enthusiastic faculty may come up and say, “I will love to be a peer mentor.” The committee agrees that what really needs to be garnered is faculty motivation and involvement. A model can be developed which will ask to illustrate how CT is happening in a particular class and then evaluated. The committee members agree that there is a need to break the power barrier in order to facilitate an effective model.
- b. Goals for Next Meeting
  - i. The committee will pick back up with the discussion of leadership for the Critical Thinking community at the next meeting on June 27th.

#### Meetings for 2016

Friday, Jan 29, 2015 — 10:00am to 11:00 am (Kennedy 505b)  
 Friday, Feb 26, 2015 — 10:00am to 11:00 am (33 fisherscience)  
 Friday May 6, 2016 — 9:00am to 10:00am (1-301)  
 Friday June 27, 2016 — 9:00am to 10:00am (1-301)

## Critical Thinking Advisory Group

### GOALS:

#### Campus Culture

- To develop a campus culture that embeds critical thinking into its very fibers and uses language that reflects critical thinking at every turn.
- To develop a more discipline-based, discipline-rich discussion and understanding of critical thinking on campus.
- To develop a more interdisciplinary, culturally inclusive critical thinking model. To retain its audience and to increase its credibility and educational efficacy, (Cal Poly) needs to validate, publicly and often, that critical thinking can be practiced and assessed across all disciplines.
- To re-evaluate how to assess students' critical thinking skills holistically.
- \*\*\*To focus on existing success stories of departments achieving coherent critical thinking for their students.

1. Changing culture about assessment – more meaningful, holistic
  1. Change “assessment” to “appreciation” or “celebration”
  2. Exemplars from many disciplines (built into program review?) – self reflective component – asking depts. To add success stories. Identify where the competencies exist? How difficult was it to find them?
  3. We need to ask and collect these examples (samples with variety – written, tactile, informative, etc.).

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| <b>Teaching and Faculty Development</b> |
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- To develop a deeper faculty connection to critical thinking assignment design that leverages student understanding and transferability of CT skills across disciplines and between classes.
- To develop highly user-friendly, simple language regarding CT skills for faculty in general to use across disciplines and to encourage them to use that language within their own classes, with reference to their own projects and pedagogy.
- To develop guidelines for fostering (enhanced) critical thinking effectiveness among teaching faculty by developing institutional procedures that support such effectiveness. Consider such effectiveness as it connects to course load, distribution, and frequency as well as to service, engagement with the Cal Poly community, and professional development opportunities.
- To develop a program to foster interdisciplinary and team-teaching approaches to both CT and writing instruction. A pilot program that pairs interested faculty teaching upper-division and senior project seminars with interested, vetted CT instructors could help to complete the circle of research, writing, and CT begun in their A3 courses at a point where their ability to communicate discipline-specific content effectively becomes most critical to them and to future employers.
- Create a WAC program (as recommended by Dan Meltzer’s research)--a potential hub for disseminating critical thinking competencies to both faculty and students as well as a potential means of fostering increased community, professional currency, and collegial respect across disciplines and faculty ranks.
- Provide direct support and encouragement for those who are incorporating and/or experimenting with CT in their curricula (mentorship).
- Distribute CT courses among all faculty more regularly; create a minimum standard frequency for teaching lower-division CT-focused courses for all faculty in order to aid in closing the circle at the upper levels of student coursework.
- Focus on how departments build their curriculum on the GE A3 classes in an explicit way
- Find ways to include lecturers in more service-oriented projects and lessen their active teaching load to strengthen community relationships, increase overall teaching effectiveness, and provide a more humane, respectful teaching environment for working and teaching for all faculty.
- Shift the focus of improvement to a department-level which treats the major curriculum as a whole (versus looking at individual courses in a vacuum)
- Establish guidelines for increasing lecturer-tenured faculty interactions with respect to curricular

issues, especially those connected to foundation courses and CT.

### **Pedagogy and Practice**

- Create and disseminate standards for some consistent CT terminology applicable across courses, levels, and disciplines: this is key to helping students continue to recognize and develop those skills themselves, as they need explicit, recognizable terminology as well as modeling of the skills to which that terminology refers.
- Provide an easy, visual reference guide with examples of those principles across disciplines (an infographic, perhaps); ideal would be something for faculty (and students?) to pin up by their computers or even outside their doors, on their bulletin boards--and attractive enough that they would want to do so.
- To develop a set of reference points, faculty's own explicit conversancy with critical thinking models both within and beyond the writing context.
- To continue to support faculty to develop assignments that intentionally draw on students' critical thinking skills. We spent much of the last AY working on that question, but not sure we are continuing our focus there, even though assignment design was a factor in scoring student work. Badly framed and worded assignments can set students up to perform poorly.

### **Critical Thinking Resources**

- To build a campus archive/ clearinghouse for strong critical thinking assignments, tasks, and activities.
- To create rich, annotated exemplars of critical thinking assignments, tasks, and activities
- To foster more faculty collaboration and sharing of practices and ideas surrounding CT.
- Develop "bite-sized" strategies that are easy for faculty to implement in the classroom in order to gain a wider reach and more traction with CT across campus.

### **Assessment**

- To develop a well-defined plan and set of goals for the next review cycle built upon a solid understanding of the past cycle.
- To achieve buy-in at the department/program level of a campus-wide commitment to and assessment of critical thinking in every course
- Develop an approach to assessing implicit, material or performative products of critical thinking assignments as distinct from explicit, narrative products.
- Move away from crude college- or university-level measures -- they don't mean anything and can't be used in any practical way

- Share the results of the CT Assessment more widely with campus and determine ways to apply what we have learned from the assessment across campus.
- To reexamine recent critical thinking assessment components (the definition, rubric, assignments, methods, analysis, and conclusions) to determine what worked and what we might do differently.
- To create curricular maps for each College illustrating where students develop their critical thinking abilities (I, D, M); where are skills, disposition and application being explicitly taught?
- To locate where critical thinking is being explicitly or most effectively taught on campus and reach out to those instructors to share their pedagogy.

## QUESTIONS:

- How can the university build on the A3 coursework better to develop critical thinking?
- How does reflection increase one's critical thinking skills and how can we incorporate reflection into our curriculum more purposefully/meaningfully?
- How can we more clearly connect critical thinking to our Learn by Doing signature pedagogy?
- What are three tenets of critical thinking that can guide the university at all levels?
- What is the role of holistic neurological intelligence in informing our ability to "think" critically? The basis for this question is that there is research coming out of the neuroscience field that is pointing to the fact that we make decisions at unconscious levels prior to becoming aware of our "decision". We then "rationalize" the decision that we have made unconsciously. I'm wondering about how this neurological activity is informing what occurs to us as problematic behavior/decisions of our system.
- How can we foster a culture of sharing and exchange on campus that will produce more visible exemplars of critical thinking assignments, tasks, and activities?
- Which higher education institutions might serve as models for developing critical thinking assignments, tasks, and activities across the curriculum?
- Beyond writing, in what forms can critical thinking be identified and assessed?
- What outcomes does the CT leadership hope to achieve, and to what lengths are they willing to go to achieve them in terms of time, financial support, and outreach efforts?
- How and to what extent does the manner in which the university organizes, assigns, and schedules its 1) courses and 2) teaching force support the goals of critical thinking or demonstrate that the university has thought critically about not only efficiency but efficacy regarding those goals?
- How and to what extent do current guidelines and goals for critical thinking consider the fundamental role of emotion as both a predictor of bias in critical thinking effectiveness and assessment (inhibiting reasoning, critical thinking, and the objectivity required) and, at the same

time, the role of emotion as a necessary and useful skill in considering audience, purpose, and end-user experience?

- How does our polytechnic identity impact our students' abilities to think critically and how we teach critical thinking in our curriculum?
- Cal Poly students are high achievers academically. Are they better prepared to think critically as a result?
- Critical thinking is not "one size fits all." How can it be applied in different disciplines?
- How can we, as a group, work together to bridge differences in understanding about CT at Cal Poly and then disseminate our findings to the campus?
- In what ways can we leverage the student engagement in CT (co-curricular, free-speech wall, diversity rallies) to help push for change in courses, programs, and campus attitudes?
- How can we assure that students continue to develop as critical thinkers throughout their time at Cal Poly? The data shows that students may be plateauing.
- What does critical thinking look like in different disciplines?
- If practice is the most essential ingredient in developing critical thinking as a "habit of mind", what are the most effective Critical Thinking practice techniques that can be implemented across disciplines campus-wide?
- What strategies can we implement that assures all Cal Poly students graduate with Critical Thinking as a "habit of mind"?
- Can course evaluation questions and exit surveys better capture students' critical thinking exposure, development and experiences?