Work Packet 1

# **Chapter 1 Response:**

**To:** Professor Maddox

**From:** Jesse Ma

**Subject:** Exercise 1: Agency Website Analysis

*Industry:* Civil Engineering

*Agency:*Contra Costa Transportation Authority

*Website:* http://www.ccta.net/

*Characteristics:*

*Audience*

The CCTA website addresses residents of Contra Costa County and encourages them to be more involved in the county's development. The main article shown on the home page links to a questionnaire that lets county residents put in their thoughts into what projects the agency should invest in. The home page also contains many photos involving construction projects and different modes of transportation. This approach appeals more to the public because it lacks any engineering material incomprehensible to non-engineers.

*Problem Solving*

The homepage by itself does not provide much information for anyone seeking help. However, there are clearly visible tabs which allows the reader to learn more about the agency as well as everything the company does, i.e. project management, planning, funding regulation etc. There is also an additional resources tab for people seeking more information on a specific function of the agency. Public meeting dates and meeting minutes are also readily available to keep people up to date. The website provides a friendly user interface to give users all the information they need.

*Agency's Goals/Culture*

This agency's goal is to improve the transportation system in Contra Costa County. Various projects associated with this organization are listed in the projects tab. All these projects relieve transportation issues like vehicle safety and congestion. The agency prides itself in being a leader in innovative solutions. This is shown with the various support for ITS, Innovative Transportation Systems and CMS, Corridor Management Systems.

**To:** Professor Maddox

**From:** Jesse Ma

**Subject:** Exercise 2: CCTA Request for Proposal (RFP) Bus Study

*Bus Study RFP Link:* http://www.ccta.net/about/download/53ebe892810be.pdf

The CCTA RFP for an express bus study greatly emphasizes the guidelines for the measure of excellence discussed in this chapter. The document is very the clear and concise to ensure consultants know exactly what CCTA is looking for from the potential consultant agency.

The RFP starts off starts off with an introduction/scope of work and then continues on to the whole the whole RFP process. Throughout the whole document, main ideas/requirements are either bolded or italicized, or in separate paragraphs. This allows other agencies to quickly grasp the main idea and requirements outlined by CCTA. Required submittals and important dates are also stated in separate paragraphs to ensure the reader doesn't miss it. The document is also readily available for anyone to access online. The only item that this document lacks flexibility. Engineering projects can be ever changing and situation, thus a document that provides clear alternatives is hard to produce. But this weakness is rectified by having amendments to the RFP. Overall the document is very organized showing professionalism and experience in preparing RFP documents.

The CCTA RFP for an Express Bus Study is a very thorough document that exemplifies the guidelines for the measure of excellence. It does not dwell on unnecessary ideas making it very efficient for the reader. It is very organized exemplifying professionalism as well as being to the point in every task being outlined. Future modifications and amendments will come as needed based on the changing conditions for the study. If any problems arise, the public is encouraged to submit amendments to the RFP as necessary to CCTA.

# **Syllabus and Grading Contract Response:**

**To:** Professor Maddox

**From:** Jesse Ma

**Subject:** Syllabus and Grading Contract Response

*Syllabus Questions*

1. On page five, you emphasize that we need to participate in 87% of the class sessions. Where does that percentage come from?

2. Group peer review is outlined in the participation section. Numbers wise, how does that affect our grades in the class?

3. Will we be able to schedule difference office hours if the ones you put on the syllabus conflicts with our schedules?

*Grading Contract Questions*

1. For revisions, do we risk the chance that we may achieve a lower grade is the revision is worse than the original submitted work?

2. Work packets outlining work outcomes were discussed and shown in the contract. Will any of the packets be group work? If not, what aspect of the class will be group work?

3. In the syllabus, it says we have to participate in 87% of the class sessions but in the grading contract it specifies 90% for attendance and participation. Is that discrepancy intentional? Also, if we let you know ahead of time that we will miss a class for an academic reason, does that count against us?

# **“Literacy, Discourse, and Linguistics” Response:**

**To:** Professor Maddox

**From:** Jesse Ma

**Subject:** Response to "Literacy, Discourse, & Linguistics"

**1.** According to Gee, Discourse is a unique collection of actions, values, beliefs that someone learns through social interactions in one's which make up his or her identity. One can develop many Discourses throughout his or her life. Primary Discourses are a baseline and will usually not change overtime. Secondary Discourses are learned later on and can either be dominant or non-dominant. In the reading, Gee states that Discourses cannot be taught by conventional means, but are acquired through social interactions. This coincides with the definition above because values, actions, and beliefs cannot be directly taught. They are only acquired through social interaction. Because a Discourse is initially a whole new identity, it requires full mastery in order for it to be effective.

**2.** A Discourse community is an agency, organization, and/or group which share similar Discourses. In the reading, Gee points out that Discourses aren't just reading and writing, but also the way one acts, thinks, and believes. Therefore they are all or nothing qualities that require full mastery. In an industry setting such as interview sessions, Discourses of the hiring agency and the potential employee are tested to determine if they are a fit for each other. Ultimately it will require full mastery of certain Discourses will determine whether one is the right fit for the position.

**3.** Within the "educational industry" of Cal Poly, I am a part a discourse community called Chi Epsilon, a Civil/Environmental Engineering Honors society here at Cal Poly. This group supports civil engineering students by providing education opportunities such as review sessions for engineering exams as well as recruitment of industry speakers and career advisors.

**4.** Chi Epsilon is built upon four pillars: sociability, practicality, scholarship, and character, as well as a phrase: chi delta chi, which represents conception, design, and construction. These aspects are the values and beliefs of our society. We advocate and support Civil Engineering education as well as service to our community by working together. All of these aspects make up our society's Discourse community and operation.

# **Sequence 1 - Deconstructing an Industry:**

**To:** Professor Maddox

**From:** Jesse Ma

**Subject:** Deconstructing an Industry: Civil Engineering

The civil engineering industry is very broad and professions can range from design all the way to project management and construction. With so many specific professions to this industry, many Discourses have developed over time for the different professions. Industry employees will need to acquire specific Discourses based upon the specific profession he or she is in. The way these Discourses are acquired will not be by conventional teaching, but instead, by social observation and interaction. "Discourses are not mastered by overt instruction, but by enculturation into social practices..." (Gee, pg 7) This "apprenticeship" is very common in engineering practices because there is just so much more to learn besides technical skills such as an organization's structure, hierarchy, practices, values, beliefs, and the everyday working environment; all of which, make up a certain company's Discourse. Basic technical skills can be achieved through universities, but what separates school from the working world the Discourses one can only learn when he or she actually participates in the organization of interest. However, even with the broad range of professions, all of the professions share a common view of literacy with an emphasis on quick, accurate, and to the point communication. Now why are those aspects of literacy so special in this industry? Besides the high risk and liabilities associated with this kind of work, every profession the civil engineering industry will intermingle and work together for all projects. For example, a design for a housing project will require communication between structural, transportation, geotechnical, environmental, and water resources engineering professions. And this is just for the design phase. Civil engineering also encompasses project management and construction which requires even more communication; therefore, literacy is a standard form of communication for all these different professions in the industry. But even so, every profession operates a little differently. Taking a look at the Contra Costa Transportation Authority, a public agency within the civil engineering agency that has a primary focus on the transportation profession, we can see that it holds the same values of literacy has its own unique hierarchy and operation tactics.

The Contra Costa Transportation Authority is a subset of this industry and focuses on improving the transportation system within Contra Costa County. The agency plan and oversee ongoing and future projects as well as regulate the funding from a sales tax measure used for transportation projects. All this oversight and management requires excellent communication, therefore, literacy at this agency isn't just the ability to read and write, but also clarity and concision of the stringent requirements as well as comprehension of the heavy consequences that can rise due to inaccuracy. This agency subcontracts to many different engineering firms for various work from studies, to construction management and planning which requires drafting extremely clear RFPs, Request for Proposals and contracts to find the best fit companies within the industry for each task. CCTA and its members pride themselves in being more nimble than other government counterparts when it comes to making informed decisions, therefore verbal and written communication is very important. The agency consists of only twenty members who are responsible for managing billions of dollars in tax revenues making it essential to be able to communicate with each other and partnering agencies. Employees at CCTA have many responsibilities ranging from project management to transportation planning and public outreach. The magnitude of responsibilities bestowed upon this agency greatly outnumber the staff, therefore subcontracting and partnering with other agencies is a very common practice, thus requiring the comprehension of other company Discourses. Politics also plays a huge part in the decision making process, thus, members of this agency will have to be familiarized with the social hierarchy of the political world. But ultimately, the goal of this agency is clear, to improve the transportation system in Contra Costa County.

The civil engineering industry contains a broad range of professions which also comes with many Discourses. These Discourses will constantly clash because all the professions in the industry will be required to work together at some point; therefore, the many different smaller Discourses can make up one large Discourse community in which anyone in the civil engineering industry will be exposed to. All communication is standardized to ensure that all the different professions working on a project will be on the same page. But even so, the specific professions and industries will still have their own unique Discourses. Entering into this complex industry will not only require Discourses from the specific profession one wants to be a part of, but also the Discourses of civil engineering as a whole.