Appendix 3-C
APS Interview Manual Example

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Background Information for Interviewers

Campus Contacts for the Formal Interviews:
• List contacts for Technical Public Institution, Urban Private University, Suburban Private University, and Large Public University.

Campus Contacts for the Ethnographic Interviews:
• List contacts for Technical Public Institution, Urban Private University, Suburban Private University, and Large Public University.

APS Librarian: Librarian [aaaa@yahoo.com]

CAEE APS Database: Database Manager [bbbb@withinc.com]

Intranets: Intranets Manager [cccc@engr.lpub.edu]

Performance-Scoping Task: Researcher [dddd@cs.lpub.edu]

Calendar Scheduling:
• List contacts for Technical Public Institution, Urban Private University, Suburban Private University, and Large Public University.

Please contact CAEE Assistant Director [cccc@engr.lpub.edu] for general assistance with the scheduling tool.

General Help and Information: Please cc and/or call the researcher [phone #] on all questions related to the interview protocols, process, etc. so we can keep track of what issues are coming up and also direct you to the right persons and resources.

Interview Descriptions:
• No students will receive both interview types.
• All 40 students per campus will do the performance task as part of the interview.
• There will be a total of 48 events organized as follows:
  o 24 formal interviews and performance tasks with the unobserved students
  o 16 ethnographic interviews and performance task with the eight observed students and eight unobserved students who were “combo” students during the ’04 interview year

Formal Interview Packets: What you need to have in hand before each interview
For each formal interview, print out a copy of each of the following for each respondent:
  1. APS Formal Interview Protocol 2006
  2. Your School’s Preamble
  3. Performance Task Sheet
  4. Extra Blank Paper for Performance Task
  5. Interviewer Reflection Sheet
The only sheets each respondent actually sees are: 1) the Performance Task Sheet; and 2) the Preamble.

A packet with all of the above has been created with the following names:
- TPub APS Formal Interview Packet 2006
- UPri APS Formal Interview Packet 2006
- SPri APS Formal Interview Packet 2006
- LPub APS Formal Interview Packet 2006

Formal Interview Reminders:
- Follow the protocol.
- Ask complete questions.
- Remember to ask “And why” for certain questions.
- Do not skip/omit questions. If respondent asks you to skip a question, be sure to return to the question before administering the Performance Task.
- Do not initiate personal conversations.
- Use appropriate probes when respondents do not answer the question. (See Probes for Formal Interviews and Usefulness Document for question’s objectives.) However, do not ask new questions.
- Do not offer suggestions as to how the respondent should answer the question. (For example, do not say that other students have been answering the question such-and-such a way.)
- Make sure you complete the Interviewer Reflection form immediately after the interview is completed and preferably, before the next respondent arrives.
- Remember, this is NOT an ethnographic interview.
- Do not offer advice during the interviews. This is not a counseling session. (If a major issue arises, make a note of it in the Interviewer Reflection Document.)

Ethnographic Interview Packets: What you need to have in hand before each interview
For each ethnographic interview, print out a copy of each of the following for each respondent:
1. APS Ethnographic Interview Protocol 2006
2. Your School’s Preamble
3. Performance Task Sheet
4. Extra Blank Paper for Performance Task

The only sheets each respondent actually sees are: 1) the Performance Task Sheet; and 2) the Preamble.

A packet with all of the above has been created with the following names:
- TPub APS Ethnographic Interview Packet 2006
- UPri APS Ethnographic Interview Packet 2006
- SPri APS Ethnographic Interview Packet 2006
- LPub APS Ethnographic Interview Packet 2006
Before each respondent arrives:
- Check the batteries and the recorder. Make sure there is enough space on the memory card.
- Check the microphone battery.
- Make sure your interview room does not have any distractions (turn off phones, close door, etc.).

INTERVIEW EMAIL NOTIFICATION

Formal Interview

Email for a Person doing the Scheduling

Greetings from the Center for the Advancement of Engineering Education research team!

We will be conducting the APS interviews from (START DATE) through (END DATE). We anticipate that it will take approximately one hour to complete the interview. However, recognizing that interview length naturally will vary for each individual (for example some interviews may take as few as 45 minutes, while others may take up to an hour and 15 minutes), we are asking all participants to sign up for 1½ hour slots to avoid scheduling overlaps.

To arrange your interview, please call (NAME) at (Number) or report to (Building Name, Room #____) to select a date and time that is convenient to your schedule. The interviews will be held in the (Building Name, Room #____).

Your continuous participation in the APS is valuable to us. Thank you again for helping us to improve the quality of engineering education.

Sincerely,

Academic Pathways Study Coordinator
Center for the Advancement of Engineering Education

Email for Calendar System Scheduling

Greetings from the Center for the Advancement of Engineering Education research team!

We will be conducting the APS interviews from (START DATE) through (END DATE). We anticipate that it will take approximately one hour to complete the interview. However, recognizing that interview length naturally will vary for each individual (for example some interviews may take as few as 45 minutes, while others may take up to an hour and 15 minutes), we are asking all participants to sign up for 1½ hour slots to avoid scheduling overlaps.
To arrange your interview, please log on to our on-line interview scheduling system at:

(LINK)

In the “LAST NAME” field, type: #LoginID#
In the “PASSWORD” field, type: #Password#

You have until 4/14/2006, 5:00 pm to sign up. You will not be able make any changes on the system. If you need to make a change after the 14th due to circumstances beyond your control, please contact your interviewer directly at the email address provided by the system. If you have difficulty using the scheduling system, please email (NAME) at (EMAIL ADDRESS).

The interviews will be held at the (Building Name, Room #____). Your interviewer will greet you at (location).

Your continuous participation in the APS is valuable to us. Thank you again for helping us to improve the quality of engineering education.

Sincerely,

Academic Pathways Study Coordinator
Center for the Advancement of Engineering Education

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Ethnographic Interview

Email for a Person doing the Scheduling

Greetings from the Center for the Advancement of Engineering Education research team!

We will be conducting the APS interviews from (START DATE) through (END DATE). We anticipate that it will take approximately 90 minutes to complete the interview. However, recognizing that interview length naturally will vary for each individual, we are asking all participants to sign up for two-hour slots to avoid scheduling overlaps.

To arrange your interview, please call (NAME) at (Number) or report to (Building Name, Room #____) to select a date and time that is convenient to your schedule. The interviews will be held in the (Building Name, Room #____).

Your continuous participation in the APS is valuable to us. Thank you again for helping us to improve the quality of engineering education.

Sincerely,
Greetings from the Center for the Advancement of Engineering Education research team!

We will be conducting the APS interviews from (START DATE) through (END DATE). We anticipate that it will take approximately 90 minutes to complete the interview. However, recognizing that interview length naturally will vary for each individual, we are asking all participants to sign up for two-hour slots to avoid scheduling overlaps.

To arrange your interview, please log on to our on-line interview scheduling system at:

(LINK)

In the “LAST NAME” field, type: #LoginID#
In the “PASSWORD” field, type: #Password#

You have until 4/14/2006, 5:00 pm to sign up. You will not be able make any changes on the system. If you need to make a change after the 14th due to circumstances beyond your control, please contact your interviewer directly at the email address provided by the system. If you have difficulty using the scheduling system, please email (NAME) at (EMAIL ADDRESS).

The interviews will be held at the (Building Name, Room #____). Your interviewer will greet you at (location).

Your continuous participation in the APS is valuable to us. Thank you again for helping us to improve the quality of engineering education.

Sincerely,

Academic Pathways Study Coordinator
Center for the Advancement of Engineering Education
Preambles

Technical Public Institution Preamble

Preamble for Investigative Procedures
NSF Center for the Advancement of Engineering Education
Urban Private University

This is an investigation in the Center for Engineering Education. This study is being conducted by a CAEE researcher. The purpose of this study is to gain an in-depth understanding of how engineering students explore and utilize the educational opportunities available to them in college, plan and carry out their curriculums (successfully or unsuccessfully), and navigate the process of becoming engineers.

The purpose of the individual interview is to obtain a deeper understanding of students’ perceptions, expectations, motivations, practices, and experiences in engineering. We are interested in your perceptions of your experiences inside and outside of the classroom. In no way is this interview designed to individually evaluate a person’s abilities. The interview is not diagnostic. Please answer the interview questions to the best of your ability.

We anticipate minimal psychological risks and personal time inconvenience. Participants will be compensated $175.00 per year for participating in a combination of survey, interview, and observation methods. Annual payments will be made at the end of spring semester upon continuous participation for that school year.

All of the information that we gather on this project will remain strictly anonymous and will not identify you in any way. The interview sessions will be audio taped, and the ethnographic sessions will be audio taped, photographed, and videotaped so that we can review them later. However, all identifying information will be removed and replaced by code numbers. Participant codes will be kept in a logbook, which will be stored in a locked file cabinet separate from the actual data information. We will keep all materials in a secure place in our university office.

The participants should be 18 years of age or older and in good health. If you are younger than 18, please contact the investigator immediately.

The Project Researcher may be contacted at [phone #] in the event that you have any questions regarding your participation in this project. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Office of Executive Secretary, Urban Private University Institutional Review Board at [phone #].
Urban Private University Preamble

Preamble for Investigative Procedures
NSF Center for the Advancement of Engineering Education
Urban Private University

This is an investigation in the Center for the Advancement of Engineering Education. This study is being conducted by a CAEE researcher. The purpose of this study is to gain an in-depth understanding of how engineering students explore and utilize the educational opportunities available to them in college, plan and carry out their curriculums (successfully or unsuccessfully), and navigate the process of becoming engineers.

The purpose of the individual interview is to obtain a deeper understanding of students’ perceptions, expectations, motivations, practices, and experiences in engineering. We are interested in your perceptions of your experiences inside and outside of the classroom. In no way is this interview designed to individually evaluate a person’s abilities. The interview is not diagnostic. Please answer the interview questions to the best of your ability.

We anticipate minimal psychological risks and personal time inconvenience. Participants will be compensated $175.00 per year for participating in a combination of survey, interview, and observation methods. Annual payments will be made at the end of spring semester upon continuous participation for that school year.

All of the information that we gather on this project will remain strictly anonymous and will not identify you in any way. The interview sessions will be audio taped, and the ethnographic sessions will be audio taped, photographed, and videotaped so that we can review them later. However, all identifying information will be removed and replaced by code numbers. Participant codes will be kept in a logbook, which will be stored in a locked file cabinet separate from the actual data information. We will keep all materials in a secure place in our university office.

The participants should be 18 years of age or older and in good health. If you are younger than 18, please contact the investigator immediately.

The Project Researcher may be contacted at [phone #] in the event that you have any questions regarding your participation in this project. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Office of Executive Secretary, Urban Private University Institutional Review Board at [phone #].
Suburban Private University Preamble

Preamble for Investigative Procedures
NSF Center for the Advancement of Engineering Education
Suburban Private University

This is an investigation in the Center for Design Research. This study is being conducted by a CAEE researcher. The purpose of this study is to gain an in-depth understanding of how engineering students explore and utilize the educational opportunities available to them in college, plan and carry out their curriculums (successfully or unsuccessfully), and navigate the process of becoming engineers.

The purpose of the individual interview is to obtain a deeper understanding of students’ perceptions, expectations, motivations, practices, and experiences in engineering. We are interested in your perceptions of your experiences inside and outside of the classroom. In no way is this interview designed to individually evaluate a person’s abilities. The interview is not diagnostic. Please answer the interview questions to the best of your ability.

We anticipate minimal psychological risks and personal time inconvenience. Participants will be compensated $175.00 per year for participating in a combination of survey, interview, and observation methods. Annual payments will be made at the end of spring semester upon continuous participation for that school year.

All of the information that we gather on this project will remain strictly anonymous and will not identify you in any way. The interview sessions will be audio taped, and the ethnographic sessions will be audio taped, photographed, and videotaped so that we can review them later. However, all identifying information will be removed and replaced by code numbers. Participant codes will be kept in a logbook, which will be stored in a locked file cabinet separate from the actual data information. We will keep all materials in a secure place in our university office.

The participants should be 18 years of age or older and in good health. If you are younger than 18, please contact the investigator immediately.

The Project Researcher, may be contacted at [phone #] in the event that you have any questions regarding your participation in this project. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Administrative Panels Office, Suburban Private University [contact info].
Large Public University Preamble

PREAMBLE FOR INVESTIGATIVE PROCEDURES
ACADEMIC PATHWAYS LONGITUDINAL STUDY
LARGE PUBLIC UNIVERSITY

This is an investigation in the College of Education. This study is being conducted by CAEE researchers. The purpose of this study is to gain an in-depth understanding of how engineering students explore and utilize the educational opportunities available to them in college, plan and carry out their curriculums (successfully or unsuccessfully), and navigate the process of becoming engineers.

The purpose of the individual interview is to obtain a deeper understanding of students’ perceptions, expectations, motivations, practices, and experiences in engineering. We are interested in your perceptions of your experiences inside and outside of the classroom. In no way is this interview designed to individually evaluate a person’s abilities. The interview is not diagnostic. Please answer the interview questions to the best of your ability.

We anticipate minimal psychological risks and personal time inconvenience. Participants will be compensated $175.00 per year for participating in a combination of survey, interview, and observation methods. Annual payments will be made at the end of spring semester upon continuous participation for that school year.

All of the information that we gather on this project will remain strictly anonymous and will not identify you in any way. The interview sessions will be audio taped, and the ethnographic sessions will be audio taped, photographed, and videotaped so that we can review them later. However, all identifying information will be removed and replaced by code numbers. Participant codes will be kept in a logbook, which will be stored in a locked file cabinet separate from the actual data information. We will keep all materials in a secure place in our university office.

The participants should be 18 years of age or older and in good health. If you are younger than 18, please contact the investigator immediately.

The Principal Investigator and the Research Associate, may be contacted at [phone #] in the event that you have any questions regarding your participation in this project. If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - the Human Subjects Division [contact info].
ACADEMIC PATHWAYS STUDY WINTER 2006
FORMAL INTERVIEW PROTOCOL
TECHNICAL PUBLIC INSTITUTION/URBAN PRIVATE UNIVERSITY
SUBURBAN PRIVATE UNIVERSITY/LARGE PUBLIC UNIVERSITY

SECTION I.

INSTRUCTIONS
Good morning (afternoon, evening). My name is ___. Thank you for coming. This interview involves two parts. The first part is an interview in which I will ask you about your experiences as a student at this university. The purpose is to get your perceptions of your experiences inside and outside of the classroom. There are no right or wrong, or desirable or undesirable answers. I would like you to feel comfortable with saying what you really think and how you really feel. The second part is a short pencil-and-paper task, and I will give you specific instructions for completing that task once we have finished with the interview. The entire process should take approximately an hour to complete.

The results of this research will provide useful information to engineering educators in structuring effective educational programs to help them succeed in college.

TAPE RECORDER INSTRUCTIONS
If it is okay with you, I will be recording our conversation to get all the details but at the same time be able to carry on an attentive conversation with you. I assure you that all your comments will remain confidential. I will be compiling a report, which will contain all participants’ comments, but have no references to individuals.

PREAMBLE/CONSENT FORM INSTRUCTIONS
Before we get started, please take a few minutes to read this preamble

(Hand Respondent (R) preamble.)

(After R returns preamble, turn tape recorder on.)

Verbally ID the Recording
1) Date; 2) Interviewer Name; 3) Time; 4) Location (Room # and School); 5) Type of Interview (Formal); 6) Respondent ID

Q1. What is your major?

Q1a. When did you declare this major?
Q2. Are you a member of any engineering student organizations on campus?

Yes  No  →  Skip to Q3

Q2a. What are those organizations?

Q2b. What are the most helpful aspects of that/those organization(s)?

Q3. In your own words, would you please define engineering?

Q4. Are there particular skills that you would say are important for an engineer to have?

Yes  No  →  Skip to Q5

Q4a. (IF NOT ALREADY ANSWERED) What are those skills?

Q4b. Of the skills that you mentioned, which ones do you possess?

Q4c. Please tell me how you developed your skill(s)?

Q5. Have you had any engineering internship experiences?

Yes  No  →  Skip to Q6

Q5a. (IF NOT ALREADY ANSWERED) Please describe those experiences.
Q6. Have you had any experiences inside or outside of your classes that have enabled you to develop general engineering knowledge?

<table>
<thead>
<tr>
<th>Yes</th>
<th>If R asks for definition</th>
<th>No</th>
<th>Skip to Q7</th>
</tr>
</thead>
</table>

Say “Whatever it means to you – anything that comes to your mind”

Q6a. (IF NOT ALREADY ANSWERED) Please describe those experiences.

Q7. Have you had any experiences inside or outside of your classes that have prevented you from developing general engineering knowledge?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Skip to Q8</th>
</tr>
</thead>
</table>

Q7a. (IF NOT ALREADY ANSWERED) Please describe those experiences.

Q8. Have you had any experiences inside or outside of your classes that have enabled you to solve problems?

<table>
<thead>
<tr>
<th>Yes</th>
<th>If R asks for definition</th>
<th>No</th>
<th>Skip to Q9</th>
</tr>
</thead>
</table>

Say “Whatever problems come to your mind”

Q8a. (IF NOT ALREADY ANSWERED) Please describe those experiences.
Q9. Have you had any experiences inside or outside of your classes that have prevented you from solving problems?

- Yes
- No → Skip to Q10

Q9a. (IF NOT ALREADY ANSWERED) Please describe those experiences.

Q10. Where do you see evidence of your engineering abilities?

- If R asks what type of abilities
  SAY “Whatever it means to you – anything that comes to your mind”
- Otherwise, after R responds go to Q11

Q11. On a scale from 0 – 10, (where 0 = not confident at all and 10 = extremely confident), how confident are you in your math ability? _____ (ONLY ACCEPT WHOLE NUMBERS.)

Q11a. Describe the experiences that led you to rate yourself in this way.
(REMIND THEM OF SCORE IF THEY ASK.)

Q12. On a scale from 0 – 10, (where 0 = not confident at all and 10 = extremely confident), how confident are you in your science ability? _____ (ONLY ACCEPT WHOLE NUMBERS.)

Q12a. Describe the experiences that led you to rate yourself in this way.
(REMIND THEM OF SCORE IF THEY ASK.)

Q13. On a scale from 0 – 10, (where 0 = not confident at all and 10 = extremely confident), how confident are you in your design ability? _____ (ONLY ACCEPT WHOLE NUMBERS.)
Q13a. Describe the experiences that led you to rate yourself in this way. (REMIND THEM OF SCORE IF THEY ASK.)

Q14. Are there any aspects of engineering that you particularly like?

Yes  No → Skip to Q15

Q14a. (IF NOT ALREADY ANSWERED) What are some of those?

Q15. Are there any aspects of engineering that you particularly dislike?

Yes  No → Skip to Q16

Q15a. (IF NOT ALREADY ANSWERED) What are some of those?

Q16. In general, how do you feel about engineers?

Q16a. (IF NOT ALREADY ANSWERED) And why?

Q17. As a student, how do you identify with practicing engineers?

If R asks for clarification  Otherwise, after R responds go to Q18

SAY “In what ways do you see yourself as a practicing engineer?”

Q18. How do you believe members of other professions feel toward engineers?
Q18a. (IF NOT ALREADY ANSWERED) And why?

Q19. How important is being an engineering student to how you feel about yourself?

Q19a. (IF NOT ALREADY ANSWERED) And why?

Q20. How committed are you to pursuing an engineering major?

Q20a. (IF NOT ALREADY ANSWERED) And why?

Q21. What does diversity mean to you?

Q22. To what extent do you consider your school to be diverse?

Q22a. (IF NOT ALREADY ANSWERED) And why?

Q23. Does your gender affect your views of becoming an engineer?

Yes

No

Skip to Q24

Q23a. (IF NOT ALREADY ANSWERED) How?

Q24. Does your racial identity affect your views of becoming an engineer?

Yes

No

Skip to Q25

Q24a. (IF NOT ALREADY ANSWERED) How?
Q25. Are any of your family members or close acquaintances working engineers?

Yes  No → Skip to Q26

Q25a. (IF NOT ALREADY ANSWERED) Who?

Q25b. Did their experiences influence your decision to become an engineer?

Yes  No → Skip to Q26

Q25c. (IF NOT ALREADY ANSWERED) How?

Q26. Do you have a mentor?

Yes  No → Skip to Q27

Q26a. (IF NOT ALREADY ANSWERED) How did you get affiliated with your mentor?

Q26b. Has your mentor influenced your decision to continue majoring in engineering?

Yes  No → Skip to Q27

Q26c. (IF NOT ALREADY ANSWERED) How?

Q27. When is your expected graduation date?

Q27a. What do you see yourself doing after graduation? (Have R be specific)
Q28. At this institution, are there any aspects of majoring in engineering that are particularly difficult in achieving your academic goals?

Yes  No  Skip to Q29

Q28a. (IF NOT ALREADY ANSWERED) Please tell me about those difficulties.

Q28b. How do you deal with those difficulties?

Q29. At this institution, are there any aspects of majoring in engineering that are particularly helpful in achieving your academic goals?

Yes  No  Skip to SECTION II

Q29a. (IF NOT ALREADY ANSWERED) Please tell me about those helpful aspects.
Section 3: Formal Interview Debriefing

(READ ALL OF THE FOLLOWING ALOUD TO R.)

Thank you very much for coming this morning (afternoon, evening). Your time is very much appreciated and your comments have been very helpful.

The purpose of this interview is to better understand students’ perceptions of their experiences inside and outside of the classroom. We are interested in your opinions and your reactions. In no way is this interview designed to individually evaluate a person’s abilities. The task is not diagnostic, nor can it provide a measure of the “quality” of your performance. Your only requirement was to do the best job that you could.

Your identity will be kept anonymous during all phases of this study including any experimental writings, published or not. Procedures for maintaining confidentiality are as follows: (1) individual participants’ results will be pooled with group results; and (2) participants should not place any identifying information on data collection instruments. (Such identifiers include name, social security number, student identification number, specific birth data, telephone number, address, etc.)

DQ1. Is there any other information regarding your experience as an engineering major or at this institution that you think would be useful for me to know?

Yes

No

DQ1a. (IF NOT ALREADY ANSWERED) Please share that information with me.

Again, thank you for participating. (TURN TAPE-RECORDER OFF.)
Section 4: Formal Interview Interviewer Reflection

INSTRUCTIONS:
After the respondent leaves the room, please take a couple of minutes to indicate your reactions and observations about the interview. An electronic copy of this form has been provided. Feel free to use this hard copy for your own notes, but please submit the electronic copy for official use.

<table>
<thead>
<tr>
<th>Your name (the interviewer):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your race:</td>
</tr>
<tr>
<td>Your gender:</td>
</tr>
<tr>
<td>Your age:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respondent ID No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Interview:</td>
</tr>
<tr>
<td>Please describe the respondent’s attitude toward you and the interview:</td>
</tr>
<tr>
<td>Please describe any unusual circumstances and/or events that had any bearing on the interview such as interruptions, language difficulty, etc.:</td>
</tr>
<tr>
<td>Please describe anything else that happened during the interview that has any bearings on the study’s objectives:</td>
</tr>
<tr>
<td>Additional comments:</td>
</tr>
</tbody>
</table>
## Probes for Formal Interview

<table>
<thead>
<tr>
<th>Interviewer’s Probe</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat Question............................................</td>
<td>RQ</td>
</tr>
<tr>
<td>Anything else?...............................................</td>
<td>AE or Else?</td>
</tr>
<tr>
<td>Any others?..................................................</td>
<td>AO?</td>
</tr>
<tr>
<td>How do you mean?............................................</td>
<td>How mean?</td>
</tr>
<tr>
<td>Could you tell me more about your thinking on that?......</td>
<td>Tell more</td>
</tr>
<tr>
<td>Would you tell me what you have in mind?...................</td>
<td>What in mind?</td>
</tr>
<tr>
<td>What do you mean?..........................................</td>
<td>What mean?</td>
</tr>
<tr>
<td>Why do you feel that way?.................................</td>
<td>Why?</td>
</tr>
<tr>
<td>Which would be closer to the way you feel?................</td>
<td>Which closer?</td>
</tr>
</tbody>
</table>

Submission Instructions for Formal Interviews

Formal Interview Protocol
Be sure to write the Respondent’s ID Number on the first page of your Formal Interview Protocol sheet. (The paper document is the protocol sheet that the interviewer used during the interview and wrote notes on.) Keep the original protocol at your institution in a secure location.

Digital Audio Files
At the end of the interview, upload the audio file in the Interview Data folder of the CAEE Academic Pathways Database. Please read the section on “CAEE APS Database File Naming Protocol” for more information. Save a copy of the audio file on a compact disc to be kept at your institution.

Please read the section on “The Transcription Process: For the Researcher” for more information.

Interviewer Reflection
Each interviewer will create an Interviewer Reflection document for each respondent. Here is an example of how this document would be named according to the File Naming Protocol:

**RespondentID-INTS-060329-3-N1_1-KE.doc**

<table>
<thead>
<tr>
<th>RespondentID</th>
<th>Respondent ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTS</td>
<td>Formal Interview</td>
</tr>
<tr>
<td>Date</td>
<td>Date in “YYMMDD” format</td>
</tr>
<tr>
<td>2</td>
<td>EventID indicating that this is data from the second formal interview</td>
</tr>
<tr>
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<tr>
<td>KE</td>
<td>ResearcherID initials</td>
</tr>
<tr>
<td>.doc</td>
<td>Word file extension</td>
</tr>
</tbody>
</table>

At the completion of all of the Formal Interviews, each school will have 24 Interviewer Reflection documents, one for each respondent. These 24 files should be zipped into one file using a program such as Aladdin’s StuffIt or WinZip. The one zipped file of each schools collection of Interviewer Reflections should be given a name similar to the following:

**SCH01-INTS-3-N1_1.zip**

<table>
<thead>
<tr>
<th>SCH01</th>
<th>School and Cohort 1</th>
</tr>
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<tbody>
<tr>
<td>INTS</td>
<td>Formal Interview</td>
</tr>
<tr>
<td>3</td>
<td>EventID indicating that this is data from the third formal interview</td>
</tr>
<tr>
<td>N1_1</td>
<td>ItemID consisting of: Notes (Data Type), 1 (Item Number), 1 (Revision Number)</td>
</tr>
<tr>
<td>.zip</td>
<td>Zipped file extension</td>
</tr>
</tbody>
</table>

This one zipped file should be uploaded into the CAEE APS database.
Academic Pathways Study
Ethnographic Interview Protocol
Interviewer’s Guide
January 23, 2006

This document is intended as a guide to be used by interviewers in conducting the APS Ethnographic Interviews. It is not a “script.” Because ethnographic interviews are intended to be semi-structured and open-ended, the exact wording of the questions will change depending on the context. Furthermore, the questions below are not meant to “stand alone,” but rather to elicit responses that will be followed up on by the interviewer in order to explore the participant’s perspective further.

The questions are listed in the order that we would like topics to be introduced. However, you might find that a participant brings up a topic on her/his own before the scheduled point in the interview. For example, a participant might mention issues of gender or ethnicity before you have reached these topics in Question 17. In this case, it is useful and perfectly appropriate to explore the topic when it is first introduced. (The later “slot” for that topic can then be used to address the area further, if in your judgment there is more insight into the participant’s perspective to be gained from this.)

There is no scripted introduction to be used in the interviews with the 8 ethnographic participants—we want you to adopt the style, phrasing, and tone that are most comfortable for you. In general, we would suggest that you first introduce, or re-introduce, yourself. Remind the participant that this is the yearly interview that he or she has agreed to participate in, and that the interview will last approximately 2 hours. Tell the participant that you will be talking with her/him about a number of topics that are of interest for the Academic Pathways Study. These topics are about the student and his/her experiences in and out of school. Stress that you’re interested in the student’s ideas, opinions, and perspectives, and let her/him know that you appreciate whatever he/she is able to tell you about the topics you’ll be exploring.

We have tried to indicate the kinds of follow up questions you might make in the context of the questions below. However, following up on evaluative statements is generally important, and warrants mentioning here. Whenever possible, follow up on subjects’ evaluative statements: e.g., S: “That was a hard class” …Int: “What was hard about it?” or “How was it hard?”; S: “I like math”…Int: “What do you like about math? Can you give me a specific example?”

Before interviewing a subject, remember to re-read and familiarize yourself with relevant data collected on that subject, including fieldnotes, the Year 1 ethnographic interview, and any informal interviews that may have been conducted. Also review the current state of the analysis of that subject’s data. This will allow you, on a case-by-case basis, to tailor questions to a particular subject. This will greatly increase the comparative power of the interviews for the longitudinal aspect of the study.
Please feel free to use your judgment to explore potential points of interest that might arise, whether or not they are included in the questions below. Sometimes the most important issues have not been anticipated by the researchers at the outset.
1. Tell me how things are going for you.
   a. Explore further on specifics of response, if student doesn’t provide details: e.g., if student says, “It’s been a lot harder than I thought,” ask, “In what ways?”

Note: Follow the subject’s lead on how to handle this question – in some cases, it might be best used as an icebreaker, just to begin the conversation and move on to other questions. However, some subjects (most, based on our informal interviews at LPub this year) will have quite a lot to say, on a range of topics. In this case, don’t be too quick to move off of this question – explore all of the issues the subject seems willing to get into.

b. Before moving on to other questions, give subject a chance to say more, e.g., “What else is happening with you these days?”

2. We talked about this some last year, but I’d like to ask about it again: Can you tell me how you became interested in engineering?
   a. Explore further, if needed, with: What were some of the experiences that were important in getting you interested in engineering?

3. Thinking about yourself before you came to [School Name] – are there things that you would say prepared you to succeed in engineering?

4. What are you majoring in (or planning to major in)?
   a. How did you choose (xxx)?
   b. What other majors did you consider?
   c. What other kinds of engineering did you consider?
   d. Are there certain fields of engineering that you just can’t see yourself going into? Why?
5. Can you take me through a typical day for you here at [School Name]?

6. I’d like to ask about your classes and other academic experiences you’ve had since you’ve been here.
   
a. Have you had academic experiences here so far that you would describe as particularly good? Can you tell me about one of those? *If necessary, make sure to follow up with a question like: “So what was it that made that a good experience?”*

   b. Have you had academic experiences that you would describe as particularly bad? Can you tell me about one of those? *Again, if necessary, make sure to follow up with a question like: “So what was it that made that a bad experience?”*

7. How would you describe yourself as a student?
   
a. *Make sure to explore further on issues of change and development brought up by the subject, e.g., “I’m a lot different now than I was last year.”*

8. Let me ask you to think about the other engineering students you’ve come across here. Would you say that in general they are more different from you or more similar?
   
a. *Explore further: “How are they similar?” (or “How are they different?”)*

9. Have you had much contact with non-engineering students? Would you say that there are things that distinguish engineering students from students in other majors?
   
a. *Explore further as needed to get details.*
10. What would you say has been the most difficult thing here for you so far? *Students might mention non-academic difficulties. Make sure to explore further to get at academic difficulties.*

a. How did you handle (or how are you handling) that?

*The following sub-questions can be asked if time permits.*

b. What else have you found difficult?

   i. How have you handled that?

c. Do you have strategies for handling difficult situations?

   i. *Explore further for specific examples.*

11. What’s been easy for you here so far?

a. *Explore further if subject doesn’t elaborate.*

12. Has anything surprised you about your classes?

13. Let me ask you about your strategies for deciding what classes to take.

a. What kinds of things do you think about when you’re deciding what classes to take?

b. Do you talk to other people when you’re making your decisions about classes?

   i. Explore further to get at who these other people are as well as the role they play.

*Note: Be prepared to explore further on issues such as the following: what is an easy (or good, or interesting, etc.) course, what is a hard (or bad, or boring, etc.) course; what’s an easy (or good, etc.) professor, what’s a hard (or bad, etc.) professor; and how do they know about particular professors, courses, etc.*
14. Are there any groups that you’ve become part of since you came here to [Name of Institution]?

   a. Explore further for each group (or, if there are a lot, for what the subject would say are the “most important” ones)
      
      i. Can you tell me about [group]?

   Note: This may need some prompting to establish the range of places we are interested in, both on and off campus, both social and para-professional. Explore further to see if they have answered with respect to both on and off campus groups.

15. Think about your professors here at [Name of Institution]. What would you say they think it means to be a good engineer?

   a. How does that fit with your own image of a good engineer?

16. Knowing what you know now, as you look back on the time that you’ve spent here, is there anything that you would do differently?

17. One of the things that our research team is interested in is diversity in engineering and engineering education, in terms of race, ethnicity, and gender. I’d like to ask you some questions related to this.

   a. (This is a question that you’ve already answered on the survey, but your survey responses aren’t available to me yet.) Can you tell me how you identify yourself racially or ethnically?

   b. Are there supports or barriers, advantages or disadvantages, for you as a [ethnic identification] engineering student?

      i. How about for people of other racial or ethnic groups?
c. Do you think that there are differences between the experiences of male and female engineering students?

d. How has it been for you here, as a [male/female] engineering student?

18. I want to ask you to think about the rest of the time that you’ll be spending at [School Name].

a. What are you looking forward to during the rest of your time here?

b. What are you concerned about?

19. Okay, let’s imagine it’s a few years from now, and you’ve graduated with a degree in (student’s planned major).

a. What’s next for you?

   i. Or, if not planning on becoming an engineer, explore why they’ve made this decision.

b. What do you imagine yourself doing on a day-to-day basis?

   i. Or, if not planning on becoming an engineer: What do you imagine engineers do on a day-to-day basis?

c. What would you say it takes to be a good (insert student’s career choice)?

d. How are you at (insert characteristics student mentions)?

e. Are there things about yourself that you think you need to work on to become a successful (xxx)?
20. Here’s a more personal question. I’ve been asking a lot of questions so far about your academic experiences. What else do you do in your life besides being an engineering student?

(Question 23 is partially redundant with question 17; ask if time permits.)

21. Here’s a scenario I want to ask you about: There’s a high school student who’s interested in pretty much what you were interested in when you were in high school. This student comes to you for advice. Knowing what you now know, what advice would you give her/him?

22. If you could whisper in the ear of the people who set up the pre-engineering (or engineering) program here at [Name of Institution], what advice would you give them about improving things?

23. Is there anything that I haven’t asked you about that you think I should? Anything else that’s relevant in an interview like this, do you think?

24. Do you have any questions you’d like to ask me?
Submission Instructions for Ethnographic Interviews

Ethnographic Interview Protocol
Be sure to write the Respondent’s ID Number on the first page of your Ethnographic Interview Protocol sheet. (The paper document is the protocol sheet that the interviewer used during the interview and wrote notes on.) Keep the original protocol at your institution in a secure location.

Digital Audio Files
At the end of the interview, upload the audio file in the Interview Data folder of the CAEE Academic Pathways Database. Please read the section on “CAEE APS Database File Naming Protocol” for more information. Save a copy of the audio file on a compact disc to be kept at your institution.
Section 2: Performance Task Background
Performance Task Protocol and Respondent Question Sheet

Respondent ID: ____________________

**PERFORMANCE TASK**

**TRANSITION FOR ETHNOGRAPHIC INTERVIEWS:**
The last part of today’s session has a different format from the interview we just completed. I will be reading instructions and questions from a script.

**INSTRUCTIONS:**
At this time, I'd like to ask you to work on a short activity. While I hope that it is a fun activity for you, I would also like you to give it your best effort. You have up to ten minutes to work on it. Please let me know if you are done before that. Do you have any questions?

OK, here is the activity—I’m going to read it with you, out loud. You might remember this activity if you were asked to do it two years ago as part of this study. (CHECK START TIME ON AUDIO RECORDER AND INDICATE IT IN THE BOX BELOW. THEN HAND R THE PERFORMANCE TASK FORM.).

Start time: 

<table>
<thead>
<tr>
<th>HH</th>
<th>MM</th>
<th>SS</th>
</tr>
</thead>
</table>

**PTQ1:** (NEXT READ THE FOLLOWING ALOUD TO R) Over the summer the Midwest experienced massive flooding of the Mississippi River. What factors would you take into account in designing a retaining wall system for the Mississippi?

**TRANSITION:**
(CHECK END TIME ON AUDIO RECORDER, AND IF NECESSARY): Okay, it’s been 10 minutes now, please stop.

End time: 

<table>
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<tr>
<th>HH</th>
<th>MM</th>
<th>SS</th>
</tr>
</thead>
</table>

**PTQ2:** What questions came to your mind as you were brainstorming your list?

(The questions MUST be fully formulated. If R offeRs a fragment as a question, remind R to speak as if he/she is playing Jeopardy, and ask R to clarify how he/she used the fragment in a question. If R is not familiar with Jeopardy, tell R that it is okay, and that all he/she needs to do is to respond in questions only. It is okay for R to browse through the list of solutions he/she has written, but there is no need to suggest this in your instructions. If R offers 2 questions or less, prompt him/her again. R should be able to provide 5-10 questions in 2-3 minutes.)
Here’s a copy of your list of factors from back in 2004, when you first did the Mississippi flooding activity.

PTQ3: Take a look at both the response you just wrote today and your response from two years ago. What similarities and differences do you notice between the two responses?

PTQ4: You’ve told me a little about how your responses are similar or different. How about how you came up with them? Consider how you thought about the activity and how you came up with the factors you wrote down, both today and two years ago. What similarities and differences do you notice?

(IT’S FINE IF R ALREADY BEGAN COMPARING THOUGHT PROCESSES (VS. COMPARING RESPONSES) IN ANSWERING THE PREVIOUS QUESTION (PTQ3). ASK THEM TO CONTINUE, E.G., “Do you notice any other similarities or differences in the way you came up with your response?”)

▼

PTQ5: Have you had any past experiences that helped you do the written activity?

(IF SO, ASK R TO DESCRIBE THE EXPERIENCES.)

PTQ6: Have you had any educational experiences that helped you do this activity?

(IF SO, ASK R TO DESCRIBE THE EXPERIENCES. R MIGHT HAVE ALREADY DISCUSSED EDUCATIONAL EXPERIENCES IN RESPONDING TO PTQ5. IF SO, ASK THEM TO CONTINUE, E.G., “Are there any other educational experiences that helped you do the activity?”, OR ASK FOR ADDITIONAL DETAILS ABOUT THE EDUCATIONAL EXPERIENCES, IF TIME PERMITS.)
Transition for students who did not do the activity in Year 1:

Now, I’d like to ask you some questions about a recent natural disaster in the U.S.

PTQ7: How familiar are you with Hurricane Katrina and the flooding in New Orleans? Could you tell me what you know about these events?

PTQ8: Did what you know about these events affect how you approached the Mississippi flooding activity today?

(if so, ask R to describe how their knowledge affected their approach to the activity.)

Closing transition for all students:

(Collect both 2004 and today’s response pages.) Great! Thank you. We hope that you’ve enjoyed this activity and we want to make sure that you know that there are many right answers. We’ve used it to collect information from engineering students across the nation to understand the types of things students think about.)
Over the summer the Midwest experienced massive flooding of the Mississippi River. What factors would you take into account in designing a retaining wall system for the Mississippi?
Submission Instructions for the Performance Task

Timing: Jot down the approximate start and end times while administering the task. After the respondent has left, double check the start and end times by reviewing the audio recording. Record the start and end times in minutes and seconds (e.g., start 43:21, end 49:16) on the Performance Task Sheet (the sheet where respondent has listed factors).

Labeling: At the end of the formal interview, write the Respondent ID and the start and stop times on the Performance Task Sheet.

What to do with the Performance Task Response Sheets: Make a photocopy, keep the photocopy in a secure location, and then send the original (via FedEx/UPS/or some other service that will track the package) to: [researcher contact information]

You may send the Performance Task sheets to the researcher in one batch.
Academic Pathways Study

Exit Interview Protocol

Technical Public Institution/Urban Private University/
Suburban Private University
2005-2006

1. Can you tell me about your reasons for majoring in engineering when you started at (name of school)?

   Note: For this question in particular, it will be worth knowing how a given subject has answered this question (or similar questions) previously. We wouldn’t suggest being confrontational (i.e., “But wait, that’s not what you said last year…”), but previous responses can usefully inform follow-ups for this question.

   This can be a very useful question analytically, in that it can be compared to what students said in their Year 1 interviews. We expect that students might answer this question retrospectively, from the perspective of someone having left.

   Please probe the answer to gauge whether the student had a prior connection to engineering through family or friends or some other type of exposure. Did the student’s understanding of what engineering would be like change? Question #4, below, gets at this as well.

2. Think about your expectations when you started last year. Did things go as you expected? What did? What didn’t?

3. What’s your current major? How did you choose XXX? How is it going?

4.a. When did you first start to think about switching out of engineering? (or, if more appropriate, into their current major – some students might frame leaving engineering as a positive switch into something that was more appealing to them.)

   Follow up with, e.g., “What was going on at the time to make you start considering this?,” and explore each of the things they discuss.

4.b. So from that point, can you talk me through the process until now?

   Follow up with, e.g., “What was switching like for you? Were there difficult moments? Were there moments when you doubted the direction you were headed in? Were there moments when you were certain you were headed in the right direction?
Were there any particularly important events/moments/etc.?” Any specifics should be explored further for more detail.

5.a. I’d like to ask about some of your specific experiences. Let’s start with your classes. Did you have any classes that you would say were particularly good ones? *(Follow up on why they were good, looking for details.)* Did you have any classes that you would say were particularly bad ones? *(Follow up on why they were good, looking for details.)*

5.b. How about out of class? Any particularly good/bad experiences? *(Follow up as above)*

Note: If student volunteers non-academic out of class experiences, let them talk about those. We’d suggest then directing them back to out of class academic experiences (e.g., tutoring, office hours, etc.) **The mentor questions might come up here as well.**

6. How would you say you’re feeling at this point about leaving engineering?

7. What’s different for you now that you’re (no longer an engineering major/ an xxx major)?

8. What’s ahead for you? What are you planning for when you leave (name of school)?

9. If you could talk to the people who run the engineering program, what would you tell them?

10. Do you have anything to add to what you’ve said so far?
Academic Pathways Study
Exit Interview

Large Public University
2005-2006

1. Can you tell me about your reasons for intending to major in engineering when you started at LPub?
   1a. Were you aware of the engineering admission process?

Note: For this question in particular, it will be worth knowing how a given subject has answered this question (or similar questions) previously. We wouldn’t suggest being confrontational (i.e., “But wait, that’s not what you said last year…”), but previous responses can usefully inform follow-ups for this question.

This can be a very useful question analytically, in that it can be compared to what students said in their Year 1 interviews. We expect that students might answer this question retrospectively, from the perspective of someone having left.

Please probe the answer to gauge whether the student had a prior connection to engineering through family or friends or some other type of exposure. Did the student’s understanding of what engineering would be like change? Question #4, below, gets at this as well.

2. Think about your expectations when you started last year. Did things go as you expected? What did? What didn’t?

3. What’s your current major? How did you choose XXX? How is it going?

4.a. When did you first start to think about switching out of engineering? (or, if more appropriate, into their current major – some students might frame leaving engineering as a positive switch into something that was more appealing to them.)

   Follow up with, e.g., “What was going on at the time to make you start considering this?,” and explore each of the things they discuss.

4.b. So from that point, can you talk me through the process until now?

   Follow up with, e.g., “What was switching like for you? Were there difficult moments? Were there moments when you doubted the direction you were headed in? Were there moments when you were certain you were headed in the right direction? Were there any particularly important events/moments/etc.?” Any specifics should be explored further for more detail.
5.a. I’d like to ask about some of your specific experiences. Let’s start with your classes. Did you have any classes that you would say were particularly good ones? *(Follow up on why they were good, looking for details.)* Did you have any classes that you would say were particularly bad ones? *(Follow up on why they were good, looking for details.)*

5.b. How about out of class? Any particularly good/bad experiences? *(Follow up as above)*

Note: If student volunteers non-academic out of class experiences, let them talk about those. We’d suggest then directing them back to out of class academic experiences (e.g., tutoring, office hours, etc.) The mentor questions might come up here as well.

6. How would you say you’re feeling at this point about leaving engineering?

7. What’s different for you now that you’re (no longer an engineering major/ an xxx major)?

8. What’s ahead for you? What are you planning for when you leave (name of school)?

9. If you could talk to the people who run the engineering program, what would you tell them?

10. Do you have anything to add to what you’ve said so far?
CAEE APS Database File Naming Protocol

This information is taken directly from the Administrativia section of the APS workspace on the CAEE Database. For questions or more information, please contact the database administrator.

Data File Naming

Names of data file within the APS database as proposed here has 6 standard components (plus one optional component,) organized in the following order:

1. StudentID: coded per CAEEID
2. MethodType: instrument or method
3. EventID: event_sequence or event_date, or combination
4. ItemID: item_type, item_number and revision_number
5. ResearcherID: name initials
6. (optional) Pseudonym: reference subject’s “name”
7. FilenameExtension: document_type

To improve readability and facilitate accurate computer-based parsing, filename components are separated by hyphens. By design, the resultant filename will uniquely identify the context of each data file in the APS database. This filenaming convention would result in filenames that look like

   StudentID-MethodType-EventID-ItemID-ResearcherID-Pseudonym. FExt

As examples, we may have:

TPub01F00003-INTS-3-A1_1-GT.dss
UPri01F00025-INTS-3-T1_3-KE.rtf
SPri01F00008-ETH-060306-N1_1-TLB.rtf
LPub01M00034-INS-P-3-S1_1-KO.pdf

This document is a work in progress and may be revised to reflect new needs and functions of the APS database. It is important that this proposed filenaming protocol, not only meet the immediate needs related to the current study of cohort-1, but can also be carried forward to integrate data for future APS cohort studies.

StudentID

In the APS database, we must avoid identifying our study’s student participants by real names or other recognizable real-world information, in association with collected data. To abstract a participant’s identity, we have developed a coding scheme. This CAEE Student ID code uniquely identifies each student participant and can be broken down into 4 parts. It looks something like: "TPub01F00003". The first part, "TPub", is the school's official acronym (i.e. Technical Public Institution). The second part, "01", is the cohort id. The third part, "F", refers to the gender, female. The fourth an final part, "0003", is a sequentially generated number identifier of the student at the indicated school.

For cohort-1, we have TPub, UPri, SPri, and LPub as the 4 possible school acronyms. When expanding the study in cohort-3, and cohort-4, most U.S. schools have unique acronyms. If we should encounter two or more schools with identical acronyms, we can append a lower case letter (a,b,c...) in sequence to differentiate these schools. Internal to the APS database, there is a table that connects this acronym (known as UnivID) to the full name of the school.
and its related descriptive data (e.g., university's full name, semester/quarter system, etc.).

With this StudentID code displayed in the filename, a researcher can quickly tell at a glance that the data file is associated with a specific student who attends a given school, is of a given gender, and participates as a member of a specific cohort.

If student data were aggregated into container documents by school, the containers’ filenames would only include the school acronym and the cohort id (e.g. “TPub01”). No gender and student identifying sequence number would be included.

**MethodType**

The MethodType component in the filename identifies the data instrument or method being used to collect the data contained in the file. This portion of the filename is typically 3-4 letters long. For our research as planned, the following MethodTypes would be used:

<table>
<thead>
<tr>
<th>MethodType</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURV</td>
<td>survey data</td>
</tr>
<tr>
<td>INTS</td>
<td>structured interview data</td>
</tr>
<tr>
<td>INTE</td>
<td>ethnographic interview data</td>
</tr>
<tr>
<td>INTX</td>
<td>exit interview data</td>
</tr>
<tr>
<td>INSP</td>
<td>problem scoping exercise data within structured interview session</td>
</tr>
<tr>
<td>PERF</td>
<td>performance task data</td>
</tr>
<tr>
<td>ETH?</td>
<td>ethnography data</td>
</tr>
</tbody>
</table>

**EventID**

The EventID is used to identify the particular instance of the data collection event. The EventID, taken together with MethodType, allow us to refer to a specific data set in a sequence, such as Survey 2, or Structured Interview 1. We will use numeric digits such as {1, 2, 3} to specify the EventID.

Ethnographers will typically contribute new files on a regular basis throughout the year. It may be more appropriate for such research methods to use date in lieu of a sequence number to represent the data gathering event. When applied, the date would be formatted as “YYMMDD”, so as to facilitate chronological sorting. This date information should not substitute for the inclusion of more detailed date information inside the file document itself.

**ItemID**

The ItemID is used to identify one or more data items collected together within the context of a single data collection event. It is composed of three parts, in order:

1. DataType,
2. ItemNumber, and
3. RevisionNumber.

For example, in the course of structured interview #1, we may produce one audio recording file, one interview notes document, and 2 PDF scan files. In this scenario, we would have 4 files with

MethodType = INTS
EventID=1

and the following distinguishing ItemIDs
If after review, the notes file with ItemID=N1_1 was revised and resubmitted to the database, the revised file would take on ItemID=N1_2.

At the current time, the following DataType codes are proposed:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>audio recordings</td>
</tr>
<tr>
<td>V</td>
<td>video recordings</td>
</tr>
<tr>
<td>N</td>
<td>notes (field notes, interview notes)</td>
</tr>
<tr>
<td>T</td>
<td>text transcriptions</td>
</tr>
<tr>
<td>R</td>
<td>transcript revision requests</td>
</tr>
<tr>
<td>X</td>
<td>delimited columnar data</td>
</tr>
<tr>
<td>P</td>
<td>digital photos</td>
</tr>
<tr>
<td>S</td>
<td>scanned paper documents</td>
</tr>
</tbody>
</table>

**ResearcherID**

The ResearcherID identifies the researcher who is primarily responsible for collecting the data in the file. The researcher's initials (in all capital letters) will be used. If we should encounter a situation in which a new researcher has initials identical to an existing researcher, we would append a number to the new researcher's initials for the ResearcherID. For example, if we have a researcher Gwendelyn Talbot and we add a new researcher Greg Taylor, Gwendelyn Talbot would have ResearcherID "GT" and Greg Taylor would be assigned "GT1".

**Pseudonym**

Ethnographers will typically contribute new files on a regular basis throughout the year. In such cases, the CAEE student ID may be hard to write and refer to in discussion. The student pseudonym, appended to the root part of the document name and also recorded in the APS database, would be the identifier that ethnography researchers would use to refer to the student subject.

Student pseudonyms would be created by the research teams at each university, and may be something like "Lego1". Each pseudonym is unique within the subject group at each school; it is not permitted to have another "Lego1" within that school's subject group. However, it is entirely acceptable to have "Lego1" at another school. This way, researchers have full autonomy and flexibility to choose pseudonyms without fear of conflicts with those chosen by researchers at other universities.

Pseudonym, this filename component, is optional and is not likely used outside of ethnography documents.

**FilenameExtension**

We use familiar filename extensions to identify their respective applications and data types. The following example filename extensions would be used with associated applications:

<table>
<thead>
<tr>
<th>Extension</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>.rtf</td>
<td>Microsoft Word, Mac TextEdit</td>
</tr>
<tr>
<td>.doc</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>.dot</td>
<td>Microsoft Word (Template)</td>
</tr>
<tr>
<td>Extension</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>.xls</td>
<td>Microsoft Excel (spreadsheet)</td>
</tr>
<tr>
<td>.csv</td>
<td>Microsoft Excel (comma separated values)</td>
</tr>
<tr>
<td>.dss</td>
<td>Olympus Audio Recorder/Player</td>
</tr>
<tr>
<td>.pdf</td>
<td>Adobe Acrobat Reader, Mac Preview</td>
</tr>
<tr>
<td>.txt</td>
<td>Microsoft Notepad, Mac TextEdit</td>
</tr>
<tr>
<td>.zip</td>
<td>WinZip, Windows Explorer (XP), Stuffit Expander</td>
</tr>
<tr>
<td>.jpg</td>
<td>Internet Explorer, Netscape, Mozilla, Safari</td>
</tr>
<tr>
<td>.tif</td>
<td>(tagged image format)</td>
</tr>
</tbody>
</table>
The Transcription Process: For the Researcher

For questions or more information, please contact the APS Librarian.

The two main steps for the transcription process are:
I. File Uploading
   a. File Naming Protocol
II. Reviewing returned transcripts from transcription company

I. File Uploading

Once an interview has been recorded in the .dss format, the following steps need to be taken:
1. Login to the APS database
2. Click on the “Interview Data” folder that is on the left side-bar menu (see below)

3. Inside this folder, there will be the following areas:
   a. “In” Area
   b. Return Area
   c. Final Area
   d. Transcription Area
4. Click on the Inbox for all interview audio files
5. This is the area where all NEW interview audio files (in the .dss format) need to be placed. Every Friday at 2pm, this area will be checked for new files and all new files will be organized into a batch to be sent to the transcriber. Researchers should upload all new interview files at the end of each day to this area. **PLEASE REMEMBER to use the appropriate file naming protocol as specified.**

6. Once the file has been uploaded, please write a “Description” which includes the following information (please put each piece of information on a separate line):
   a. CAEE ID
   b. Researcher
   c. Misc info and notes (if needed)

II. Reviewing Returned Transcripts from Transcription Service

1. Once the interview audio files have been sent to the transcriber, transcriber will return the files as interview transcripts in Rich Text Format (.rtf files). These files will be placed in the **Return Area**, sorted by school and placed in the respective school’s folder.

2. A mass email notification will be sent to all of the researchers notifying them that new transcripts have been returned from transcriber and are ready to be reviewed.

3. Researchers should review only their transcript files. The transcript files will be in .rtf format, and the original file names will be kept. Researchers should be able to identify which files are theirs by seeing the appropriate initials in the file name, as specified by the file naming protocol.

4. Review the transcript.
   1. If no changes need to be made, then email the transcriber that the transcript file is ready to be finalized. Once finalized, the transcript will be placed in the **Final Area** inside the **Final Transcripts** folder.
   2. If the transcript needs to be completely re-transcribed, then make notes about the observed problems and re-submit the transcript (in .rtf format), the original audio file, and any notes taken about the problems or changes that need to be made. Then place these files (still using the file naming convention) into the **Re-submission inbox**, located inside the **Inbox for all interview audio files**. These re-submitted files will go through the same process with the transcriber as the original files.

5. All of the original audio files will be located in the **Audio Archive** in the **Final Area**.

6. All versions of transcript revisions and notes that have been re-submitted to the transcriber will be located in the **Transcript Revisions & Notes** folder in the **Final Area**.