Introduction
The Tobacco Control Evaluation Center (TCEC) at the University of California at Davis provides evaluation technical assistance, training, and resources to local California tobacco control programs. Among the many documents it makes available for projects to use are data collection instruments. While a large collection of previously used instruments is available in an online instrument data base, TCEC also creates some instruments that it features on its website. Two data collection instruments were developed and sent to expert review by leaders in the field before being pilot tested: an observation tool of smoking and e-smoking behavior and a focus group with young people on electronic smoking devices. See appendix A and B for instruments.

Method
The method for this study was adapted from a report by the U.S. Census Bureau (Hughes, 2003). This work focused on the technique of respondent debriefing with a variety of situations. For the observation tool, five participants were recruited to observe smoking and e-smoking behaviors in five locations with a high probability of this type of behavior: downtown Davis near bars and restaurants, a shopping center, on the edge of campus (there is a smoke and tobacco free policy on campus that may drive smokers to the edge of campus outside of the jurisdiction of the policy), downtown Davis near a busy parking lot, and an outdoor dining and grass area. Observer training took place before each observation and debriefing was completed immediately after the surveys were completed in order to avoid any loss due to time lapse. The focus group with young people on electronic smoking devices was conducted twice with six participants in each group. A new technique, called a Likert scale poster to facilitate a more comprehensive discussion with participants that may otherwise have been more quiet throughout the focus group. The same observers were used for both instruments and in each iteration.

Participants
Recruitment efforts were designed to attain a diverse group of participants. Fliers were posted in multiple locations on the UC Davis campus, restaurants, coffee shops, supermarkets, and laundromats. The study advertisement included a general description of the study purpose, eligibility criteria (18 years or older, understand written and spoken English, and have reliable transportation to the TCEC offices as well as observation locations), and timing and compensation for participation (a $20 gift card). Potential participants emailed the researchers and were contacted to ensure that they met the study criteria before being scheduled for the studies.

Analysis
The observation survey responses and debriefing notes from the five observers were summarized through content analysis. Focus group responses and observation notes by a second observer from two cycles of six participants (eight female, four male) were also summarized through content analysis.

Results
Observation tool of smoking and e-smoking behavior: During debriefs, multiple observers noted that there were several smokers in the area that he could not record because it was not the right cycle to mark smokers. This brings up the question, do we want to record smokers and e-cig users throughout the entire activity even though it isn’t the right cycle? Perhaps in
Focus group with young people on electronic smoking devices: During the debrief session in the first focus group, the majority of the participants had mostly positive things to say. One participant mentioned he felt uncomfortable with how one question was asked, but was unable to specify which question it was, and why he felt uncomfortable. There were no questions where the wording threw off the participants, and they felt as if the question order was acceptable. When facilitating, make sure to remain impartial when asking the questions, and to speak in a neutral voice to avoid feelings of bias. In addition, participants felt there would be more meaningful discussion if there were both smokers and nonsmokers participating in the focus groups.

One of the questions asked participants to rank most convincing to least convincing a variety of statements relating to the dangers of electronic smoking devices, ranging from most to least convincing statements about the dangers of electronic smoking devices. Facilitators used a wall likert scale method adapted from an American Evaluation Association session on “Strategies for Conducting Focus Groups in Tribal College Communities.” To make it easier to code the data, facilitators decided to color code the statements by having each statement be one color to allow participants to see any trends or commonalities the group as a whole had. First participants ranked the statements individually while in their seats, and then they taped it to the Likert scale poster when finished. This allowed the participants to reflect on their own perceptions before taping the statements up on the wall. Once everyone had finished ranking their statements, the facilitator prompted participants as to why they had ranked the statements in the order that they did. This sparked more discussion, and built onto the previous questions. This question ignited the most interest among the participants, and we think was the most telling of all of the focus group questions. Having this question at the end of the focus group allowed for us to end the discussion on a high note.

Several participants voiced their concern of participants being influenced by others when placing their selections on the Likert scale poster. They discussed possibly having the poster created anonymously so no ranking is influenced by another participants. As for the Likert scale poster, although the participants felt as if individuals could be influenced by others prior to putting their responses on the poster, the purpose of the interactive portion of the exercise would be lost if responses were anonymously collected and place them on the poster by the facilitators. Instead of collecting responses anonymously, participants and facilitators can ask follow up questions and probe during the discussion if participants changed their ranking based on what others in the group had posted already.

Recommendations

Observation tool of smoking and e-smoking behavior: The biggest challenge with the observation survey is the concept of the timed cycles and whether or not to strictly code behaviors only in the specific cycle or not. These researchers recommend that perhaps in a situation where there are a lot of people, such as a fair, it is necessary to use the cycles and only code each component in its section. However, for situations that are not as busy, it may not be as useful to strictly code only what is observed during the cycle. Individual projects can also make their own decision on the protocol depending on the goal of the project and context of the observation. One other way to improve the instrument and protocol is to define the area of observation. The researchers felt that drawing the area would help, which is why this is asked in the instrument. In addition, the facilitators should be the ones to define the observation radius, not the observer, so that this aspect is consistent among all observers.
Focus group with young people on electronic smoking devices: Some of the probes were more successful than others. It is recommended to test additional probes to allow for a deeper discussion, particularly if participants are quiet in the beginning. When facilitating, make sure to remain impartial when asking the questions, and to speak in a neutral voice to avoid feelings of bias. In addition, participants felt there would be more meaningful discussion if there were both smokers and nonsmokers participating in the focus groups.

Since the wall likert scale was tested with this instrument, more resources are being developed to assist projects to use this facilitation technique in their focus groups. This method allows participants to get up, move around and spark more discussion among their peers. In this study, this simply tool ignited the most interest among the participants and was the most telling of all of the focus group questions. Having this question at the end of the focus group allowed for the discussion to end on a high note.
Appendix A

**Observation of Smoking & E-Smoking Behavior**

Data Collection Form

**Survey Date:** ___/___/___  **Day of the week:**  **Observer:**  **Weather:**

**Name of Business/Location/Event & Address:**

**Description of Location (Please use descriptors that identify the area so we may duplicate observations in future):**

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Please tally your observations of smoking evidence, smoking behavior, and the total number of people in the smoking area in 8 cycles. Spend 5 minutes at each cycle, for a total of 40 minutes. Please provide a photograph for each location observed. Record general observations, comments on the back and draw a rough sketch of the area observed.

<table>
<thead>
<tr>
<th>Location comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this a designated No Smoking area? □ Yes □ No □ Don't Know</td>
</tr>
<tr>
<td>Are “No Smoking” signs posted? □ Yes □ No  If yes, number / location:</td>
</tr>
<tr>
<td>Did you take a photograph of this location? □ Yes □ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start Time</th>
<th>□ AM □ PM</th>
<th>End Time</th>
<th>□ AM □ PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1: Smoking evidence</td>
<td>Cycle 2: # of Smokers</td>
<td>Cycle 3: # of E-Cig Users</td>
<td>Cycle 4: Total # people</td>
</tr>
<tr>
<td>Ashtrays? □ Yes □ No  If yes, number / location:</td>
<td>Tally of smokers:</td>
<td>Tally of e-cigarette users:</td>
<td>Tally of people:</td>
</tr>
<tr>
<td>Tobacco litter? □ Yes □ No  Type tobacco litter / Tally of litter:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smell smoke? □ Yes □ No  If yes, tally number of times:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Survey adapted from Vista Community Clinic Healthy Environments Against Tobacco (H.E.A.T.) and from the Lassen County Public Health Tobacco Use Reduction Program Summer 2010

This document was made possible by funds received from the California Department of Health Services, Tobacco Control Section, under Contract# _______.

California Smoker’s Helpline – 1-800-NO-BUTTS or 1-800-45-NO-FUME
Pilot Testing Data Collection Instruments

Survey adapted from Vista Community Clinic Healthy Environments Against Tobacco (H.E.A.T.) and from the Lassen County Public Health Tobacco Use Reduction Program Summer 2010

This document was made possible by funds received from the California Department of Health Services, Tobacco Control Section, under Contract# ________

California Smoker’s Helpline – 1-800-NO-BUTTS or 1-800-45-NO-FUME
Electronic Smoking Device Focus Group with Young People

Introduction [Greet all and explain purpose of the focus group, ground rules, etc. (this will be laid out explicitly when protocol is added to this tool).]

One type of tobacco product that is gaining in popularity and use among young people are electronic smoking devices, also known as e-cigarettes, vape pens, e-hookah, etc. [Show pictures of them or describe them.] Throughout this discussion, when we use the words “electronic smoking devices,” we are referring to all products used to vape nicotine or non-nicotine solutions.

1. How many of you know what they are?
2. What names have you heard these devices called? [Probe for various terms until no new terms are mentioned.]
3. How easy is it for young people under age 18 to buy these products, do you think? 
   [Ask for clarification if necessary to define “easy”. Probe for where minors can buy them easily – What type of retailers? Are they local or online?]
4. Think about what your peers say about these products. What are the reasons that some young people like or use these products? [Possible probes: Is it for the flavors? Because the devices are portable or easily hidden? Is there a certain image associated with these products?]
5. Do you think vape products are safer or healthier than traditional tobacco products, such as cigarettes? 
   [Possible probes: What health claims have you heard about these devices? What do you think about the claim that devices allow users to vape in places where smoking is not allowed?]
6. What have you heard about the possible health effects these products can have on users? [Possible probes: What positive effects have you heard about? What harmful health effects have you heard about? Which claims do you believe? Do you think these devices are as addictive as traditional tobacco products such as cigarettes?]
7. County health departments are trying to find the best way to communicate the dangers of using electronic smoking devices to young people. Which of the following messages do you think would be most convincing to people your age? Rank them in order with the most effective at the top and least effective at the bottom. 
   [Give each participant a stack of cards with statements on them and ask them to rank them in order of effectiveness. Then go around the table and invite participants to share how they ranked one of the statements and why. After all of the statements have been covered, ask the group if they would change the order of effectiveness and see which few are the top three.]

Statements might include messages like:

I. Research shows that young people who experiment with or use electronic smoking devices are more likely to eventually use more traditional products like cigarettes than people who have never tried electronic smoking products.

II. Electronic smoking devices produce more than just water vapor. The aerosol users inhale contains toxic chemicals like formaldehyde, lead, nickel and acetaldehyde which can cause cancer, birth defects and other harmful health effects.
III. Devices are used with flavored e-liquids, most of which contain nicotine. Nicotine is as addictive as heroin and cocaine. Even short exposure can harm the brain development of young people.

IV. E-cigarette companies are trying to hook a new generation of young users on their products with advertising, fun flavors and easy access everywhere – just like they did with traditional cigarettes for the past 85 years.

V. E-cigarettes are promoted as tools to help people quit smoking cigarettes. But there is no real evidence that they help. In fact, studies show that 89% of users were still using e-devices one year later.

Wrap up
Before we wrap up does anyone have anything they would like to add or ask? Any questions I can answer?

Well thank you all so much for sharing your insights with us. They have been very helpful. Feel free to take some literature that explains the dangers of electronic smoking devices. We encourage you to share this information with your friends and family.

Thank you again.