

Visual Techniques

Although asking questions is one way to find out what you want to know, there are other methods that can be very powerful in eliciting information from people individually or in group settings. Participatory Learning and Action (described later in this guide) is a community-centered assessment approach that uses what are called “visualizations” as one of its main techniques. Visualizations are a good way of gathering information and facilitating problem-solving that can be very valuable in developing and improving programs.

These visual techniques fall into five categories:

1. Mapping ;
2. Assessing change;
3. Analyzing systems;
4. Differentiating--by sex, age, wealth, or in other ways where power and control may be unequal; and
5. Prioritizing and comparing.

In this section, we'll look at activities that illustrate these five categories. The important thing to remember is that these activities can and should be adapted. They can even be adapted by participants themselves, revealing that the community priorities may not be the same priorities as those of the team doing the assessment. This modification of the activities can be very valuable in terms of the information that results from it.

An important first step before putting these visualizations into action is to develop a strategy to interact with the population you're interested in collecting information from, not just to use the activities in a “scattershot” manner. The interviewing sampling schemes discussed earlier can be a good guide to use. Have people do these activities in organized groups or in groups that form naturally, such as with people sitting at a picnic table at a park outreach site or gathering just outside an apartment in a public housing facility. These techniques can be combined with other qualitative methods, such as focus group interviews, to give a framework and provide more information to interpret findings.

Technique #1: Mapping

Maps can be made of any area, such as a neighborhood, or even the human body. Mapping tells a lot about how people perceive something or gives specific information on where to find something, such as a shooting gallery or other places where people gather.

Community Mapping:

The map of a community can identify a range of things, including social services, sites of risky behavior, and community resources.

Steps to creating a community map:

- ❖ Develop contacts with knowledgeable community members and ask them what part of the community should be mapped.
- ❖ Find a good place to create the map and gather several community members together to create it.
- ❖ The process of creating the map should be participatory.
- ❖ Be patient as the map is developed; facilitators shouldn't interfere in the process.
- ❖ Give the map a title and list (if possible) the names of the participants who created it.

Mapping can be part of a “transect walk” described earlier—the mapping can occur before a transect walk and then the map is altered afterwards depending upon the consensus of the group doing the mapping.

A caution: Mapping should only be done once trust is set up between the assessment team and community members.



Examples: Community Assessment

As part of the community identification process initiated in the area reporting high gonorrhoea rates, the entire Any Community AIDS Network assessment team, following observations and interviews with key respondents and gatekeepers, developed a map of the area with area residents. They were able to find out where people gather to drink or do drugs, where anonymous sex was taking place, and points where risk reduction materials could be distributed.

Facilities Mapping:

Facilities mapping allows those who are familiar with a building or facility to describe it in detail. This type of mapping, which can also be thought of as “risk mapping” (D.E. Wigmore, personal communication, 1998) or “social mapping,” can illuminate barriers, both physical and social, as perceived by staff or clients.

- ❖ The activity begins with mapping the general layout to a building, such as an agency or treatment center.
- ❖ Participants can use colored markers or stickers to map hazards, such as dangerous areas that are colored red (however they define “dangerous” or “hazardous”) and “safe” areas colored green.
- ❖ Participants can also choose to do “social mapping,” to identify where people gather (green) and where the leaders are (red). Colored circle stickers are helpful for this. The leaders can be identified as helpful (with a smile) or not helpful (with a frown).
- ❖ Have participants discuss what they see.



Julia and Alex used facility mapping as a first assessment step with young people in a drug treatment facility. Their maps, done in groups of 4-5, helped to explain the adolescents' perception of the social environment they were living in, and revealed some issues that were important for educators to take into account as they developed programs for clients of the facility.

Body Mapping:

The use of body mapping provides a way to determine community and individual perceptions about how the body works. *Body mapping should not be used to correct assumptions* (at least, not at this stage), but to simply understand perceptions and utilize this information when developing an intervention or interventions. If a perception is incorrect but not dangerous, it may not be necessary to correct it at any time. Allowing participants to feel “safe” in presenting their perceptions allows for more freedom to express themselves without fear of being ridiculed or demeaned.

Steps to creating a body map:

- ❖ Have the participants draw the body to address any health issue; in the case of HIV and STDs, have them draw the body of a naked woman and a naked man.
- ❖ Let them describe visually the reproductive organs, signs and symptoms of STDs, or erogenous zones, depending upon the health issue being explored.
- ❖ Facilitate a discussion among participants about what they see.

This activity can be done individually first, if possible, and then done in a group. Or it can be done in a group where there's already some group cohesion or members seem open to this kind of exploration. Women can map men and men can map women; then the two groups are brought together. In the case where sensitive issues, such as gender issues, can result in strong emotions, it is important to mediate the discussion.

Body mapping often brings out more than what's originally asked for. For example, a mapping exercise around beliefs about contraception may illuminate beliefs about what a desirable body type is. These issues often have to be processed with and between group members.



Ana and Robert used body mapping with several groups following presentations on STDs. Ana had group members divide into males and females, then had them map the signs and symptoms of infection. Robert observed the males mapping female bodies and Ana observed the females mapping male bodies. In addition to assessing how much the participants had learned from the previous presentations, they identified several relationship issues that emerged from the discussions that they incorporated into their presentations.

Note: *Care must be taken when doing any same-gender activity to acknowledge that there may be transgender individuals in the group and to remind the participants to participate with any group that s/he feels comfortable.*

Technique #2: Assessing Change

Seasonality Analysis:

The technique of seasonality analysis can be used to understand the relationship between time of events and issues of sexual health. For example, doing an analysis with a group of people (e.g., adolescents) to determine why the STD clinic demand increases or decreases and what happens during that time that can be linked to understanding sexual behavior.

- ❖ Draw a large square and divide the square up so that you create four squares (for spring, summer, winter, fall) or into twelve squares (for January-December). Label each square depending upon how you're doing the analysis—monthly or by season.
- ❖ Have participants discuss and either write or illustrate with pictures what usually happens at different times of the year. They can write or draw within each square or across squares. For example, a group of adolescents may illustrate activities common to them and/or their peers—work, going to the rec center, hanging out with friends. Have them discuss what happens regularly and what happens at different times of year (e.g., the State Fair).
- ❖ Discuss with them how different “seasonal activities” impact on sexual activity among their peers. Keep adding to the diagram as they identify more factors.



Ana and Robert used seasonality analysis to have residents describe activities and the community environment over several periods of time during the year. Several groups of residents decided to create a seasonal diagram divided up into the four seasons: winter, spring, summer and fall. Within each period, they discussed what generally happens in that period of time in the year. They wrote words and some groups added some pictures to illustrate the community's activities at that time. The team posted the diagrams in the community center and left them on display, along with the product of other visual activities. With this display, residents who didn't want to do the mapping but were curious as to how the maps came out had an opportunity to give their input. They then had casual conversations with these residents and learned more from them.







Among other things, this seasonality analysis revealed the times when adolescents engaged in risky behavior in the summer time and what they did, a fact that didn't come as a surprise to the team. But it also revealed that there were times when many residents were without jobs and turned to unsafe behaviors as a result of being out of work.













Daily Activity Charts:

Daily activity charts create another way to examine when sexual or drug activity may occur during the day. In Africa, these charts were used to show to the men how much work that women have and how this affects their relationships. When the men saw how much work the women did, they worked out the conflicts between them and the men agreed to take on more responsibility to improve their relationships. Adolescents can use this activity to talk about when their peers find time for sexual activity.

- ❖ Find a suitable group that is willing to talk about these issues.
- ❖ Find out if a “clock” drawing is preferred or a “linear” chart is better (see the linear example below).
- ❖ Activities can be represented by symbols that the participants agree upon.
- ❖ Discuss the differences between the different “clocks” represented, for example, between genders or different groups.

Below is a *very simple* activity clock for one day. You can repeat this over several different days, including weekends. Participants can make up their own activity illustrations or you can offer some suggestions.

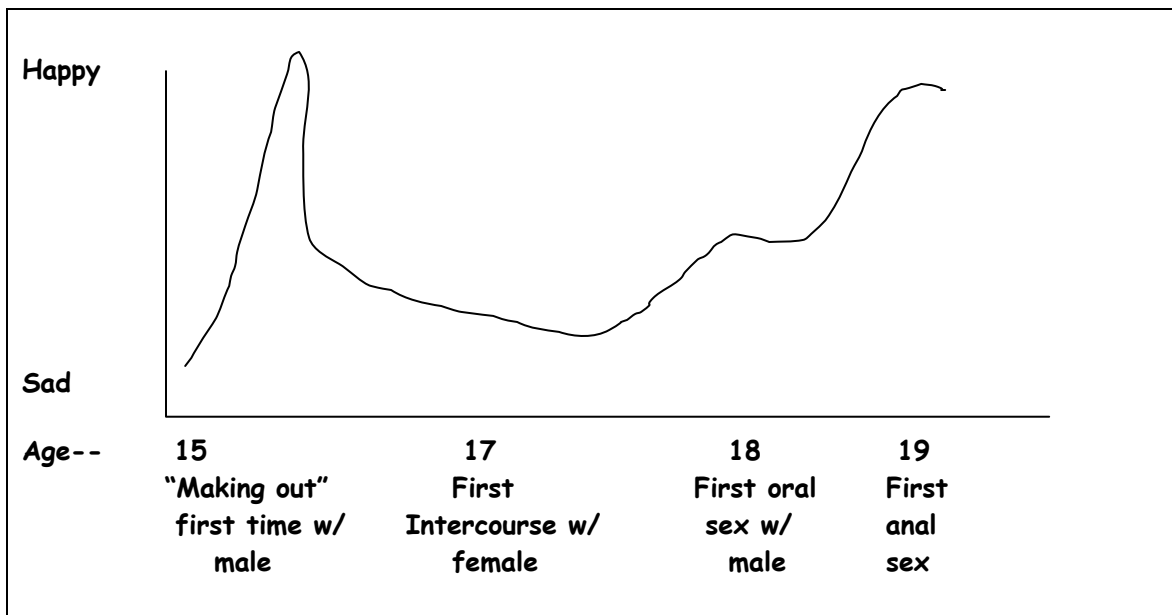
 = having sex
  = school
  = hanging out with friends
  = sleep
 = bored; thinking about having sex
  = hang out at rec center

Sexuality Timeline:

Sexuality timelines can be used to examine issues around different events related to sexuality. This is usually done by individuals, but can be done in a group session to discuss group perceptions around sexual events, such as first intercourse.

- ❖ Identify several sexual events in a person's life. The facilitator can offer some suggestions, such as first sexual encounter, first intercourse (anal, vaginal, oral may be separated), first relationship, etc. For females, this can also include contraception, menstruation, and/or childbirth. (See the example that follows for a more structured approach.)
- ❖ The participant can then graph these events with time at the bottom and "happy" and "sad" along the side. The line is low for sad and high for happy. See the example below for a gay man. Have the participant discuss what s/he sees.



Carlos and Sam interviewed several young men who have sex with men. After asking them some general interview questions, they asked them to create a timeline and identify their age when the following happened: (1) he first thought he might be gay or bisexual; (2) he first told anyone he might be gay or bisexual, (3) he first had consensual sex with another man, (4) he first had anal sex with another man, (5) he first had unprotected anal sex with another man, and (5) he first had an HIV test.

Carlos and Sam then brought together three groups of these young men they'd interviewed. In addition to asking some specific questions in an interview format, they facilitated a discussion of sexual time points and assessed the participants' attitudes about each by creating a common sexuality timeline. Carlos and Sam learned about some of the barriers to safe behavior through the discussion that accompanied the activity.

Technique #3: Analyzing Systems

Taking apart a system and analyzing it can be a very helpful exercise in determining how to impact the system. The two activities below are simple ways to do this analysis, and can be useful assessment tools.

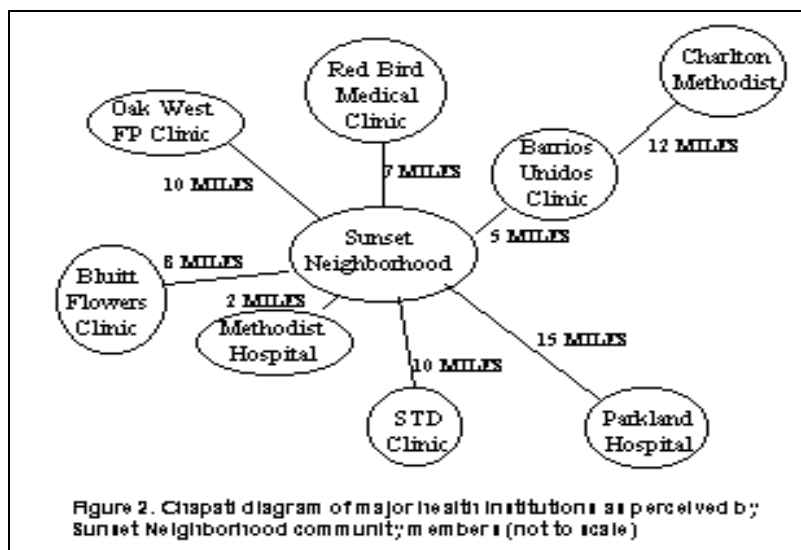
Chapati Diagrams:

Chapati diagrams involve the use of circles to define relationships or to look at which institutions are important and how these institutions may be perceived in a community.

Steps to create a Chapati diagram:

- ❖ Individually or in a group, define a “central figure” (in the following example, the community the population of interest lives in).
- ❖ As the participant(s) draw(s) the diagram, the size of the circle can equal the importance or physical size of the institution; larger is more important, smaller is less important.
- ❖ The length of the lines between circles indicate actual distance as perceived by the participant/participants.
- ❖ The thickness of lines can indicate the importance of the institutions or frequency of contact; thicker means more important, thinner means less important.
- ❖ The perceived distance in terms of miles can be written on the lines that connect the circle to the center.

Below is an example of using a Chapati diagram to find out how major health institutions may be perceived in a community.

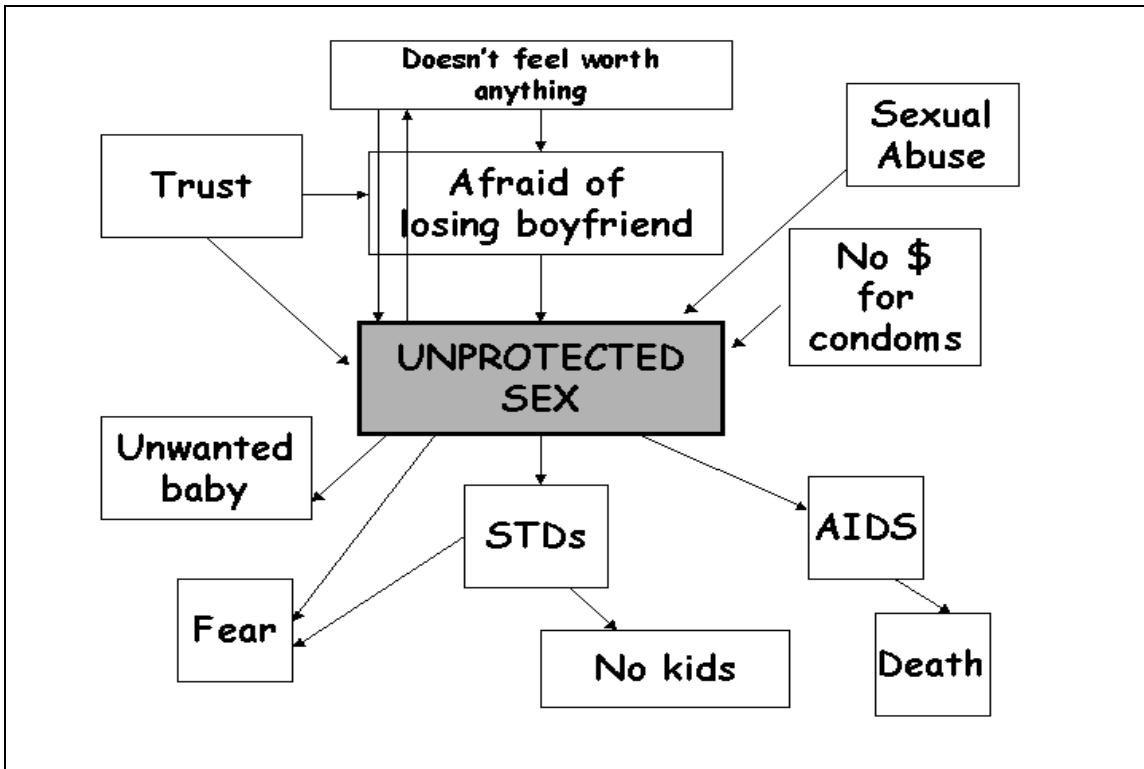


Causal Flow Charts:

Causal flow charts help to identify a “cause and effect” relationship between different issues as perceived by a community.

Steps to create a causal flow chart:

- ❖ Decide what issue or problem should be the central one to analyze; write it in the center of a sheet of paper or on a card, putting a box around it.
- ❖ Write down on a sheet of paper or on cards (one issue per card) the things that cause or result from the problem or issue; try to keep issues “value-free” (in other words, avoid using “homosexuals” as the cause of AIDS).
- ❖ If cards are used, work with participants to arrange the cards to determine what causes what; otherwise, write them on a sheet of paper and draw arrows from one to another (arrows may work both ways).
- ❖ Plus or minus signs can be used to determine if a cause is negative or positive.
- ❖ If participants aren’t satisfied with the diagram, start again.
- ❖ Have participants discuss what they see.



Problem Trees:

Problem trees are variations on causal flow charts. They, too, are mechanisms to identify the causes and consequences of specific problems, such as sexual health problems (World Neighbors, 2000).

- ❖ Brainstorm various problems faced by the community or the population of interest. You can focus the discussion by relating the problems all to sexuality and sexual health, or you can open it up to larger issues such as drug and alcohol use.
- ❖ Divide up into groups. Each takes a problem that they write on a card, and each card is posted on a tree trunk, drawn on large sheets of paper and posted on the wall. The small groups then brainstorm the causes of the problem and write those on cards that attach to the “roots” of the tree. They then brainstorm some of the consequences of the problem that become the “leaves” of the tree. Same colored cards should be used for each problem.
- ❖ The participants as a whole can take a “walk through the forest” and then describe what they see.

Chapati diagrams, causal flow charts, and problem trees can provide very detailed and important information that can be helpful to an assessment. After doing a Chapati diagram, a facilities mapping exercise can be done to identify barriers within the institutions identified. Or the activity can reveal what resources people use so that they can be asked about what they don't use—do they not know about other clinics, for example, or do they have a bad opinion of them?

Causal flow charts and problem trees can help people to see how certain health behaviors can result in other negative outcomes, and can help them look at what causes the behaviors. These types of exercises can initiate a discussion on problem-solving. Where can the community or the participants have an impact? What support and resources do they need? How can they offer suggestions and support to HIV prevention workers in their programs? See the **Problem Solving** section following for activities to help with this discussion.

Technique #4: Differentiating

Access and Control is a technique used to analyze power relations.

Steps to create an access and control chart (male and female example):

- ❖ Assemble a balanced group of men and women, or do the activity in gender specific groups and then bring them together to analyze what they found.
- ❖ Identify issues that are important to people; list them vertically (see below for male/female example).
- ❖ Create four columns for “Who decides?” (access) and “Who makes it happen?” (control), with “male” and “female” under each (see below) Along the left, list whatever issues will be explored. You could add to the example below of “where and when to have sex” and “safer sex” a line for “contraception” or even “sexual positions” or “oral sex.” If you do have an activity exploring gender in female-male sexual relationships, make sure to consider those who have same-gender relationships as well.
- ❖ Use marks on the paper or points to allocate across columns, with ten marks or points per issue per “access” or “control”; *the points given to males and the points given to females should add up to ten.* The more control is given to males versus females, the more marks or “points” are put under that column. For example, the group may give seven points to women under contraception for “who decides?” and three to men, but if she’s counting on him for transportation to the clinic, he may receive seven points under “who makes it happen?” and she gets only three.
- ❖ *Pay attention to what is being said more than the numbers.* Simply doing the exercise reveals a great deal about relationships and power within relationships.
- ❖ *Always follow with an activity arriving at solutions,* such as identifying the top three difficulties or conflicts identified during the activity and carrying out a problem-solving session around these issues.

Examples of other situations that can be examined are: (1) same gender relationships (2) relationships with age differences, (2) relationships with unequal economic power, and (3) sex worker/client relationships.

	Who decides?		Who makes it happen?	
	Male	Female	Male	Female
<i>Where to have sex</i>	5	5	6	4
<i>When to have sex</i>	7	3	3	7
<i>Safer sex</i>	7	3	7	3



Julia and Alex did an access and control activity for several groups of males and females, then brought the groups together to discuss the results. The activity resulted in a lot of emotion that they had to moderate, but they discovered some very important issues emerging related to power within male-female relationships. Because no one in the group identified as gay or lesbian, they addressed this issue with the group and informed them that participation was voluntary and that anyone could participate and give his or her opinion about male-female sexual relationships, whether or not they now or ever engaged in them. They also solicited feedback before starting and invited participants to come up and discuss their feelings about this activity after it was over.

Because the exercise revealed some acceptance of power imbalances, Julia and Alex introduced into their educational sessions a “how it feels to be powerless” exercise and an assertiveness skills module that they modified with input from the participants who participated in the analysis.

Technique #5: *Prioritizing and Comparing*

Free-Listing:

Free listing is another tool that can reveal a great deal of important information. Bernard (1995) describes the process of free-listing as, “a deceptively simple but powerful technique” used to explore a cultural domain. Individuals can be asked to list the days of the week, which most everyone will list the same, or to make a list of animals, a list that will vary greatly among the individuals surveyed. Trotter (1981) used free-listing with Mexican Americans, asking them to list remedies for health problems and what the remedies were used for. He was able to look at the lists and count the ailments most reported by men and those most reported by women, tell differences between older and younger individuals, and tell the differences between recent immigrants and those born in the United States.

An example more directly relevant to HIV work is one used with active drug users recruited for a National Institute on Drug Abuse (NIDA) HIV prevention program (Trotter, 1995). These individuals were asked to list all of the positive aspects of drug use. The purpose of the exercise was to identify barriers and potential positive reinforcement points for reducing HIV risks by reducing drug use. The investigators in this study were able to take the results and create a table. Below are the top five responses.

Aspect of Drug Use	Frequency¹	Response Percentage²
Escape reality	6	38
Relaxation	5	31
None	3	19
Feel good	2	13
Gives you energy	2	13

Free-listing can be used to monitor cultural, gender and age differences regarding attitudes about substance use, STDs and/or HIV. The activity can also be used to make connections between STDs/HIV and related issues. For example, a free-list on condom use can help educators tease out gender differences on condom use barriers.

A simple free list exercise involves asking people the health problems they think are most common in their community. They can do this individually or in groups. They then determine the top five of most concern, again individually or in groups. Do HIV/AIDS or STDs appear among the top five?

Creating free lists can generate questions that can be used on survey instruments, identifying words and phrases to be explored in greater detail. Using free lists in this way will be discussed in the “Survey” section of the guide, Part III.

¹ How many people identified it

² What percentage of the people asked identified this factor

Pile-sorting:

After free-listing on a topic, individuals can be asked to sort the concepts that go together or are similar. Pile sorting is usually done by writing a concept on a card, creating as many cards as necessary. Individuals then sort the cards, grouping them by similarity. Remind them that similarity is however *they* want to define it; there is no right or wrong answer. If they want to put a card in more than one pile, the facilitator has the option of creating new cards, if s/he wants.

Trotter (1981) writes that pictures, real objects, written labels, or combinations of the three, (such as description of risks for HIV infection) on cards are options. Participants then discuss their thinking behind why they sorted things the way they did, and this information is recorded.



Carlos and Sam used free-listing with men who have sex with men who gather at a local bar. At appropriate moments, they'd start up a conversation with individuals or small groups of men. They told them that they wanted to identify individuals to talk to that everyone respected. Using blank cards, they first asked the participants to write on each card the name of a person they'd invite to a party, up to ten names on ten cards. Then, they had them turn the cards over and jot down what about that person that would make them want to invite him. They then asked each participant to create two piles, one of those made up of the persons they believe have an influence on others and those who have less influence. As Carlos and Sam did this with several individuals, they analyzed what they found and were able to identify four names that kept coming up. Through the process, they also had some of the attributes of these individuals identified. They used this technique to concentrate their efforts on these four "peer leaders" as people who could influence those around them to reduce their risk for HIV infection. They also solicited their help in mentoring young men who have sex with men by creating positive role model stories to be distributed.

Problem Solving

After using a technique or techniques for identifying problems, how do you develop solutions? One option is for the assessment team to take all the information they've gathered and figure out for themselves what to do to effectively deal with the issues. This method will be discussed at the end of this section. Another method to supplement that task is the use of a problem solving activity with those who participated in the earlier visualizations. One such activity is the "By us, with us, for us" activity that was used in a participatory well-being assessment done in a housing community in England. Andrea Cornwall (1997) describes this activity in her report on the assessment:

"By us, with us, for us":

Residents of the community participated in an assessment with health professionals in the area. Through this process that incorporated visual techniques, residents identified various problems they confront where they live, but also acknowledged several strengths and assets of the community, such as community cohesion. (An important lesson: don't forget to name and acknowledge what people *have and have to offer* as well as what they *need*.)

After priority recommendations for solving the problems were identified by residents, the recommendations were then divided up into three categories:

- ❖ what the residents could do for themselves to solve the problem ("by us"),
- ❖ what residents could do with help from others ("with us"), and
- ❖ what residents needed others to do for them, if they could muster the resources from agencies and institutions ("for us").

Action plans were then developed by community residents.

Solution Trees:

Just as with problems, trees can be used to generate solutions. Participants can take an identified problem, then come up with solutions to the problem by creating "leaves" for the solution tree. Depending upon the group, a solution "wall" (large sheets of paper) can also work as an image. The solutions can be determined in small groups or in the group at large.

Here is a variation on this activity:

- ❖ Have the participants break up into small groups.
- ❖ Give each group a "problem" and the task of coming up with solutions. Have them write each solution on a 5" x 7" card.
- ❖ Give each participant in the group five beans or small objects of any kind. Each participant can assign their "points" to the cards laid out in front of them, even giving all five to one solution.
- ❖ The group counts the number of points per solution, then presents their top five or six. Members discuss why they assigned the number of points that they did.

The small groups or the group as a whole can discuss what is needed to make the priority solutions work.