PAC-ITT

PUBLIC ACHIEVEMENT COMMUNICATION WITH INFORMATION TECHNOLOGY TOOLS

"Our way of life has been influenced by the way technology has developed. In future, it seems to me, we ought to try to reverse this and so develop our technology that it meets the needs of the sort of life we wish to lead."
Prince Philip, Duke of Edinburgh,
Men, Machines and Sacred Cows, 1984.

"The best way to predict the future is to invent it."
Alan Kay

This guidebook was developed as a tool for Public Achievement coaches and groups. We hope it will give you ideas about how to do public work, inspire your group to make your issue work public and entice you to continue involvement in issues that matter to you and your community.

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Contributions from people involved in both Public Achievement and the Community Information Corps are throughout this guidebook.

Table of Contents

PAC-ITT

Welcome to the Public Achievement Communication with Information Technology Tools (PAC-ITT) guidebook. PAC-ITT has been written with Public Achievement in mind, however it can be used in all types of public work. Public Achievement (PA) is an international youth civic engagement initiative of the Center for Democracy and Citizenship at the Humphrey Institute of Public Affairs.

PAC-ITT is organized into sections that can be used as one complete book, or separately. The sections are:

- **Information Technology Tools**
- **Information Exploration**
- **Internet & Websites**
- **Mapping**
- **Multimedia: Video, Graphics & Audio**

The sections are intended to be general guides and resources for ideas. They were developed based on the experiences of PA groups and the work of the Community Information Corps. Each section contains some comments about stories and interviews because PA groups and the CIC alike found that stories are crucial in doing public work.

The PAC-ITT series will be most useful if paired with the Public Achievement handbook, *Building Worlds, Transforming Lives, Making History – A Guide to Public Achievement*.

Please, please, please use your own creativity and group ideas to adapt these guidelines. There is no one method of doing Public Achievement or public work.

Public work is the visible effort of ordinary citizens who cooperatively solve common problems and create things of lasting importance in our communities, nation and world.

University of Minnesota Humphrey Institute: **www.hhh.umn.edu**
Center for Democracy and Citizenship: **www.publicwork.org**
Public Achievement: **www.publicachievement.org**

HOW TO USE THIS GUIDEBOOK

Use this book any way you like – adapt it, change it, pick pieces from it. Use Internet links from it. Please be sure to cite the source.

There are symbols that are used throughout the book that refer to various resources and points. The symbols are as follows.


Point of Interest
Things to consider


Team or
PA group members
Self-Interest


TASK
Activity Idea


Publicity
Making work public


Quotation,
Story or
Another Method


Celebration


Internet Resource


Alert
Watch for…


Exercise or
Documentation


Definition,
Concept or Idea

THE IMPORTANCE OF STORIES & INTERVIEWS WITH PA

Because stories, interviews and building relationships with people in and outside the group are important in doing PA, each section of this guidebook will have a description of how to use stories and interviews along with technology.

While coaching or being a member of a PA group, remember that stories are often the best way to convey an important idea, issue, concept, problem, or describe a project. Stories are some of the most useful tools around. They are found everywhere, including in technology, so use them.


High School students from Saint Paul Minnesota, wrote these stories in their journals, July 1, 2002 while working on the Community Information Corps Storytelling project. They were asked "Why are stories important?"

"Stories are the most important thing in a human's life. It captures the moments in history. In good times, it makes up people's culture and how they live their lives. Such stories as tales or myths show how there are differences in cultures. Stories bring out the memories in a picture, a laugh and maybe even a tear. Stories have a way of capturing the reality in people's lives. Stories make up my culture and who I am"
– Sheng Ly, July 1, 2002.

"Stories are important becuz they help keep history alive and they're entertaining on a boring day. Myths are stories, the birth of Jesus is a story, how the world came to be in Greek and European cultures are stories. Everything that happened in the world so far is a story."
– Annie Lusso, July 1, 2002.

"Well, stories are important because we get to know what happened in the past and more people get to learn from the past for the future. More new people can learn from the past."
– Adalpho Lamadrid, July 1, 2002.

Stories are one of the best ways to make issues public. Why?

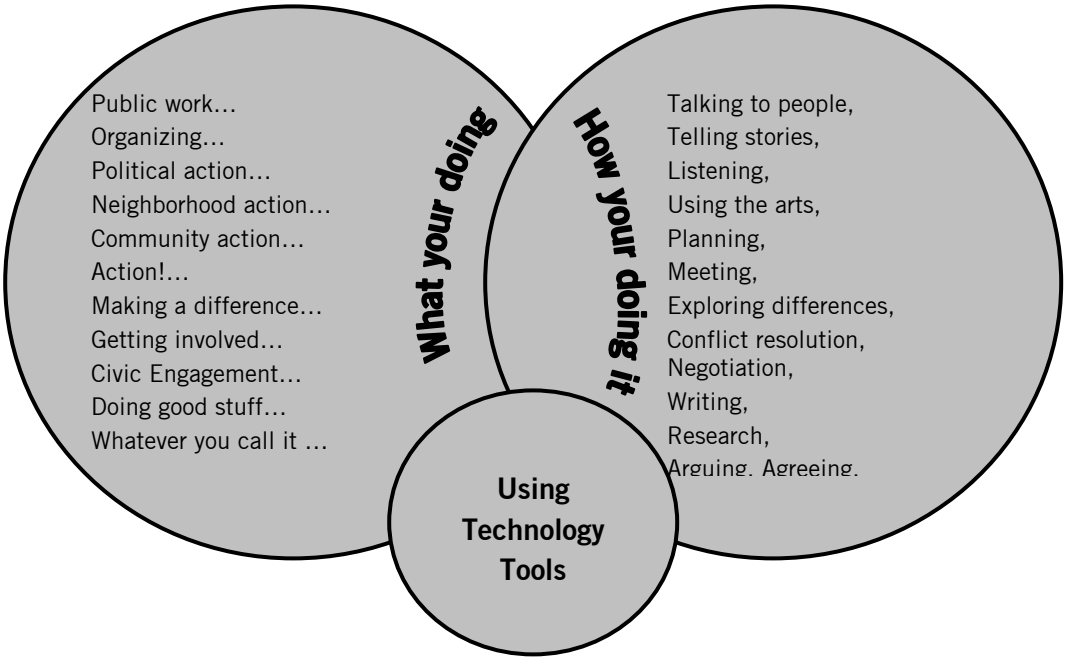
- People understand stories easily.
- Facts and figures are easily forgotten, but a well-told story is not.
- Everyone can tell a story and use stories everyday.

Stories can be used in getting to know you activities with your group. One of the best ways to start with story is to ask each person in the group to tell a story about the issue that they are involved with. Later, these stories can be used to describe self interest.

INFORMATION TECHNOLOGY TOOLS

Technology is a part of the world. Even if we don't use technology ourselves, technology affects our everyday lives. PA groups use technology because in communication because the use of technology is an accepted form of communication and often an preferred form of communication among busy people.

Public Achievement and other groups involved in doing public work have already been using technology in their work. But to do public work do you need technology?



Technology is not needed to do public work. People, an issue and communication skills are needed. However, technology can help to tell the story of the group in a new way.

- Technology can complement public work.

To do public work you do not need technology, but it can be useful. Computer technology is often most useful when you want to send the same or similar information to a large number of people.

- Technology is a set of tools.

Technologies are invented all of the time. At one point in history, a pencil was technology, then a pen, then a typewriter, word processor and now computers. Who knows what will be next? But, to get by with just a pencil or a pen at this point in time is difficult. New technologies are a large part of our world.

- People use tools to do work (sometimes more effectively and efficiently).

Imagine what it would be like to have to write letters by hand to hundreds of people compared to using a computer. Not long ago, people wrote letters by hand and some still do today. In fact, sometimes low technology is better than high technology when trying to send personal messages such as thank you notes or personal invitations.

- There are practical sides to using technology in public work.

It can sometimes make it easier to disseminate information to a wide audience. Most of all, technology is important for people, particularly young people, to know how to use to get their issue in the spotlight to get attention.

Consider when using technology can get your issue more attention.

- When would handmade methods get your issue more attention?
- When it is appropriate to use technology? When is it not?
- What kinds of technology are appropriate for your group's work?

PAC-ITT BACKGROUND

This guidebook came out of the experiences of Public Achievement groups and the Community Information Corps (CIC). Adaptation, creativity and experimentation are always a part of doing public work and using guidebooks. This one is no exception.

THE CIC STORY

The CIC is a project that began in the year 2000. It began as a project to combine public work, journalism and technology with youth. For two years the CIC was a project that worked along side PA at the local public library on the West Side of St. Paul, Minnesota.

The CIC experimented with several approaches and uses of communications and technology with youth. These sections are a result of many of the lessons learned by the CIC and Public Achievement groups.

Community Information Corps: **www.westsidecic.org**
Or **www.stpaulcommons.org**

CIC & PA

After two years of working in Saint Paul, Minnesota on the Community Information Corps, it appeared that a closer connection with Public Achievement would benefit both initiatives. This series recognizes the importance of communications and technology in public work.

Communications skills and ideas can help make an issue public. Technology can be used to spread information, explore and learn new skills. Technology is a part of every-day living for most people in the world. It is increasingly important for people doing public work to know how to use technology. The use of technology can help us build worlds, transform lives and make history.

Public Achievement: **www.publicachievement.org**

WHY INFORMATION?

Ever been lost and couldn't seem to find a map, a guide or a landmark to help you figure out where to go? Any clue or little bit of information is relieving to help you know what to do next.

Just like when we're lost, information is important to guide us through doing public work, or any work in our lives. Many times formal school systems have students do work that provides all of the directions that they need. However, once out of school students sometimes feel lost because direction is not always apparent in everyday life.

Information can serve as a tool or a guide to help us figure out which steps are next.

Searching for information is a key part of doing public work. It can make us think about what is true and what is false, what is real and what is virtual. When a group is able to take a wide variety of information and make sense of it or develop interesting and informative content, that is what using information is about. Then, we know we are learning, being informed ourselves or informing others.

Searching for information can be exhausting!

Many coaches have said that the process of doing PA and public work seems more important than the end product. Achieving a final goal is less important than knowing how to move through complex systems. Public work can be both frustrating and mind boggling, but builds real world skills.

In Public Achievement, groups document their progress and the lessons they have learned to help them keep track of their progress. Using a notebook for the group can help to keep track of information. Sometimes PA groups can serve as an information committee to not only continue the efforts of a project, but also educate others on how to go about making change on their issue.

From the first day that your group meets, it can really help to keep a record of your group's actions and decisions. It is amazing how quickly groups forget steps already taken and previous discussions.

- Keeping minutes helps your group stay on track.
- Keeping journals or diaries can capture the mood of the group, useful in evaluations and to keep a history of the group's ideas, breakthroughs and stumbling blocks.

Ask your group how doing PA is different than a research project.

- What is the purpose of research projects?
- What is the purpose of work on an issue?
- Does all issue work require research? Why or why not?

STORIES & INTERVIEWS WITH PAC-ITT

Without stories, technology tools become rather dull and boring. So how can you bring stories to life when using technology? That is what this manual is about. Your ideas, your groups ideas, those interesting bits of information that get you excited about an issue are all what should drive a project.

What is meant by *technology*?

In PA, technology means when team members

Learn to use something for the first time,
or
Learn how to use something in a new way.

Technology tools can include-

Computers	Radio	Television
Websites	Video	Voice Recorders
Internet	Phone	Music Production
Email	Fax	Photocopier
Schedulers	Camera	Megaphones
Graphics	GPS	PA systems
Mixed media	GIS	(loudspeakers)

Interviews and stories can be used together to give and get information. Stories give information to others. Interviews get information from others. Many times when people are being interviewed they will tell stories to illustrate a point.

Some PA groups like to use surveys too. Because surveys are usually rather structured, most o the time asking for stories and interviewing people is a more effective method to get meaningful information in public work.

Work on issues is always about stories. Ideas of how to use stories are throughout this guidebook. Many times people don't realize that they use stories every day. Stories help people relate to each other.

Stories can be about everyday people and everyday events. In fact, some of the most effective stories for PA issues are those that describe every day events that many people can relate to. When considering work with stories, don't worry about being interesting or funny, let the story speak for itself.

WHY TECHNOLOGY TOOLS?

Organizing around public issues involves building relationships, talking to people and groups and working through a political system. Organizing can be complemented by the use of technology tools such as websites, email, Internet use, mapping, graphics, media arts and computer literacy in general.

Using technology in public work efforts will not only help move the issue along, but can also help the group learn new skills and see how technology tools are used in public efforts.

Real world experience using technology can build confidence and technical literacy for PA team members and coaches.

TECHNOLOGY IN PUBLIC WORK

There are countless ways that technology can be used in public work. Here are a few.

- Connect school learning with experience.

Using technology can help students see how the things they are learning in school will relate to their present and future lives outside of school.

- Gain confidence.

Learning technology starts slow, but builds fast. Many times, using technology can bring awe to groups because of its speed, large amount of information and steep learning curve.

- Communicate a message.

Using technology can also help to communicate a message to a large number of people at a low cost, when computer, email and Internet resources are available.

- Language Literacy

Language literacy is increased by learning how to read and write in a new context. People can improve their language literacy by exposing themselves to various languages over the Internet.

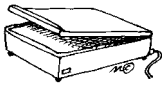
- Technical Literacy

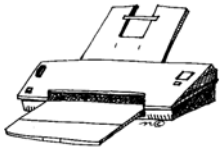
Using technology can help to contribute toward technical literacy. That is, the ability to use technology tools effectively in different situations or contexts.

Create an equal environment of learners and teachers where everyone is a doer.

PA teams members can teach skills to other team members. Technology use can create opportunities for everyone to be a learner and everyone a teacher.

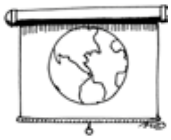
While working with technology tools can be a great learning process, it sometimes takes more effort, time and energy than without technology. It is often a balance between what the group wants to learn and getting the work done. Discuss the tradeoffs between learning new skills versus getting the work done with your group.



When your group is considering the advantages and disadvantages of using technology, the following questions may be useful:

- Will using a technology tool save us time or cause us to spend more time?
- Is spending more time worth the effort?
- Will we really save time?


- How will using the technology tool serve our purposes?
- What benefits will we have from learning to use a tool?
- Will arranging to use the tool give us a headache?
- Do we have someone who can help us to use the tool?


- Is the technology tool appropriate for the people we want to reach?
- If we want to make a video, do people have access to a VCR?
- Do people have fax machines or email?
- Do people know how to read the language we plan to use?

Garbage in, garbage out.
Technologies are just tools!
People need to put information and content into technology.
Remember if you put garbage into the computer, the outcome will still be garbage!

TECHNOLOGY TOOLS – HOW TO WORK WITH THEM

People make tools work. Sometimes when we are working with tools like computers, we forget that people make the tools and use them.

Technologies are tools. Think about it, can a computer get work done without any help from a person? Can a video camera? Can a telephone or photocopier or television or the Internet?

It seems silly to think that technology can do anything on its own, but many people seem to have this idea. It is often useful to remind your group that you have control over the technology, even though it sometimes feels like the technology has control over you. Joke about this! Use it as an opportunity to have your group get to know each other.

Technology does nothing without people. Below are ideas of how people use technology tools.

Communication in public work can be enhanced by using technology to **spread messages** to a wider audience than without them. People put content and information into technology to communicate ideas.

Remind your group that you are using tools. Try to **use the right tool** for the job. There was a time that a pencil was technology or a book or a camera. These things still work – use them!

- Sometimes it is easier to use a pen and paper instead of a computer.
- Sometimes it is easier to take notes than record a conversation.
- Sometimes it is easier not to use a modern technology tool.

New technologies almost always require **money**. Make sure that your group plans for the costs involved in using technology.

Celebrate!

When your group uses technology tools effectively or produces something. Show it to others! Have them show their parents! Eat cake! Give each other a pat on the back! Just celebrate.

BUILDING TECHNOLOGY LITERACY

Most of the time when people think of technology literacy, they think of computer literacy. Computer literacy is one part of technology literacy.

Building technology literacy involves:

- Learn to use equipment and programs for the first time.
- Learn to use equipment and programs in a new way.
- Learn to teach others how to use technology effectively.

Effective use of technology involves:

- Identifying the most appropriate tools for the job.
- Having communication skills to back the use of technology.
- Minimizing or decreasing fears in using a technology in a different way or for the first time.

Technology, and the definition of what is and is not technology is always changing. Remember, for the purposes of this guidebook and Public Achievement, technology is considered using equipment or programs for the first time or in a different way.

Building technology literacy involves having group members learn and teach each other the skills they know or all learn new skills together. For instance, if you know how to make photocopies, but I do not, you could go along with me to make photocopies to teach me how. Many times coaches will ask those who know how to do a task do it along, building technology literacy means sharing skills.

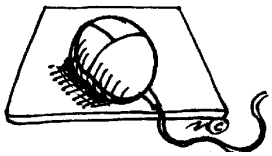
WHAT IS COMPUTER LITERACY?

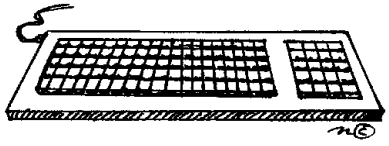
"Computer literacy is an understanding of the concepts, terminology and operations that relate to general computer use" (Virtual Bill's Computer Literacy World Headquarters).

Doing public work is a great opportunity to begin to use computers, sound equipment, video equipment, cameras and office equipment. A public work team can be an opportunity to share ideas, actions and exchange skills. Taking turns learning and teaching others how to use different technologies can help PA team members not only get the job done, but also learn new skills. Teachers often deepen their knowledge on a subject when teaching it, particularly with computers.

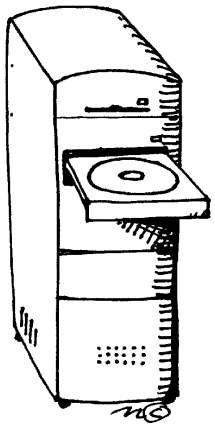
The first steps in teaching others to use a computer involve helping them understand what a computer is for and the roles of the different parts of the computer.

Playing computer games can be a great way to learn how to use a mouse. When teaching how to use a mouse, as a rule, never touch the mouse yourself. Most of the time when people first start to use a computer they would like to see what it can do. Using the mouse is a good first step.





When a person is learning how to type, it is often easiest for them to first write down what they want to say on a piece of paper, then type it from the paper, this is particularly true for people with some learning challenges.



The computer itself is often the most difficult piece of the computer for beginners to understand. In the Chinese language, the word "computer" literally means *electronic brain.*

Computers need to be organized. Just as files are organized in a filing cabinet, computers have things (documents, files, pictures and programs) that are organized into the computer's memory in files and folders.

Computers can read a variety of files including music from music CDs, word processing documents, power point presentations, digital photos, digital audio, digital video and spreadsheets. All of thee require programs to make them run.

Usually, if you try to explain how a computer works to someone who is completely new to one, they find it difficult to understand. Instead, you can have them play with the mouse, then try to create a file, and finally learning how to store a file can lead to a good discussion of how a computer works.

How to help someone use a computer

Tell yourself-

- Be patient (remember no one is born knowing how to use a computer).
- Remember how frustrating (and exciting) it can be being a beginner, maybe have them teach you something too.
- If it's not obvious to them, it's not obvious.
- They learn by seeing what the computer does – "when I do this, the computer does that". It takes time, but let them learn from experience.

Have them -

- Let them type or use the mouse. Don't take the keyboard or mouse from them.
- Check in to make sure that they understand what they are doing. Have them explain what they have done, then help them use the appropriate computer language, slowly.
- Review what they have done and have them practice it over and over again.
- Find out what they are trying to do. Help them break down what they need to do to get to the end.
- Talk to them and explain your thinking.

There are many useful programs that can be used on the Internet to learn how to use computers. Often the best way to learn a tool is to start using it. Before you begin teaching someone how to use a computer, be sure to ask what they hope to do with a computer. This can help you direct them to the kinds of exercises that will interest them. Here are some websites useful for kids to learn about computers…

Reading, Math, Creativity and Typing for Kids.
Disney Online – Disney Interactive – Learning
http://disney.go.com/disneyinteractive/learning/

How to use a mouse. (Crayola- Kids – Games)
http://www.crayola.com/kids/games

Invention at Play (making and designing inventions using a computer)
http://www.inventionatplay.org/

Yahooligans – the Web Guide for Kids
http://www.yahooligans.com

National Geographic for Kids
http://www.nationalgeographic.com/kids

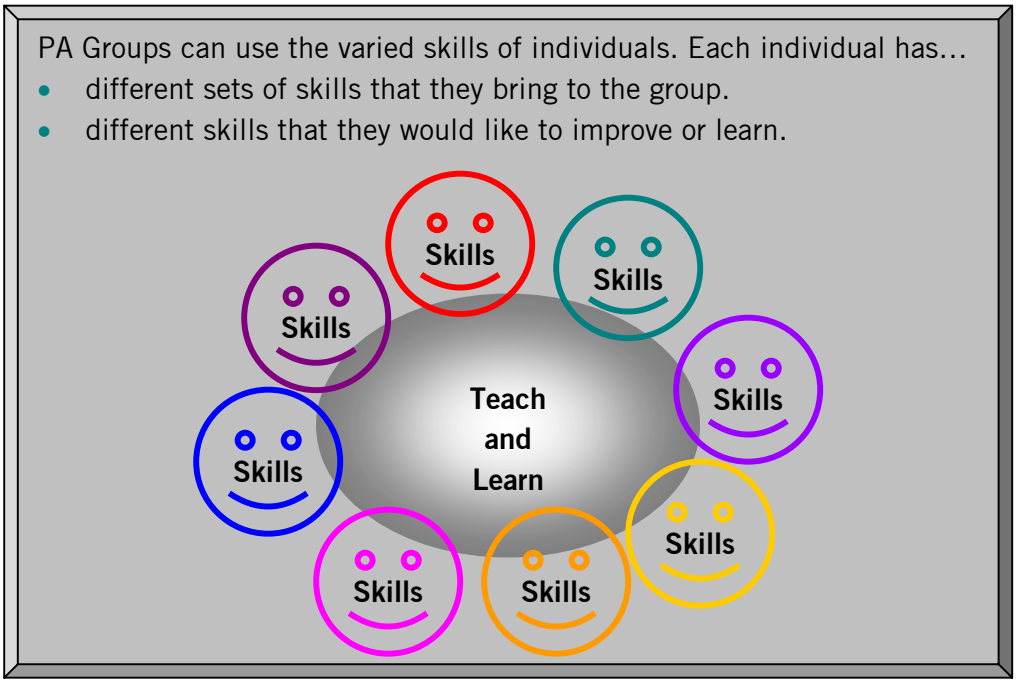
You could also do an Internet search. Here are some useful words to use.

Kids	Computer	Interactive	Game
Children	Internet	Adventures	Lesson
Youth	Online	Classroom	Tutorial
Beginner	Cyber	School	Magazine

TECHNOLOGY SKILLS & PA SKILLS

Those who participate in Public Achievement and public work in general may also want to teach each other different talents and skills throughout the PA process. Though this requires patience and time, a great way for youth in particular to gain confidence and respect is to teach others the skills that they know such as computers, video and audio production skills. Many times students and adults that haven't worked in an office environment may also be interested in learning how to use a photocopier, fax machine or even how to use a telephone to contact people they do not know.

Some PA groups may also want to consider teaching others how to use the skill they have gained during the PA process by providing information and support to other groups. Teaching can be one of the best methods to learn and re-learn a skill well.



Language can be a challenge in using computers since most computer language is in English. Even fluent English speakers have difficulty with computer language. Using analogies of the computer functions to other more familiar words can be useful when working with people who find computer language difficult.

Remember that people often like to talk about their skills, but fear that they will sound like they are bragging. Try to create an environment where skills can be celebrated.

Name and highlight skills that the PA group is developing, both public work skills and technology skills. This is a great way to show progress, build moral and keep people energized to continue the work.

Suggested comments or questions –

- "Look what you did today. You didn't know how to do that before!"
- "How many of you struggled today? What did you learn?"
- "How many of you overcame a frustration? What happened?"
- "Describe something that you saw today that you would like to learn."
- "Did you teach someone how to do something today?"
- "Did someone teach you something today?"

When you publicize the work that you do, make sure that you also tell people about the skills that you have learned along the way. People often want to know not only about the project, but also learn about the process. If you think that what you learned is impressive, someone else will also want to know how you did it.

Every group has different dynamics. Sharing skills can sometimes cause tension between group members. Students are generally not accustomed to being both students and teachers in the same group. Creating a group environment based on equality is challenging, but well worth the effort. Here are some ideas of how to accomplish a learning circle where everyone is a learner and everyone is a teacher. A learning circle is:

"A group of people is sitting around a table, a meeting room or a friend's lounge room. As one is speaking, someone else is jotting down notes, several others are waiting to make their points, another is skimming through the readings looking for a point, a facilitator is watching the whole group and the rest are listening quietly. This is a Learning circle in action.'

"In a Learning circle, groups of around 5 - 15 people meet regularly to learn about and discuss issues of importance to them and society. They learn at their own pace, drawing on their own experiences and understandings, without a lecturer or an expert 'running the show'.

"For over 100 years Learning Circles have proven an effective and practical method of learning and social change. Community organizations, trade unions, churches and social justice groups have used them to empower their members to make choices and take action. They are one way that people can come to grips with important social and political issues, in their own way and their own time.'

"How does it differ from a discussion group? The distinction between a learning circle and a discussion group is not great, but there are three common differences. A learning circle is often more focused that a discussion group. A learning circle is based on common resources, which may not be the case with a discussion group.'

"A learning circle is intended to have action outcomes - which may not be the case with a discussion group. " (from www.learningcircles.org.au)

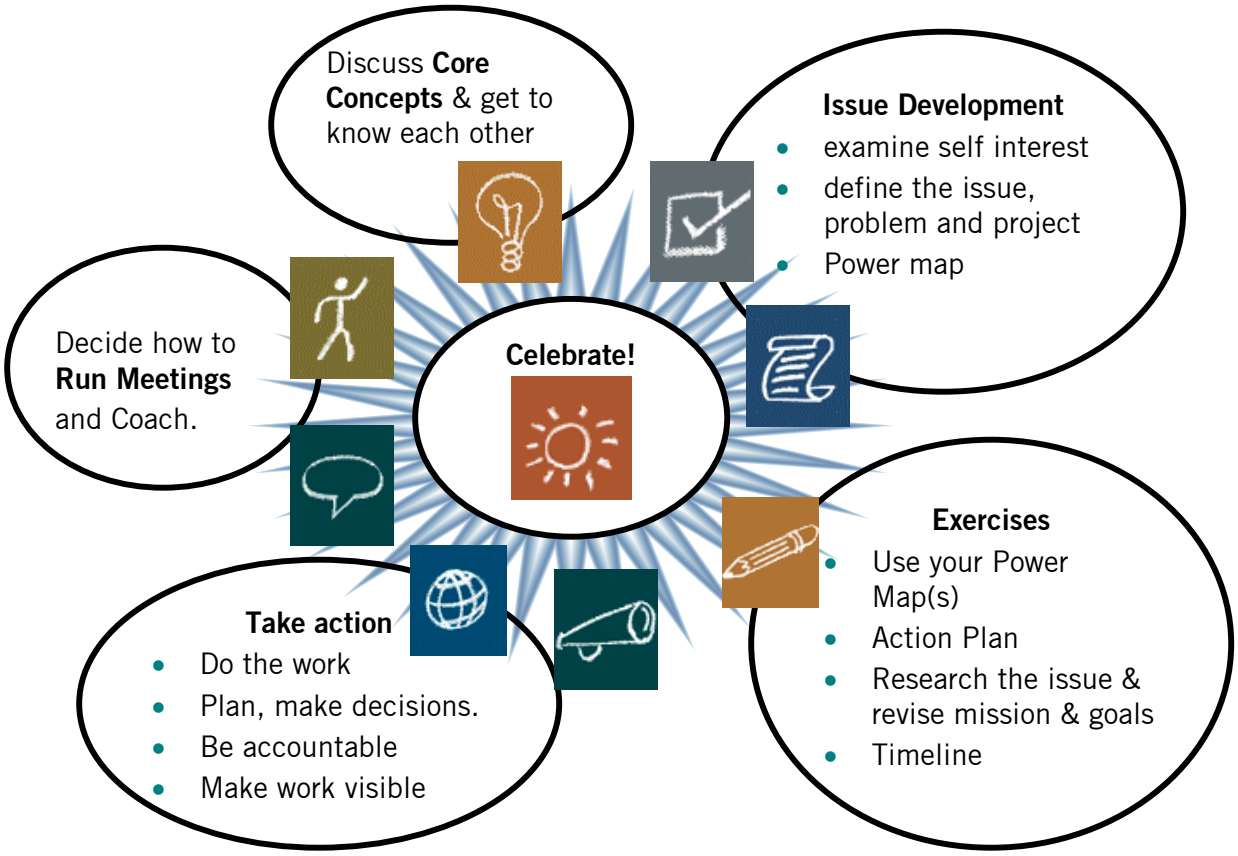
WHY PAC-ITT?

Public Achievement is a great way to learn the skills of public work. Doing public work requires information. Information can be powerful and build power in a group. Technology can be an efficient way to get and disseminate information and to learn practical skills on gathering, assembling and disseminating information.

In the beginning, groups research to figure out their issue, problem and project. Power mapping requires research about the roles of the people involved in the project. Many PA groups seek to inform the public about their issue in order to solve a problem.

This section will review basic PA methods and examine how information can be obtained and used in different stages of PA.

There is no particular order of doing a PA project, but some useful tools to getting the work done. For instance, celebrations should never be forgotten, and done several times throughout the process.



COACHING

The coach doesn't have to know everything about the issue that their group is working on. In fact, it is often best if everyone in the group is learning together. Just as a coach on a sports team, a PA coach challenges, questions and advises, but the team carries the work out and makes the ultimate decisions.

When considering information and technology use, the coach can provide suggestions on how to use technology or gather information. Coaches should find resources outside of the group to learn how to use technology or obtain more information to use for the PA issue.

How does a coach use information?
Sometimes a coach will gather information about the group's issue, find a guest speaker or figure out how to go about getting equipment for the group. This can help to move a group's issue along by shaping the actions.

Coaches can get relevant information from the school or organization, other students, teachers, Internet searches and simply by asking around.

Think about a sports coach, they bring skills and tactics to the team. They instruct, guide and also learn from their players. In PA, coaches often bring their previous knowledge and ability to find resources quickly. Even if you find resources for your group, simply showing them how you found them will help the group understand how information can guide action.

For more information on coaching, take a look at Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement, Chapter 6.

Check out the Public Achievement website for more tips on coaching.
www.publicachievement.org → Resources → Toolbox
http://www.publicachievement.org/5_2_4_tips.html

After working for a year and a summer with teens on the Community Information Corps project, a coach, Mitch Ogden wrote:

> *"I like working with High School students because their brains work differently than mine. Teens always have different ideas than I do. It makes it fun to work, and fun to come to work. I think my friends are jealous because most of them are trapped inside corporate walls – doing the same job over and over- something they don't' even care about. I think the CIC is important and I think it is important that students are creating it."*

There are all kinds of coaches: full time, part time, teachers, students, volunteers and people who just like to get involved in public work. Most coaches, if not all find that enjoying the differences and similarities of their group members is one of the most fun aspects of coaching.

RUNNING MEETINGS

Running meetings in an organized way enables the group to get work done. The following is a sample **agenda** for each meeting:

1. set the **purpose** of the meeting,
2. determine the **roles** each person will play in the meeting,
3. figure out what to do in the meeting by **setting the agenda**
4. **report** on any news,
5. **evaluate** the meeting, and
6. **plan** for the next meeting.

Time the agenda

When using information and technology in a project, it is important to set an agenda and plan future meetings, particularly if the information you need is in multiple locations. Making arrangements to use technology tools is often difficult. Plan in advance!

It is always useful to have the group define rules for the group and also enforce those rules. Coaches often don't want to be the *bad guy*, but remember that group members also get frustrated when they are prevented from making progress.

For more information on running meetings, take a look at Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement, Chapters 7 & 8.

Many coaches find that it is helpful to do a few tasks that they know their group will easily succeed during the first few meetings. Below are suggestions of what to do in the first days and beyond.

Meetings		Getting to know you exercises.
	One	Self Interest (and available skills and skills the group wants to learn)
	Two	Differentiate and define your Issue, Problem, Project
	Three	Power Map → Research → Re-map Celebrate. After making tough decisions and realizations about the problem(s) behind your issue and the identification of one or more appropriate project(s).
	Four Five Six…	Action Plan – take a look at how much time you have to spend on your project and plan it out based on the previous discussions and exercises. Include making your issue public in your action plan. Then, do it.

When considering the use of technology and exploring self interest, you can also ask your group to suggest skills they already have and ones that they would like to learn during your work together.

THE FIRST MEETING(S)

The first meeting is often the most difficult. Getting to know the group is important as well as taking a first step. The first step may be defining the issue, setting individual goals or discussing why the group members are attracted to working on the issue.

Some ideas for starting the first meeting are:

- Do a getting to know you exercise
- Talk about why the individuals in the group are interested in the issue.
- Tell stories about the issue.
- Define what success would look like for the group, as a group.
- Draw a picture about yourself, the issue, your interests and share it with the group.
- Write a letter to yourself saying what you want to get out of the process and the group, then discuss those letters. Keep them until the end of the group's work to share.

During the summer of 2002, the Community Information Corps storytelling project team wrote letters to themselves to describe what they wanted to accomplish during the summer. Here are some excerpts from the letters-

"Dear Shaun,

"I am looking forward to sharing the stories about the old West Side also looking at what murals are out there to enjoy.

"I look forward to bringing my kids back here someday and showing them the way the West Side was. I want to show them all of the rich history and the beautiful works of art. I hope that in doing this, I can reflect on how my community is and just what makes the West Side so special.

"I am also doing this for my father who would have loved to see the rich history be told and shared. He would have been impressed with how youth was doing this for the community. Remember your father when doing this, and have fun, but "don't get excited" if something goes wrong." Shaun Devaney (Age 18, June 19, 2002)

P. S. RIP 2-7-02 John H. Devaney"

"Dear Annie,

"By the end of the summer I want to have accomplished a lot. I want to have learned how to approach people I've never met before. I want o have learned how to carry myself when interviewing someone, I want to learn how to look professional. And I want to learn a lot about the murals. I want to be able to explain them to someone without anything to remind me of what I've forgotten, becuz I won't have forgotten anything.

"I want to feel like I've accomplished something great. So that when people ask me what makes me so great? I can answer with a great reply "I am great because I've accomplished great things." And I won't have to feel like I can't do anything right. Even when Ulysses makes me feel that way. I will be able to accomplish something great. ♥ Annie" (Age 16, June 19,2002.)

"I hope by the end of this summer my skills in computer will increase.

"I hope that my quietness will decrease. I hope that the skills I have learned through CIC will help me throughout the school year. I hope to learn new skills at interviewing and talking to people.

"I hope that my writing skills will be better towards the end of the summer. Sheng Ly" (Age 16, June 26, 2002.)

1. PURPOSE OF THE MEETING.

When using technology during a meeting, there should usually be some sort of end product. When figuring out what kinds of outputs will result from using technology, people tend to overestimate how much they can get done in the time allotted to them.

Practice is key to learning new skills. This is no exception with technology. There may be times when your group has to choose between getting things done or giving everyone enough time to practice and learn new skills.

It helps to go over each step that is needed when using equipment in order to arrive at the desired output. For instance, if a group is drafting a letter on a computer, it may help to first write an outline as a group on a piece of paper before using a computer. Then a team can draft the letter using the computer, print it, and edit the letter before it is sent. Reviewing these steps can help the group realize that simply writing a letter is more than a one step process and help to curb impatient feelings.

Keep notes!
Sometimes the purpose of a meeting is to discuss concepts, make decisions, or plan future actions. Progress can be seen if notes are taken. Many times group find it useful to look back at notes from past meetings to see how their thinking has changed and developed over time. Good notes show progress and provide teachable moments about being involved.

2. ROLES

Practice using technology relates to the roles that will be played within a group because different people in the group will have a different set of skills. The roles that people play from meeting to meeting should intentionally change.

Roles can, and should, be assigned by the team members or the coach. Sometimes the rolls may be obvious for a particular activity. For instance, if there is a computer wiz in the group, they can help teach how to use computers. Sometimes those roles may be fluid, as in learning circles, when everyone is simultaneously a teacher and a learner.

Facilitator can make sure that the meeting sticks to the agenda and also that everyone in the group has an opportunity to work with the technological tool(s) in use. Sometimes this may not be possible, for instance, if the group has to send out only one fax, then only one person can do this action.

Recorder documents the information and decisions made during the meeting. When working with Internet searches and computers, it might be useful to trade off this role during the meeting so that useful websites can be documented.

Timekeeper works closely with the Facilitator to move the meeting along and make sure that everyone gets a chance to use the technology tool.

Encourager and the Guru may be the same person. The coach may also want to take on this role from time to time. Learning to use new tools can be frustrating. Reassurance can help everyone in the group. Point out what people figure out something on their own and encourage everyone in the group to use their creativity to find different ways to do the same thing.

Evaluator will not only evaluate how the session went and what could be improved, but will also point out the output from the meeting, perhaps a document, or video clip or set of photos. Even if the evaluator is unable to find some sort of output, it is useful to have this person explain how the group has moved further in their plan during the course of the meeting.

Equipment tracker to make sure that all of the equipment is used properly and returned in good condition to its proper place.

A **Guru** to teach the rest of the group the skills that they have learned about how to use the computer, video or other technical equipment effectively.

An **investigator** to find out information or skills that the group needs to know in order to continue with their work.

Other roles may be created. It is generally best to rotate the roles from meeting to meeting so that everyone gets a chance to assume a different kind of responsibility. Having a role gives the group member an opportunity to be responsible and accountable for one aspect of the project on that day, which can give group members' confidence and pride.

Leaders often find it difficult to lead. They may not always recognize that they are leading or even want to know. Let all of your group members lead at different times to share the responsibilities of leadership. High School students from Saint Paul Minnesota, wrote about leadership in their journals, July 9, 2002 while working on the Community Information Corps Storytelling project.

> *"Leadership can be found in families, in the work place, JROTC, Neighborhood House, High Schools and the library" – Annie Luzzo, July 9, 2002.*

During the 2001 Community Information Corps mapping exercise, Jasmine Brennan frequently led the group in times of tension. She was frequently the voice of reason when those voices seemed to be absent. At the middle of the project she wrote this in her journal:

> *"The past few weeks have been very difficult. I have been on edge with a few people. I don't want to name any names, but one of them is a*

neck cracker and the other is a relentless flirt. I don't think they are the only ones that are bothering me, but they are certainly not helping.

"Yesterday was a really big help [when we set the work aside for a minute, took a walk to have a good time together]. It broke the tension and we laughed about a lot of things. I really felt good when I went home. The rest of my day was very fast and fun because I went home in a good mood.

"Overall, I'd give this job about a B or a B+ (if we were grading it). It has been a wonderful experience, but it has also cause some unwanted stress and frustration. I can't wait when we can all have fun and not worry about getting things done."
-Jasmine Brennan, July 31, 2001.

3. REPORTING ON NEWS

Giving the group a chance to inform others of new developments before the meeting starts can help people show that they are making contributions to the project. Particularly, for those who are not accustomed to using technology, this is a time when they can contribute in different ways, such as learning to search for websites on their own time or talking to people about the issue or project.

Reporting on news is a great time for people to report back to the group after doing outside work. If the group does not have access to equipment during the meeting time, they can work with technology tools outside the allotted meeting time and present them to the group during this time.

Shy or quiet group members often do well on tasks outside of the time the group has together. Asking group members to report on any news can help bring in the less vocal group members.

There is a lot of discussion in PA. Many coaches have found it useful to use role play, art, drawing and creative methods to explore an issue. Emails could also be used to report on news to the group.

4. SETTING THE AGENDA

When figuring out what to do with a group, the roles can help to provide focus for the group members. This involves setting the agenda with times allocated for each topic. The group decides a PA agenda before the meeting begins. It is useful to write it down for everyone to see. It may look like this –

Reporting – 9:15
To Do
- make a list of people to interview - 9:25
- how to contact people on the list – 9:45
- how to interview people – 10:00
- Evaluate – 10:15
- Plan – 10:25

The facilitator, the timekeeper and the coach all help to keep the group on track. Sometimes it helps for the coach to outline expectations for the group before an activity begins, particularly if there have been groups dynamics difficulties in the past. For instance, if a guru is assigned to teach the group about how to use a graphics program, then the group needs to be clear that they are intended to follow the steps of the guru, ask questions and further the learning of the group.

Keep a written record of your agendas (with the minutes of the meetings).

5. EVALUATION

Evaluation is very important to give the group a chance to speak up about how the process is going. It can be a time when past actions can be corrected in the future. For instance, if a person wanted to use the video camera, but did not have an opportunity during this meeting, they can be given the first opportunity in the next meeting.

In evaluation teachable moments and learning can be recognized, but also where the group can work through good times and bad. Evaluation helps the work move forward.

When using technology, evaluations can ask how well the new technology was used and whether it is more effective than other, low-tech, methods.

- Learning new things can be frustrating, evaluation can be a time to vent.

Depending on the age of the group and focus of the day, the evaluation questions can change. Sometime evaluation is as simple as asking – "What worked?" and "What didn't work today?" Other times, it can be a chance to review the output from the technology tool and decide whether or not further revision is necessary.

For more information on evaluation when running meetings, take a look at *Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement*, Chapter 8.

Check out the Public Achievement website for more tips on evaluation.
www.publicachievement.org → Resources → Toolbox
http://www.publicachievement.org/5_2_6_eval.html

As a coach during the Community Information Corps 2001 mapping exercise, There was a community mapper who seemed to find the work challenging. Keeping her motivated was rather difficult, but in an evaluation she wrote this:

"In the morning sometimes I have to get up early and I don't want to because I'm tired, but when I go to work at the CIC it sometimes wakes me up and each day I learn something different."

Doing evaluation can be useful for both the coach and the team members. Sometimes, people working in groups may look like they are not enjoying the work, but outside appearances are not always what they seem. Evaluation can begin and keep a conversation going about how things are going. Once people get used to evaluation, they often miss it if it is omitted.

6. PLAN

Making a Plan for the next meeting prepares the group for the next meeting, but also helps the group keep track of the process and see progress. Even if the plan seems obvious, it helps for the entire group to hear what is planned for the next meeting. Voicing these plans can not only help the group to prepare, but also give them the opportunity to either agree or revise the plan.

The planning portion of the meeting can also be a chance to make sure that the group is prepared for the next meeting. Is the equipment reserved for the group to use? Do people know what they are supposed to do outside of the group before the next meeting? What are the next steps?

- Final thoughts on Meetings

Generally, most coaches suggest being yourself when coaching, if you try too hard or try to be someone that you are not, the team will see through you. Respect is a foundation for a well-run meeting.

Project documentation is important!
Keep track of progress and steps taken on paper so that you will have a record of what the group has done. Even with a group of people, often steps are forgotten.

Don't forget to take notes!
Keep an eye on your group.

If there are group members that are being disruptive, address the problem immediately. If problems persist, let the group decide what the rules should be and the consequences.

Celebrate!

When difficult or long tasks are completed, people like to recognize that they've overcome difficulty in order to motivate them to do further difficult tasks.

CORE CONCEPTS

It is the coach's job to bring up a discussion of a Public Achievement core concept or point out that a core concept relates the issue or problem. Similarly, when naming the public skills that the PA group is learning, the coach may do this by pointing out how the skill fits with a core concept. These are teachable moments when the group can see how their work will impact their community, neighborhood and even the world.

Discussing core concepts helps the group be intentional about what they are doing – to recognize that by doing this work they are taking part in democracy. "Concepts are not just words and definitions, they are ideas and ways of thinking about the world." Page 22, *Building Worlds, Transforming Lives, Making History, a Guide to Public Achievement*.

Think about it, how often do you have a chance to really discuss important concepts in a group, particularly a group of youth? PA offers a great opportunity to not only do good work, but also develop a deeper understanding of a conceptual framework in a larger context.

When exploring the core concepts, try using the core concepts as ways to practice or teach how to do Internet searches. Or when searching the Internet about the group's issue, have the group point out the main core concept in play in the work that they are doing as compared to the work of others.

Public Work **Politics**
Citizenship **Democracy** **Freedom**
Public **Free Spaces**
Interests **Diversity** **Power**
Accountability / Responsibility

It can be useful to have a discussion as a group about the meanings of these concepts in their lives and world. For instance, in a group of high school students who wanted open campus lunch privileges, it was important to discuss the core concept of freedom and how it relates to their issue.

Games can also be played using core concepts. Sometimes it is a good idea to put away some of the project work in order to examine what the group is doing and why. Core concepts help to explain how this work fits in the world.

HOW CAN CORE CONCEPTS BE USED?

There are countless ways to use core concepts in all stages of Public Achievement. When concepts are considered along with technology, such as the Internet, the conversation about important core concepts extends from your group's work to the work of many people around the world on similar issues.

The group can **search the Internet** for various definitions of core concepts to see how others define them, then have a discussion about what they found. A dictionary, thesaurus or quotation book can also provide insights on the concepts. This can be a learning tool on how to do Internet searches.

If the group is doing a **video or audio project**, they could do a practice video or tape on a core concept, such as a song, public service announcement, interview or commentary.

Team building activities can be formed around core concepts. For instance, group members can give a line from one of their favorite songs and describe how it fits with on of the core concepts. Games can be played to act out the core concepts (see *Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement* page 79).

The group could make a sample **audiotape**, interview or website with each of the concepts. For instance, if the group needs practice interviewing, they could interview other team members about a concept, then practice summarizing the interview to the rest of the group or writing the main points of the interview into a story.

Another way that a group can use core concepts is to **make a game** out of them. If they would like to develop their computer skills, they could make the game using graphics software, word processing software or make a web page with the concepts.

Core concepts offer groups subject material that can be very useful in practice communications an information gathering skills that can be used on PA issues.

For more information on core concepts, take a look at Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement, Chapters 2 & 7.

Check out the Public Achievement website for more tips on core concepts and games that can be played with them.
www.publicachievement.org

ISSUE DEVELOPMENT

Information is most needed when the group starts to research the issue. In doing this, groups have found that it is easier to get focused and move forward if they examine **self interest** & public interest, define the **issue**, **problem** and **project**, and do a **power map**.

Many technological resources are quick and fun to use as research tools for issues. However, a combination of technology and talking to real people should be used because conversation and interaction with people is still the most effective way to get work done on the ground.

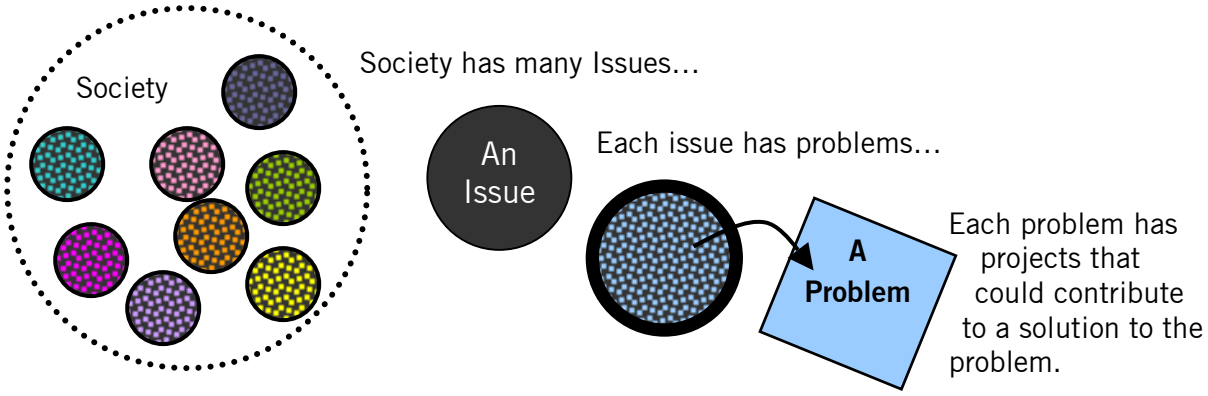
ISSUE, PROBLEM & PROJECT

Many times PA teams either confuse or have difficulty figuring out their issue, problem and project. However, figuring these out can help everyone in the group...

- Talk about the larger context (the issue),
- The particular aspect of the issue that they find unacceptable (the problem), and
- The partial or complete solution to the problem (the project.)

Many times it is useful to write three columns down for the group to see with the words "issue, problem and project" in order to have them define each aspect of their work. Later, these will be useful to explain your issue and do information searches.

Issues are matters of public concern, good and bad, that affect society.
Problems are negative consequences or matters of uncertainty related to an issue
Projects are planned actions designed to positively impact identified problems.



After a problem is solved, the issue has one less problem.

Some examples of issues, problems and projects.

	Issue	Problem	Project
Examples	Safe public recreation spaces	No place to play	Build a playground
	Environment	Too much trash	Recycling program
	Knowing about the Community	History is being lost	A community storytelling project
	Mental Health support for teens	Teen suicide	Campaign to inform teens about suicide and local resources

The words and phrases that you use in the issue, problem and project can all be used when looking for information such as searching newspapers, magazines and the Internet. For instance, if you do a search on "safe recreation places" the information may be a little different than if you do one on "no place to play" or "build a playground", but all of the searches will likely provide useful information.

Developing the issue will also help later, when the group wants to explain the issue to interviewees, stakeholders, the public or any other person. Saying "we're going to build a playground" is a bit different than "We're going to build a playground because we have no place to play and we want safe recreation places". Figuring out your issue, problem and project not only gives you better words to search, it also helps you explain what you're doing and why.

For more information on defining the project, take a look at Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement, Chapter 11.

THE EARTH FORCE EXAMPLE

Make Connections and learn from the experiences of others.

Earth Force is an organization that focuses on youth acting on environmental problems in their community. They have useful suggestions and resources for issue development.
http://www.earthforce.org/

Earth Force suggest six steps to "prepare for your expedition" in their guidebook. Groups could first do a lot of research about their community before issue work. Here is a brief description of the six segments suggested by Earth Force.

While Earth Force concentrates on the environment, the topics and steps are easily adapted for broader issues.

In Public Achievement, groups are encouraged to look at the examples and practices of other groups for guidance. In this Earth Force example, the suggestions are good for doing background research and issue development work.

Earth Force Segments

1. Community Environmental Inventory
   What is happening in your community?
   Explore your community's issues & strengths.
2. Issue Selection
   What issue do you want to work on?
   Narrow your list, begin research.
3. Policy and Community Practice Research
   What are people already doing about this issue?
   Find opinions, policies, practices & key players.
4. Options for Influencing Policy and Practice
   What are your choices for making a difference about this issue?
   Explore the options. Chose a course of action.
5. Planning and Taking Civic Action
   What are your plans for making a change?
   Plan your action, then do it.
6. Looking Back and Ahead
   How did everything go? What will you do next?

USING TECHNOLOGY FOR RESEARCH

Research can be done in a wide variety of ways. Technology can assist in research by providing effective ways to gather, store, process and analyze information.

- Use the Internet to find out background information about the issue and to answer questions. Use search terms from the description of your issue, your problem and your project. Learn how to use bookmarks if you can use the same computer(s) all of the time, or copy the URLs of particularly useful websites.

- Look at the PA related websites (**www.publicachievement.org**) and having contact through the PA forum (**paforum@yahoogroups.com**) could help to spark ideas for interesting issues.

- Explain PA to local activists and resource people so that they have the opportunity to talk about their interests and get those involved in PA thinking about the issues that they would like to tackle. First have the group call or email the local activist or resource person to explain the information and assistance the group wants and makes an appointment to meet or agree to exchange emails.

- Take photos, video coverage or audio record things that represent your issue, problem or project. Use these to explore and research what your issue is about and later to explain the issue, problem or project.

The ways to use technology in research are endless. Remember that some of the strangest ideas can later become some of the best. Using technology in Public Achievement for research involves creativity, detective work and gaining familiarity with work on real world issues and problems. When you are doing research on your project, refer back to your issue and project regularly, have fun and evaluate regularly so that the group can see the progress they are making.

SELF INTERESTS, SKILLS & PUBLIC INTERESTS

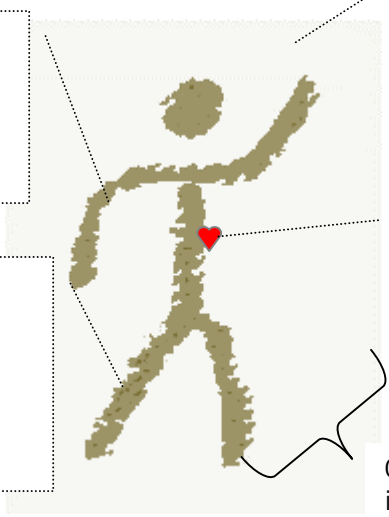
Exploring self-interest helps a group to understand the issue and get to know each other. It is a time when the group can name why they are interested in the issue and explain the reasons or tell stories about why it is important to them.

When considering the use of communications and technology, exploring self-interest is also a good time to ask the group the various skills or talents that they bring to the group. For instance, there may be a good artist in the group who could assist with drawings or graphics for posters or publicity materials. Sometimes people feel embarrassed to name their skills in public because they don't want to brag.

Knowing the group member's self interests and skills will also help the group to figure out which skills they don't have, but will need to get the work done. For instance, students who want to build a playground probably don't have carpentry skills, so they will have to find ways to bring people into their project that have the necessary skills for their project.

Discussion of self interest can help bring the group ideas together.
The reasons why various people in the group are interested in the issue will likely vary. Discussing self interest will help to quickly further the thinking on the issue and give the group participants an opportunity to explain the reasons why they find the issue important in their lives.

Some groups have found it useful to make a diagram to explain their self-interest, then discuss their diagrams as a group. You can start by asking them to draw a large stick figure on a piece of paper and then write their name and the issue. Around the stick figure they can write about their self-interests. If the members want to have practice on the computer, they can try to write their self-interests on the computer or even in an email to group members.



What do you want to learn?
- About the issue?
- About yourself?
- Any skills you want to learn or teach?

What work do you want to do on this issue?
- Talk to whom?
- Go where?
- Make what?

What kind of experience do you want?
- What do you really want to happen?
- How do you want to feel?

What kind of legwork do you want to do?
- With people?
- With places?
- Over the Internet?

Or ask the group to explain their self-interests without instructions. See what they come up with.

Skills are easy to explore along with self-interests, but often difficult to explore when alone. Think about it, what would you say if you were asked what your skills are when you start working with a group of people? Many times people are modest when asked what their skills are. However, if the coach asks the group skills when looking at self-interest, then *the group member can decide which skills they want to contribute to the group.*

When working with technology, skills and experience that are particularly useful are:
- computer use
- office equipment use
- working with cameras, both video and photography
- writing, storytelling skills and editing
- drawing, visualizing and planning layouts
- communicating, teaching and talking people you don't know well.

Public interests are often what the group looks for when they do their research about the issue, problem and project.

Before talking to a stakeholder about your issue, problem or project, you can ask your group the following questions to help them focus on how they should approach that person.

- What do you suppose their self-interest about this issue will be?
- Compare the similarities and differences of their interests to ours.
- How should we approach them? What do we want to emphasize?
- What information do we want from them?
- What agreements do we want from them?
- What do we do if they disagree with what we want?
- What information should we provide to them?
- What should we leave behind – a letter? A brochure? Our contact information?

Some groups have found that role-playing what the conversation might be like is useful. After the conversation, consider sending a thank you note or email thanking them for their time and briefly reviewing the conversation or agreed actions.

POWER MAPPING

Power Mapping helps a group to think through the political environment of their issue. Power mapping can be extremely useful to make a plan for the project.

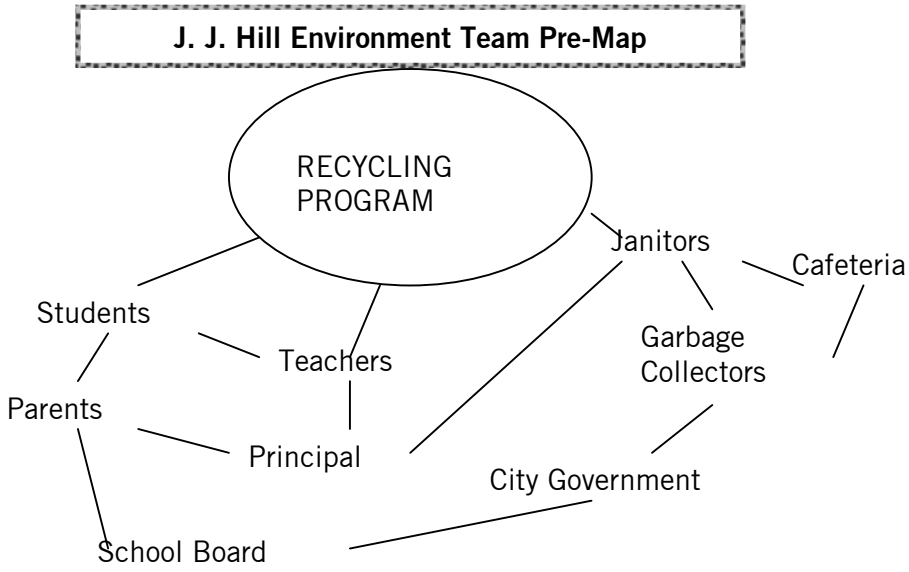
A more detailed description of power mapping is found in Chapter 10 of *Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement*. This overview is intended to show how power mapping can be used with information gathering and planning.

Take time to power map. It's worth it.

PRE-MAPPING

Pre-mapping is an opportunity to try to figure out who the team *thinks* are the main stakeholders for their project. A stakeholder is someone who has interest in the problem or will be impacted by the solution of the problem. The PA team is only guessing about the stakeholders at this point.

As you can see from the example below from the J. J. Hill Environment Team, power mapping can tell a story about the problem and identify people to talk to for solutions.



To start power mapping:	Communications & Technology Ideas
discuss power	Explore power on the Internet. Discuss how information relates to power. Have a chat room discussion about power. Email each other with a story about power. Do a sample website, poster, video, song or recording about power.
brainstorm who is involved in the issue	Write down who is involved in the issue on a computer. Search the internet to see who usually writes about your issue.
Draw your power map.	Scan in your power map or take a digital photo and put it on the PA website or your own website.
Keep a record of your power map(s).	Keep a journal of the group's work. Make a large power map that you can display every time you meet.
Pin your power map up at each meeting.	Taking a look at the power map can help the group see progress about what you have learned.

Power mapping Hints.
"As you map, keep these points in mind:
Interests. Your map will show any number of potential allies your team can work with in order to achieve your goal.

- What are some of the resources the group can tap into?
- What are the interests of all the stakeholders, allies or not?
- What strategies are useful to enlist the support of stakeholders in our work?

Power

- Who is impacted by your problem?
- Who has power in relation to it?
- Is it known how decisions are made and who makes them?
- What kinds of power to the stakeholders have?
- What kind of power does the team have?
- How can you access more power?

Rules. Knowing the rules of stakeholders and their organization

- Does the team understand protocol and how things get done?
- When interviewing and gathering information, do the students understand the cultural and institutional cultures that may exist with the particular stakeholders and their organizations?
- Discuss the possibilities of negotiation."

o Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement page 123.

RESEARCH

Research happens throughout the entire process of doing public work. Research can be interesting and fun when you combine the use of technology and old-fashioned methods, such as talking to people in person. It helps to vary the methods of doing research throughout the PA process to maintain and spark renewed interest in the project.

At times, groups can feel bogged down by research, but if you frame research as an exploration or adventure using a combination of methods, research suddenly becomes more interesting.

When researching using the Internet, it is important to know how to do a good Internet Search. Some hints on Internet searches are below.

- Use quotations only where appropriate for things such as formal titles, names and specific phrases.
- Use place names to narrow your search to a particular geographic area.
- If you find something that is close to what you want, use the "similar pages" function on the search engine.
- Try Boolean logic with "AND" and "OR" phrases in an advanced search.
- Look at web pages that you have found useful, are there links to other recommended web pages?

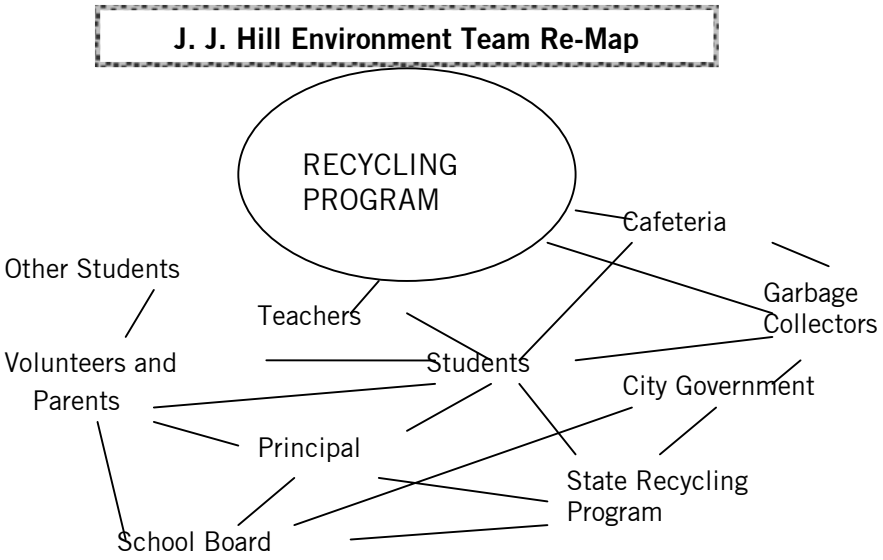
RE-MAPPING

When re-mapping, start a new map or keep track of the changes from the pre-map(s) to remember and document the progress of the team.

The J. J. Hill Story…
"When the Public Achievement Environment Team started talking to the stakeholders that were placed on their map, they made some startling discoveries. Their principal was supportive of starting a recycling program, but said that she did not have the resources to supply special bins, did not know whether the custodial staff or teachers would participate, and did not know whether the city would pick up the recyclables. The head custodian informed the group that because of staff cutbacks, the custodians would not have time to collect recycled materials. Many teachers were positive, but did not want to be responsible for recycling in their rooms. The cafeteria workers offered their support. After talking to a friend who attends another school, one team member found out that other schools ***do*** *recycle. A call to the principal of his friend's school uncovered the fact that the state had a program to pay for the bins. That principal even gave them the phone number of the state agency. A call to the state recycling agency revealed that they would have to arrange for pick-up before they could even apply for the bins. By contacting the city sanitation department, the team found out that they city would pick up recycling, but that their principal had to submit a special request."*
Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement page127.

When you compare the revised map to the previous map, it becomes clearer that the J. J. Hill students saw themselves having power to take on the recycling program effort. And it also became more complex.

The re-map helps to outline what the team learned after research and talking to stakeholders. A power map is a good beginning to start meaningful action.



For more information on power mapping, take a look at Building Worlds, Transforming Lives, Making History: A Guide to Public Achievement, Chapter 10.

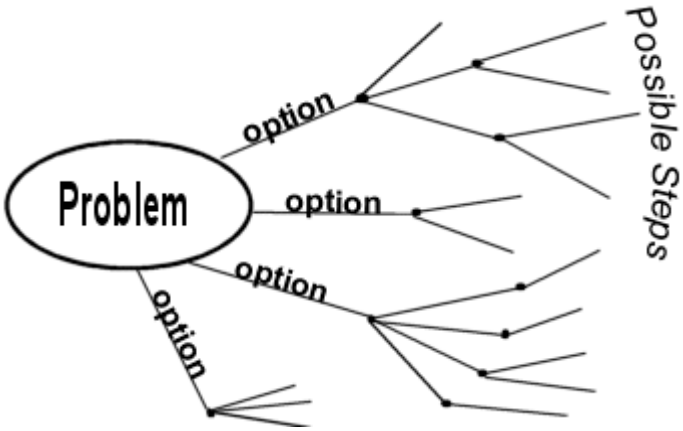
Check out the Public Achievement website for more tips on power maps.
www.publicachievement.org → Resources → Toolbox
http://www.publicachievement.org/5_2_3_pwrmap

DECISION TREES

Power mapping goes well with decision trees, particularly for visual learners. Sometimes it is easier to make a decision tree rather than taking linear notes because the team can see options all laid out for them. Decision trees are mostly used in business, computer science and scientific modeling.

- What is a Decision Tree?

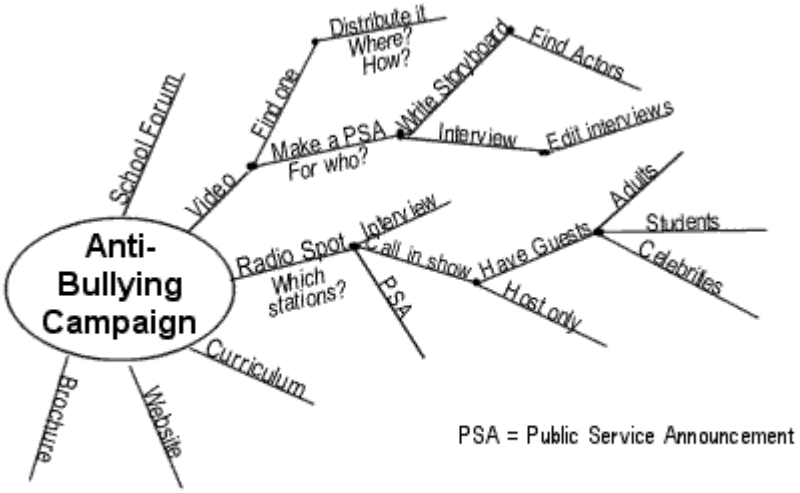
A decision tree is a visual map or plan of options and consequences related to the decision being made. Here there are two types of decision trees - one to look at options, another to document decision made by the team.



An Option Decision Tree -

PA decision trees could be made to help a group think through options and the consequences in order to help them make a decision. Usually there are many different paths that a group can take to work toward the solution to their problem.

Once a decision tree is made, the group can decide which idea(s) they like the best, highlight them and move forward to an action plan.

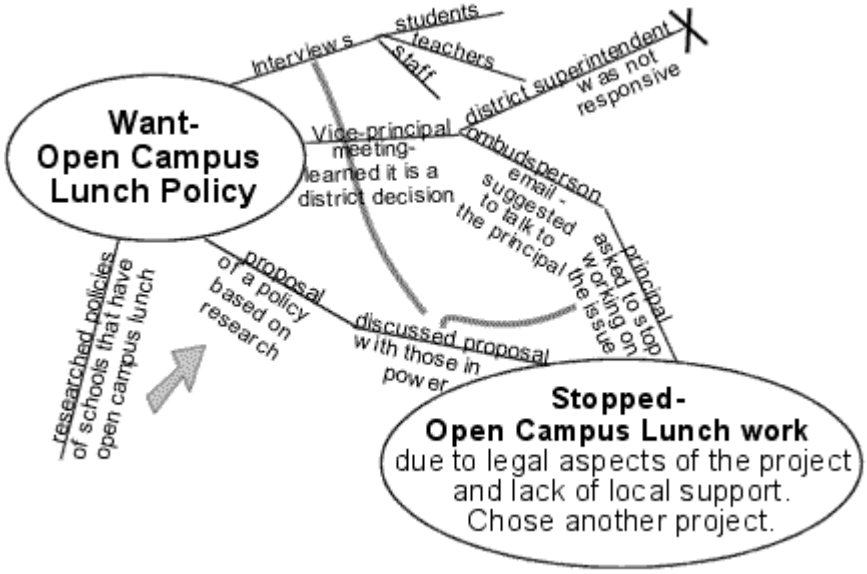


Anti-bullying decision tree to explore options.
This shows what could be done for an anti-bullying campaign.
It helps groups see their options.

This example is from a group at the Minneapolis Community Technical College (MCTC) who knew they wanted to do something about bullying, but didn't know what. A decision tree can help them think through options and decide on one or more paths to take. Once decisions are agreed by the group, they could be highlighted on the decision tree. Later, the group can revisit the decision tree if they change their minds about what to do.

Decision trees can also be used to document what actions that group took. Instead of calling them Decision trees, we could call them Accomplishment Trees.

When a group feels like they are getting nowhere or feeling stuck, an accomplishment tree can help them redefine their steps based on what they have already accomplished. Below is an example of an accomplishment tree from the experiences of a Humboldt High School team in Saint Paul Minnesota that was working toward getting open campus lunch privileges. Although this group decided to change their focus, the accomplishment tree could remind them what they have learned and done to work toward open campus lunch. Even though they didn't succeed in obtaining open campus lunch, they learned skills about how to work through a public issue. They were successful as a group.



In the case of the Humboldt Open Campus Lunch Policy Group, they would often get frustrated and feel as if they were doing nothing. Looking back at what they already did and learned can help them to see new directions. In this case, the group was not ready to go to the district level for two main reasons – first, they didn't have enough time to continue working as a group and second, they realized that they would have to build a stronger support network with adults in their power map, which would involved compromising their plan beyond what they wanted.

The Humboldt Group was able to convey their concerns about the lack of freedom and chance to show their responsibility. In their plan they recognized that open campus lunch is a privilege that could be taken away from students who abused the privilege. Their research and

knowledge of the problem was important for them to move it as far as they did. Most of all those involved with the issue were impressed that they group understood the variables of the problem.

In the case of a project that reaches its goal, the accomplishment tree would eventually lead to another circle indicating that they have achieved their goal and possibly even branch out to other groups that would help to continue the work.

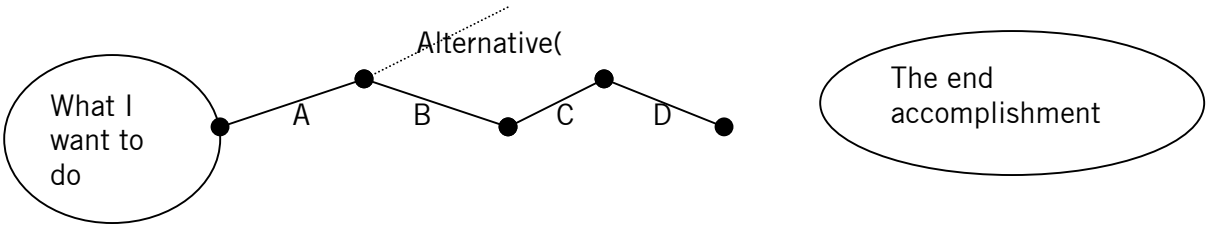
How do decision trees relate to technology?
Decision trees have been used in computer science to figure out how computers should be programmed. Many times people would think that if I do this, then this next step has to follow.

Using these "if-then" statements can help people think through a problem.

If I do A, then I must do B

If I do B, then I have to do C

If I do C, then I have to do D, etc.



Drawing them on a decision tree can make it even more clearly about what needs to be done. So in this case, if I do A, then I have to do B or the alternative, then I have to do C, and D and some other steps before reaching the end accomplishment.

Try using a decision tree if and when you find your group gets confused by their notes or can't seem to remember what options or steps were discussed.

THOUGHTS ABOUT USING TECHNOLOGY

While working with technology can be exciting, frustrating and fun, it is important to keep the main goals of the group in mind. Balancing what the group wants to learn and what they want to achieve is important. For instance, if a group really wants to try doing a website, it is most important that they try, but if they really want to get a message out doing a website may or may not be the best thing for a group.

Things to remember-

- Combine issue work and learning new skills.
- Point out achievements.
- Decide priorities as a group.
- Recognize the opportunities and limitations of technology.
- Using technology takes time.
- Stay focused on the goals and tasks of the group.

Remember to adapt this information for your needs. Hopefully, this will spark ideas and enhance your work.

Contact PA to share your experiences. Your work can go up on the PA website through the contact on the website: **www.publicachievement.org.**

Using Email to coordinate PA activities in a school
Kathy Jackson, the site coordinator at Saint Bernard's School in Saint Paul Minnesota, told this story via email.

"We have a high school site coordinator and a grade school site coordinator. In addition to these "coordinators" we have a pastor, a president, a principal, and an associate principal all of whom are quite interested in and dedicated to Public Achievement at our school. Needless to say, with all these interested parties, not to mention our coach coordinator and the coaches themselves, we have continual communication needs.

This year, more than ever, we are using email to its fullest potential. Whenever anyone in our PA community has a need, they simply make the request via email and then send a "cc" to not only all the parties who may be involved in the transaction, but also to those who are interested. This way the person who can have the particular needs met, simply responds as to what their role would/should be. Also, those who may not have to take action at this time are also kept informed.

The widespread use of email amongst coaches, school personnel, and other contacts has improved communication greatly at our site.

Several groups have used our computer lab for Internet research. The High School Site Coordinator, is also working with some kids putting together a newsletter for regular distribution. They will be using our computer lab for this as well. We will also be using our closed-circuit televisions in the high school to display power point displays regarding public achievement throughout the high school building.

WHAT ABOUT FUNDING?

Many PA groups think that they will need funding for their projects at first, but later find that many resources are already available for no cost or through the contributions of a school or organization.

Several groups have had local businesses or organizations donate their services or materials to help them complete their project. For instance, a mural project went to a local hardware store for supplies, they told the owner about their plans and had several paint brushes donated to their cause. They didn't even ask for the donation! The bottom line is that resources come from all sorts of place – sometimes you just have to talk about your project and ask around.

If you find that your group wants to do some fundraising, searching the Internet and talking to people is often the best start. Below is a list of funding resources for youth.

Amounts may change and funding sources vary. Remember to do searches of your own, particularly for local resources.

- Youth Action Net Award **www.youthactionnet.org/minigrants**
- Youth Service America **www.ysa.org/awards/award_grant**

HINTS FOR TECHNOPHOBES...

- Are you afraid of technology?
- Do you know how to use some technology, but think that your skills aren't good enough to work with a group using technology tools?
- Do you not even want to think about using technology?

Top Ten List of Reasons for Non-technical People to Use Technology in PA

❿ You probably know more than you give yourself credit.

❾ Everyone brings different skills to a group, so do you.

❽ Others in the group may know less than you (or different skills).

❼ You don't own a computer, so now is a good time to learn.

❻ You think that technology is only about computers.

❺ You don't even know how to begin talking about technology – so you can just do it.

❹ You want the people in your group to also contribute to your learning.

❸ You want to learn along with your group.

❷ You consider yourself a part of the digital divide.

❶ Your dog ate your computer, too bad you don't have a dog or a computer.

If you are working with youth, it is a good chance that they know how to use a computer and seem fearless when using them. However, they may not know how to use equipment that is often used in offices such as faxes, photocopiers or even word processing software.

Similarly, many youth don't know how to make a phone call to someone they don't know or an announcement. Although these things sometimes don't feel like new technologies, they are important tools to be able to use in the world today.

It is not enough to just technically know how to use technology, people need to also know how to communicate effectively with it. Life experience teaches us how to communicate over time. Still, coaches can help youth learn communication skills with stories of the mistakes they have made in the past, roll play and practice. Although technology provides us some tools, the real skills are often knowing approaches to use the tools. Life experience often builds up this kind of knowledge.

INFORMATION EXPLORATION

There are many reasons why a group would gather information. Usually, groups first look for information about their issue to get ideas and to better understand the issue. Groups are constantly gathering information for their own use and responding to it.

Research is close, careful study.
In PAC-ITT, research means finding information to further work on the groups issue. Research is for the issue group's use.

Another reason why groups gather information is for publication. When you think of the work publication, you might think of a book or an official documents. Here, publication simply means to communicate information to the public. So don't worry about publishing your group's work, but be concerned about making your work public.

Publicity is information in the form of a message or messages that concerns a person, group, event, or product and that is disseminated through various media to attract public notice. In PAC-ITT, publicity is informing people of your work and your issue. Publicity is for everyone, produced by the group and targeted toward an audience.

PA groups do research and publicity. They discuss the issue, talk to people about it and find information from different type of sources about their issue. Research is a type of exploration. Explorations can be mapped, used in publicity materials and used to further work on your issue, problem and project.

What does it mean to explore?

- **Explorers search for information** – clues and trends. They are not always sure what they will find. They have hunches and best guesses. They are trying to discover more about an aspect of the world they explore.

- **Explorers have findings.** Good explorers have findings that lead to even more questions than they had in the beginning. Sometimes those findings do not support their hunches, sometimes they do.

- **Explorers look at things with a fresh perspective, with new eyes.** They try to see things differently, through other people's shoes and different views. They listen with open minds.

- **Explorers keep an open mind.** Sometimes the results from an exploration are even better than expected, sometimes they are worse. One of the key factors in exploration is to learn about the place, people or situation that you would benefit from knowing more about.

Explorers often seek out adventure and fun. Your group can maintain an element of fun in almost everything you do. Public Achievement is hard work, but if you build a team, define

your direction, review and evaluate accomplishments and joke or learn from your set backs, then exploration as a team will be easier and a lot more fun.

RESEARCH

What kind of information to Public Achievement and groups working on public issues need? Many times the type of information that a group will used depends on the issue.

Type of research	Questions answered	Information Gathering Tools
Issue History	• What do we know about this issue? • What do we need to know? • What is the history of this issue? • What has been done about this issue? • How were decisions made?	Group discussions Talking to people Internet searches Library use
Self Interest	• Why are we interested in this issue? • What stories do we have about this issue? • What motivates us to work on this issue? • What do we want as a result of our work?	Group discussions Storytelling Interviews
Power Dynamics	• Who is interested in this issue? • How are they related to issue? • Who do we have to influence and how? • How do people relate to each other? • What are these peoples' self interests? • What kind of power do we have?	Power Map Talking to people Interviews Internet Searches
Finding Allies	• Who will want to help us? • Is there similar work that we can learn from? Can we be in contact with them?	Talking to people Internet searches
Issue Response and Project Identification	• What about the issue needs to change to resolve the problem? • How do our interests fit with the issue? • What project(s) would address our interests? • Who is our target audience? • What messages fit our audience?	Group discussions Review information Talk to people Email people Internet searches

Most people know how to do research, but many people have difficulty organizing it to make the research useful to them. Even if your group is not planning on doing some sort of publicity work on the issue or project, it can be useful to summarize information found and keep the information in a notebook or file folder.

Written summaries of information can be used to explain or publicize your issue. Sometimes doing a summary may seem like it takes some time, but it can help your group better understand the issue and the issue context.

Groups sometimes think that they will remember what they find, however, the usually forget some research as the project continues. Whenever research seems like it might be useful at some point in the project, write down, print out or document where the information was found. Keep your information sources.

PUBLICITY & GATHERING CONTENT

Get the message out! That is what publicity is about. When you are deciding what you would like people from the outside to know, consider what your group wanted to know when you first started. Here are some ideas of what you might want to publicize:

- **How your group did its work.**

Maybe there are other groups out there like you who would benefit from knowing about your experience. How would you get the message out? You could submit something (either a web page or written statement) to be put on the PA website.

- **Your message** about the issue, problem or project.

Your message about the issue could increase awareness.

Your message about a problem could suggest ways to solve the problem.

Your message about the project could suggest ways in which others could get involved or actions that would help continue the work you started.

- **Let stories speak for themselves.** You could have a media strategy to publicize your issue. In order to do this you have to have some stories to tell. You can do this in several ways -

You could submit articles to newspaper, television and/or radio station.

Arrange a presentation before some stakeholders.

Make a brochure and hand it out at an event.

Make a website and have emails or promotional materials to get people to use the website.

If your message is clear and/ or interesting, it will stay in people's minds. Think of some of the advertising campaigns that you have seen, which ones stay in your mind? Why do you think they do?

Have a conversation with your group about messages that you remember in your everyday life. Discuss why those messages seem to be effective.
Then, discuss what your group would like to "Tell the world" and how. Write down ideas.

WAYS TO COLLECT INFORMATION

Collecting information can be a lot of fun. Most of the time youth, in particular, are very nervous about talking to adults and/or people they don't know. In past PA and CIC projects, those who have had challenging conversations with others are often the ones that find the experience valuable for them selves, and also note that talking to other people can really help them move their issue along.

Information comes from many sources – books, the Internet, conversations, everyday experiences, stories, etc. Deciding what kind of information your group wants and how to get it is often the best step in figuring out how you should collect the information.

Generally, Public Achievement information gathering works well if you ask questions like these–

- What information do we need?
- Who can we/ should we get this information from?
- What is the most appropriate method(s) to get this information?
- **How** will we get the information? What method(s) does our group feel most comfortable with or want to learn?
- **What** will we do with the information once we have it? Double check to make sure that the information, the way you are collecting it and from whom all fits with your project.

Sometimes people go through a lot of effort to collect information, but then find that the results are not very helpful. To prevent this from happening to you, test your information gathering strategy on a few people before you go to the people that will be able to give the most information. If your methods don't tend to work the first, second or third time, they will probably not work later on. Collecting valuable information is more difficult that it sounds, so if you find you're not getting good information, try again by going back to the drawing board.

PRACTICAL MATTERS

There are some very practical things that people often forget when collecting information from other people. People often forget what should be done with the interviews. It is important to use your own judgment for yourself and the group. Make sure that you question what you are doing and why; then your results will likely be helpful to the group. The following practical matters will be described in this section:

- Getting permission to use information
- Documenting the interview
- Starting the Conversation
- Guiding the Conversation
- Using silence effectively and awkward silences
- Knowing when you are finished
- Completing an Interview and follow-up

GETTING PERMISSION TO USE INFORMATION

Would you want all of the conversations that you have broadcast all over the Internet, newspapers, in schools or anywhere in the public? Unless you are constantly in the public view, you are probably not accustomed to having whatever you do or say broadcast for everyone to see, read or hear.

When you are interviewing someone, it is important that you obtain permission if you plan to use the content of an interview in public. Also, if you are going to use someone's recorded voice, photo, song or idea, it is a good idea to obtain permission before you reproduce it or use it in public. Many times permission can be as easy as asking:

May we use your	_____	in our	_____?
	Photo		website
	Interview		newspaper
	Voice recording		CD
	Artwork		brochure
	Ideas / information map		

If you plan to use the information in a formal setting, such as a book, a website, a radio show, a CD or a recording, it is an even better idea to obtain written permission. Because legal language can be rather confusing, using a short simple statement like the one below for tape-recorded interviews works well:

Permission to be taped form

I, _____ (Name), give permission for _____(Interviewers) to record and interview me on _____ (Date).

I understand that this material may be used for historical, archival, instructional purposes, or be posted on the world wide web and may be heard by other parties other than the person conducting this interview.

I also understand that I may not be used for commercial use without my additional written consent and that I retain all copyrights to the interview I am granting.

_____ (Signature)

This permission form was obtained from Loren Neimi, an established community organizer and storyteller. He uses this form, with some modifications for various community projects. The form should be signed before the interview starts.

DOCUMENTATION

Writing and talking is difficult and takes practice. One way to get around the difficulty in writing and talking at the same time is to do interviews in pairs. This requires preparation. For instance, if interviewer A is asking a question, both the question and the answer can be documented by interviewer B. Likewise, interviewer B documents the question and answers for interviewer A.

Practice talking and writing at the same time with mock interviews in your group. This can not only give group members a chance to practice writing and talking at the same time, but it can also help them practice doing interviews (without even knowing that they are doing an interview).

Not all notes are the same. This can become a source of tension when some people take better notes than others. To get around this, after the interview is done, the interviewer(s) can review and add to the notes immediately after the interview.

Recording interviews does not necessarily save time, but does provide more accuracy. If you are working with younger children, who are not accustomed to taking notes, recordings can be fun. Even with older youth, recordings can help them improve future interviews, practice listening skills and check their notes against the actual dialogue to capture the most important or interesting points.

What to do with interview recordings:

- Listen to interviews to take notes and improve notes.
- Listen to recordings as a group if not all of the group members were able to be present at the interview.
- Transcribe interviews (this means typing out all or most of the text).
- Assemble interview voices on a compiled recording of voices on your issue.

After you have interview notes, recorded interviews or both, it is time to take action on using the information. The following questions can help you direct the attention of your group to how the information from an interview can further the group's project:

- How can we use information from this interview for our project?
- How can the interviewee help us?
- What should we say in the thank you note to this interviewee? What kind of follow up is appropriate?

Say thank you to interviewees!

Thank you notes can be a good opportunity to follow up on other issues that were discussed during the interview, to ask for further help and at least thank them for their time.

Documented interviews can also be a good way to pass on the work to others. For instance, if your group also works with another group, your documented interviews can be shared. Documented interviews can also be sources for quotations and ideas for publicity materials such as news articles or brochures.

STARTING THE CONVERSATION

Many times people don't think that they will get nervous when interviewing someone. They may forget to use their notes or even introduce themselves.

If interviews are being done as a group, each group member can be assigned a responsibility. For instance, one person can be in charge of describing the project, another can be in charge of doing introductions (or at least starting introductions), and yet another could be sure to ask a little background information about the interviewee.

In the beginning of an interview it is important to help both the interviewers and the interviewees be at ease. Interviewers can be at ease by practicing starting an interview and also having a cheat sheet of interview points that will help them guide their way through the interview. Interviewees can be made at ease by having a short conversation before the official interview begins.

There are three stages in starting the conversation:

1. Introductions and easing into a conversation.
    - Say your name and something about you.
    - Explain where you're from and something interesting about yourself.
2. Explain the project
    - Explain the issue, problem and project.
    - Express why you are interested in the project.
    - Explain why you want to talk to the interviewee before you.
3. Asking for background information about the interviewee.
    - Find out what they did when they were about the interviewees' age.
    - Find out what issues in their community interest them.
    - Confirm their name, position and contact information.
4. Tell them how long you think the interview will take, make sure your interviewee has that much time.

Starting a conversation should not take much time. You don't have to cover every one of the elements listed above, these are merely suggestions. However, easing into the conversation can be as simple as saying something like "we want this to be a very relaxed conversation" or taking a deep breath and saying, "let's get started" after introductions are completed.

GUIDING THE CONVERSATION

The role of an interviewer is to guide the conversation. Interviewees will sometimes get off the topic that the interviewer wants, without knowing it. The more preparation that the interviewers have before the interview, the better. Interviewers need to be aware of the information they want, the interests of the interviewee and have questions to help them guide the interview to get information and keep the interviewee interested in talking.

Interviews are often called structured, semi-structured or unstructured. A structured interview has a series of questions (like a survey) that are asked in the same manner to every interviewee.

Semi-structured interviews combine the use of stock questions, that is, questions asked of each interviewee and improvised questions. Unstructured interviews may have some common questions for every interviewee, but are very much like a conversation or a story.

Types of questions

Open-ended questions are where you can really get people talking. These are questions that ask for a story, an idea or a history. Open-ended questions cannot be answered with one word. For most PA work, open-ended questions will be most useful to further understand an issue, in order to get further on your problem or project.

Examples of open-ended questions (and statements)-

- Why do you like your favorite ice cream?
- Tell me about your favorite ice cream.
- Could you tell me about an experience when you were eating your favorite ice cream?

Closed and factual questions can generally be answered with one word or phrase, such as "yes" or "no", "true" or "false". Fact-finding questions can provide information such as the name, address, phone or title of the person you are talking to. These questions can be important to verify detailed information.

Examples of closed and fact finding questions-

- Do you like ice cream?
- Is ice cream available in your town?
- What is your favorite ice cream?
- How many times a week do you eat ice cream?
- Where is the nearest place to your home where you can buy ice cream?

Structured Questioning

Surveys are one of the most common types of structured interviews. Survey questions are generally all the same, follow a particular order and are intended to compare the answers of different people to the same question. That is, structured interviews are often good for comparing the opinions of people.

For the interviewee and the interviewer, structured interviews are the most challenging type of interviews to keep interesting and tell good stories. Structured interviews most often asked closed or factual questions.

Semi-Structured Questioning

Semi-structured interviews combine open-ended and closed questions. Questions can be asked in almost any order. This flexibility gives the interviewer the chance to ask follow up questions of the interviewee about things that they mention.

Unstructured Questioning

Unstructured interviews feel like a conversation. The role of the interviewer is to keep the interviewee talking on the topic of interest. The interviewer will adapt their questions to fit the conversation topic.

During the summer 2002 storytelling project, interviewers found it useful to have a cheat sheet of questions that they may want to ask. The group brainstormed the questions based on the kind of people they were going to interview (mostly artists and community activists). Here are some examples of their questions:

- Tell me more about _____.
- What do you want people to know about _____?
- What do you enjoy most about_____?
- What do you find most challenging about_____?
- What did you learn when you worked on _____?
- When did you decide to do _____?
- What influenced you to _____(produce a mural)?
- Why is *it* on the West Side?
- What is unique about the West Side?
- How has this _____effected you since you produced it?
- How do you think _____(this) has influenced the community?
- What is meaning of the mural?
- How did you learn how to paint?
- What artists have influenced you?
- Which do you prefer to do public or private art?
- How is doing public art different than private art?

These questions were written on a piece of paper that the interviewers took with them. If they found themselves at a loss for words, the *cheat sheet* could help them guide the interview to get the information they wanted.

USING SILENCE EFFECTIVELY & AWKWARD SILENCES

Silence can be a good thing, particularly in an interview. Silence allows your interviewee to pause and think. Without pauses, the interviewee may become tired and forget to mention an important point. Pauses can also give the interviewer a chance to ask the interviewee to expand on a point or change focus.

Some interviewees will talk on and on and on and on. During these interviews it seems like the interviewee will not take a break to let you ask more questions or shift focus. In these cases, the a pause or moment of silence is most useful to the interviewee to gather their thoughts on next steps.

Using silence effectively means to use silence to pause and think, to allow the conversation to shift focus, and ask for more detailed information about a topic already discussed.

Using silence ineffectively happens when there are long, awkward silences after the conversation has come to a logical end. Awkward silences can be avoided by knowing when the

interview is over, preparing questions for the interviewee and checking off once questions are answered, and reformulating questions that were briefly answered.

Interview preparation is key to using silence effectively and getting good interview responses. Some people are simply natural interviewees, while others are difficult to get information. Practice interviews with group members can help prepare interviewers to realize what it feels like to be interviewed and to be an interviewer.

Silence can be used effectively in a variety of ways. Here are some ideas of how you can keep your interview on track and at a good pace:

- Give the interviewee a glass of water (or another beverage) during the interview. People usually take pauses for a drink of water when they are shifting from one point to the next. This can be a good chance to ask for more detailed information, shift the conversation to another topic, or simply have them continue.
- At the beginning of the interview, you can invite the interviewee to pause and think about responses throughout the interview by saying something like this: "Feel free to take some time to think throughout the interview if you'd like."
- When asking a question, the interviewer can pause. You could say something like this: "I want you to think about the use of technology in PA." [Pause] Then ask, "Can you give me some examples of things that you and your group has done?" Yet another example is: "Think about when you were my age." [Pause] "How did _____[name of issue] affect you?"
- The interviewer can ask the group to pause before answering the question. The interviewer could say something like: "I am going to ask you a question, I want you to first pause and think about it for a few minutes, then answer…" Even if the interviewee doesn't pause, at least you gave them the invitation to pause.
- When it seems like a conversation has come to an end, the interviewer can ask the interviewee questions like these:
  What questions do you think we should be asking of you?
  Have we missed any questions that you think we should be asking?
  Can you give us some information that you think would be useful to us?
  Can you tell us about an experience that you've had with _____[our issue]?
  Do you have any questions for us? / Do you have any questions for me?
  Are there other people that you think we should be interviewing? Who?

Pacing and using silence effectively in an interview comes with practice. If your group plans to interview a lot of people, having mock interviews or practice interviews with a variety of people can help to prepare the interviewers for a wide variety of situations. Still, there are many interviews that cannot be predicted. Challenging or exciting interviews can be a good opportunity to evaluate the information obtained, the interview process and the time line of the project.

KNOWING WHEN YOU ARE FINISHED

Some interviewees will talk on and on and on and on. Finishing an interview with a talkative person or people can be challenging. It is just as challenging to finish an interview with

someone who has given you almost no information. So how do you know when an interview is finished? It is all about information.

If you know what information you hope to get from a person, it is easier to end an interview once you have that information. Keep a list of questions or points you want addressed. Once all of the items have been fully answered, you're finished. However, if there seems to be a lot more to talk about, that you think will be useful, let them continue or schedule another interview focused on specific issue.

The key to knowing that an interview is done is to have a focus, maintain that focus and stop when you have all of the information. Once you have the information you need. You can politely thank the person you are interviewing, and, if you think appropriate, ask for contact information and further advice on your project. Even if you don't use the advice, you might get a few more useful bits of information.

If you are unclear about the information you want, but you think they will be an interesting person, you may want to spend a bit more time explaining your project and that you think they may have some ideas or stories for you. This way, they will let you know when they are finished talking to you.

Again, practice helps with interviews. Interviewers may want to use one or more phrases to end an interview, such as "Thank you for your time and information. We seem to have the information we need."

An interview is done when you are out of time. When you make an appointment for an interview, make sure you know how much time you have and stick to it. It is often a good idea to leave five to ten minutes at the end of an interview for follow-up questions and comments.

Have someone from your group keep track of time during an interview, so that they can push the interview along if there is limited time and a lot of questions.

The time keeper may want to remind everyone, both interviewers and interviewee(s) how much time remains. The interviewee will appreciate your respect for their time and your group will hopefully be able to get the information needed in the time available.

COMPLETING AN INTERVIEW AND FOLLOW-UP

Thank the interviewee(s) for their time and information. Get their contact information in case your group has further questions, but also so that you can give them information on the outcome of your project.

Follow-up can be done my phone, mail, email or in person. Sometimes groups like to do a final presentation on their work and invite all of the people they talked to. If you plan some sort of event, don't forget your interviewees.

STORIES AND INTERVIEWS

Sometimes it is difficult to tell the difference between a story and an interview. During an interview, people may tell stories. Some stories can sound more like an interview than a story. So what is the difference?

Stories are a narrative, true or untrue, about past, present or future events and situations. A person tells a story. The storyteller tends to have control over the topic.

Interviews are meetings in which information is obtained. In an interview, the interviewer is intended to guide the topic.

Have you ever had someone say: "tell me a story"? If you have, did your mind suddenly go blank? Sometimes even the most gifted storytellers need a topic or a direction. Storytellers will usually want to tell a story relevant to their audience.

In PA, collecting stories may be useful for writing newspaper articles, documenting local history or the history of an issue for a publication or presentation, or collecting oral histories. Although the storyteller is in control of their story, and it's topic, the PA members can ask to hear about an event, a situation, or a particular story.

Interviews, in contrast to stories, have the interviewer(s) in control of the topic. Interviewees are there to provide information, they are relatively passive. The interviwers are the ones who should know what information they want.

In both cases of stories and interviews, communication needs to happen between the teller and the listener; the interviewee and the interviewer.

- The listener / interviewer needs to inform the teller / interviewee what they are interested in and why. In PA, this means to tell them about the issue, problem and project.
- The storyteller / interviewee needs to know the context of the PA groups issue.

Therefore, it is a good idea to explain who you are and why you want stories or information.

Stories can have some interaction. The listeners may want to ask questions about the story being told. Particularly with people who not accustomed to telling stories, their bits and pieces of a story may have to be put into a different order to make sense.

Interviews are good for when your group knows the information it wants and has a good idea of who has the information you need. Stories are good when you want to explore an issue.

CAPTURING STORIES

Stories are everywhere. We tell stories everyday (even though we may not realize that we are telling a story). We hear even more stories than we tell. Most people know that stories tend to change depending on who is telling them and also when told from one person to another and so on.

So how can we capture stories?

Stories can be recorded, retold and passed on by others or documented in writing.

- Recorded stories can be listened to over and over again. They can be transcribed into a written story or notes can be taken about important points.
- Retold and passed on stories can vary depend on who tells the story, adapted to fit different situations and used as a way to have intergenerational dialogue. Retelling stories can be a good way to gain experience in public speaking.
- Documenting stories in writing is a long process if a there are long stories to be documented. Story documentation projects can involve learning how to use audio equipment along with word processing programs on computers. The advantage to getting the actual words that a person said, is that you can more easily capture their sentiment in brochures, newspaper articles, websites or presentations.

Should we be concerned if stories are true or untrue?

When stories prove a point, does it matter if they are true or untrue? This is a good question to ask of your group when you encounter a questionable story. Many times it is difficult to prove the truth of a story. Some stories are intended to be untrue. Some stories are intended to have a little truth with a little fiction. Whatever the case may be, stories are intended to have at least one message. Good stories have timeless and clear messages.

When you are looking for stories you may be looking for historical perspectives, fiction, adventure, imagination. Yet in all stories, there is one message or another. A story's message could be a moral, a feeling, a lesson learned or an unforgettable mistake. Often in stories the message is not explicitly said, but the listener can decide for themselves.

If your group cannot decide on the message about a story, have a conversation about the messages and explore how everyone who hears the same story can walk away with different interpretations. This could lead to a discussion of free spaces (to think freely), interests and diversity.

During the middle of a summer mapping on the West Side Saint Paul, Minnesota community, the following rules were made by the CIC mapping team. These rules were made by looking at the results to improve future interviews.

"Rules:
Keep typing when doing data entry.
Encouragement.
When asking someone to fill out a form before a survey, make sure that you get the filled out forms back.
Go to bed early.
Arrive on time.
Ask for help.
Fill in every blank.
Participate.
Get all of the information on the first visit.

Clarify questions if people don't seem to understand.
Ask if phone numbers and emails are private or public."

CONDUCTING INTERVIEWS

Good interviewers listen well, get the interviewee talking and direct the interview. For people who have never done an interview before, it can be difficult to keep an unstructured interview on track. This can be resolved by having fairly structured interview questions and/or having several people as interviewers with different roles.

A problem with very structured interviews is that they are not very interesting to conduct. Structured interviews also do not allow much storytelling or additional information. In PA, relationship building is one of the most important skills to develop. In order to build relationships while doing interviews, semi-structured or unstructured interviews work best.

When conducting semi-structured or unstructured interviews, it helps to do the interviews as a group with different roles. These roles can be alternated during the interview.

One way to conduct an interview as a group is to share all responsibilities equally. If part of your objective in doing the interview is to give everyone a chance to serve in a different roll, this is a good approach.

You can have your group brainstorm a list of questions for the interviewee. Assign each interviewer one or more question(s). Also assign a time keeper. The interviewers will have two roles – to ask questions (including probing questions and follow-up questions) and write responses to other people's questions.

- List the questions on a notebook or piece of paper and clip board, leaving space for the answers to be recorded.
- Practice roll-playing the interviewers and a pretend interviewee.
- Pass the notebook around, first for the interviewee to read the question, then for a person next to them to record the answer. The interviewee is in charge of listening to the response and asking probing and follow-up questions.

The method of sharing responsibilities during an interview can be done in a variety of ways. Key things to keep in mind are…

- The person asking the questions should be in charge of listening closely to the answer and asking probing or follow-up questions.
- The person recording the interview responses, should not be the same person asking questions because listening carefully and writing is difficult. The person asking questions may want to keep their own notes to remind them of which questions they want to ask, but it would likely be difficult for them to keep notes that would serve as the interview record.
- A time keeper doesn't always have to use verbal cues to say that there is not much time left. Be creative about how best to keep time during an interview so that it is not disruptive (using hand signals, signs or another form).

Inexperienced and young interviewers often have difficulty asking probing or follow up questions. These kinds of questions work well on a cheat sheet. If questions are written down

in advance, the interviewers may find it easier to think of appropriate questions during the interview.

Another challenge for young interviewers is that they assume that the person they are talking to either has all of the answers that they need or are an expert. With time and practice interviewing, youth often find that some people will have more answers than others, but very few people will have all of the answers that they need in order to do their project. Before an interview, you could help your group understand that they may or may not find the information they need by reminding them that the person they are interviewing is human too.

Key things to keep in mind when interviewing, particularly on controversial projects, is that…

- People can agree to disagree. Discuss what your group would do if one of your interviewees does not agree with your project.
- No one person can know all that there is to know. Be as patient and understanding as you can, even if you become frustrated with some responses or lack of knowledge on your topic. If you think the person you are interviewing doesn't have much information, thank them for their time and stop the interview.
- Adults do not have all of the answers. Children and youth sometimes think that adults have all of the answers. When interviewing, they will soon find out that adults do not have all of the answers, but that they can build relationships with adults to accomplish different aspects of their project.
- Respect your interviewee and they will respect you. Treat your interviewee how you would like to be treated. Listen carefully, respect their time and ask for assistance.
- Don't forget to explain your project to the interviewee so that they can address their responses to you.

One of the most nervous people about going on an interview during the 2001 Summer Mapping Project by the CIC said on her Post-Interview worksheet:

> *"It was really easy, and it wasn't as bad as I thought it would be. It was easy because I was really comfortable."*

There was nothing that you could have told this mapper before she went on the interview that would have calmed her down, other than preparing her for the interview. In preparing for the interview, we practiced interviewing each other. When we were doing this the mappers all felt kind of crazy, but the practice paid off. Almost all mappers said that they knew what to say, with only a little stuttering here and there.

Nervousness can sometimes be on your side when doing interviews because it can make you hone in on the most important topics as long as you are prepared. So before you go on an interview… make sure you can explain your project, why you want the information and what you hope to do with the information.

After you finish an interview, evaluate how the interview went. Write down and fill in your notes with things that you remembered immediately after the interview. You would be surprised how quickly people forget what was said.

SURVEYS

Beware of Surveys!

Many PA groups do surveys. It often seems like a really good idea that involves getting public opinion about an issue. However, there are a few major problems with surveys.

Surveys take a lot of time and effort for very little return. People often do surveys without really considering how they are going to use the results. Surveys can fill a lot of time, but may not have a lot of purpose.

When you are considering a survey as a group, ask whether or not a series of strategic interviews with people on your power map would be better. Many times, conducting an interview is more interesting than a survey and a good opportunity to start building relationships with the people on your power map. These relationships, and the information from interviews, can lead toward new, faster, ways of completing your project.

PROBLEMS WITH SURVEYS

There are six main problems with doing surveys:

1. Sampling –

- Who will be interviewed?

How many people do you have to interview to get a good idea on their opinion? Are opinions what your really need? Is it more important for you to get support in a different way?

- Is the population involved in the issue adequately represented in the survey?

Many times surveys do not get a wide enough sample to capture the opinion of the people who make decisions on the issue, problem and project.

2. Privacy & objectivity–

- Can privacy of the respondent be guaranteed? Will names be on the questionnaire?

People usually don't feel comfortable writing down their names on surveys, particularly if they are not clear on how it will be used. Before doing a survey, even a nameless one, it is important to be clear about what will be done with the results. If you can adequately explain what you plan to do and what you plan to do with the surveys.

- If the survey is about a sensitive topic, will respondents feel comfortable answering?

Sometimes survey questions are phrased in such a way that it makes it difficult to answer. Before you do a survey, test the questions on a few people to make sure that they can answer the questions easily. Sometimes rephrasing questions can get the same results, but be easier to answer than direct questions.

3. Appropriate Questioning-

- Do the questions being asked really reflect the information you want to gather?

Many surveys don't quite get to the heart of a group's issue, problem or project. Surveys tend to be limiting on what can be asked in the same way to a variety of people. If your main goal is finding out public opinion, then surveys may work, otherwise try interviews or capturing stories.

- Is it clear how the information will be used? Are all questions appropriate?

If you explain what you want to know to your interviewee, then ask a different set of questions, your interviewee might wonder what you're really trying to get at. Be honest with your interviewees and they will be honest with you.

4. Information Storage –

- What will be done with the survey forms once they are complete?

Explain how confidentially will be kept, or not. Explain how information will be tallied and stored. Most of the time, keeping complete confidentiality is close to impossible. Surveys don't tend to enable a conversation as interviews, to build trust and relationships.

- How will privacy be maintained?

Are you going to destroy survey papers? If yes, make sure that you have the ability to process survey results effectively –without losing information.

5. Survey Analysis –

- Who will compile the results and how?

Compiling results is one of the most difficult things for PA groups to do. Graphic displays of surveys using percentages or averages are often the most easily understood methods to process surveys. However, many people have a tough time processing survey results in a way that is not only easily understandable, but also effective to meeting the goals of the PA project.

- Will the survey results in fact contribute to solve a problem or help a project along? How?

Again, before doing a survey, make sure that public opinion is what you're after. If not, then consider doing interviews for information, a news article, website, brochure or some other piece of work that indicates public opinion, often in a much more meaningful way. People tend to relate more to stories and common trends than they do to numbers. Surveys generally crunch numbers, but how can you get a story?

6. Follow-through –

- What will happen with survey results?

Who will get the survey results and what do you expect them to do with them?

- How will survey results be used?

A survey may be a part of a PA project, but make sure that the time spent doing the survey is worth the outcome. Information is often easier to use.

SURVEY ALTERNATIVES

Survey alternatives are –

- Interviews
- Story collection
- Building relationships with key people impacted by your problem.

These alternatives can be used to write newspaper articles, make websites, gather information to further develop your project work and build relationships.

INTERNET & WEBSITES

The Internet is a great source for information and connection with similar groups. With the Internet, people can make connections with others all over the world, near or far.

During difficult times people doing public work feel like they are the only ones who care about their issue, the Internet can help them see that there are others who are also working on the same issues, possibly with different approaches.

One great strength of the Internet and websites is to use and spread **information**.

- Information on the Internet and websites may not be useful.
- There may not be much information at all.
- Information can be so biased that it is difficult to know the truth.
- Information can be untrue.
- Information can be useful
- Information can come from reliable sources.

Figuring out how to use the Internet effectively takes practice. The next sections are about how to use the Internet and make a website or web page.

ABOUT THE INTERNET & WEBSITES

Many people don't know the difference between the-

Internet
World Wide Web
Websites
Web Pages
URL versus website address

Email
List Serves

Do you know the difference between these things? If yes, then try to remember how confusing computers can be if you don't understand these terms.

If you aren't so clear about what they mean, than you will be at an advantage when you work with groups to explore the Internet. Why?

Teaching something while you are learning it makes you slow down when explaining new concepts. This can help everyone better understand difficult concepts. If you know the topic well, sometimes it is more difficult to make sure that everyone understands.

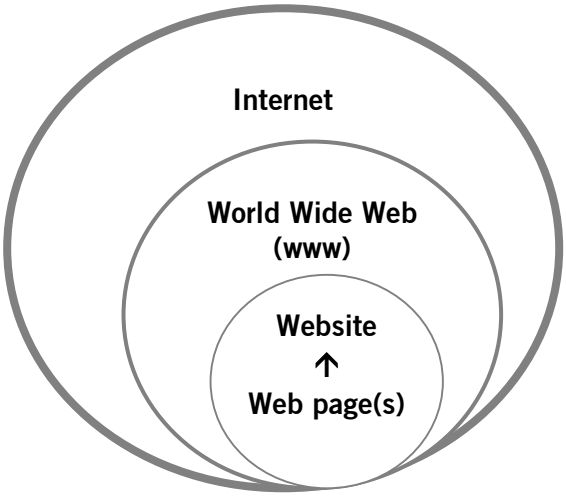
If you are Internet savvy, then try to remember what it is like to learn something completely new. Remember one of the most important guidelines when working with people who are new to technology: **if something is not obvious to the learner, it is not obvious.**

- Do you really have to know what all of these things mean?

Many people use the Internet without knowing the meaning of the terms, however some basic knowledge can be helpful. When working with your group, just a quick skim through on Internet terms should be more than enough.

- Why bother learning these terms?

To be able to prevent mistakes, do faster and more efficient searches and understand basic concepts in preparation of making websites.



Web pages are a part of websites.
If a website were a book, a web page would be either a chapter of the book or a page.

Web sites are often on the World Wide Web, that is, they start with www. Not all websites are on the World Wide Web, some may start with something other than www.

The World Wide Web was created as part of the Internet to share information across the world. The World Wide Web is like an international library of websites.

The Internet is a network of computers across the world used to share information.
Sometimes people forget that there are people behind computers. People can communicate with each other over the Internet.

Internet *(also called "**The Net**")* – a network of computers of all kinds around the world connected to share information and services. Also see-
Internet Society (internet) **http://www.isoc.org/internet/**
Search **http://whatis.com** for the term "internet"
Search **http://www.howstuffworks.com** for "internet"

World Wide Web *(www also called "The Web")* – a collection of Internet sites with text and graphics using the hypertext transfer protocol (http) to communicate from computer to computer across the world.
Web site a location on the World Wide Web that has a homepage (the first page you see when you go to the site) that may or may not be connected to other pages. For instance this is a web site: **www.publicachievement.org**

Web page a document on the World Wide Web. Each page has a unique URL (Uniform Resource Locator). For instance this is a URL:
http://www.publicachievement.org/4_forum.html

People often don't need to know the difference between a URL and a website address. Briefly, a URL (Uniform Resource Locator) is the entire path name of a web page. A website address is the root name of a web page.

Beginners often get confused between URL or website address and Email. The easiest way to explain this difference is to note that email always has the @ (at) symbol in it.

While learning about computers at a public library, several adult students tried to put emails as an Internet address. When the instructor explained that it will not work to put an email as an Internet address, one of the learners asked – "but they are both addresses aren't they?" This was yet another reminder that computer language is not always obvious.

The instructor explained it this way…
When you mail a letter, you send it to a particular person. That is like an email. There is the name of the person (or department) followed by the name of the organization or address location. **someone@someplace.com**.

Website addresses are like street addresses – they are places on the internet. When you want to go to the library, you go to it's street address. You might not know the name of the librarian, but that doesn't matter, because you can find information there. A website is like a resource for a place (either real or virtual). Think of it as
www.someplace.com

An exercise for those learning about email can be to explain how to read email addresses. For instance, read the imaginary email **you@youremail.com** ("you at youremail dot com").

Email is a way to communicate using the Internet. Email means "electronic mail". Emails always have the @ (at) symbol in them.

http – hypertext transfer protocol is a system that defines how languages are formatted and transmitted by computer servers and Internet browsers. It uses the hypertext markup language (html) to communicate across the World Wide Web. From
http://www.webopedia.com/TERM/H/HTTP.html

HTTP is the format of the Internet. Sometimes people may also find FTP (file transfer protocol) sites. FTP sites are used to transfer (move) files from one computer to another, while http sites are to transmit information in an accessible format.

Finally, don't overload your group with definitions, let the questions come up naturally. There is a lot of things to remember when learning how to use the Internet, so try to keep it simple.

USING THE INTERNET IN PUBLIC WORK

Many Public Achievement groups use the Internet to find information about their issue, ideas for projects and contact information for people who affect their issue.

The Internet is a very public space, and it can also be a very commercial space. Sometimes newcomers to the Internet are unaccustomed to figuring out what is real and what is virtual, what is true and what is false, what is a hoax and what is not.

Discuss with your group appropriate and inappropriate uses of the Internet. If you are working in a school or on public computers, there may be filters for inappropriate material, even still, it is important to talk about appropriateness to emphasize safety.

Completely new to the Internet? Check out
Northern Webs→ Beginners Central **http://www.northernwebs.com/bc/**

WHEN TO USE THE INTERNET

Information comes from all sorts of places. In public work, some of the best information comes from talking directly to people. Other useful resources can be the library, organizations or government agencies.

Depending on the issue, the Internet is not always the best information resource. If the issue is uncommon or very specific to a particular location, the Internet may not be the best choice.

The following are some ideas for using the internet in Public Achievement.

- **Explore the issue.** Thinking through which words and phrases are related to the issue.
- Figuring out the **problem** and possible **projects** that relate to the issue.
- **Finding people** that have some power in relation to the issue. Or finding the appropriate person or department to contact.
- **Finding contact information** such as addresses, phone numbers and emails. Using email to ask questions and make appointments.
- **Interact with other groups** that are involved in the issue on list serves or through websites to share ideas and approaches to doing the work.
- **Post information** through websites, public email groups or list serves to lobby for support for the issue or provide public information.

The advantage of using the Internet is that it is fast, fairly easy to use and has a lot of information. However, because there is so much information on the Internet, groups need to be careful about how they search for information, what they use and what they believe.

Celebrate when your group does productive searches and finds useful or thought provoking information.

HOW TO SEARCH

Many people have never been taught how to search on the Internet. They just learn by doing. Some people just *get it* while others don't. Be careful to work with everyone to learn how to search. Even some of the most confident Internet users often benefit from some tips.

This section will cover four aspects of searching – browsers, search engines, search terms, and sifting through the results.

BROWSERS

Most Internet users know about the two most common browsers,

Microsoft Internet Explorer 

and Netscape Navigator  **.**

Browser programs need to be on the computer in order to use them. You also need an Internet connection through an Internet Service Provider (ISP) either through a dial up phone connection or DSL / Fixed connections (connected by a cable). A modem enables a computer to connect to a dial up phone service or DSL / fixed connection.

Computer ←→ modem ←→ Internet Service Provider

A **modem** is similar to a telephone in that it transmits communications. Through modems, computers can be connected to other computer networks and the Internet across phone lines, cable or wireless networks. .
An **Internet Service Provider (ISP)** is similar to a telephone company. You have to subscribe and pay for communications services.

If you are working in a public place, such as a school, library or community center, they probably have an Internet connection service. If you do not have an Internet connection, Internet access can be bought through an Internet Service Provider (ISP). To check for a list of ISPs in your area, see The List **http://thelist.internet.com**.

You can download web browsers from the Internet. To download a web browser means to install it on to your computer. Make sure that you only download items from reliable sources. If you are using a computer other than your own, make sure you ask if you can download new programs before you start. Many computers in public places have rules against downloads.

Browser
A program used to view HTML documents [web browser].
A web browser is a program which is used to visit web pages.

SEARCH ENGINES

Search engines are what you use to search the Internet. Most web browsers have a search function that searches using their own company's search engine. MSN Explorer uses MSN to search and Netscape uses either Netscape or Lycos.

Ever wonder how search engines work? Here is how they work as of 2003…

> Google is a **crawler-based search engine**. They use a software called spiders that create their listings automatically. The spiders go through the web and list their findings. If a web page changes, a crawler-based search engine will find the changes. Crawlers examine the entire web page including page titles.
>
> Open Directory (http://dmoz.org) is a **human-powered directory**. People submit a short description to the directory for the entire web site using the classes provided, or editors write one for sites they review. A search looks for matches only in the descriptions submitted. Changing web pages has no effect on the open directory listing.
>
> Now there are many search engines that use a **hybrid method** of searching, using both the spider software and the human powered directory.

It is often a good idea to register a website that you make on the human powered directory (**http://dmoz.org**) because when people search for websites using terms that you use in the description, they will likely find your website. Remember that the directory is for the entire website (not individual web pages).

Search Engines!		For Kids Too!
Google www.google.com		**Ask Jeeves for Kids** www.ajkids.com
Yahoo www.yahoo.com		**Yahooligans** www.yahooligans.com
Alta Vista www.altavista.com		**CyberSleuth Kids** http://cybersleuth-kids.com
HotBot **Good for specific searches** www.hotbot.com		**KidsClick!** **Web search for kids by librarians** www.kidsclick.org
Lycos www.lycos.com		**Lycos Zone** www.lycoszone.com
All the web www.alltheweb.com		**Super-Kids** www.super-kids.com

There are a lot of search engines out there. The list above is only some of them, but a good start. Don't worry about how many you use, just use the ones that you find easiest.

How Search Engines Work-
www.learnthenet.com→Animated Internet→How Search Engines Work
http://www.learnthenet.com/english/animate/search.html
Also see How Stuff Works **www.howstuffworks.com**

For detailed information about search engines and comparisons of search engines see-
www.searchenginewatch.com

SEARCH TERMS

There is an art to doing a good search. Many people find it challenging at first, but once you get the hang of it, it becomes a lot easier.

When searching for Public Achievement work, it is best to keep in mind your issue, problem and project. Using terms from each can help to narrow your search.

Some tips on search terms:

- Put phrases in quotation marks.
- Narrow your search with place names.
- Try many different word and phrase combinations.
- Encourage the group to be creative.
- Try different web browsers to get different results.
- Look at how many web pages the browser found – if the number seems huge, then try to narrow your search.

Brainstorm with your group the different search terms that you would use for your project before you go to a computer.
Think of words that describe your issue, problem and project.

SIFTING THROUGH RESULTS

It is useful to take a look at the number of web pages found from a search. The browser looks for search words or the combination of the search words.

Search words	Number of pages found
Ice	14,700,000
Ice cream	2,710,000
“Ice cream”	2,460,000
Ice cream cone	177,000
“Ice cream cone”	111,000
Ice cream cone strawberry	13,000
Ice cream cone strawberry with sprinkles	755
Ice cream cone strawberry with sprinkles Bermuda	9

If you can't seem to find good websites with the search you did, try narrowing your search first or use different terms.

Once you find a website you like, look to see if it gives you all of the information you want. If it doesn't than take a look at the links suggested on the website or go back to the search engine to click similar pages by the web site listing of the one that you liked.

WEBSITES

So your group wants to make a website, but how do you start?

Sometimes it happens very quickly. For instance a group working on racism had a member who liked to do websites. Although he didn't talk very much during group meetings, his contribution to the group was to make a web page about racism and how to prevent it based on the discussions of the group. In this case, the group member made the website on his own and decided a lot of the content based on conversations in the group.

If your website is done as a group, it can take a while to create. Many groups tend to think that the website design is what takes the most amount of time in making a website. In fact, most of the time, developing the content for the website can be one of the most time consuming parts of website development.

Generally, the more time your group spends on collecting, writing and editing content for the web page, the better it will be. However, time is limited, so make sure that you plan a website project early.

Web pages for Public Achievement projects can be posted on the Public Achievement website **www.publicachievement.org**. For more information about how to do this, contact Public Achievement through the website to ask about how your group can post a web page.

Websites can be a great form of publicity.
This section covers how to make a website and how to get published (under communications hints).

TYPES

Different types of websites serve different needs. In the table below there are some examples of the types of sites and how they would be used in doing projects for the public good.

Type of Site	Purpose of the Site	Example
Information Brochure	For browsing. Generally do not leave or download	**www.publicwork.org/home** **www.publicachievement.org**

Billboard	information.	
Family Personal	For fun. A type of information website.	www.myfamily.com
Trading (e-commerce) Commercial	Buying and selling stuff.	www.amazon.com www.ebay.com
Interactive Client Websites Customer Websites	Like information sites, but you can leave and download information.	www.idealist.org (for non profit organizations) www.irs.gov (for tax forms)
Search Engine Directory	To find information on the Internet.	www.google.com http://dmoz.org/ (directory)

PA groups would most likely product information websites or web pages. They may produce personal web pages that describe their group's ideas and opinions, but generally the web page should serve a public purpose by providing information that people can use.

PA groups may also wish to create a directory of web resources for their issue. This is very similar to an information page. In fact, many information resources also provide some sort of directory. A directory usually not a list of links, it is more like the phone book (which can also be found on line).

Consider three types of web pages for doing public work: Action & Publicity, Opinion and Journalistic.

	Target Audience	Get *what* done?
Action & Publicity **We want you to…**	You want certain people to- ↳ go somewhere, do something that benefits your issue, or behave in a some way.	Convince people to - Attend an event. Write, talk about, do or donate something. Change behavior.
Opinion **We think…**	You want people to- ↳ Understand what you think and why you think that way, whether they agree or not.	Convince people to - Begin of further a dialogue among groups with different opinions.
Journalistic **We've heard…**	You want people to – ↳ Read, listen or view a story important for people to know. ↳ Get involved in something as a result of the information you provide.	Convince people to – ↳ Have an understanding about the history or story of an issue. ↳ Take action based on information that you have provided them.

Many websites combine action and publicity, opinion and journalistic aspects. It can help to talk about what you want to get out of a website before you even start to develop content or figure out your audience.

Ask your group –

- What do we really want to get out of this?
- Do we want people to act on something?
- Do we want to influence public opinion?
- Do we want to gather information for publication? (A necessary step in web page production,)
- How important is learning new skills to us in this process? Or is it better to get it up quickly by having someone who already knows how to make web pages do one for us?

Work with the group to figure out if making a website is the best option. Sometimes there are better ways to get across information across such as submitting articles to a newspaper, making a brochure, having a radio show, doing a play, posting a web page on someone else's website, submitting a web based article or posting information on websites that deal with issues similar to your group's issue.

Whether your group decides to make a web page or not, remember that similar skills are required to produce public information, such as gathering information, formatting it, editing it, preparing it for public viewing and then arranging public viewing.

Brainstorm as a group what kind of website you want to create or find – one with suggested actions, one with opinions or one with journalistic articles that provide a story or information.

Talk about the advantages and disadvantages of creating a website versus getting publicity by contributing to other websites, newspapers or publications.

CREATING WEBSITES OR WEB PAGES

The biggest mistake that people make when creating a website is not putting effort into content. If your reason for creating a website is just to learn how to make them, then not paying attention to content is fine. However, in public work – content matters.

Content is information. Content can be written, it can be sound, it can be video, artistic, graphics, silly or serious. Content is the reason why people go to websites.

Have you ever been to a website or web page that seems to have no purpose? There are plenty of web pages on the Internet that don't say much. So to make sure that you create a good website – start with content.

Steps to building a website or web page:

1. Develop Content
2. Define your target audience (who will use the site?).
3. Develop your message (what do you want to say?).
4. Gather information and edit it.
5. Design it around content (how will people use it?).
6. Check usability (do people know how to use it?).
7. Post it – put it on the Internet.
8. Promote it so that people know about it.

Explore other websites.

Before you begin developing a website or web page, it is a good idea to make sure that you have all of the resources you need. Before moving into the steps to building a website or web page, you will need:

- A computer
- Knowledge of HTML ***or*** website software such as DreamWeaver
- A website host ***or*** distribution plan
- Content

Once you have these basic things, then you can get started with design – believe it or not, the first step in designing a website is not design! You need content.

After one month of working with the Community Information Corps, high school students made these comments in their journals.

" So far I've learned a lot form the CIC. The website stuff especially. I never knew it could be so fun. I also never had a clue about how to make a website. It's not as difficult as I thought it would be. I caught on almost, if not, right away. It's really fun working on computers.

I haven't yet gotten the chance to contact anyone on the phone – but that is because I think I'll mess up. And then they won't want to talk to us. That won't be cool. But I'll probably do it next. And then I'll probably think it wasn't so bad…maybe. But either way, I'll still know what I'm doing with the web work!" – Annie Lusso, July 10, 2002.

"I feel that this week we did a lot of work and finished or almost finished the tasks we had to do. Today went by fast because people were having a good time and were busy with their work. I would like to learn more on how to use DreamWeaver." – Sheng Ly, July 10, 2002.

"The thing that I learned this week is that I now know that people work so hard to make web pages for us. They make web pages easy for us, but it was hard for them to build them." - Adolpho LaMadrid, July 10, 2002.

DEVELOP CONTENT

Knowing what you want to say and how your going to say it is the most important part about making information public, including in a website or web page.

Brainstorming can be one of the best ways to get started in thinking about what your group wants to say. Before you begin to write, gather or record, it is a good idea to define your target audience, develop your message, and then gather information and edit it.

Your Target Audience is who you want to reach.
Who are the main people that you want to reach?
What do they like? What don't they like?

The more you define your target audience, the easier it will likely be to develop your message. If your group doesn't know your target audience, you can arrange to have them ask people who fit the target audience questions about the issue, problem and project.

Surveys can also help you get to know your target audience better. Remember when doing a survey, that most audiences appreciate seeing the survey results. So if you do a survey, be prepared to show the results in a public way.

Develop Your Message geared toward your target audience.
What do you want people to know in one sentence? …one paragraph?
Figure out what you want people to do or to know.

You can develop your message as a group. Don't worry if you can't come up with an overall good message in one meeting. Brainstorming is a great way to further define your project and the types of messages that your group wants to send out.

Gather Information and Edit It
Information can be disseminated over the Internet in written form, in images, in sound files or movies.

It is easiest to use written information and images on a website. Sound files and movies generally require plug-in software. In the early stages, it is often best to gather as much as you can, then narrow down the focus as time goes on.

If your group had difficulty defining their message, gathering information can help to spark ideas of different kinds of messages. Sometimes after gathering information, your group may also decide to revise their message too.

Editing cannot be underestimated. People always make mistakes when writing or producing information. Make sure that your group proofread and edits the information that you put out for public viewing. Before editing, it is often a good idea to have a brief introduction to editing and ask the group to suggest edits respectfully, but also ask those who are having their work be edited to receive the editing ideas respectfully. This is a good time to discuss how work can be improved as a group.

Another important discussion involves taking and giving credit for work, both inside and outside the group. Copyright and permission should be discussed when outside information and images are being used. Even inside the group, asking permission to use the work of the group members can help everyone realize that their work is valued and wanted.

DESIGN CONTENT FOR YOUR AUDIENCE

Once your group has a good idea of what they want to say and how they want to say it, then it is a good idea to think about design.

Starting with the computer can be difficult. It is generally easier, particularly with a group, to draw the layout of the web pages on a piece of paper before going to the computer.

Unless the group knows HTML already or wants to learn HTML, it is probably a good idea to use a program such as DreamWeaver to produce a website. DreamWeaver is a program used to produce websites. Using DreamWeaver is somewhat similar to using a word processing program – it is easy. There are other programs out there, so it is probably best to ask around.

Before you begin, check around to see if there are computers that you can use that already have DreamWeaver or a similar program. If not, the software can be bought at an education rate for school use and for some non profit groups.

If your group would like to use HTML, there are several web based resources that could be useful such as Webmonkey for kids (and adults)
http://hotwired.lycos.com/webmonkey/kids
or Lissa Explains (for kids) **www.lissaexplains.com**
or Alien Explorer (for kids) **www.alienexplorer.com**
or search for website design for kids, or website design for children.

When designing web pages, simple is better.

Many sites are designed for a **screen size** of 640 pixels wide because the smallest monitor screens, commonly found in schools and libraries, display 640 pixels wide. Sites can also be designed to stretch the width of the screen depending on the size of the monitor, however, all navigation bars accommodate a maximum screen size of 640 pixels.

Exploring other websites before you start to design your own can help your group figure out what they like in a website and what they don't like. This can also be an opportunity to further understand how image sizes very in download times. That is, high resolution or large images can take a long time to download.

Questions that may be useful for your group to consider when looking at other websites are:

- Which websites seem to be easiest to use? Why?
- Which websites are the most attractive? Why?
- Which websites do you use most often? Why?
- How should our website or web page look?
- How should people navigate it?
- How many sections should there be?
- How many colors should we use?
- What should the layout look like?

Check Usability by having a few people use the site and comment on it. If users can't find what they want, they tend to quit looking quickly. Making your website easy to find information is important.

Usability: The ease with which visitors are able to use a Web site.

If you are designing a website for first time Internet users or people who are unaccustomed to using computers, using simple and clear language will help them find what they need. For instance, first time users often find it easier to use buttons or blue underlined links. If you use other types of underlining on the website, it can be confusing, so it is often best to save underlining for links only.

It is also a good idea to check web accessibility for people with disabilities. The five types of disability that affect Internet users are: visual impairments, hearing impairments, mobility impairments, cognitive impairments and seizure disorders.
A good resource to look at is WebAIM: Web Accessibility Information and Solutions at **www.webaim.org**.

Websites with hints about website design (search website design hints)
Page Resource **www.pageresource.com**
HTML Help **www.htmlhelp.com**
Web Monkey for Kids **http://hotwired.lycos.com/webmonkey/kids**

POST IT – PUT IT ONLINE OR SEND IT

Web pages can be posted on the Public Achievement website for PA groups. To find out more information about this, go to the PA website at **www.publicachievement.org** and contact PA to ask about how to post your web page. You can contact PA via email, mail or telephone.

Otherwise, if you already have web access you will have to find out directions about how to post your website online. If you used DreamWeaver, you can probably post it directly through the program as long as you have a web host. Web hosting services generally charge an annual fee for use of the web posting service. It is easiest to search the Internet for the best website host.

If you are doing your project from a school, non-profit organization or library, there may be a chance that you could post your web pages on the school or organization's site.

If your site is text only, it can be emailed to people by just emailing the HTML files. The advantage to emailing HTML documents is that most computers have an Internet browser, but not all computers have the same word processing software.

If you would like to burn a CD-ROM with your web pages, this is also possible. The entire website can go onto a CD-ROM or sometimes even all of it can go on to a diskette. You just have to be careful to make sure that you get all of the support files such as images, style sheets or graphics. The advantages of burning a CD-ROM or using a diskette to distribute your web pages are if you do not want them to be open to the entire public, but if they are more appropriate for a small audience. The disadvantage of this is that it is not making your hard work public and it also will cost some money to buy the burnable CDs or diskettes. Plus not all computers have diskettes, so it is important to check if your desired audience can use diskettes.

If you are new to the Internet, it is probably a good idea to ask around for help when posting an Internet website. There are some programs that can help you post information to other computers using FTP (file transfer protocol) such as ws ftp by Ipswitch. You may also be able to post your site using DreamWeaver.

- FTP – File Transfer Protocol

FTP is one way to exchange files across computer using the Internet. It is often used to post web pages on websites.

- HTTP- Hypertext Transfer Protocol

HTTP is a common language and structure read by Internet browsers.

World Kids Network **http://worldkids.net** will post websites and is also a good place to see websites produced by kids.

Posting a website is a time for celebration. Make sure you and your group celebrate your project among yourselves and with others.

PROMOTING WEBSITES

Many websites are rarely used. Just because a website is on the Internet, doesn't mean that it will be used. It is a good idea to publicize your website or web pages to your target audience, but how? Here are five ideas…

- Personal contact – talking directly to people about a website or web page that you are excited about is probably the most effective promotion of your website. Tell everyone about it, even people not in your target audience, because they might know of someone in your target audience.

- Phone calls – phone calls are great to inform people that you have talked to in the past about the progress of your group. When you call, you should probably ask for a specific person and ask if they knew that your website is online. Phone calls can also be a good way to follow up on emails and to get constructive feedback from your users.

- **Emails** – many people get a lot of emails, but emailing can be a good way to inform people about your website. The most important aspect of emails is to put the most important parts first, to use the subject line and to be brief. A good email to promote a website should briefly explain your group's issue, provide the web page URL, indicate your excitement to complete this project and provide contact information for the group.

- **List serves** – Before you made your website, you may have found some other groups that are interested in the same issue. Many groups form list serves about their issue. Writing a brief email to a list serve to promote your web pages can help you get even more visibility.

If you find that a lot of people are interested in your issue and use your web pages, you may want to form a list serve to talk about your issue. The list serve address can be put on your web page too. There are several list serve groups that are free because of commercial advertising such as Yahoo Groups or Group Mailer.

- **Promotional Materials** – Depending on your budget, promotional materials may be difficult to develop. However, if you have some resources available to you, things like business cards, brochures, magnets, buttons, mailings, stickers, or printed pencils can be used to promote the use of your website.

LEGAL ISSUES

There are three main kinds of legal issues that PA groups involved with website work should be aware of: copyright, working with minors and web accessibility.

If you are concerned about going to web pages that are unsuitable for children, you can use search engines for children (see the Search Engine section). If you are working in a public library or school, there may be filters on the computers that limit the web pages to acceptable content.

There are standards for website production as well, although it is not illegal to disregard the standards, they are general guidelines that are good to keep in mind. You can find web standards at the World Wide Web Consortium **www.wc3.org**.

COPYRIGHT

A discussion about copyright in the context of public work can involve a few core concepts such as accountability, responsibility, freedom and public. Copyright is about granting and receiving credit for authored work. Although people think of copyright as being for books and published work, all original work is copyrighted – with or without the copyright symbol ©.

Many times copyright for text, images or photographs can be obtained with permission, particularly from web sites. As a general rule, it is a good idea to have a conversation with your group about copyright and explain that websites should be checked for copyright arrangements before copying graphics, photos or text.

Many websites and publications will allow the use of their material as long as they are given credit for it in a citation.

If you have questions or concerns about using or reproducing information obtained on the web, the best option is to ask the source for permission or look for guidelines on the website.

WORKING WITH YOUTH

Using the Internet and producing web pages with youth requires some extra attention.

In the United States, parent or guardian permission is frequently required to use a photo or image of a child in a public document, including the Internet.

It is never a good idea to put the address and phone number of a child on the Internet. Although most people would not wish to do harm on children, there are enough people out there who look for trouble.

When discussing the reasons why your group can and cannot post information on the Internet, a discussion about safety will help the child understand. For more information you can search the Internet for child Internet safety or go to Cyber Angels at **www.cyberangels.org**.

If you are working in a school or organization, ask the administration about their policy on public materials with their youth. The solution might be as simple as getting permission slips signed by parents.

Schools and organizations often require parent or guardian permission to publish photographs of young people online or in public documents. When in doubt, ask for permission to use names and images of young people.

Never put the contact information of youth on the Internet such as their telephone number or address.

WEB ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Although it is not illegal to produce a website that is not accessible to people with disabilities, it is a good idea to check web accessibility. The five types of disability that affect Internet users are: visual impairments, hearing impairments, mobility impairments, cognitive impairments and seizure disorders.

A good resource to look at is WebAIM: Web Accessibility Information and Solutions at **www.webaim.org**.

MAPPING TO EXPLORE AN ISSUE

Mapping is one way for people to explore their community. Maps tell a story about the land and the people who come and go from the land. Many times these stories are about both the land and the people who live on it.

Sometimes mapping is not about land, in fact many maps are more about the interaction among people than land. For instance, consider power mapping – this is a mental map of how people interact with an issue. This section will cover mapping in the geographical sense – about who goes where, what they do and what happens in particular places.

Think about it, what community or communities do you belong to? How many of them are tied to land? How many of them aren't at all related to land?

One of the aspects of using technology in PA, particularly the Internet, is that it causes us to expand beyond our neighborhood boundaries across the world. Many times this causes us to think more about where we are from, our neighborhood and community or communities.

WHAT TO EXPLORE AND MAP

Every issue has a geographical context, that is, it has a place. That place might be the world, the country, the city or town, the neighborhood, the school or even a particular room or space. Defining the space of your issue, problem and project can sometimes help a group to define boundaries for their work. Below are some ideas about what it means to map.

What does it mean to map?

- **Mapping requires exploration.** Before you can map anything you have to know the lay of the land. You have to know something about the topic of the map or know where to look for information.
- **Maps provide direction to a physical place or an idea.** Think of your power map, this provides direction and information about an idea. Physical maps show land in some way, provide direction, or inform. Mental maps or organizational maps explain complex or even simple relationships.
- **There are many kinds of maps.** Most often when people think of maps, they think of street maps, but there are also thematic maps that show land cover, land use and social characteristics such as population density and housing costs.

A good resources for street maps and directions are MapQuest **www.mapquest.com**, Map Blast **www.mapblast.com**, Yahoo Maps **http://maps.yahoo.com** or Maps on Us **www.mapsonus.com**

- For a variety of maps see National Geographic Maps **www.nationalgeographic.com/maps** and the U. S. Census Geography **www.census.gov/geo/www**
- Altapedia (world maps) www.atlapedia.com and World Atlas **www.worldatlas.com**

STORIES & INTERVIEWS WITH MAPS

Maps tell stories. Some maps tell stories more than others. By looking at maps, we can sometimes try to figure out the history behind some of the places and current situation.

To illustrate how maps tell stories, hand out different maps to people in the group and have each one of them tell a story about the map based on what they see. The story that they tell does not have to be right or wrong, it is simply an exercise to see what kind of information can be obtained from different kinds of maps.

PURPOSES OF MAPS

There are many types of maps. In public work maps are used for a wide variety of purposes. Think about where you find maps that you would use everyday – in the phone book, for bus routes, road maps, for various districts and just for general curiosity about the world. Below are some examples of the various types of information that maps can provide.

Maps provide…

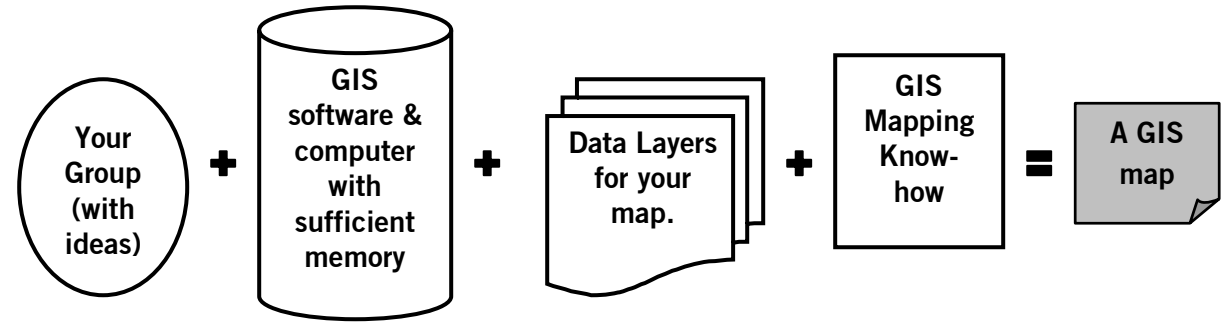
- **Direction** to get around. – Try not to get lost.
  (Road, bus stops and routes, tourist, travel and hiking maps.)
- **Guidance** in decision making. – Tell a story about a current situation.
  (Population density, population by age, population by ethnicity, income, crime, school enrollment maps, proximity to services, community assets.)
- **Planning tools**. – Figure out the best course of action.
  (Building, street and sewer placement, land use permit authorizations, public art plans, future population change projections)
- **Organizing tools**. – Indicate who does what, where.
  (Newspaper delivery routes, handing out brochures)
  Power maps are also organizational tools, even though they do not focus on mapping land, they still indicate who does what, where.
- **Boundary** Information, both political and practical.
  (Voting district maps, national, regional and local boundaries, protected areas, national and regional parks.)
- **Perspectives** about a place.

(Ideas about how a place already is or could be)

For the purposes of this guidebook, the types of maps are divided into two methods – using a GIS (Geographic Information System) or not using one (with hand drawn or scanned or reproduced images).

TO GIS OR NOT TO GIS? – THAT IS THE QUESTION.

Your decision to use a GIS or not may be easier than you think because it depends on the resources available to you. Although many GIS programs are becoming easier and easier to use, it is still a good idea to have someone who knows GIS well either in your group or easily accessible by your group. Below is a diagram of what is needed to do a GIS project. This is followed by a list of questions to help your group decide whether doing a GIS project is right for you.



Plan your map.	Access software.	Get Data.	Map!	Distribute
know the data layers you will need.	Know where and when there is a GIS system for your use.	Order, collect and gather all of the data you will need according to plan.	Find someone and/ or learn to map.	Make your map public & explain it
Estimated time...				
4-8 hours. Have an idea of what you want on your map and what information is required. Start finding and/or ordering data.	Varies widely. (4 hours to learn very basic GIS skills) Check software and data memory requirements. Need 500 MB RAM.	Varies widely. (4-8 hours to find basic data, extra time for ordering or applying for data.) - If you are collecting your own data, you will need extra time for designing your collection method, collecting information, entering it into the computer and varifying data (plus filling in holes in the data).	Varies widely. (4-5 hours with all information for a basic map.) - Even if you plan to map on your own, make sure that you have someone who knows GIS well to act as a resource. - Find a teacher, student or GIS professional to help.	Varies widely. You might have a written report with a map and/or a presentation. Maps usually go along with some sort of explanation. Plan time to distribute and explain your map.

This is only a rough time estimate. Your group might be lucky and have excellent GIS resources. If not, here are some questions and considerations for your group.

How can you access GIS software?
In the United States, many local governments have GIS capabilities and even some neighborhood associations. Some schools have GIS software and even public libraries.

- Is the software available to you able to make the kind of map that you want to make?
- Can you answer these questions as a group, if not, is there someone who will be able to help you throughout the project?
- Do you have funds (and a computer) to buy GIS software? If you are a non-profit organization or school, there may be special reduced rates for the software.

Do you have the data that you need?

- How much data will you have to collect?
- How long will it take you to collect it and put in into the computer?
- Do you have enough time to do an adequate job of collecting data?
- Better yet, is all of the data you need available to you?
- Which data is available for free, which costs some money?
- How long will it take for you to get the data for your group to use? (Sometimes data has to be ordered or there are legal restrictions on the use of data which requires an application process.)

Will another group or person do the GIS mapping for you (according to your requests)?

- Can you ask a local government or organization to do some mapping for your group? If yes, can some of your group members sit in so that they can learn a little GIS? (Note: you would be surprised how many GIS technicians or college students are interested in working with others on GIS projects)? (Search the Internet or phone book to find information.)
- Does a local college or university teach GIS, if yes, can you find a group of students to do a project with you? (Note: most college and university students studying GIS have to do at least one outside project during their studies. You might be helping them as much as they are helping you. Search the Internet or phone book to find information.)
- Is there a professor or teacher who knows GIS and is willing to work with their class or your group to do your mapping project?

Last, but not least, do you have time to do a GIS project?

- Finding the computer, GIS software, technical expertise and data can all take a long time. On top of that, if you need to collect more data, you will likely need a fair amount of time to collect, process and enter data into a database or spreadsheet.

This list and diagram is not meant to discourage you from doing a GIS project, rather you should be aware that there are several steps that have to be present to get a mapping project started. If you have a lot of time, then go for it!

If you aren't sure about how much time is available to you, then you might want to consider a non-GIS approach to mapping. This could include adding information to existing maps by

scanning or modifying a map with graphics software. Drawing a map, then scanning it into a computer or re-creating it using a computer. Or creating your own map on a computer without a template (such as a scan or drawing).

MAPPING – USING A GIS

Geographic Information Systems are computer software programs for making maps. Community maps, road maps and maps showing boundaries are usually made with vector data. Geologists, hydrologists, farmers and land use planners will often also use raster data. Some GIS programs tend to be better at processing vector data than raster data and vice versa.

Vector data includes points, lines and polygons. Points will indicate things like bus stops or points of interest such as tourist viewpoints or libraries. Lines will often indicate roads, power lines and paths. Polygons will often indicate administrative boundaries (such as state, county, city or town), census blocks or residential buildings and blocks.

Raster data includes aerial photos, land surface maps showing topography and other continuous information across the landscape. Raster maps tend to look like a photo because they show a continuous land surface.

The Environmental Protection Agency of the United States defines four categories – base, thematic, combination and summary maps. Many geographers uses these categories of maps.

A base maps shows basic land features. A thematic maps has a theme, that is, it uses data generalized over a land area. For instance a population map does not map out each individual person on a map, it give a population density figure for a particular area. Most maps combine both base maps and thematic maps. Summary maps require analysis, this type of analysis is generally done by people who are trained geographers and analysts since these kind of maps require statistical analysis.

Base Maps	Thematic Map	Combination Maps	Summary Maps
Land features, locations (basic land information)	Generalized data on a topic	Combine base and thematic features.	Show results of data analysis
Aerial Photograph Maps Boundaries Elevation Maps Topographical (“Topo”) maps	Census Data Maps Demographic Maps Field Study Maps Geological Maps Historical Maps Land Use Maps Population Maps Soil Maps	Asset maps Community maps Green maps Hazard maps Planning maps Political Maps Physical Maps Recreation Maps Road Maps Street Maps Weather Maps	Analysis maps Characterization Maps Classification Maps

When mapping people usually don't pay much attention to the type of map that they are producing. It can be useful to know that you will probably need base map information if you are going to map because base maps show land boundaries (of towns, cities, counties and countries).

In the US there most youth mapping projects tend to focus on community asset mapping.

- Community Asset Mapping

Community asset mapping is a great way for groups to explore their community to find out what it has to offer. Most community mappers upon finishing a community mapping project will be amazed at what their community has to offer, if only people know about it. This is a chance to inform people of resources that they may or may not know about in an easy to understand form – a map.

Still, it helps to remember that there are a lot of different kinds of maps out there. Looking at the different kinds of maps can help your group think through what kind of map they want to do. It is not important that they know the technical terms about the kind of map that they would like to make, what is more important is that the group figures out which features they would like to have on their map.

Feature
In mapping language, a feature is one type of object on a map. For instance, a feature on a map can be the roads, another feature can be population data, or yet another feature could be points of interest.

Features are usually represented on a may using points, lines, polygons. Text can be associated with points, lines or polygons.

When your group is considering what to map, figuring out what features you want on your map is a good start. You could ask your group – "What do we want on our map?"

Do we want boundaries?
What kind?

- Lines or polygons?
- With text?

Do we want roads?
What kind?

- Major roads, minor roads or both?
- Lines, names or both?
- With text?

Do we want environmental features such as lakes, rivers, streams, parks or fields?
What kind?

- Points, lines or polygons?
- With text?

Do we want buildings?
What kind?

- Points or polygons?
- With symbols?

- With text?

Do we want special places?
What kind?

- Points, lines or polygons?
- With symbols?
- With Text?

How should our issue look on a map?

- What kinds of information?
- Would the information be a point, line or polygon?
- Would the issue have a symbol?
- Would the issue have text describing it?
- Would the issue have statistics?

After working for an entire summer on a Community Mapping project, a sixteen year old mapper, Kong Vue wrote:

> *"Everything was cool. My favorite thing is learning the new thing GIS. I like most working with people I know. I liked least an interview where I got no information. What I thought I learned is how to work more on GIS."*

Mapping projects tend to eat up time! Keep it simple.

> *"This summer I learned that work can be confusing, but working with teens is not as hard. I like being in a work place where you can be happy about who you work with. I've learned a lot about the GIS system and how to work with it. I learned that the coaches help out a lot on what we have to do. Having a lot of ideas is good for what we need to do to complete this mapping project." Kong Vue, end of the summer 2001.*

PROJECT SCALE

In the beginning of the Community Information Corps summer mapping project in 2001, we had a lot of grand ideas. You name it, we were going to map it in the community. Our main focus was to map learning opportunities, with a vary broad definition of learning.

Since information about learning opportunities could not be found in one source, we had to gather a lot of data. As we gathered data and the project became more and more clear, we wanted to add to it to incorporate all of the interesting things we had discovered. Our time was limited, and so we had to try to not add on additional information.

The more information you gather, the longer the time it takes to enter it, verify it and analyze it. It is often better to try to gather the data you really need, and forget the rest.

Data collection can be both interesting and boring. The CIC mappers found data entry rather boring. When doing data entry, we discovered that our data was not very complete. Getting information on the first visit would have saved us a lot of time. We were new to this type of work, so we were learning along the way.

We probably made what could have been a simple project, rather complex and occasionally frustrating because we tried to do too much. The moral of the story is, if you find yourself adding more and more to a data collection and mapping project, try to keep yourself in check by reminding you of what you really need, and leave the rest for another project.

In the end, most of the CIC mappers found that the process of learning about their community, how to do interviews and learning basic mapping skills was more important to us than the final product, however, it sure helped that other people were interested in what we had to say as a result of the project. More than anything, we were proud of what we learned.

In mapping projects, coaches will likely take on a very active roll to guide the project on a day to day basis.

While for a year and a summer with teens on the Community Information Corps project, a coach, Mitch Ogden wrote this during the middle of the summer project:

"The CIC is doing some cool things. I am amazed to think that we've been together for more than five weeks- it doesn't seem like it has been that much time, and yet, we've done a lot of stuff. Certainly there are many things we could do more, but I am proud of all we have done.

"The most meaningful thing to me is how the kids own the project. Today Shaun was talking to the visitors and he said 'We're six youth with three coaches. They motivate us and give us direction, but it's really up to us.' That was really gratifying to hear. I hope they all believe that. I think they do though they would articulate it differently.

"Some days I don't know how to motivate or guide them. I'm often unsure of what most needs to be done. I feel bad about that because it means that I can't keep the right pace or tempo for the students. There is so much more we can do – it is so totally limitless, but I'm sure that the kids feel there isn't much to do many times.

"I enjoy the way that the mappers amuse themselves. I like the way that they all feel comfortable with their own personalities in our space. If they feel comfortable in that way, then we can be sure that trust has developed and we have created a safe environment here. That's important to me.

"I think back to the expectations the students had at the beginning of the summer. I wonder if the best ones have been fulfilled or not or if they have developed entirely new expectations because the whole prospect was new and so unknown.

"But, honestly, I'm exhausted. I go home really wiped out. If I was with the students for six hours a day, I think I'd probably get sick from fatigue." Mitch Ogden, July 31, 2001. Note: the CIC mappers met with coaches for five hours a day, four days a week during the summer of 2001.

There are all kinds of coaches: full time, part time, teachers, students, volunteers and people who just like to get involved in public work. Most coaches, if not all find that enjoying the differences and similarities of their group members is one of the most fun aspects of coaching.

RESOURCES – TOOLS REQUIRED

To do a GIS mapping project, you will need a computer with at least 500 MB of RAM. GIS software requirements are often requires less RAM, but the data tends to take up a lot of memory. You will likely need some funds for printing, software or lessons.

Most desktop GIS software is designed to be used with Microsoft operating systems, not Apple products. However, some software has been developed for the Macintosh platform. Check the websites to find out if you can use GIS on your computer.

What are your GIS software options? There are several, but really only three types of software that are used widely for community mapping.

Vector GIS systems (with some Raster capabilities)

- ArcView (most widely used GIS software in the U.S.) **www.esri.com**
- MapInfo (used internationally, but less in the U. S.) **www.mapinfo.com**
- Community 2020 (developed by the U. S. Department of Housing and Urban Development). This was only used on Windows 95 and 98 operating systems. As of 2003, HUD was looking into developing Community 2020 as a web based tool.)

There are other GIS systems out there, but these are the most commonly used and easiest to use with existing data.

Raster GIS systems (with some Vector capabilities)

Most likely you will want to use a vector GIS system, but here are some websites for raster GIS software. You can look it up on the Internet if you think you might need raster. If you're not sure, you will probably need vector, try searching the internet for "GIS" and the name of your location to find out who is involved in GIS in your area to find out more.

- Idrisi **www.clarklabs.org**
- Grass (open source GIS) www3.baylor.edu/grass

When mapping, you will likely also need…

- Internet connection to download GIS data.
- Winzip to unzip files downloaded off the Internet (a trial version is available online).
- Spreadsheet or Database software to enter data if you are collecting your own. Most GIS software can import data from spreadsheets or database tables.
- Graphics software (such as Adobe Illustrator or Paint Shop Pro) can be helpful to really make your maps look good (if you know how to use graphics software packages). Many GIS systems can print off a pretty good looking map, but benefit from a little help from the capabilities of graphics software.
- Printer (preferably color) or plotter for large map printing.
- Photocopier or photocopy service to reproduce the maps and data.

- Erdas IMAGINE **http://gis.leica-geosystems.com/Products**

If you want to have a better understanding of vector and raster, go to the heading "Data" in this section to see examples of vector and raster data.

Apart from GIS software, most things that you need to make computerized maps are commonly used in other computer work. Don't worry if you don't have some of these things, with the exception of an Internet connection. The Internet can be a great resource for obtaining quick data and finding out more about what others are doing with GIS mapping.

RESOURCES – PEOPLE REQUIRED

Like any computer work, people are the ones who really make things happen.

If your group has never touched a GIS and has no idea how to use one, then plan to spend a lot of time figuring things out and learning the software. Otherwise, if you have someone to work along with you who knows GIS, then you're in luck.

It can take a little time to think like a geographer, particularly when you have your data and you start to map. If your data requires some analysis, such as averaging or combining two or more types of data together, displaying it effectively on a map can take some time.

Also, when you take a look at a variety of good maps, they usually have the date, the name of the people who made the map, a legend explaining symbols and a north arrow. These things are easily done using a GIS. People who have a lot of experience using GIS will often be a wealth of information on when to use various symbols, colors and data layers on maps.

To see mapping standards, it is easiest to look at street maps, internet maps or other official maps published on paper or over the Internet.

STEPS TO TAKE

An optional, but practical first step to understand the concept of layering in a GIS, would be to work with graphics software, such as Adobe Illustrator, to make a graphic for the group. This way, the group can learn that graphics, as well as maps, are made with layers. Later, the group may want to consider exporting their GIS map to a graphics program so that they can chose the quality of their output image (such as the compression value of a JPEG image, or a high quality, but also high memory TIFF). For more information on graphics, see the graphics and photography section of this guidebook.

Here are some suggested steps to mapping using a GIS. There are lots of websites on the Internet about community asset mapping, so do a search to find out other approaches.

1. ***Form your team*** to be Community Mappers so that they not only learn how to map their community, but they also learn about public work. Mapping is hard work, so many projects will pay or give credit to community mappers.

2. ***Learn what Geographic Information Systems (GIS) can do*** and basic GIS concepts. Noting the need for a database or spreadsheet to store information.
3. ***Review examples*** of similar projects.
4. Work with the youth to ***define the project and identify relevant questions*** to ask on a survey for a CIC database.
5. Formulate the ***data instrument*** (the survey questions). Try to keep it to the point.
6. ***Pre-test*** the survey, make changes and create a ***survey guide***.
7. Brainstorm ***a list of people*** to survey and set appointments, adding additional contacts as the survey progresses with referrals from question six of the Learning Opportunities Questionnaire.
8. ***Interviews*** (for several weeks) and ***data entry*** preferably immediately after an interview.
9. ***Map*** your issue (with a couple weeks of GIS training or by sitting along side learning GIS with the person doing your mapping for your group.)
10. **Show your findings.** Present these findings to the public in several different ways.

Behind the scenes preparations (for a large Community Mapping Project)

Have a (public) work space and contact information (an address, phone and email).

- A public Library or school works well for this.

Weekly re-grouping meetings

- Meetings to check progress are really important to figure out the next steps.
- It helps to work with the mappers a few days in a row and have the coaches regroup at the end of several meetings

Have computers with enough memory & internet access

- Computers should have a minimum of 500 MB of RAM.

Obtain & install ArcView or a similar program ($500 for non-profits as of 2001.)

Obtain & install MS Access if you are using a database to enter information.

- Note: databases may take more time and effort to set up, but if you plan to have a lot of data, a database can be very useful, but not worth the effort if you have simple data. An alternative to using a database is a spreadsheet (such as MS Excel).

Become friends with the network administrator.

- On a network, to install something requires an computer administrator. You may have to install both a GIS system (with enough memory) and database software unless the computer already has it.

Obtain GIS data (particularly parcel attribute data) and have a plan B (such as buying a GPS and using free or cheap data, though it doesn't look as good as with parcel attribute data).

- Parcel attribute data is expensive (in the thousands of dollars). Find out if non-profit connections can get it. Plan this far in advance (preferably at least 4-5 months before the project starts)

Inform key organizations about the project in advance (both verbally and with a brochure or written statement)

- People who are aware of a project will be more likely to respond favorably to an interview request

Test questionnaire ideas by talking to some key people before the project starts and to also learn how to explain the project.

- Figuring out which sections of questioning in advance can help to provide instruction on how to ask questions when the youth start.

Step One – Recruit Youth or do some team issue work.

If you are going to hire mappers, make an application and spread it around to organizations and schools to find youth.

- Plan this in advance (about one month). Spread around applications as a means to also inform organizations about the project. Have a brochure along with the application.

Interview the potential mappers and explore self interest.

- Most students wanted to learn something and have fun with their work.

Pay them (if over the summer) to keep them interested and involved, but to also value their time.

- Payment or credit is important to keep the team interested and involved, but even if it is less than "boring jobs", the most interested will still come.

Have a contract and emergency contact(s).

- Clearly let mappers know what is expected of them in their work on the project. Decide this as a team and periodically review expectations.
- Build a sense of professionalism, responsibility and pride.
- Know where to go and who to contact in the event of an emergency.

Step Two – Learn what GIS can do.

Prepare basic introduction to GIS to show the mappers during the first week. This will help to prepare the group for what lies ahead. If they have a good sense of how mapping works, then it will be easier to understand why the next steps follow and the importance of good data.

- Youth are accustomed to computers and less responsive to written instruction than simply playing around with the software.

Step Three – Review examples of how GIS can be used in Community Asset Mapping.

Prepare some example websites to view similar projects so that mappers can see what a final product looks like.

- Let youth explore the way that they sites can be used, occasionally directing them to hidden features.

Step Four – Define the project and identify relevant questions for information collection.

Go to step nine if you are not doing a survey as a part of your mapping project, instead you can do a lot more exploration of the GIS data that you already have. Getting to understand data well can help you understand it. If you gather data, then you will really understand it.

Plan the first week with activities to get to know each other and get to know the project (schedule topics to cover for each day including the descriptions in Steps two and three).

- Abstract discussions were difficult for mappers to grasp. Putting the project in their minds to conceptualize was best since these brainstorming sessions, though exhausting were the most insightful.

Be flexible for good ideas, breaks and brainstorming sessions

- The mappers are accustomed to a very structured environment in school, giving them the chance to dream was very important to have them own the project. The mappers ran with many ideas before they could be explained or decided!

Prepare a draft questionnaire for people to take a look at.

- It is too difficult to start with a blank page, this would have taken too much time. We also had control over the type of information we would gather so that the parameters we set for the issue, problem and project could be met.

Role play using the questionnaire to figure out awkward or difficult parts.

- Mappers are more likely to modify a questionnaire when they have had the chance to use it and see its strengths and weaknesses.
- Take out questions that get information that doesn't get relevant answers.

Provide brainstorming time for people to think about what information when they would use the CIC website (the final project).

- Mappers wanted to add more information than take any away. Be careful of having long interviews – short ones that get relevant information will save you time later. They also seemed to realize that questions require explanation due to different interpretations.

Step Five – Make the data instrument (the survey or data collection form)

Formulate a project statement as an activity with the mappers.

- Mappers knew that they have to be able to explain the project, so they formulated a project statement to write on one of the questionnaires for their reference.

Finalize the questionnaire with the mappers (for a pre-test).

- Modifications to the questionnaire were done as a Form in Microsoft Access, so that the questions and the data entry template are simultaneously developed.

Step Six – Pre-test the survey and make a survey guide.

Pretest the survey. Set up interviews with known people in the community for the mappers to practice interviewing while also testing the questionnaire.

- Subsequent discussion lead to clarification of the questions and slight modification of the questionnaire.

Make a survey guide. A survey guide is be useful to prevent misinterpretation of questions

- With the CIC experience, more time could have been spent on the interpreting of the questions and doing follow-up probing skills. For instance, many people named organizations as learning opportunities instead of actual learning activities

(if mappers knew how to ask further questions, information would have been more consistent). A guide was not created because mappers were not very receptive toward written instructions (so the guide should be discussed as a group to ensure that each question is understood by all mappers.) Your circumstances could be different. A survey guide could help the interviewers ask clarifying questions and remind the interviewer of what specific information you are trying to collect.

Step Seven – Interview List (of potential interviewees).

Generate a list of people to interview as a group and add to it as more referrals are made during interviews.

- It took about 2 hours to brainstorm a list of about 70 people. With time and referrals the list grew to about 180.

Practice telephone etiquette and procedures, particularly in the beginning.

- When the mappers were more comfortable with knowing what to say, they were able to make more appointments.
- Trying not to sound like a telemarketer was stressed.

Make phone calls for appointments (not many in-person appointments were made, most were by phone). Keep track of scheduled interviews, calls made, messages and people to remove from the list. Have the mappers set a daily goal for the number of appointments scheduled.

- Mappers were most comfortable calling people that they know. These people were called first. Later they lost interest in calling. It became difficult to keep track of who had been called. Some organizations accused us to pestering them too much because we called too much. A more reliable system need to be developed and followed.
- A future suggestion would be to have the calling list on the database and used while making calls. Notes about the call could be immediately entered into the database.

Step eight – Interviews and Data Entry.

Keep an appointment book for interviews.

- At the beginning of each day, list the interviews to be done.

Have the mapper(s) review the information before they go on an interview so that they are clear about what information they are supposed to get.

- Knowing some background information about the person they are about to interview helps to give some focus to on the project and how this particular interview fits into the project.
- Some questions may still requires some explanation. Knowing some background information helps the interviewer become more confident in the information the group wants.

Keep track of missing forms / information so that the person who did the interview can go back to collect the forms or information. Try to get the information on the first visit. If a second visit is required or the person is a particularly good interviewee, ask if the second interview can be recorded if your group also wants to gather stories.

- Although the mappers were encouraged to ask the interviewee to immediately fill out forms while the mapper waits and answers any questions, they were hesitant to do this.

Add referrals of others to interview made during the interview to the referral list.

- Keep track of referrals as new interview possibilities.

Verbally have the mapper review information after an interview, check the notes from the interview and ask the mapper to straighten up their notes. Monitor missing information to ensure data completeness. It is also helpful and insightful for the interviewer to review and add to their notes and write in their journal about the interview.

- Some information was almost always missing on the notes. The CIC coach could add missing components to the mappers notes as the mapper is talking.
- We didn't monitor data completeness enough. There were a lot of holes. It is best to check information immediately after the interview.

Design data entry according to the forms (with the same order).

- Make data entry as easy as possible (particularly since most mappers didn't like it).

Try to have the mapper enter the data immediately after the interview (while the information is fresh in their minds).

- Missing information is more likely to be caught into the database immediately after the interview. Mappers found it difficult to write and listen at the same time during the interview, but if entered into the database immediately after, the results seemed better.

Constantly check the data entry for errors and completeness.

- Informing the mappers of easy improvements early saves time and mistakes later.

Check data entry on printouts for accuracy and to check if it is understandable.

- This was done once with the mappers and a second time by the coaches. Two checks appeared necessary.

Step Nine – Map Findings.

Establish a set of lessons using the CIC data. (If there is limited time to develop lessons on the fly, have everyone explore the data at the same time or have small groups work with the data).

- Although much of the work was done in the first lessons, the mappers seemed happy with a little GIS work because the saw that they gathered the information. If there was more time, more GIS skills could be learned.

Use a GPS as a learning tool and also to make placing points on the map easier. On screen point placement (digitizing) is also possible in GIS. This means that you can put points on the map by simply looking at other landmarks.

- A basic GPS with downloading capability costs about $200. This is much easier than address matching and the mappers enjoyed using it (while they also took pictures of the places for the website). Free software for downloading the GPS data was obtained on the manufacturer's website.

- Mappers really enjoyed using a GPS, not only as a new type of equipment, but also as a way to get out and explore the neighborhood. We also made observations about the neighborhood and took photos. Later, we added the photos to our database and website.

Step ten – Completing and Presenting your Project.

Work with the mappers to identify projects based on initial findings. For the presentation, mappers chose the topics that they were most interested in.

- Time is needed to do in depth analysis and projects. Those projects need to be considered from the very beginning (including what question is being asked and what data is needed to answer the question). Future efforts would benefit from formulating clear research questions from the onset (if there are special focus areas other than the main topic being addressed.)

Presentations were made those who contributed to the work and the people in power to affect the issue. Results can also be presented in written form or on a website, particularly to the people interviewed and those concerned.

- Follow through is important and should be discussed with the mappers as a part of the expectations of the project.
- Mailing results to people interviewed should be considered to show interviewees what we learned and see that their interview was a part of a larger effort.
- Emailing and informing interested people in major developments, including relevant website links is another way to keep the issue active.

If the group plans to stay together, they can continue to store the data and possibly do further mapping. If the group plans finish working together once the project is finished, finding another organization or group to house and use the information is a good idea. You never know, sometimes others may be looking for the same type of information you did. Your work could further their efforts.

After the fact work & realizations.

Space out time working with the mappers so that the person working on the database and the GIS instruction can have time to catch up.
Make sure that something is up on the website after the project is finished so that there is something to show immediately after the presentation.

- Bear in mind that technical issues take time to figure out.
- If possible, have a break between interviewing and data entry to clean the database, then move on to mapping. It also helps if adult coaches working on the project receive some instruction on the project (at least process and the software) before working on the project.

Make it as simple as possible.

- Showing immediate results is important, the CIC experienced a lull.
- Our questionnaires were probably too complex, we needed to do more thinking about the desired outcome of the project. Perhaps starting to work with the group during the school year on this would have been a good idea so that summer work could start quickly.

Community mapping with surveys will take more time than without surveys. In this example, the coaches were working full time during the summer. This experience was good for the mappers because they provided information that people in the community wanted. If you are

going to go through this much effort, it pays to talk to people as much as possible before you begin formal surveys.

In the second summer of CIC work, a different group did a public art tour of the community. This was very well received by the community. In this case, mapping wasn't used for analysis as in the learning opportunity survey, instead mapping was used to show where to find public art. The storytelling and public art project gathered stories that were transcribed, edited, then put on a website along with a map.

The map was a secondary output of the storytelling and mural tour, but it helped as a navigational tool on the CIC website and to guide people through the neighborhood.

The work in the storytelling project seemed a lot more rewarding than with the community asset mapping, primarily because the information was more entertaining. Formal survey work is difficult, requires great attention to detail. Qualitative surveys and gathering stories requires much more creativity and flexibility.

If you are unsure of whether or not you want a very structured survey, unstructured, or even not survey but a collection of insights, try to match the learning goals of your group to the process.

- Structured surveys (mostly quantitative) are often difficult for anyone, particularly youth, because they require attention to detail.
- Unstructured or semi-structured (qualitative) surveys are more easily done as a group, require practice and creativity, but can be very rewarding when the group is prepared to capture stories from their interviewee.
- Collecting insights and talking to people, then later gathering their words in writing, oral history or another form is tends to require less time than such formal surveys. Sometimes the results can be just as good, if not better, when the group prepares ideas and questions directed toward the people they talk with.

Mapping and survey work using GIS is fun and challenging. Though out the process the mappers will learn a variety of skills, including GIS.

During the summer of 2001, six teenage mappers mapped learning on the West Side. After the summer was over they wrote journal entries. Jessica Gonzales, then seventeen, wrote:

> *"This summer, well where do I start, it's been great. At first I thought it would be kind of boring, but was I wrong or what. I've learned a lot about my community and myself, I guess. I'm not so shy about talking to strangers, that's for sure.*
>
> *I've had a couple of really good interviews that stand out and I think that's why things got easier, because you know that they're all not going to be bad. I like the people that I work with because we're all kind of the same. What I dislike – entering the data on the database, but it will all be worth it in the end. What I like most is the community and the people I work with."*

One month earlier, Jessica Gonzales wrote:

"Last week went horrible. I was really frustrated when some of my co-workers really bothered me. This week has been better, that's for sure. I'm ready to start something new because I don't really like to sit around."

Doing a formal surveys requires discipline. There are often times of great activity followed by lulls. The challenge for coaches is to try to keep the team going and motivated. If you do a series of interviews or survey work, expect ups and downs.

DATA

Data is key to using GIS effectively. Your end maps will only be ask good as the effort you put into them. When considering data, you can either rely on existing data or try to gather your own.

The summer 2001 CIC example was one of using some existing data with our own data. Gathering data is a painstaking process, and not recommended for groups with limited time. Things to consider before you start gathering your own data are listed below:

- Does the information you want already exist?

(If yes, how can you access that data?)

- Is your team prepared to do a lot of legwork required for a survey?
- Can you get the results that you want most effectively from a survey or are there other options?

Note: sometimes a basic map with an accompanying story can be more effective than a large or even a small survey that is on a map. Not all maps have to be made from surveys. Many times existing data is sufficient or even better than survey data.

The advantages of relying on existing data are many, namely, you will save time and energy by learning about the data available to you and have more of an opportunity to learn how to use GIS as a group.

Where can you get data?

In the US, your local or State Government may have a GIS office. Your best first step may be to search the Internet for GIS + Data + (_____your location) to see what you find.

U. S. geographic Data can be found at the following websites:
Government agencies:

- Federal Emergency Management Agency (FEMA): **www.fema.gov/maps**
- Federal Geographic Data Center: **www.fgdc.gov**
- National Geospatial Data Clearinghouse: **http://nsdi.usgs.gov**

In Minneapolis and Saint Paul Minnesota, data can be found from three main sources:

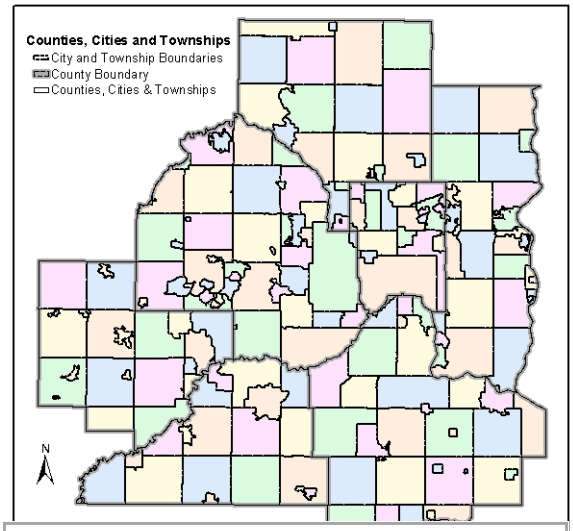
- Minnesota DNR Data Deli **http://deli.dnr.state.mn.us**
- Metropolitan Council (Twin Cities) **http://gis.metc.state.mn.us**
- Metro GIS Data Finder **www.datafinder.org**
- Minnesota Governor's Council on Geographic Information: **www.gis.state.mn.us**

- U. S. Census Bureau: **www.census.gov**
-

When considering data in GIS, there are a lot of types. Below are examples of many types of GIS data. When you are searching for data, it is sometimes difficult to know what you are looking at. If you would like to get a better idea of what is contained in data, take a look at the Metadata.

Metadata –
Metadata are data about data. It is a way of documenting information about datasets. The information contained in metadata will document the creation of a dataset and give you an idea of what the cartographic product to which it is attached was designed to do.

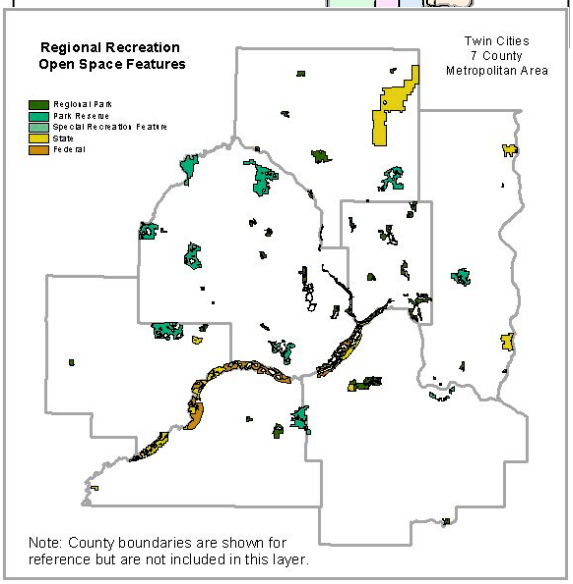
Learning how to read metadata can take time. When in doubt, find someone to help you figure out the GIS world if you don't have the time or energy to do so yourself.



This is an example of **administrative boundaries** using vector polygon data.

The legend give you a hint of what layers may be included in this dataset – City and township boundaries, county boundaries and an overall data layer of counties, cities and townships.

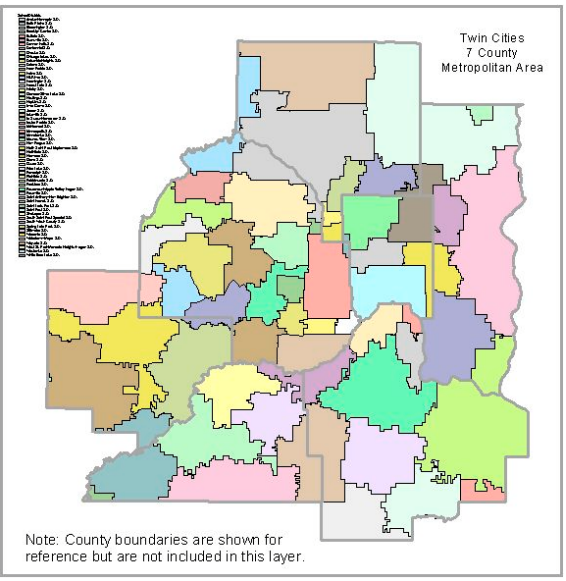
This is the Twin Cities metropolitan area of Saint Paul and Minneapolis Minnesota, with surrounding counties.



This map shows regional recreation and open space features. The legend indicates that on this dataset there is: Regional Parks, park reserves, special recreation features, state land and federal land.

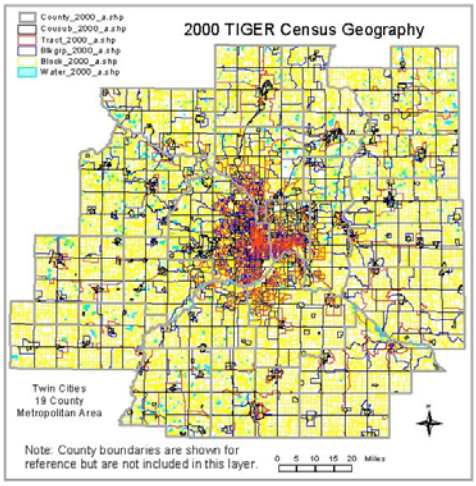
The county boundaries are shown in this example, but are not included in this layer.

This is vector polygon data.



This dataset shows the boundaries of the school districts in the 7 county Twin Cities Metropolitan region.

Each of the vector polygons represents a different school district. The dataset also contains information about school attendance. Although you cannot see the attendance records on this map, you would know that they are there by reading the metadata. In this case, attendance records would be in the form of a data table that is linked to the school district polygons.



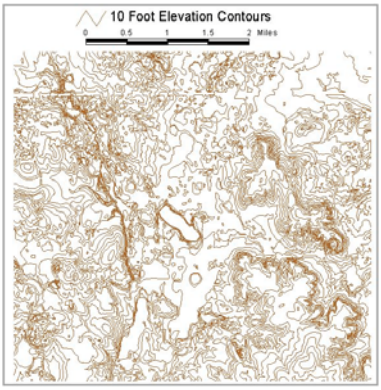
Census information is stored in census tracts, in GIS this is vector polygon data. In the example to the information. The smallest colored yellow.

left, there are five levels of blocks in this case are

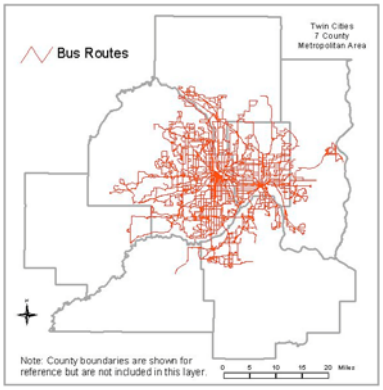
When you get this data tracks and basic census tables that can be tracks.

there would be the census population information in attributed to the census

The left layer shows railroads. It is vector line data. The railroads are likely divided into line segments in this dataset.

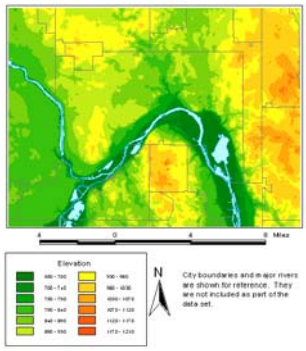


The right layer shows ten foot elevation contours. It is vector line data. This means that every time there is a rise or fall of ten feet in elevation, a contour line is drawn.

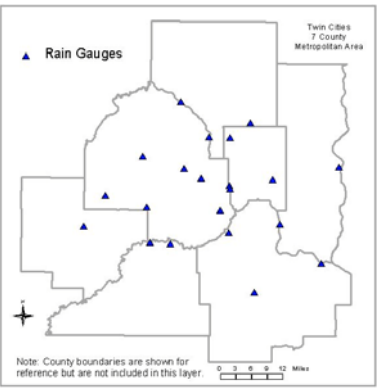


To the left there is a vector line layer of bus routes in the Twin Cities metropolitan area.

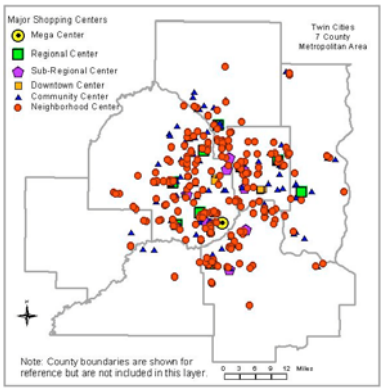
Sample of the TCMA 30 Meter DEM for St. Paul and Surrounding Communities



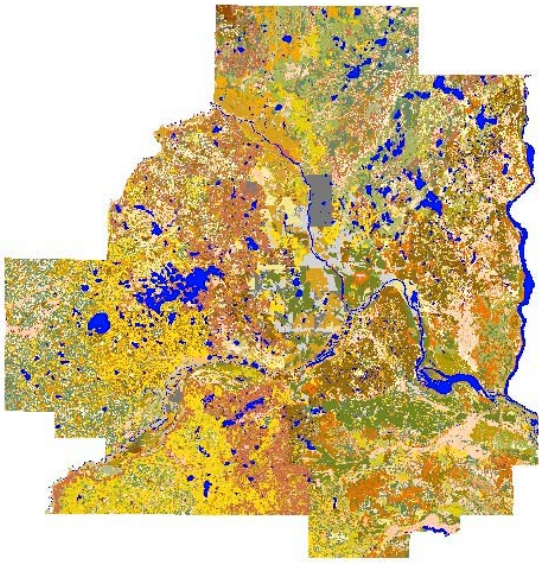
To the right is a Digital Elevation Model (DEM). This is a raster image that is made using vector elevation contours.



The left layer shows rain gauges sites in the Twin Cities Metropolitan area. It is an example of vector point data.



The right layer shows major shopping centers. These are divided into: mega centers, regional center, downtown center, community center, and neighborhood center.

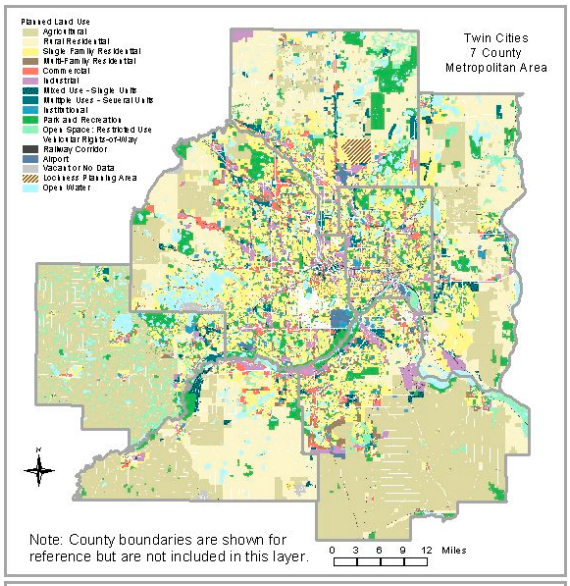


The image to the left is raster data. It shows a digital soil survey, that is each color represents a different soil type.

The blue areas represent water.

In the Minneapolis – Saint Paul metropolitan area there are several lakes and rivers. Layers showing lakes and rivers available in both raster and vector format.

Raster layers are more like a photograph than vector layers which tend to have defined features in points, lines and polygons.



From this view, the image to the left may look like raster data, but it is vector data. If you look closely you can see vector polygons.

Sometimes a wide variety of data can be on one dataset. This particular layer shows planned land use. The data layers included in this image are: agriculture, rural residential, single family residential, multi-family residential, commercial, industrial, parks and recreation, airports, transportation corridors, etc.

This is a Digital Orthophoto quarter- quadrangles (DOQ). These aerial photos are taken in the US every census year to plan for census blocks. It is an aerial photograph, hence it is raster data.

Many people unfamiliar with maps like to use aerial photos to represent a small area. If you are interested in a large area, aerial photos can take up a lot of computer memory. There may be some aerial photos available for free, but many times you have to pay to obtain a geographically referenced aerial photo which is compatible with a GIS system.

Parcel data is very useful in GIS, unfortunately it often comes at a cost. Parcel data of blocks and streets in a community are often low cost or free.

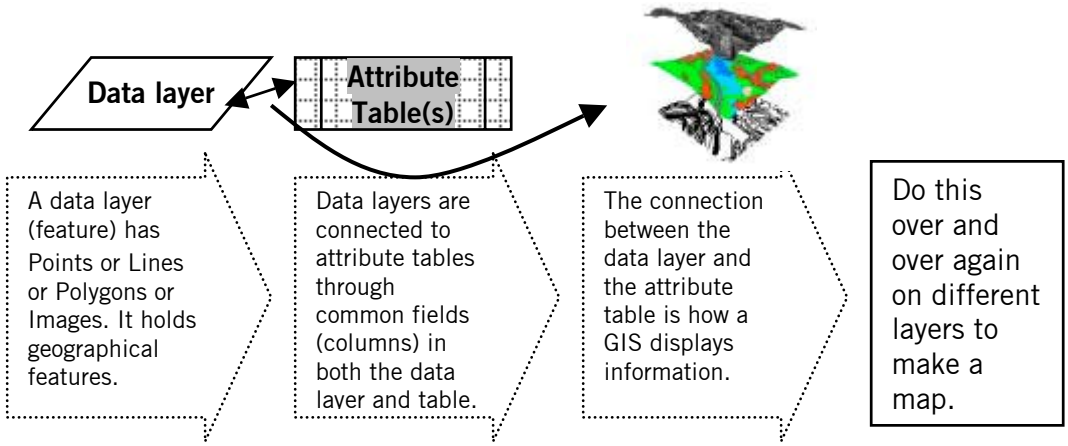
However, data that contains building and their addresses is often priced per polygon. So, if there are 16,500 buildings in the parcel data that you want and each parcel is $0.10 each, the cost of the data will be $1,650. It can get expensive. However, if you work through a local agency on the state, city or neighborhood level, there may be chances of obtaining data through government or non-profit connections or having someone prepare a small amount of data for you using parcels.

So no that you've seen various examples of different types of geographical data, you might be wondering how you use it. Probably the best way to learn is by doing – to do the GIS tutorial that comes with the GIS software. Still, a few terms may be helpful.

In GIS, there these terms are commonly used-

- Layer – Vector GIS maps have layers displaying different types of information. A raster layer can be displayed behind a vector (as a backdrop). For instance, you can display a aerial photo layer behind school district boundaries and roads.
- Attributes – are the qualities held in a data table of each GIS point, line, polygon or raster image color. For instance, a census block polygon will have attributes held in a data table with information such as the population that lives in that polygon, ethnic composition, average income, etc.
- Data tables – store attribute information. Also called attribute tables.
- Data sets – the geographic layers and data tables associated with them. One geographic layer may have several data attribute tables.
- Projection – Latitude / Longitude is the most commonly known projection of the earth. However, for GIS uses, data is often formatted in a projection that best fits the local area. Sometimes information will not display correctly if the projection is not defined. Projections are usually written into the metadata of the data sets. GIS users may have to define the projection of the data you are using in order to have different data layers line up correctly on a map.

Data is used on a map (in a vector system) in this way…



Understanding how GIS works…

- The University of British Columbia Library has a good description of how GIS works: **www.library.ubc.ca/scieng/gis_wrk**
- The Pennsylvania Spatial Data Access (PASDA) also has a good representation of how a GIS system works. Go to **www.pasda.psu** →Outreach & Education → GIS tutorials. **www.pasda.psu.edu/tutorials/gisbasics**

During the summer of 2001, six teenage mappers mapped learning on the West Side. After the summer was over they wrote journal entries. Jasmine Brennan, then fifteen, wrote:

"When I first heard about the job I was interested but a bit skeptical. I thought about all the job had to offer. I knew that there was a lot I could learn from participating such as computer skills, people skills, and information about the West Side. I also thought it might help me get over my fear of talking to complete strangers.

"On the first day I walked into the library only vaguely knowing my new co-workers and not having a clue who my supervisors were. I decided not to shy away from everyone. By the end of the week I felt like I belonged to a brand new family. I felt safe and comfortable with them. None of us singled the others out and we supported each other, especially when we had to do our first interviews.

"My first interview was a chance for me to ease into things. I was surprised at the cooperation and enthusiasm my interviewee had, even though they didn't know much about what we were doing. Each interview brings something new, but there are a few very memorable interviews. One of them was with Gene and Irene Joseph. They own a market on the West Side. The two of them were very friendly. I didn't feel uncomfortable at all, despite the fact that we were surrounded by slabs of meat ready to be butchered. I learned about the old [West Side] flats where Gene used to live and about the young kids in the neighborhood. I was very surprised when they said that they had seen my photo before…my grandfather had shown it to them over coffee and donuts. I'm no longer uneasy about going to their store, or any other store, because now I know that the owners are real people who are only trying to make ends meet.

"At the Girl Scouts, me and my friend Jessica were nervous about going into such a huge building, but we sucked it up and headed in. We ended up getting lost but we found our way. We were taken into a conference room to conduct the interview. I felt really grown up about that and I knew it showed in the interview. Already my confidence was rising! From that moment on I've conducted each interview with maturity and grace.

"When we started data entry in the very beginning I was really bored. Now that we are working with our own data everything seems so much better. I am really enjoying what I'm doing." Jasmine Brennan, then fifteen years old, summer 2001.

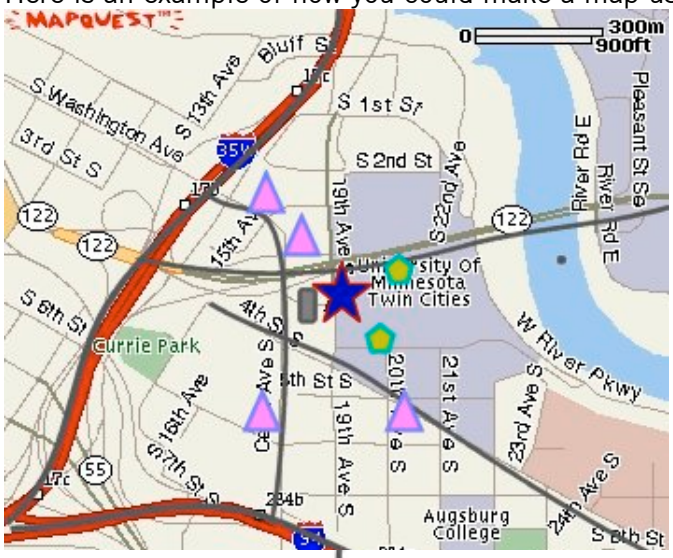
MAPPING - WITHOUT A GIS

Mapping without a GIS can be just as exciting and interesting as with a GIS.

If you want to do a very simple map with points of interest throughout, it is fairly simple to do a map using graphics software, pointing out landmarks and other items of interest.

If you want to make sure that you get the placement of information in approximately the right places, you could make a photocopy of a map, mark the places of interest with a marker or pen, then scan it into a computer. Using graphics software, such as Adobe Illustrator, Paint Shop Pro or even word processing programs, you could reproduce the points you made on a map with symbols.

Here is an example of how you could make a map using another map…



A map that you find off of the Internet, such as on Mapquest or Yahoo maps could be used as a backdrop for your own information.

Likewise, you could scan in a street map as your backdrop.

Next, you can make symbols and streets using graphics tools. This example looks a little sloppy, it could be cleaned up a bit, but it gives you the general idea.

After you have the parts that you want to display on your map, you can take off the backdrop image (which is not difficult to do in graphics software such as Adobe Illustrator or Paint Shop Pro).

You can add other items that you may want to have on your map.

This map is lacking a legend (or key). The star is the Center for Democracy and Citizenship offices (where PA is administered). Little do you know that the triangles represent restaurants that the CDC staff will often go to at lunch time. The hexagons represent cafeterias.

Maps can be very simple. Although this example is rather silly, having only the most important information on a map can help your

group prove your point about what is most important to you. Still, people need reference information to get a sense of the area you are talking about. In this example, that is why the major streets and street names are included. Sometimes less is more, that is, a little information can tell a more powerful story than one with lots of details.

MAPPING PERCEPTIONS

Mapping perceptions is about understanding and issue in people's minds.

For instance, students could draw a map of their walk to school, highlighting places of interest such as tricky intersections to cross or places they know are safe to go in case of an emergency. Similarly a map could be made of places to go after school or on the weekend.

In developing countries mapping perceptions is often used to identify issues, problems and projects through a process called Participatory Rural Appraisal (PRA). For instance, a woman may place greater importance on the proximity to a water well, if she is the one who gathers the water. Maps can also show the relative importance of institutions in the area. For instance, a church or traditional healer may be perceived as more important, or more likely to visit, than a hospital.

Mapping perceptions can be done with a lot of instruction or almost none. Sometimes simply asking a group of people, or individuals, to map their community by hand is a good exercise to see what items they put on their map. This can be done by asking the group or individual to map the places that they go. To remind them of where they go, you might want to ask them a series of questions, such as

- Where do you go on Sunday, Monday…?,
- Where do you go after school? How do you get there?
- What do you do in the evening, on the weekend, in your free time…?
- What places are most important in your day to day life? Mark them somehow on your map.

Mapping perceptions can be particularly useful if your PA group is struggling with what to do. It can further help to define self-interest.

Even when your group has figured out its issue, problem and project, maps can help to tell a story within and outside your group. Think about it, if you hand someone a map about your issue, explaining the story behind the map, that person will think of the map every time they think about your group. Without a map, the story that they make up inside their head is what they envision. Maps can help your group tell their own story.

Too many maps could confuse the people in power or with interest in your issue. So to get around the problem of information overload, your group may want to consider consolidating your individual ideas on to one common map. This can be done in a couple of ways – make a map initially as a group or make individual maps and then make a master map with all of the individual ideas.

Creating community or neighborhood perceptions maps to explain your perceptions to others is surprisingly easy to do and can easily tell a story. Sometimes showing a

drawing of a map to others is easier than talking to them without any prop, particularly for children.

For the background of your map, it is sometimes best to use a blank sheet of paper, particularly with younger children. Don't worry about it if your map is accurate or not – the perceptions are more important than accuracy. In fact, inaccurate maps can show the relative distances perceived by the mappers.

If your group is set on doing an accurate map and they find themselves using a road map to make their map, a coach can make their work easier by photocopying a road map on a very light ink setting on the photocopier so that there is a gray overview of the road map as a backdrop for them to draw their map on.

So get out the color crayons and markers and start mapping. Here are two ways that may work for your group:

- Draw one map as a group.

Drawing a map as a group will require discussion of pertinent things to put on the map. Sometimes groups are tempted to leave obvious things off of their map, such as school or the bus stop. Whenever the group comes to a consensus, then the item under question should be drawn on the map.

Facilitation is key to this exercise, since many people working together on a common project often want to all talk at once. A coach may want to assign a facilitator, a drawer and a timekeeper. The facilitator will guide discussion and determine when decisions should be made, then make the decisions as a group. In order to give everyone a chance at these roles, they can be changed throughout the mapping time.

- Draw several maps and consolidate them into one map.

Sometimes drawing several maps, then consolidating them all into one map can be an easier and more rewarding process than mapping as a group in the first place. The advantage to drawing several maps is that the more quiet members of the group have a better chance of being heard.

In this scenario small groups or individuals draw a map together (about their issue or of their community), then share them with the larger group. The larger group will compare the various maps drawn by individuals and teams and discuss which elements they want to have on the entire group's map. Then, they begin to draw the map for the entire group with elements from each of the individual maps.

Maps tell a story in a way that words cannot. When you work with maps, it is important to allow time for everyone to see each other's maps, ask questions about them and compare them.

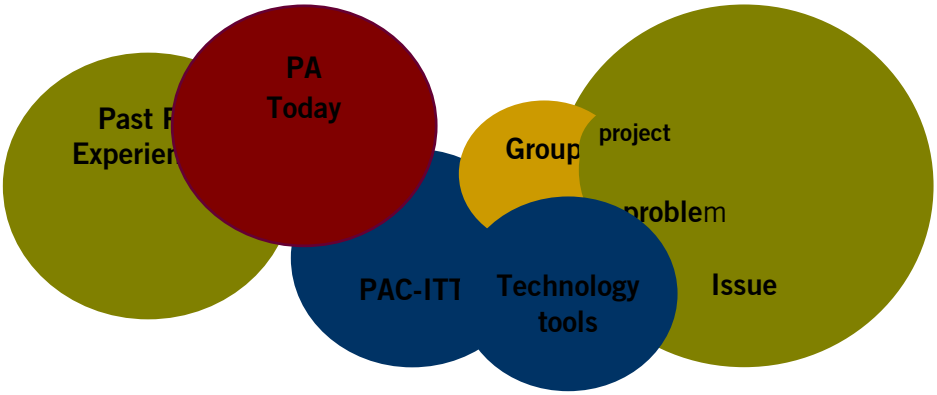
➔Don't forget a legend or a key when drawing maps, to further explain your story.

Another way to use maps is to not draw land at all. Power maps and decision trees are examples of different ways to *map out* information. Venn diagrams and modifications of Venn diagrams are useful tools to show how different elements of your life relate to another. Venn diagrams can show perceptions due to the size of circles, the distances of the circles from each other and the overlap of circles.

Many times Venn diagram maps indicate resources to a person, community or group. Look at the Venn diagram below, although there are not any labels on the diagram, you might be able to make some guesses about the relative importance of the different circles and the interaction among circles. These circles represent a resource, institution or activity.

Now consider what these circles could represent. They could represent almost anything. Looking at the picture, it appears that the blue circle is central somehow, the large green circle must be important because of its size, but then there are two related green circles inside.

Now consider what these circles could mean. Here is one example below with some modifications.



The diagram above could be drawn in many ways. Just like in power mapping and decision trees, Venn diagrams should be about learning along the way. There is no one right or wrong way to use them in your group.

There are other types of mapping and diagramming methods that you could use in PA. The advantages to mapping and diagramming are that you can get a visual picture to understand an issue, problem or project better. This can help your group internally and also help people outside your group understand your concerns.

Youth often find talking a lot about an issue boring or it makes them feel like they are not doing very much. Doing a diagram or map can help your group figure out next steps, feel like they've accomplished something because they have made something tangible and build a team identity.

MULTIMEDIA MESSAGES

Messages can be made in many ways to different audiences. When your group wants to do a campaign to get out a message, you have many options available to you, particularly using technology.

Regardless of your issue, it is important that your message is clear and understandable. Many people find that having a variety of ways to disseminate a message is also important. For instance, if your group does a video, you will have to have some sort of way to broadcast that video.

If you want some sort of action or behavior group in your audience, then follow-up action is required after a message. Follow-up action could be a discussion after a video, contact information for more information and action on a brochure, or stating the aims of a project clearly on an audio tape, both in the beginning and the end.

When using technology multimedia messages are seemingly limitless. They can be found on billboards, brochures, television, radio and especially on the Internet.

USING MULTI MEDIA

What does it mean to use multi-media? The media is used for publicity, that is, to make your issue, problem or project public. Using multi-media resources to get your message out may involve using two or more of the following:

- News print media, such as magazines or newspapers.
- Graphics and Photos to illustrate a point or an identity.
- Television for a combination of visual and audio messages.
- Radio to get out audio messages including voice, music and spoken word.
- Multi media presentations (using PowerPoint and other media)
- Internet (with capabilities of displaying audio, video, graphics and text).

When using multi media resources, groups tend to learn new skills. If, during your self interest discussions, several group members expressed the desire to use equipment such as computer software (such as graphics, word processing or website production) or want to become less shy or a better writer, then you may want to encourage your group to use the media so that group members can not only learn new skills, but also get publicity for the work you do.

Using multi media resources is about publicity.
Many times groups think that if they get their project done, without publicity, it is just the same as getting it done with publicity.

Consider these points and discuss them with your group:

- Publicity can help show others that you're capable (no matter what your age).
- Publicity can help other groups interested in your issue by seeing your example.
- Publicity can encourage other groups to get involved in your issue in other communities or expand on the issue in your community.
- How can publicity benefit your group? (with or without multi media)
- How can publicity benefit others?

STORIES & INTERVIEWS WITH MULTI MEDIA

Using the media is all about stories and interacting with people. Think about it, when you watch a commercial, see a billboard, watch a news bulletin, read a newspaper or surf the Internet – stories are everywhere. Granted, some things will tell a story with more depth than others, but they are stories nonetheless.

See stories in the media.
Have your group tell the stories from various media that they see everyday. Below are two ways of exploring stories behind a media message:

- Gather magazine, billboard or other types of printed advertisements. Have your group members describe the story behind the advertisement. Not only is this an exercise in being aware of the stories behind graphics and photos with limited text, but it is also a way for your group members to be come more media aware.
- Go to the Listen up website **www.listenup.org** where you will find Public Service Announcement videos produced by youth. If you don't have Internet access, talk about the stories behind some of the commercials they see on television. It may be useful to ask them to talk about anti-drug, anti-smoking and other campaign messages. Try to get your group members to tell the untold story behind the message, considering the images and attitudes in the media.

Discuss with your group the story behind the stories you see in everyday messages. Use this information to figure out what kind of story you want to tell. Given the messages you see everyday, ask your group:

- What kind of feeling do you want people to have with our message?
- What images or imagery (unseen images) should we use?
- What is our main story?
- What do we want people to think when they see our story?
- What is our main story? What is in the background of our story?

Youth today tend to be very media savvy. They know when a message is effective or ineffective. Producing their own media message can enable them to reach their peers and further understand the role of the media in their everyday life.

DEFINING A MESSAGE

A good message is key to using the media effectively. Sometimes the message is clear from the beginning, other times the message only becomes clear once the group has almost finished their project. Whether a message is clear from the beginning or emerges as a result of telling a story, a message should be clear and understood or at least make the recipient of the message question your issue or problem.

When to define your message.
Some groups can define a clear message from the very beginning and build a story around it. Some groups need to explore and tell their story, then figure out the message. It doesn't matter much when the message is figured out, just as long as it is thought provoking on your issue or problem.

- To know if you have an effective message, show several people your media project without telling them what it is about. Then, ask them to explain what your work is about. If they understood it easily and fully, you've created an effective message. If they don't understand it easily, then ask them what they think could improve the piece. When asking people for input into your project, prepare your group for constructive criticism and possible change. Also, try to get some people from your target audience to give you feedback.

Media professionals will test and retest their messages to make sure that they are effective. Your group may not have a lot of time to do extensive tests, but testing the effectiveness of your message on at least a few people from your target audience can help your group improve their message and understand how effective messages are created.

There are several types of messages with different aims. Messages can seek to:

- Change behavior (also called social marketing).

Example: The message *Get Involved* calls for individuals to change their behavior, that is **how they can do something different** that will affect an issue or problem.

- Inform.

Example: The message *Get Involved* can **provide information on the issue** by telling people about a study or an interview of how when people are active in their community are healthier then when they are not.

- Act.

Example: The message *Get Involved* can name a project and provide background information on it that would be of interest to the target audience and make them want to act and **inform them how they can act on the issue**.

When you and your group are trying to define your message and work on publicity, it may be helpful to ask the following questions:

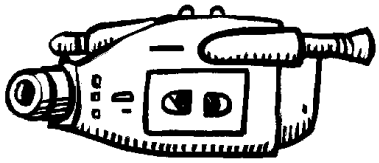
- What story do we want to tell?
- Who do we want to tell this story to? (Who is our target audience)
- What do you want people to take away from this message?
    - Do you want them to change they way they do something? How can they change?
    - Do you want them to be informed, without action?
    - Do you want them to act on something? What?

- What is the most effective way to reach this audience? Using what media?

There are many different forms of media that could be used in Public Achievement. Many forms can be used with each other. Almost all forms can be found on the Internet. The following will be described here: video, graphics & photography, audio, presentations (such as PowerPoint), and newspaper &print media.

VIDEO PROJECTS

Videos are fun projects for PA groups, particularly for teens and even younger groups. Visual media projects emphasize image. Many youth struggle with issues around their image and enjoy exploring their image with video. However, others like to be behind the scenes and not in front of the camera.



Although sharing and experiencing roles and responsibilities are important in PA, also being attentive to the comfort level of various participants is also a good idea. Depending on the group, having a combination of individual and group conversations about what they want to do in the video works well. Otherwise, roles can be defined by the process, that is, people can define their roles by acting on what they want to do.

A coaches role in a video project will likely be to make sure that everyone has the opportunity to contribute to the video in their own way. A coach should be attentive to participants who seem to do everything and those who don't seem to have anything to do. Coaches will likely find themselves saying "How about if you give _____ a chance of working on _____ for a while?" while working on any video project.

If there are children or youth who are in your video, check with your local organization or school to find out if they need to have parental permission to be in the PSA and have it be viewed publicly. Even if you're not sure if permission is required, it is best to err on the side of caution and get parental permission stating how you plan to make the video and distribute it.

There are many types videos out there, but PSAs and documentaries are the most common video types that a PA group would do.

PSA

A Public Service Announcement (PSA) is usually a 30 second video of which 24 seconds are for the main part of the video and 6 seconds are for the message and contact or follow-up information. Thirty seconds is the most common length of a television commercial. Thirty

seconds may not seem like a lot of time, but a good message can be delivered effectively in a short period of time.

PSAs are noncommercial messages for the public good. PSAs express what a group of people want to tell the world, or at least a target audience. Some of the most well known PSAs are for anti-drug use and anti-smoking. Worldwide, UNICEF does a lot of PSAs about issues concerning children and their future.

To see examples of PSAs, try surfing the Internet.

- Public television in the USA has a project for teen produced PSAs called Listen Up. Examples can be found at **www.listenup.org**
- See the PSA produced by Saint Paul Boys and Girls Club youth along with the Community Information Corps at **www.westsidecic.org**.
- Some of UNICEF's PSAs on topics such as landmines and children's labor rights can be found on their website under videos or films at **www.unicef.org**
- Try searching the Internet too, using key words such as PSA, video and the topic you are interested in.
- You may also want to search for organizations in your area that may have the equipment and the training capabilities to do a PSA with your group.

There may already be a PSA about your issue or project. Instead of making your own PSA, your group may want to consider using an existing PSA. If you find an appropriate PSA, check whether or not your group can use it in the way you want by checking the copyright. Some PSA producers encourage the wide use of their PSA for free, others have restrictions about its use.

- Making a PSA? Where can you get help?

Your group may be able to find help from your local television station or school. The more local the television station the better. Some cities and counties have public access television stations meant to broadcast community information about community issues. Some schools have a video lab and instructor. You may also want to check larger television or video production stations to find out if they have any special programs for producing PSAs.

- How is your PSA going to become public?

PSAs can be broadcast on television, used in classrooms followed by a conversations, open a presentation or broadcast over the Internet. If your group wants to broadcast your PSA on television, it can be expensive, so be prepared to raise some funds or check with the station you want to see if they have any programs for groups like yours.

If you completely own the rights to a PSA, you may want to consider broadcasting it over the Internet. Even if you don't have a website available to you, check out the contacts on the PA website **www.publicachievement.org** to ask about posting a PSA on the PA site. Because PSAs are short, broadcasting them over the Internet is fairly simple.

Broadcasting your PSA to a classroom, on television or the Internet is usually not enough to get the audience you want.

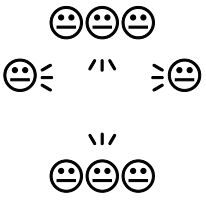
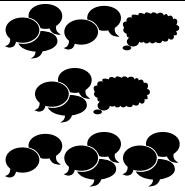
Your group may also want to considering telling others about your PSA through word of mouth, brochures, cards or other ways. Probably one of the most effective ways to get people to watch something that you created is through word of mouth – talk to people about what you've done and inform them of where they can see your PSA.

STORYBOARD

Before your PSA is made, you have to plan what you want to film in order to capture your message visually and in sound. A storyboard is like a script with visual cues. It consists of frames where you can draw the video scene and write in dialogue and sounds for each scene.

Storyboards are like comic book representations of your PSA. Because PSAs are short, your storyboard will likely have around ten scenes give or take a few scenes.

Example: storyboard about making a PSA-

				
Scene 1 "We have something I want everyone to know"	Scene 2 "We want to make a PSA!"	Scene 3 "But we don't know how to make videos."	Scene 4 "So we found people to help us learn to make a PSA"	Scene 5 "We thought through our message and story"
				
Scene 6 "We drew out our scenes."	Scene 7 "We filmed."	Scene 8 "We edited and edited."	Scene 9 "Arranged a broadcasting plan"	Scene 10 "Told everyone we knew to watch it."

Storyboards are usually hand drawings of each scene, with acting notes and dialogue.

A storyboard is easy to make.
On a piece of paper make squares to represent each scene with a dialogue or camera instruction box on the bottom. Draw in the scenes that you think should be on your PSA. When working with a group, it works well to come up with several storyboards as small groups, present them to the large group, then come up with a group PSA storyboard.

When you are filming your PSA, you should refer to your storyboard to guide you through which scenes are next. Thanks to video editing equipment, you may not have to film your PSA in storyboard order because you can cut scenes and move them around on computerized video editing programs.

FILMING & EDITING

Sometimes opportunities come up while filming that seem better than what is on the storyboard. Go ahead and film these, because when you get to the editing stage, you might find that these clips work better than your original plan.

It may be fun to also play with different camera angles. For instance, if you want the effect of feeling small, the camera can look down on what's being filmed form above. Similarly, if you want the effect of looking big, you can look up to what's being filmed.

Be careful of your equipment. Have someone be in charge of making sure that the same equipment borrowed is the same returned.

Give everyone who wants the opportunity, a chance to film and act. This can be done by give each member of the group at least one scene to film.

Editing is fun because you can change the speed of the film, change or add sound and play around with special effects. Expect to spend the same amount of time filming as you do editing.

BROADCASTING A PSA

A PSA can be broadcast using video tapes, DVDs or computer video files. Videos can be broadcast using television, playing videos to groups or over the Internet.

Before you make a video, find out what form your video should be in. If you want to broadcast your video over the Internet, a video cassette will not be the form you want, instead you should try to find computer video files such as .mpeg, .mov, or Windows Video Files.

In order to play videos over the Internet, users will have to have video players on their computer or the video player needs to be embedded in the video file or html code (if over the Internet). If you want to know more about how to put a video on the Internet, do an Internet search to find out the most common and up to date methods. At the time of the writing of the manual, the easiest and most common programs were RealPlayer and (the Apple one- can't think of the name right now).

DOCUMENTARY

Documentaries can be of almost any length. They are films to document a particular issue, often with the attempt of having a balanced view of an issue and letting the viewer decide what they think is the best possible course of action (or inaction).

In 2000 several high school students participating in PA at Humboldt High School made a video documentary questioning the fairness of the U. S. citizenship exam. They let the issue speak for itself by asking citizenship exam questions to a wide variety of people, both citizens and non-citizens. On the film, the group's message is quite clear – American born citizens were often unable to answer citizenship test questions.

The method of producing this documentary was quite simple and the message is clear even though it is not explicitly stated. What is unclear is what action should be done, here again, documentaries often let people decide for themselves what action should be taken. Documentaries are meant to inform.

Copies of the citizenship video made by PA students at Humboldt High School may be available for viewing from Public Achievement. To get a copy of the video for yourself, go to the Resources section of the PA website at **www.publicachievement.org**.

Documentaries can be used as learning tools and tool to begin a discussion. If your group has an issue that is important to your school or community, you could do a video about the issue, the problem(s) and even suggested solutions as a video to start a discussion.

The beauty of using a video to start a discussion is that it puts everyone involved in the issue (hopefully those people on your power map) on equal footing in the start of a discussion. It also sets the stage since everyone quietly listens and absorbs information when watching a video.

How do you get people to view your documentary?
People need to know about something in order to watch it. Your approach to publicizing your documentary can be similar to a PSA – talk to people and broadcast it on television or even the Internet.

Documentaries are good tools to begin meetings, presentations and discussions. If your group is considering a documentary, from early on figure out who your audience is and try to arrange a viewing and discussion. Also consider putting copies of your documentary in your local or school library.

GRAPHICS & PHOTOGRAPHY

Graphics and photography can be a fun way for a group to represent, document and publicize their issue and it's problem as a PA project. Using computer graphics programs can also be a good introduction to the concept of layering in GIS maps.

GRAPHICS

Most computer graphics programs that come with a computer when it is new are very simple. Advanced graphics programs, such as Adobe Illustrator, Corel Draw or Paint Shop Pro tend have the ability to layer images on top of each other with ease. If you plan to do a graphics project,

it would be best to use an advanced graphics program, however, they can be expensive. As a start, good exercise for your group could be to find a place where your group can use a graphics program to get your work done in a school, library or other public place.

Word processing programs, publication software (such as MS Publisher) and basic graphics software have the ability to assemble graphics together and make basic graphics. Sometimes simplicity is appropriate for your group. The limitations of these programs is that they may or may not have the ability to Antialias text (a process that makes text more attractive and readable within a graphic) or produce high quality images that would work for professional printing services. Still, if you are making publicity materials that you plan to photocopy or very basic web graphics, these programs are fine.

When making graphics for the World Wide Web, it is important to pay attention to the file size of the graphic you are producing. Why? Because in web graphics, the larger the file, the longer the download. If you have a lot or even one graphic with a large file size on your website, it can take a long time to download, so you may lose people going to your website because they get impatient waiting to see what you've produced.

Explore how to modify and make graphics.
When first starting to work with graphics with your group, it may help to use existing graphics and modify them. Find a graphic on the internet or clip art, then ask your group to color it, add new features and add text in a graphics software program.

This will help to give the group members a chance to familiarize themselves with how graphics are made and modified, so that when they begin to look at their own graphics, they have a sense of the capabilities of graphics software.

Below there is a discussion about graphics file types (Bitmaps, JPEGs and GIFs, plus others). But before we get to that, some brief notes on photography…

PHOTOGRAPHY

Photography is a good chance to focus on documenting an issue or process visually. Most people, youth included, know how to take a photograph, but generally take scenery, vacation photos or smiling photos at special or every day events. Using photography in PA is a good opportunity to discuss and use photography for the public good.

How can photography used to capture the essence of an issue or problem? Some projects, such as littering or waste reduction are easy to capture on film by simply taking a photo of messy areas and proposing ways to clean them up.

There are projects that are difficult to document on film such as the importance of having a good learning environment. Sure, you could show someone learning and appearing to have a good time, but a more powerful image would indicate the before, during and after effects of learning. When you are showing your case through photography or graphics, particularly of complex issues, people may benefit from understanding your vision of the future.

To get started with photography, you may want to take a look at photos in the newspaper and magazines (such as National Geographic) and ask your group the stories that they see in the photos, then consider your project and how it can be visually represented. Consider…

- The angle of the photo. How does this perspective tell a story? How would other perspectives or angles have a different meaning?
- The framing of the photo. How is the photo framed – what is in the photo? Why do you think the photographer chose to do a photo at that distance from the subject of the photo? Why do you think the photographer chose to do a close up? A landscape? At close, medium or far range?
- Are there captions on the photo? Does the photo need explanation? When is explanation needed in a photo? When is it better not to have an explanation?

On the practical side of photography, your group has options about what type of photos to take – with film or digital photos. The resources available to you may dictate what kind of photos you take. If you have access to both a film and digital camera, you may want to consider:

- Film cameras can often take better quality photos (with a higher resolution) than most digital cameras. This may be important if you plan to use your photos in professional printing or want to enlarge photos. To make digital copies of your photos, you can have them digitally processed when you have the film developed. Most film developers have the option of receiving a CD with your photos or downloading them over the Internet. You can also scan in printed photos on a scanner. The resolution of scanned photos depends on the size of the photo and the capabilities of the scanner.
- Digital cameras are generally good for lower resolution photos that you may want to use for websites, photocopies, presentations or basic printing. Digital cameras are getting better and better all of the time, so in many cases, a digital camera will work well for most, if not all the work you plan to do. One major advantage of a digital camera is that the photo will already be in digital form and there is no fee for processing photos (as long as you have a computer and printer).

Some groups have also enjoyed taking photos of the PA process. If your group would like to submit some photos along with a description and story about your group to the PA website, contact PA through it's website: **www.publicachievement.org**. PA is often looking for good photos of groups to use on the Internet and in publications, but most of all, PA would like to hear your stories and see your photos.

BITMAPS, JPEGS & GIFS – OH MY!

When working with digital images it helps to understand some of the differences between various types of file formats. Depending on the use of each image, you may want to change the file format. A major consideration on whether to change a file format is file size.

If you are using an image in a document or website that will be used and passed around to others, it is best to keep the file sizes small for the following reasons:

- Small files have shorter download times. If a file has a large image in it, it will increase the file size.
- Internet and World Wide Web graphics do not need to be high resolution most of the time since people are viewing these graphics primarily on screens only, not downloading them to be professionally printed. Plus, large file size images take a long time to download.
- Some email programs have a limit on the size of document that can be transmitted by email. If you plan to send something by email, particularly to web based email systems such as Yahoo or Hotmail, be careful to keep your file sizes small. There are size limitations to some email services.

Note, when talking about the size of a file, it does not mean how large the actual image is. However, larger images tend to have larger file sizes. Instead, what is meant by file size is the actual size of the file stored on the computer in bytes.

	Bitmap (.bmp) Also called Windows Bitmap.	127 KB	(127,000 bytes)
	JPEG (.jpg or .jpeg) with a compression of 50	10 KB	(10,000 bytes)
	GIF (.gif) Also called Compuserve Graphics Interchange File	14 KB	(14,000 bytes)

When looking at the pictures of an iceberg above, you may be thinking that it is best to use a JPEG all of the time. While JPEGs are useful for many types of files, there are other reasons for using different file types, other than file size.

Of the three file types above, only the GIF image can have image transparency. In this example the background was made transparent.

If the background color that you will be using changes from time to time or if you want to layer several images over one another, but be able to see through them, then GIF image transparency is very useful.

However, if you know the background of your image, you may want to just color the part that you want to appear transparent the same color as your background.

In this example, an image has been used that has a lot of color variability, that is, there is a wide range of colors. You can see that the GIF image simplified these colors. However, when you're considering which images to use for solid color blocks of text or images, GIF tends to work equally as well as JPEG or BITMAP with the added advantage of transparency. For instance, if you want to place a block of text over an image, you could make a GIF image to place over a JPEG.

The advantage to JPEGs over BITMAPS is that JPEGs use compression to make the file smaller by simplifying the color schemes. If you are going to need very precise colors, a JPEG may not be right for you, but generally it works very well for most uses.

Below is a table of images that you may use describing these three types of images and a few more that you may encounter. As always, if you find yourself with more questions, check the Internet or ask your favorite graphics whiz.

Graphic File Type	Extension	Common Usage	Size	Advantage(s)
BITMAP Windows Bitmap	.bmp	Windows programs often have bitmaps as the default graphics file setting. Photos processed on CD may be saved as bitmaps or JPEGS.	Medium	Since it is not compressed, a bitmap holds a lot of image detail.
EPS Encapsulated PostScript	.eps	Used primarily for printing. EPS files are often used for logos that need to be clear at various sizes.	Medium – large	A friendly file for professional printing services.
GIF Compuserve Graphics Interchange File	.gif	GIFS are found all over the Internet. They are sometimes used for Clipart because of their small file size and transparency capabilities.	Small	Transparency. Good for web graphics.
JPEG	.jpg .jpeg	JPEGS can be compressed to make a smaller file size. On graphics software JPEG compression values can be selected. The results of compression is a large file can be simplified slightly or greatly to a smaller file size with a little loss of detail (sometimes unnoticeable).	Small	Compression. Good for web graphics.
PNG Pronounced "Ping"	.png	PNGs are one of the newer file types designed for fast upload on websites. It is similar to a cross between a JPEG and GIF.	Small	Not all computers are capable of reading PNGs. Created for web graphics.
TIFF	.tif	May be used with professional printers or some GIS output because it retains the full detail without compression or loss of detail. TIFFs are easily converted into other file types, though not widely used by novice computer users since high resolution graphics are generally not needed.	Large	Can be used to transfer files from one person to another, particularly for professional printing if you are not sure what file type to use.
Graphics Software Files	.ai .psp	Graphics software files are stored as all of the graphics layers. If you made a file in graphics software, it may be a good idea to store it in the software's file format if you need to make changes later. But when you use these files for other uses, be sure to convert them to a more common file type that is not dependent on graphics software.	Large	Stores the graphics you assembled in layers. Easily changed and exported to other file formats.

The descriptions above are only approximate and based on experience. These file types may change or the descriptions may not be completely accurate. If you're doing a lot with graphics, it may pay to do tutorials on graphics software and / or search the Internet for the latest and more detailed information.

Finally, when using graphics files, check the scale of the file both when you make a new graphic and when you insert it into a website or document. Generally, you want to match the display size of the graphic to the place that you have for it. Therefore, if you have a two inch by three inch space for the file, you should export your graphic file as a two inch by three inch graphic.

Many times people who use graphics frequently, particularly for websites, will save the various sizes of the same graphic using the same name, but with different endings, such as iceberg-sm.jpg, iceberg-md.jpg and iceberg-lg.jpg or iceberg2x3.jpg, iceberg4x6.jpg, etc. This can help you keep track of which file is which, particularly when using the same image with different display sizes, but you can also look at the file size to see that a file the same format with the same name will have fewer bytes.

If you plan to use the same image in many display sizes, format the graphic in the largest display size (or even slightly larger than the largest size) so that you can always reduce your display size. In graphics software you can also expand your display sizes, sometimes with little or no loss of resolution, however, to play it safe, try to make files the display size that you want them to be when you print them or larger.

PRINTED MATERIALS (POSTERS, T-SHIRTS, MAGNETS…)

Posters, Signs, Magnets, printed pencils are often used for social marketing purposes when you have a simple message that you want to spread to many people to get them to think about something or act on something.

A challenge with producing printed materials in PA groups is that they cost money. Fundraising or obtaining donated materials and services will be a necessary part of a PA project. This can take time.

Before you do your fund raising (or even while your doing your fund raising), it helps to have an example of the image or message you plan to print as well as the costs involved in printing. Some steps that your group will have to take in producing printed materials are:

- Have a message and test it to make sure it makes people think or is understood.
- Begin designing your image or the format of your message. Make sure you design it in a printer friendly way (large enough and with a file type that can capture the full detail of the image when printing, such as .TIF or .EPS).
- Research the costs and quantities of the items you want printed.
- Fund raise or find ways in which you can cover the financial costs with either donations, funds or possibly selling items for a nominal fee. If you plan to sell your items, make sure that you have interested buyers.

If you are designing an image to be printed, be sure to find out what the various costs are for one or four color printing. Generally, it is less expensive to print using one color. Sometimes it is least expensive to print in black. Be sure to ask questions when you look at printing options.

If you have no idea of printing costs and the decisions involved in printing, take a look at the Internet, you can find many printing services to give you a good idea of options and prices.

While feeling stuck on a graphics project to make magnets to promote the CIC website (**www.westsidecic.org**), a PA group took a break from the day to day work to discuss power – a core concept. This turned out to be a very emotional discussion among the three high school girls on this project who had become close after working together in PA for about one year. Here are some of the things they said, you will find that their conversation about power took a few turns, but in the end, they had a new found energy to work together and continue on the project.

> ***Power*** *is the ability to have influence or make a difference in some way. When I first think of power, I think of big people, but that is not really power.*
>
> *I am powerful*
>
> *Yesterday when the bell rang some girls were teasing some other students and calling them names. Later, I talked to one of the girls who was teasing and asked "Why were you mean to her?" She told me that she already told the girls who she was teasing that she is sorry. When a friend heard this story she told me "You are powerful!" I don't know if that was power. After I told this story, my PA coach asked me "Do you feel powerful now?" and I answered, "**I am powerful**". Walking away from a fight takes more guts and power than getting into one.*
>
> *"They" always find something*
>
> *A girl in school has and intimidating appearance. She doesn't care what people think about her. She is not afraid to be herself. Once you get to know her and joke with her, she is really funny. Some people lack individuality and their own personality—they don't have the ability to make a difference because they are too wrapped up in how other people will see them. "They", the people who don't act like themselves—the homogenized people, always find something to make fun of those who are different and original. "They" are the ones who are bossy, tease, have friends who do anything for them, are inconsiderate and self absorbed. They take power for themselves. What is so different about me? About her? About anyone?* They *find it because* they *don't have the power to be themselves.*
>
> *Power through Mutual Support*
>
> *A - I don't have the kind of power that I think I should. I don't stand up for myself.*
>
> *Sometimes I think about you when I wonder what I should do in a tough situation, then I think "would A do this?" because I think of you as a good person that I want to be like. You have a silent power.*
>
> *A – But I don't have the good power, I still let people do mean stuff to me, I am passive.*
>
> *B- Passive power is important to avoid arguments or fights. People still stand up for themselves, they just have power in side. It is like "I'm OK, what* they *are doing isn't hurting me."*

A—At home I can't fight back. Here, at school, I can fight back when something does something wrong to me. Especially if I have friends who help me do the right thing.

Power as the ability to change things

I helped to change the behavior of a son who was mean to his mom. The son and the mom know me. One day the mom talked to the son about his behavior and talked to his son about power. She asked him to be more like me and after that he was nicer to her.

Group Power

As a group, we feel protection. We have more brains together and more ideas for a common goal. There is not necessarily more power as a group. It is not necessarily easier. There always seems to be one person who gets people organized in a group – one leader. In Public Achievement sometimes we think "Who cares about the community anyway?" We don't make a huge difference, but you see us trying to do things and that is what matters. Then, we see more things that can change.

Struggles with Personal Power

How come I don't know better? How can people be teased and not care? Walking away or doing nothing is the right thing. A better person does nothing when teased. Sometime power is out of reach. Right now I wish I could hang out with my younger sister more, because I know if I could hang out with her, then she would be fine. I don't know how to get her to change to see that she isn't using her own power.

Powerful people have obligations and think before they say anything

I live in a traditional family and I have to do the cooking and the chores because I have no mother. If I don't care for the family, then things will not be done. Sometimes I yell at the kids and feel a little bit of power then, but later I feel bad. Real power comes from thinking first then talking to people.

Feeling stuck

I feel powerless when I'm doing something wrong and I know there will be consequences, but I didn't do anything to stop it. Power is when you have the courage to make the right choices, even the more difficult choices.

AUDIO

PA groups seem to be more likely to think of video projects before they think of audio projects. However, audio projects can be just as powerful, if not even more than video. Audio is a very appropriate medium to tell a story and be heard. Sometimes video images can overpower a story, causing people to remember the images more than what is heard. Discussions are often easier on audio than video since people are often less conscious talking without an image.

Groups have worked with audio in a few ways including: hosting a radio discussion, making a song about their issue or collecting stories for oral histories or documentation of an issue.

Audio can be used for team building among your group. If you have access to tape recorders or digital recorders, you can have your group divide into smaller groups or partners to record a discussion or an interview. These recordings can serve as useful tools to help your group prepare for talking with people outside the group, understanding the self interest of the people in the group and change the way the group operates by have small discussions instead of large group discussions. When recorded these small discussions can still easily be used by the larger group.

The coach may also want to consider keeping recordings confidential between the coach and the people who make the recording. The coach can then listen to the recordings and bring up common issues at the next meetings, without having to mention who raised the concern or idea. This is useful because many times children and youth are worried about presenting their ideas in front of a group for fear that the idea will not be accepted.

Equipment for audio production can be expensive, particularly for high sound quality. You can get around these constraints by finding a radio station to work with for discussions or finding a studio where you can record your song or stories. If finding partnerships with studios or radio stations doesn't seem to be an option, cassette or digital recorders can be used.

Generally, the sound of a digital recorder (on the setting for high quality sound) will get the best sound recording. The quality of tape recordings are great to use to hear a story again or use for transcribing, but everyday tape recordings can sound muffled when broadcast. Another advantage to digital recordings is that they can easily be burned on to a CD, broadcast on a website or forwarded as a sound file on an email.

Many examples of audio can be found on the Internet. Many audio files require a media player (similar or the same as those used for video, such as Real Player). Try searching the Internet for an audio file either about your topic or something else.

A popular storytelling show on Public Radio (**www.npr.org**) is This American Life, which focuses on everyday issues in American life. The BBC (**www.bbc.org**), or British Broadcasting System, also has a wide assortment of audio files on the Internet.

The NO BULL team did an audio project to build awareness about bullying. At Minneapolis Technical and Community College (MCTC), students in the Urban Teacher Program participate as a member of a PA group in one semester, then coach PA at a school in the following semester. Here is their story.

"First of all, we tried to meet with many different radio stations to see which one would accept our proposal. Unfortunately, not all of the meetings were successful because of schedule conflicts, but we were able to find one that worked for us, which was Jazz 88.

But before they can play any snippet, we needed to have it professionally recorded on tape, so we went to the Humphrey Forum (at the University of Minnesota) and they said they were willing to help us. Now the only thing we needed to do was schedule a time where both the students and the Humphrey Forum can meet for the recording. Luckily for us, the Humphrey Forum can meet at the site and was very flexible with timing, so we were able to record a short time afterwards.

So, last week we went to Franklin Middle School (located in North Minneapolis) to work with a great Arts teacher (Tim Buzza) and his wonderful (12-12:50pm) 7th grade class. We chose this class because Tim was interested in bringing PA to his class and we thought it would be a great idea to expose them to what we are doing, which in return will help us learn how to coach for next semester.

Our intentions were to have a one hour "warm-up" discussion with the students about their perception of bullying: what it is, if they face it, how they deal with it, are there different types of bullying, how can we prevent bullying as a community, etc. and then return the next day for a radio recording.

All of the students had a lot of creative ideas and wise words to say about bullying, which we weren't surprised, but only half or less than half were willing or able to record (unfortunately).

On the second day, Ann from the Humphrey Forum came to Franklin and we were able to record the students. The recording was then presented to Jazz 88 and played soon thereafter.

Our next step is to record another group of students that we have been working with. We are still unsure of the date. A special thanks to the Humphrey Forum and Jazz 88 for their support. – Amy from the NO BULLS group.

PRESENTATIONS

Presentations can benefit from a break from talking or a backdrop for discussion. Multimedia presentations combine speaking and discussion with video, images, or audio excerpts.

Many times groups find programs such as PowerPoint a useful tool in developing and doing a presentation because it forces the group to have an outline, emphasize main points and use computers to convey multimedia files.

Even if your group decides to do a PowerPoint presentation, it is a good idea to practice a presentation both with and without the PowerPoint slides because not all locations have the capability of having PowerPoint, and even if they do, it seems that setting up technology can fail when you rely on it most!

The Community Information Corps mapping team during the summer of 2001, presented their project to the Saint Paul School Board in late October, 2001. Many things went wrong before and during the presentation. Before the presentation there was a snow storm, causing it to be difficult for the entire group to get there. One person who planned to attend, didn't make it.

While waiting to do the presentation, the group practiced it in a small room next to the meeting room where the school board members were meeting. We could see the school board members at work. It was clear that their meetings were long and they were tired having already worked an entire day. Somehow we knew we had to get them excited and interested.

Upon entering the room and setting up the computer, we found that we weren't able to get the projector connected to the computer correctly. What did this mean? No PowerPoint presentation to go with our talk! Still, the group was well prepared and made the presentation without the PowerPoint images. As it turns out, the group thought this was their best presentation yet, possibly even because the computer could not be set up. Without the crutch of the PowerPoint slides proved to the presenters and the school board that the group really knew their stuff about the topic.

Ironically, one of the main messages in the presentation was how the group had learned to overcome adversity. The failure of the PowerPoint presentation to work at a very important presentation was evidence that the group had truly learned great skills to get by in high pressure situations.

GETTING YOUR MESSAGE OUT

Before you even start to make your message, it is useful to know how your going to disseminate it. Looking at a wide variety of ways to get out your message will increase the chances of more and more people, particularly from your target audience, of hearing, reading or viewing your message.

Easy ways to get out your message include:

- Submitting messages to newspapers, television and magazines as press releases. Indicating what you are doing, why you are doing it and dates and times of what you're doing, plus a way that reporters can reach you.

Writing a press release about your topic can not only be a good way to gain clarity on how to describe your project when talking to people in person, but it can also result in more attention by the local media. When you write a press release, make sure that you not only explain your project, but make it clear about who you are. News agencies receive hundreds, if not thousands of press releases a day, but may be more attracted to press releases made by everyday people who want to make change, particularly children and youth.

- Talk to people about your issue, even in casual environments. You never know what kinds of connections will emerge from interaction with various people. People have connections to other people, perhaps friends, teachers or parents may have relationships with people who may be able to affect change in your issue or contribute to your project.

- Don't forget to show people your multimedia messages – it shows that your group is serious about what your doing. A graphic, image, video, audio, or documentation project can show that you're serious because you've dedicated time and effort to the issue. When you show people your multimedia project, also make it clear that your group made it.

- Think of creative ways to get your message out. Maybe you can have a display at an event or a grocery store to make people aware of your issue. Maybe you can wear a button or some other piece of clothing that will cause people to ask about your issue. Maybe you can plant a tree or do some other action that may attract media attention (along with a press release) about your project. Maybe you can paint a mural, make a sign, have an event or do a little something every day that uses your graphic, video, radio message.

Finally, multimedia messages can be used along with a wide variety of other technology tools. The advantage of using graphics, websites, videos, audio tapes and presentations is that it gives you a chance to get out your message over and over again. These messages can also tell people about your group, your issue, your dreams and explain how they can help.