

# Critical Thinking and Discussion

## K-W-L Charts

From [http://www.oise.utoronto.ca/~southopt/SS\\_Resources/K\\_W\\_LCharts1.html](http://www.oise.utoronto.ca/~southopt/SS_Resources/K_W_LCharts1.html)

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**Objective:** to activate students' background knowledge and provide a purpose for reading.

- **K'** stands for what we **know**
  - **W'** stands for what we **want to know**
  - **L'** stands for what we've **learned**
- Use this strategy at the beginning of a new theme cycle/unit, before showing a film or introducing a new topic.
  - **K-W-L** is a graphic organizer that can be used with a large group or on an individual basis.
  - When a new topic is introduced, teacher uses the chalkboard, overhead projector, large piece of chart paper or individual worksheets divided into three columns - one for each letter.
  - Before a new topic is introduced, students brainstorm everything they know about the topic. Teacher records this information under the 'K' column.
  - Next, students generate questions about the topic. Teacher records all the questions students have about the topic in the 'W' column. Students can add to this column as they become involved in activities related to the topic.
  - Lastly, when the unit is finished, students go back to **the K-W-L chart** and fill in everything they have learned about the topic under the 'L' column. This allows students to reflect upon what they have learned as well as see themselves as learners.
  - **K-W-L charts** can be used with any type of text, although it seems most suited to expository text. This strategy involves students in both reading and writing activities. It provides students with a purpose for reading and helps them to organize their writing. This strategy helps the self-directed reader to expand and elaborate topic knowledge, ties together background knowledge and text and helps the passive reader to assess the understanding she/he has developed through reading.

# Instructional Strategies for Content Learning

## ➤ Anticipation/ Prediction Guide

An Anticipation Guide is series of teacher-generated statements about a topic that students respond before reading about that topic. An Anticipation Guide can be used to activate and assess prior knowledge, to focus reading, and to motivate less proficient readers by familiarizing them with the content and stimulating their interest. The value of the Anticipation Guide lies primarily in the discussion that takes place after students independently complete the exercise. A pre reading discussion of student responses to the statements elicits relevant background knowledge, preconceived ideas, and any glaring misconceptions. The teacher's role during the pre reading discussion is to activate and agitate thought, without providing direct information that will essentially make it unnecessary for students to go ahead and actually read the selection. Students should instead be encouraged to consider their preconceptions and predictions in relation to the information presented in the text.

### **Instructional Procedures:**

1. Identify the major concepts that you want students to focus upon in the selection.
2. Determine whether the major points, concepts, issues are likely to support or to challenge students' preconceived ideas.
3. Create five to ten general statements that may support or challenge the students' ways of thinking about the topic. These statements should address key points, major concepts, and broad controversial ideas students will encounter in the selection rather than specific details.
4. Arrange the statements in a format that will elicit anticipation and prediction (e.g., true/false/undecided; yes/no; agree/disagree; a Likert scale).
5. Share the guide with the students prior to reading. Have students complete the guide individually, prior to discussing their response in groups.
6. Engage the unified class in a pre reading discussion by asking for a hand count of responses to each statement. Call on students from each side of the issue to justify their responses. Refrain from simply telling them the correct response, and thereby negating any incentive to actually read the text.
7. Have students read the text material, with the purpose of finding evidence that supports or disconfirms their guide responses.
8. After students finish reading, have them confirm their original responses, revise them, or compare them to the author's stance.
9. Lead a unified—class discussion of what students learned from the reading.

*(Kate Kinsella, SFSU, 10/01)*

## Anticipation Guide Sample

Agree	Disagree	Anticipation Statement
		1. Being a citizen of Canada is the same as being a citizen in any other country of the world Reason:
		2. Voting is the only responsibility of "good" citizens. Reason:
		3. All citizens should have the same rights. Reason:
		4. All citizens have the responsibility to obey the law. Reason:
		5. I am thankful to be growing up as a citizen of Canada. Reason:

*(See Appendix for worksheet)*

### ➤ **Brainstorming**

Brainstorming is one way of quickly generating ideas for later connection and reflection. During a brainstorming session, students share all the ideas that come to mind regarding the concept or topic under discussion. Fluency and quantity are important components of brainstorming. Brainstorming can be done individually on paper or in a group, orally.

Explain the following expectations and ask students if they have any others they believe should be added to the list:

- all ideas are initially accepted without criticism, evaluation or censorship
- no put-downs, either in voice or body language, are allowed
- students should try to build on others' ideas.

### **Some guidelines for brainstorming include:**

- \* Generating--Elicit students' ideas by giving everyone a chance to respond or to say "pass," or have students call out responses as they think of them. Record, or have a student record, the brainstorm list on the chalkboard, an overhead transparency or on chart paper
- \* Clarifying--Instruct students to review the entire list and request clarification of any of the ideas they do not understand. Discuss possible multiple meanings.
- \* Categorizing--Instruct students to identify responses that are similar, or belong in the same category. Put "1" beside one category of responses, "2" beside another, and so on. Explain that not all ideas have to be grouped, and that some ideas may fit into more than one category. Explain that students should look for logical connections. Label each category.

- \* Assessing--If the brainstorm list is to be used in problem solving and decision making, suggestions will need to be assessed against criteria. Students should set the criteria and then choose the most appropriate suggestions. Assessment of suggestions should occur after all ideas have been recorded and clarified.

### ➤ Collage

A collage is a visual representation of the student's ideas, emotions and understanding in response to a specific topic, concept, situation or issue. Although a collage may include some words, it is usually composed of a variety of visual materials such as photographs, magazine pictures and scraps of cloth and paper.



Transitional Studies student assembling her collage in class.

Encourage students to use collages to demonstrate their understanding of concepts or social issues, or to demonstrate that they recognize the nature and character of time and place in historical events or eras. They can assemble their collages individually, in pairs, in small groups or as a class, depending upon the objectives. Collages can be used as alternatives to, or in conjunction with, written and oral presentations.

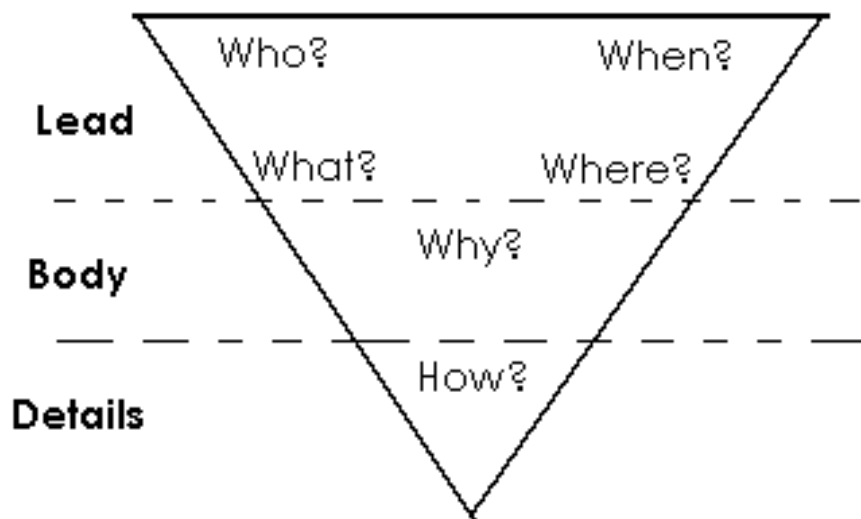
Extend student learning by having individuals or groups write one to three paragraphs explaining how their collage represents their understanding of the chosen subject.

### ➤ The Five Ws

- \* Introduce students to the five Ws found in most news stories. Often, the five Ws are introduced in a story's opening paragraph. Create an overhead transparency of a major news story. Invite students to talk about the *who*, *where*, *when*, *what* and *why* of the story. Circle or highlight and label the areas of the story that tell each of the five Ws. Then provide each student or group of students with a news story and ask them to report to the class the *who*, *where*, *when*, *what* and *why* of the story. Students might underline each of the five Ws with a different colored

marker. Select articles that are related to the concept being developed and that extend students' understanding of that concept.

- \* Have students write news stories about topics related to the concept that they are learning. Provide examples of news stories for use as models. Explain the elements of news stories: headline, byline, lead paragraph (briefly states who, what, where, when), body (provides explanation; adds more facts and details; often includes background information in a longer news story) and conclusion (briefly sums up the article). The following diagram shows the elements of news stories.

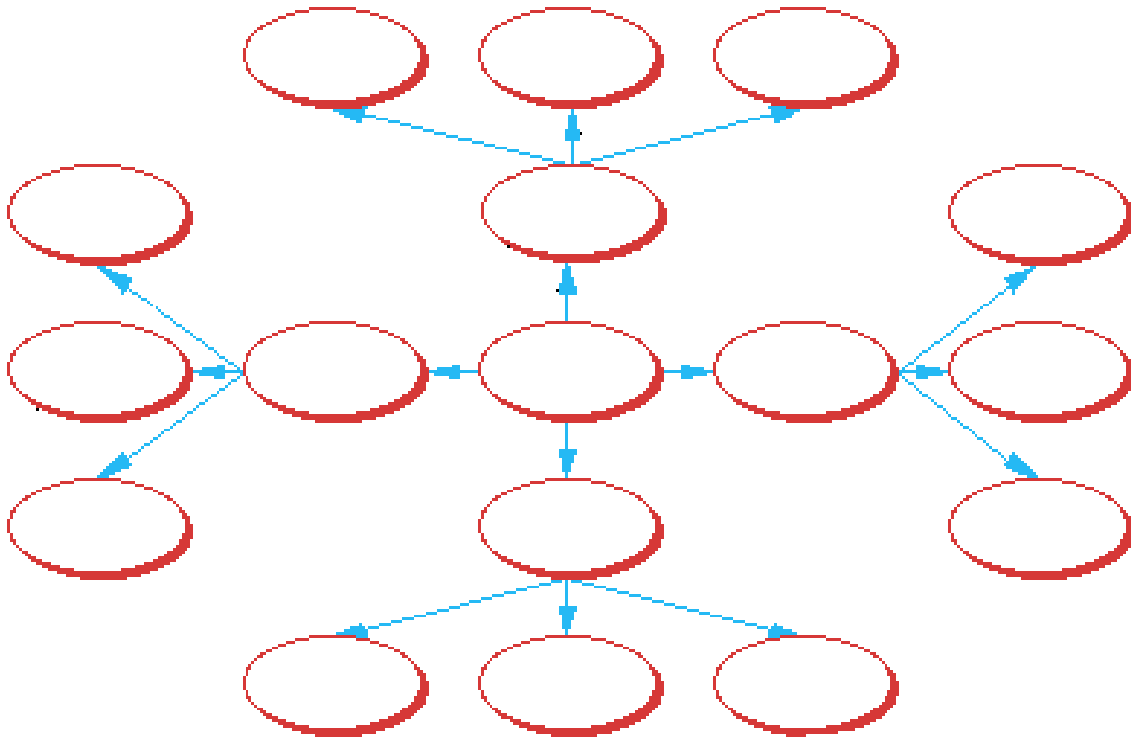


# Clustering

From <http://www.sdcoe.k12.ca.us/score/actbank/torganiz.htm>

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Clustering is a nonlinear activity that generates ideas, images and feelings around a stimulus word. As students cluster, their thoughts tumble out, enlarging their word bank for writing and often enabling them to see patterns in their ideas. Clustering may be a class or an individual activity.



## How to Make Inquiry Maps

From: David J. Rosen, January, 1996

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A group decides to make an inquiry map. This could be a group of students, educators, a study circle of people interested in a particular topic, or other groups. A guide—someone who knows how to make inquiry maps, or at least who understands the process described

below-leads the group. An inquiry map generally takes several meetings or sessions, at least three and perhaps as many as ten. A session could range from an hour to two hours.

1. The group chooses a topic together, one which participants care about, and want to learn more about.
2. Then the participants generate (real and important) questions;
  - a. The questions are clarified and possibly focused and narrowed so that they can be researched.
  - b. Questions are selected by the participants who want to research them.
3. Identify and choose the **inquiry methods**, such as:
  - a. an interview
  - b. documenting personal experience
  - c. survey (classroom, school, family, neighborhood)
  - d. systematic observation and recording of information
  - e. experiment
  - f. access to an expert-and opportunity to interview by telephone or in-person
  - g. reference book(s) at home or school
  - h. library research
  - i. research using database on the World Wide Web
  - j. posting questions to net user groups
4. Plan their research.
5. Carry out research.
6. Present their findings. Usually in prose, but possibly in a chart, graph or illustration, or through videotape. They:
  - a. cite sources
  - b. indicate if there are multiple (and consistent/inconsistent) findings
  - c. indicate new questions which have merged
  - d. critique limitations of findings
  - e. may recommend further research that is needed
  - f. may critique their findings
7. The questions are graphically linked with the findings (and possibly or emerging questions). In the case of an inquiry map on a wall, these can be linked by colored string or thread. For a three-ring binder version, at the end of each question is the page number of the answer(s). In the case of a hypertext version, the link is made with html tags.

Other participants read and possibly critique findings.

# Forming Community

*By Maria Rosales-Uribe*

Before we can ask people to work for the community, they have to feel like they're part of a community. Many of our classrooms are a community for ten hours a week for eighteen weeks. Besides teaching grammar, writing, oral communication and reading comprehension, one of Project VOICE's main objectives is to challenge our students to discover their own "voice". It is, therefore, crucial for us to give them opportunities to get to know each other, to discover their own values, to discuss in non-threatening environments sensitive issues and most importantly to have fun. Once we have these classroom communities, our students' learning will be facilitated. They will be welcoming to the new students, and, most importantly, they will begin the journey of finding their own "voice".

## **From Teacher Talk: Volume 3, Number 1**

1995 Indiana University, <http://education.indiana.edu/cas/tt/v3il/icebreak.html>

## **Icebreaker activities**

- Split the students into pairs. Each pair will have 30 seconds to find 5 things they have in common. At the end of the 30 seconds, put two pairs together and give the foursome a minute to find something all 4 students have in common. Finally, each group can present the list of things they have in common.
- Pass around a bag of M&M's. Tell the students to take as many as they want. Once all the students have M&M's, tell them that for each M&M they took they have to say one thing about themselves. For instance, if a student took 10 M&M's, they would have to say 10 things about themselves.
- Have the students line up in a particular order. (Birthdays, Alphabetical Order of First Name, Last Name)

## **Some Other Favorites:**

### **That's Me-**

Teacher makes a statement and participants stand up and holler, "That's me!"  
Make the statements fun and interesting.

I am a teacher.

I ate breakfast this morning.

I need a vacation.

I've been a student at Mission Campus for two semesters.

I like to read.

## Other Statements for “That’s Me”

*From “In the Global Classroom”*

- ❖ Own a pet
- ❖ Read the paper every day
- ❖ Believe all the news you read
- ❖ Can’t wait for winter
- ❖ Roll your toothpaste carefully up from the bottom
- ❖ Believe that animals have rights
- ❖ Like school

### People Bingo-

Participants walk around the room looking for other participants who can fill up their bingo squares. (See Appendix for worksheet).

### We’ve Got You Covered-

Photocopies of cover of a book and cut into pieces like a puzzle. Have participants walk around and find the participants who help to complete the puzzle. They can then make up a funny story plot for the book.

### Box Bingo:

Materials: Index cards, 3” by 5”, cut in half (one 3” by 5” card makes cards for two participants); one Box Bingo Worksheet (see Appendix) and a pencil for each student; a box large enough to hold all the cards; prizes (optional)

#### Process:

1. Hand out a blank index card and a pencil to each student. Ask them to write their names on the index cards.
2. Collect the cards and place them in the box. Cards will be drawn later in the activity.
3. Hand out one copy of Box Bingo Worksheet to each player. Tell the students that they will locate the other students in the class and enter their names on the worksheet, one name per block. The worksheets will be used to play a game of Bingo. Then tell them to begin. Allow enough time for the students to circulate together to gather enough names to fill out their Box Bingo Worksheets.
4. When the students have finished, tell them that the Bingo game will begin. (Students may sit down during the game.) Using the box of names, you will draw out and announce the students’ names, one at a time, and each student who has the corresponding name on his or her Box Bingo Worksheet should place an “X” over it. The first student(s) to get “Bingo”—all names crossed off the worksheet

in a row (horizontally, vertically, or diagonally)—wins the game. You may give a small prize to the winner(s).

## **Comic Capers**

**Objective:** To encourage groups to share their feelings about issues in a non-threatening way.

**Time required:** 10-15 minutes

**Materials:** Assorted comic strip panel sets.

**Preparation:** Gather a variety of comic strip panels. Paste each comic strip panel on card stock and then cut each strip into separate panel pieces.

**Process:**

1. Give out cartoon panel piece to each participant. Explain that students are to locate other students who have panels that complete their comic strips.
2. After the students have located their comic strip panels, they are told to form the comic strip panes in the appropriate order.

**Discussion:** Have the students discuss the cartoon.

## **Round-Robin Interview**

Students roam around the room, interviewing one another to find out personal information such as likes and dislikes, interests, etc. Students can write notes during each interview. After 10-15 minutes, the whole class comes together. One at a time, students come to the front and give their names. Other students who interviewed that particular student comments on that person,

## **The Hunt Is On**

**Objective:** To find students who share similar preferences.

**Time Required:** 15-20 minutes

**Materials:** A pencil and one “The Hunt Is On Worksheet” (see Appendix) for each student. (See Appendix)

**Process:**

1. Hand out a pencil and worksheet to each participant. Direct participants to fill in their personal answers to the questions in the “Self” column.

2. When all students have completed the “Self” column of the worksheet, instruct them to go on a “people hunt” to find other students with the same characteristics. As they circulate and locate other students who match characteristics, they should have them sign their names in the “Other” column of the worksheet corresponding to the characteristic. Students should continue asking questions of other participants in an attempt to fill all the boxes on their worksheets.

**Discussion:**

- ❖ Were you able to complete the sheet?
- ❖ Which characteristics made it more difficult to find a match?
- ❖ How can we utilize differences?
- ❖ How can we tap into our similarities?

## **Values Clarification: A Practical Action-Directed Workbook**

*By Dr. Sidney B. Simon, Dr. Leland W. Howe, and Dr. Howard Kirschenbaum*

Note from MRU: These are some of my favorites. There are many more questions from each of the below strategies that you can still discover in the book. Plus there are a quite a few strategies that I enjoy that I have not mentioned. This is an invitation to explore these strategies, but more importantly, it is an initiation to discover this wonderful resource. The authors suggest that after any of the strategies the “I learned statements” or “I wonder statements” can be used. Enjoy!

### **Strategy 1: Twenty Things You Love to Do**

On a paper, draw a line in the middle of the paper. Have the students write quickly 20 things they love to do. Students voluntarily share. Afterwards you can code the list. For example, “Place a dollar sign (\$) beside any item that costs money to do.”

### **Strategy 2: Values Voting**

Read the questions aloud asking “How many you ...?” Students will then vote: affirmative=thumbs up, negative=thumbs down, pass=take no action. Have students look around the room to see how people voted. Make sure you vote also.

Some I have used:

- ✓ have ever felt lonely even in a crowd of people?
- ✓ have a favorite hobby or pastime?
- ✓ think you are racially prejudiced?
- ✓ wish you were at home right now?
- ✓ think that we should have spend all that money to go to the moon?
- ✓ often think of death?
- ✓ have read a book just for fun in the last month?
- ✓ have worked together as a family on a social issue?

Class discussion can follow.

### **Strategy 4: Rank Order**

Select a dozen or so rank order questions. Students will rank order them. Each student will be asked to share or they can say “I pass.” The teacher can give his/her rankings afterwards. A discussion may follow. (See Appendix for worksheet).

### **Strategy 5: Either/or Forced Choice**

Ask people to go to either side of the room with a clear middle area. Ask questions like, “Which do you identify with more, a river or a mountain?” By pointing to either side of the room, the teacher indicates that those who identify with the river go to one side of and those who identify with mountain go to the other side of the room. Each person then finds a partner on the side he or she has chosen and discusses the reason for his or her choice. Discussion can be limited to two minutes.

Everyone returns to the middle, and the teacher gives another either/or forced choice. Look at Appendix for examples.

### **Strategy 8: Values Continuum**

Draw on newsprint a long line and list two polar positions. Have students come up a place where they fall. Volunteers can explain their position. These value continuums can be also written down and students write on their individual sheets and write down their choices. Students can then be more prepared for discussion.

Example:

- ✓ How much personal freedom do you have?  
All decision are made for you                      Complete freedom to choose for yourself
  
- ✓ Where would you place yourself on this continuum?  
Totally materialistic                                      Totally spiritual
  
- ✓ What percentage of your waking hours do you like to spend alone?  
0%    100%

### **Strategy 9: Spread of Opinion**

- Select a controversial current issue. Some examples: Health Care Reform, Fighting Terrorism, and The War on Iraq, Legalization of Marijuana.

- Research the different stands towards the issue: ultraconservative, conservative, moderate, liberal, radical and revolutionary. Have the students read the possible stands/positions and must choose their position. They then right a paragraph defending their position. Students can then share in small or class discussions.

## **Strategy 10: Values Statements and Whips**

The teacher poses a question and gives a few moments for the students to think about their answers. Then the teacher whips around the room, calling upon individual students to give their answers. The answers should be concise. Students may choose to pass. See Appendix for sample questions.

## **Strategy 12: Public Interview**

The teacher asks for volunteers to be interviewed publicly. The volunteer sits in a chair in front of the room, and the teacher moves to the back of the room and asks the questions. The ground rules are:

- 1) The teacher may ask the student a question about any aspect of his/her life and values.
- 2) The student must answer honestly.
- 3) The student has the option of passing if s/he doesn't want to answer the question.
- 4) The student can end the interview at any time by saying, "Thank you for the interview".
- 5) At the completion of the interview, the student can ask the teacher any of the same questions that were asked.

## **Strategy 15: I Learned Statements**

These stems can be used after any lesson, learning activity, etc.

I learned that I.....

I relearned that I....

I noticed that I.....

I discovered that I.....

I realized that I....

I was surprised that I....

I was pleased that I....

I was displeased that I...

## **Strategy 16: I Wonder statements**

When finishing an activity or discussion, have the students complete the following stems.

I wonder if.....I wonder why....I wonder how come....I wonder whether...

I wonder about...I wonder when

Ask for volunteer students to share their I Wonder statements.

## **Strategy 17: The Values Journal**

**Procedure:** Keep a journal or file or special section in a notebook for “Values”. All the notes from values activities or journal entries go into this journal. Have the students occasionally look over the data in their journal asking “Are my values concerns at all different from what they were a month ago? Am I clearer now on any values issues than I was before?”

## **Strategy 20: Partner Risk or Sharing Trios**

Students are paired. For five minutes (or shorter), each person is to share with his or her partner(s) the high point and the low point in his/her life during the past week. When the time is up, each person finds new partner. The new pairs are then given a new topic to discuss for the allotted time.

Following one or more discussion periods, ask the students to close their eyes and think about the following questions:

1. Were you really listened to? Did your partner really hear you? Did you listen to him/her?
2. Did you really share your feelings or did you screen them before talking about them?
3. Did you worry that you talked too much? Too little?
4. Were you mostly a “pickee” (one who was chosen by another when partners were switched) or a “picker:” (one who did the choosing?)? Suggestion: Next time reverse roles. If you were a “pickee”, try to be a “picker”. Which you rather be?
5. Would you have added to your discussion if you had more time?
6. Was your partner like you or quite different from you? Can you understand him/her? Do you like having a partner who is like you? Different from you?

Other Suggested Topics can be found in appendix.

## **Strategy 23: Alternatives Search**

Choose a value issue or life problem. Have the students brainstorm as many alternatives to the problem they can think of in 3-5 minutes in the “Alternative Search Chart”.

### **From the Suggestion List:**

1. Ways to personally stop polluting our environment
2. Ways to make new friends.
3. Ways to get more for our dollar.
4. Ways of working more effectively in small groups.
5. Ways to work for peace.
6. Ways to save time.
7. Ways to earn (save) money.
8. Ways to eat more healthfully.
9. Ways to get more exercise.

10. Ways to express appreciation.

### **Strategy 25: Brainstorming**

Share with the students the “Rules for Brainstorming”.

#### **Possible topics:**

1. How many ways you can think of to make this place a happier, more enjoyable place to be?
2. What interesting new vacations might you take?
3. Here is an object (a mirror, a ruler, a wastepaper basket, etc). Identify as many ways and purposes you can for using this object.

### **Strategy 32: Percentage Questions**

Look over the percentage questions. Have the students write down the answer or share orally their answer. (See Appendix).

### **Strategy 35: All About Me**

Each day for seven days, have the students do a free write for 10-15 minutes on the following:

Day 1: Who Am I?

Day 2: Who Takes Care of Me?

Day 3: I Am Proud...

Day 4: Someday I Want to Be...

Day 5: My Funniest Experience

Day 6: If I Could Change the World

Day 7: My Friend

Afterwards have the student's type them up and edit. The students can read aloud one of their writings in small groups.

### **Strategy 39: Strength of Values**

Have students complete worksheet. Students can discuss that they learned or relearned about him/herself from doing the worksheet. (See Appendix).

### **Strategy 40: Strongly Agree/Strongly Disagree**

Have students complete worksheet (See Appendix). There is no right or wrong. These are used as discussion starters.

## **Strategy 42: Values in Action**

Have the students make a list of five changes they would like to see in your communities. Then have the students complete “You Can Do Something About It” worksheet. (Appendix) Students will go through a process of elimination and decide what action they would take for a cause they believe in.

## **Strategy 43: Letter to the Editor**

As a class collectively draft a letter to the editor making a public affirmation to the community at large on a current issue.

## **Strategy 45: Diaries**

### **Sample Diaries:**

1. Time Diary (how the 24 hours of each are spent)
2. Budget Diary
3. Politics Diary
4. Male-Female Roles Diary
5. Doubts Diary

## **Strategy 53: Lifeline**

Have the students draw a horizontal line on a blank piece of paper. Have them put a dot on each end of the line. Over the left dot, put the number 0 (your birth date) Have them write their birth date on that dot. Have them reflect on the line reflecting on the end of the line. Ask: How long do you believe you will live? At what age do you think you’ll die? Over the right dot, put a number that indicates your best guess as to how many years you will live? Write your estimated year of death under the right dot. Now place a dot that represents where you are right now on the line between birth and death. Write today’s date under this dot.” After a minute or two of meditation ask, “how did you feel and what did you think as you looked at your lifeline?” The students can write their reflection in their journals.

## **Strategy 54: Who Are You?**

Ask for three volunteers. Have them leave the room. Ask the volunteer students to come one by one. Ask: “Who are you?” Allow the student to answer. Ask again: “Who are you?” Do this about 5-6 times. Ask each other volunteer student to come in following the same procedure. Afterwards, ask what was common to all three students. Then have the students answer “Who Are You?” This can lead to a discussion on roles.

## **Strategy 57: Two Ideal Days**

Have the students write about their two ideal days. Instruct them to include the smells, sounds, weather, etc.

## **Cooperative Learning**

### **To Do Lists-**

Allow participants time to show how they will use an idea in their own classroom. A good time to this is after a large amount of ideas or information has been shared. You and all the participants will gain ideas.

### **Carousel Brainstorming-**

In groups of four, participants pass papers with specific topics or questions clockwise in a circle. This allows participants time to generate ideas on a certain topic. Then groups can share ideas for each of the topics.

### **Do The Oprah or The Phil-**

Ask participants to share their ideas or strategies along the way. Walk around and hand the microphone to others who have information or ideas to share.