



As a dramatist I am reminded of 2 strategies of drama: 1 Role drama- where group facilitators lead people through a series of activities, often placing group participants in “**role**” to deal with a dilemma that is staged within the dramatic activity. I could clearly see what I would rather do with our class. I would **place** my **classmates** in role as counsel members at a meeting and encourage them to **solve** the Senaus water issue. Within a drama the instructor designs constraints to guide the process of **self-discovery** and **problem** solving. All participants have a voice and are heard within the context of the drama. Research suggests that this dramatic process can lead to group participant<sup>3</sup> transference<sup>3</sup> of learning in to contexts outside the drama. I would suggest that active engagement in such a role drama could lead to open ended dialogue **resulting** with new perspectives being heard, shifts in attitude and understanding would occur, thirdly participants would likely feel more **able** to take action in their real “**life worlds**”. For drama to be most effective. The concepts of ownership needs to be in play “**Toward a theory of ownership in the dramatic process by Car01 LynnMalczewski**”. The ownership concept encourages action **from** participants. For participants to take on roles they first need to research so that they are equipped to **effectively** argue or dialogue from a certain perspective. This process would increase “**scientific**”, **environmental**, administrative, communication, knowledge and skill of the group participants. A second drama strategy. I would employ in the D. **Heathcote**’s concept of mantle of the expert “**Drama for learning**”. Where in she frames group participants as experts again here in need in research and learn information to be able to carry out the exercise. Both role drama and the mantel of the expert position require effective and clear communication **skills**. The work of **Juliana Saxon** is **useful** here. I would incorporate a session specifically for designing appropriate questions to include in the role drama.

These role drama suggestions were not carried out in our class group project. However the concept of drama has been included in a sense. As a dramatist I am primarily interested in people and their working internal and external group process. I am interested in what occurs for people as they collectively work together. What is learned, what are the shifts in awareness and understanding that occurs for people both individually and collectively. It is my belief that this principal can be directly applied to our group project and to the Senaus issue.

As Dorothy **Heathcote** states “we are all experts? It is my perception that **all** people involved in the project are experts. They are experts of **different** topics. They may **hold** diverse positions within the community but **all** in my view equal. **If** we can respect each individual and what they have to offer then we level the playing field. We can break the cycle of “**stuckness**” and move forward. Then we can accept our individual and collective responsibility to society as a whole. We can then move to a position where we can sift through the material and personal agendas and let our personal agendas go or walk around them. We can then move beyond ourselves once we understand our “**self**” and our connections to a place where we truly work towards the larger issue beyond the self to society with regard to water I would **suffice** to state the same holds true. The issue from my perspective is “**water**”, What are the responsibilities of whom and what are our fundamental rights to a clean, safe and healthy environment. The issue here is how do we best meet the needs of our growing communities’? How do we provide healthy water to our communities’? What is the process? How do we implement our processes’? If we remove the debate **from** the Senaus argument what would the picture look like’? To use

another drama **principal**, the “what if” concept. What **if we listened?** Truly listened to each other. In my view we need to **be able** to understand each other% perspectives better. **Ironically**, we need to be open to seeing and understanding other perspectives to be **able** to **listen** and hear each, we do not have to agree but respect our **diversity**. To **truly** address the controversy we need to **develop a fresh** process. One in which we can **sift** through the abundance of **facts** to access need then we can **or shall I say** I can better understand the issue. This has been my process and contribution to our group **process**. In the next section I aim to sort through the text transcriptions isolating facts on the water issue listing them in order of appearance. I have chosen for the purpose **of this project** to **eliminate** the specific names from the transcript it does not matter to me who said what. What matters most to me is what was said. I hope this process **will** help to clarify the issues and sketch out any patterns that may assist in the decision making process. I do this not in the vain of objectivity but in the **light** of inter-subjectivity. I have stated my perceptions, my “**self**” in **relation** to “**other**” within the context of this project. It is my perception that **all** members engaged in this Senaus dialogue, the scientist, the landowner, community member, researcher/theorist and the **newly self-appointed** member the dramatic educator are **all** experts in their own right,. **Solutions** need to be and can be found within the Senaus community and beyond on a **global** front. These issues as important as they are, are not isolated to Senaus. They exist in neighboring communities of Vancouver Island, larger dis-concerning water issues need to be addressed in our upcoming generations. For your review I have **included** a reference **list** of drama sources that **will** be **helpful** to those of you who may wish to incorporate drama into your science teaching.

### Senaus Public Meeting: Water Issues

Stated facts: extracted water **related** facts from the transcripts in order of appearance, listed on pages transfer into charts or a **table** at a later time

**Titles** include: Water Facts  
 Location  
 Options

### Location of Water Reports

Location:	Comments:
1) Senaus Point area	Most presenting <b>problem</b> , high level of <b>complaint</b>
2) Senaus	2 years of ground water tests <b>reveal</b> (see water chart)

### 3) Mt. Newton X rd

#### Water Issues

##### 1) Water Quality – 1996 health Canada report

- 2 snapshots reveal **different** but non-conflicting accounts of general water quality
- Seasonal variations of water exist
- **pH** is similar to rain water, 3 years of test 1996- 1999
- Pronounced **effect** on aquifer
- Total dissolved TOS= significant dilution
- **Chemical** constitutes **diluted** as a result of rain water
- Chromium is a problem when combines with chlorine goes to a trivalent state, carcinogenic form
- Chromium alone = Ok = Nutrient
- Chlorinating the pipes a potential **problem**
- Little mixing in the aquifer
- Lab **pH** readings indicate number readings alone not accurate due to alternate equipment

#### Water Facts

- Water quality poor during the summer than fall (speculate algae increases in heat)
- When aquifer **levels** high quality of water good
- 24 samples taken 22=outside water 2= tap water
- No fecal count problems
- No nitrate problems
- No health concerns
- A health concern exists in our quantity of water

#### Well Samples

- Wells were sampled x 9, limited results well depth
- Aesthetic quality of water poor, color and taste
- **Conflicting** reports
- 1 out of 9 wells exceeded levels of aluminum, iron and magnesium, 4 out of 9 exceeded zinc levels
- Bacteriological facts, no unacceptable wells found
- Task force reports x 2 no health hazard existed

- Sewage concerns, how to deal with waste disposal, recycle waste water
- Water quantity not a problem with wells
- Water quality calcium ions responsible for hard water and sodium ions  
Filters do not remove anything they simply exchange minerals i.e. calcium for sodium
- Sodium levels too high
- Aluminum and iron levels are responsible for silt  
Filters help speculation, analysis reflects the whole sample
- Chromium can be treated with an ion exchange
- Filtrate a filter
- Water needs to be treated in an intermittent method
- Flow of water important factor
- Senaus area surrounded by salt water and 3 springs
- Location an important factor on water quality
- Fire a concern, aquifer getting worse
- Water kills plants
- Corrodes pipes
- Magnesium creates bio fouling which creates black precipitation

### Questions Arising

- 1j What are the hidden agendas of agencies'?
- 2j Will additional water sampling ass new meaning'?
- 3) What do we do with data?
- 4j What are factual health and safety concerns?
- 5j Was the sampling rigid enough to determine if waterproblem occurs in the home or the aquifer itself?
- 6) How do we check the bedrock and wells?
- 7) Was the well sampling method appropriate'?
- 8) Can improving individual home water systems solve the quality problem'?
- 9j What is the cost of #8?
- 10 j What is the water issue? Quality of water? Health concerns? Or Quantity of water?
- 11 )How does future development effect water quantity and quality?

### Unanswered Questions

- 1j How do diverse groups arrive at consensus or decisions?
- 2) What are the current policies and procedures'? Do they work?
- 3) What are the long term concerns for water?

### Options

- 1) Water Main: Cost total = \$850,000.00, Partial cost = \$13,000.00 over a 15 yr. period  
Payment: 1) Taxes 2) Grants- 20-50% coverage provincial and federal 3) Individual water assessment for individual property owners \$28.32 per \$1000.00, Impact of pipeline minimal may help agriculture
- 2) Further water completing if it would be helpful
- 3) Further consultants, don't know what to do with data, will any new data be meaningful?
- 4) Aesthetic water concerns can be dealt with by home filter systems
- 5) Settle issues on individual basis
- 6) Recycle waste water
- 7) Deeper wells
- 8) Rain water storage (individual systems)
- 9) Decalcification-problem plagued
- 10) Truck in other water

#### Recommendations

- Settle water on an individual basis
- Choose innovative solutions
- Be clear on intentions, what is wanted from who and why
- Retest all households and wells, test for water quality and quantity
- High cost with need and rights
- Involve a mediator and vote to bring group to a solution