

Ideas on Teaching a Frame of Reference

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Creating A Social Frame of Reference: Why it is important and ideas on how it can be taught

A quick story about my upbringing, and how it affected my frame of reference. Growing up I was exposed to many things that others were not. I remember my mother staying home; she was a typist for Underwriter's Laboratories. What I first can remember is this big blue clunky typewriter. I can remember playing with the ink tape that ran in front of the letter arms. There was not spell check; there was not an option to change the font later. There was white out and correction tape, but even those were used sparingly. I became fascinated with the typewriter and the parts that made it work. I never was excited about how to work it, or had a yearning to learn how to type. But, I would love testing the mechanics of it. Blatantly I remember pressing down all the keys and jamming all the letter arms together. Later on in my childhood, my family bought a Texas Instrument TI-99. Whenever I tell this story to people that are twenty or younger they assume it was a calculator, a really early graphing calculator. Well it wasn't, it was the combination of an early gaming console, one of the first, and an operating system. This cartridge system allowed you to write programs and play games. My dad a key player in the story was obsessed with owning the newest innovations, he bought our first family computer, an 86 IBM Clone. This would be the beginning of a long line of computers in my life. Computers were different and new. They had a language of their own, DOS. The idea of cartridges had turned to 5-inch floppy disks. On this first computer I learned how to operate DOS. I slowly got familiar with how to operate a computer. Time passed and technology was replaced with new updated models of itself. These computers had updated hardware. In the older computer everything was soldered to the main board. As the computers changed, to 386 and 486, you could replace components, i.e. modem card, video card, and sound card. Another aspect that changed was how the computer was operating. No longer was it just using DOS commands, it used something called Windows. Windows I found was a mask, a cover, and a template that converted DOS into a visual system. From understanding what preceded Windows, I was able to use my DOS skills to explain and fix problems Windows had. Over the years to come I had fun working on computers. People would ask me to help them or ask how to work computers. It was not that I was super smart; I had just absorbed the internal workings of computers. Computers made sense to me. I understood that Windows was just a poorly written visual translation of DOS. Since I knew DOS, I could trouble shoot Windows. Later I got a job working at Best Buy as a Computer Tech. Again, I had no formal training to fix computers. But I found that the people in this field were young and had observed that change in computers as I had. All these costumers that had problems running Windows failed to recognize that Windows was not the primary tool, but it need DOS to run. Thus doing something in DOS in most cases fixed errors in Windows. New versions of Windows came out i.e. Windows 98 and Windows ME. These again, were just new faces of DOS. People were misled and thought that everything had changed, in updated versions but really only a relatively few options had changed. It was still the same old DOS that I ran on the 86 IBM Clone.

That first computer helped me establish a frame of reference. Early on I learned about computers and over time I noticed similarities. Not until Windows XP did Windows make a massive change scrapping it's earlier enabler DOS for a newer language Unix. In short, I think this idea of understanding the evolution of things is important. It wasn't always like this; there is a reason for what we do today as opposed to years ago. In most cases I think this idea of having a frame of reference of prior innovations or prior events is crucial to how you view the world today. A social frame of reference is very valuable. It relates to everything from humor to troubleshooting. The lack of a social frame of reference is a hindrance. My story about computers can be analogous with many other facets of life. I would say a big part of who I am

today is a function of having been exposed to many things, though art and experiences. Not only can I remember the world without a family PC, I watched movies and television shows that emphasized life without such objects. Children born later may have the idea that computers have always been an integral part of life and/or have been available. Their frame of reference may ignore or not include the idea of life prior to the home PC. In essence taking for granted this marvel of technology. In a movie produced in the 50's with Spencer Tracy called "Deskset" we are given a look at how the world operates without mass information exchange, i.e. Internet, etc... Prior to these inventions people would call librarians to research material and wait days and weeks in some cases for the return of information. In the movie Spencer Tracy is hired to program all this information into a "Univac", a computer predating family PC's. This process will put all these librarians out of their jobs. This movie provides an insight to life prior to the information age. I think it is a value for students to be given an idea of this history and style of life. Many children and students are prone to what I call the "Veruca Complex" wanting something now, and getting it with little or no work (See or read Willy Wonka and the Chocolate Factory to meet the Lovely Veruca which this complex is named after). The work put into making things convenient and easily available is lost on them. This idea of easily accessible knowledge and/or products is expected by them. They want it and expect it now. In most cases children lack the appreciation for technology that makes things so easy.

In a recent survey conducted by me, I asked kids I knew how many times they washed the dishes in the past month. These kids ranged from 6-14 years of age. Few kids said that they did the dishes. Of those few I asked that said they did, I asked if they got "pruny" fingers. I received many strange looks. My idea of doing the dishes differed from theirs. They associated that "doing the dishes," meant loading dishes into a dishwasher, whereas I had meant physically hand washing the dishes, causing wrinkly fingertips from prolonged time with water. This didn't shock me; I had an idea that it was this way. I also took into consideration that it may be the class or lifestyle of families that prevented the children from doing the dishes, but still that failed to make the correlation that doing the dishes led to pruny fingers. One could assume that they never or rarely washed dishes manually or by hand. If this is so, can it be assumed that because dishwashers have become common household items that they failed to ever have to wash a sink full of dishes? This task has been made extinct by the invention of the dishwasher. Thus leading to not making the association with pruny fingers.

I'm not saying that knowing how to hand wash dishes should be taught in schools. Instead I assume that if a small task like hand washing dishes isn't common practice, other social knowledge with devices that do work for you lead to lack of appreciation of work that you would physically execute. This can be related to using computers and the Internet replacing book research and/or finding information from non-electrical resources. This just doesn't relate strictly to computers and technology, but students may be naive to feelings or attitudes of earlier decades or time periods. I think some students might fail to associate Jackson Pollack's painting as a response to the attitude of the time period they were made in. They might just think this was a style of painting and lose the intended meaning of these works of art.

Another illustration of this could be that kids are immune to special effects in movies. I will watch "Mystery Science Theatre 3000" and laugh at the show, due to its references to horrible movie making and it's social commentary. But when watching the show with younger kids they fail to make associations and the humor goes over their head. Some kids refer to the show as boring and or "sucky". In my opinion the frame of reference is lost among these kids to relate to the show. On the other hand, there are few kids that just laugh at everything and don't connect the humor as social commentary.

The reason that I think a social frame of reference is important is that really gives you an appreciation of what you have, and an understanding of history and progress. The appreciation for prior accomplishment

and understanding of prior social attitudes is a valuable commodity and can help kids observe patterns within our society.

Creating this frame of reference is not an easy task. And in no way am I implying we should expose students to everything under the sun. But I feel it is important to open the door. I simply suggest a general outline to spark interest in the historical changes of technology and social attitudes. To do this I have constructed a hypothetical lesson plan.

The lesson plan is meant to stimulate students and perk interest in the evolution of the culture of western technology and the changes in lifestyle and frames of reference. This would be a survey of experiences or events that happened in the U.S. or the World from 1950 on. I chose 1950 as the starting point because it seemed logical with the introduction of the Television. I had the feeling if we started back further it might be too long and become a history lesson. This lesson is intended for 7th to 9th graders. I want the students to look at the past fifty years or so and have this make sense to them. I want to see something click. Hopefully using the Socratic method, questioning everything, and making correlations between the past and the present. But the trick is I want them to get there themselves. I don't want them to be spoon fed the answers or what they are suppose to think. Hopefully supplying them with things that I find of interest will perk their curiosity.

Purpose:

The purpose of this lesson plan is to expose students to ways of life and social experiences during the time period from the 1950's to the present day. Briefly covering and discussing the social impact of ideologies and of what was common practice within these time periods. I plan to touch on forms of entertainment, careers, innovations and general feelings of people within time periods.

Activities:

The lesson plan would encompass a weeklong plan of activities. It would be split up by decades. Rough topics would include:

Day One: The Fifties – Where to begin? The beginning of suburban housing, called “ticky tacky housing”. Wives and mothers don't work outside the home. 9% of American homes had television in 1950. These households watched programs such as “Howdy Doody”, “The Ed Sullivan Show”, and “I Love Lucy”. Cars had tail fins. The first McDonald's opened in 1954. Popular among kids were comic books with cellophane 3-D glasses. Jackson Pollock shocked the art world with abstract expressionism. Also, a look at Elvis, rock and roll, and the H-Bomb.

Day Two: The Sixties – Times they are a changin'! Kennedy family has an impact on political scene. There are race riots, civil rights marches and sit ins. Music has political commentary. First successful Lunar Landing in 1969. Hippies wear love beads and men wear long hair. The Beatles, Woodstock, and “Star Trek” are among the pop culture events, which show interest.

Day Three: The Seventies – Fears. Birth of Women's rights movement. PLO hostage crisis during '72 Olympics shake idea of international safety during Olympics. Three Mile Island nuclear meltdown, Watergate, OPEC and Nixon Impeachment led to lack of confidence in government. Disco Music, leisure suit, and bicentennial pride of United States where in fashion. Jobs and Wozniak invent first PC.

Day Four: The Eighties - Confusion. The spread of AIDs. Vietnam war memorial is erected in 1982. Challenger Explosion. Wall Street Market crashes in 1987. End of Cold War. Berlin Wall falls. Medical breakthroughs with herbal Medicine.

Day Five: The Nineties to Today – AOL and Beyond. 98.3 % of American families have Television. 51% of American Households have computers. 37% of those computers are online. (Statistic is from Late nineties.) Televised Gulf War and OJ Simpson Trial draw big crowds of viewers. Hubble Space telescope is launched and repaired revolutionizing space science. Oklahoma City Bombing and Columbine School Shootings scare public.

Hopefully these topics will inspire conversation and dialogue over what has happened in the past. The more and more I write this, I see it as a mix between Humanities and History. Topics can be added and omitted; this was just a rough outline for what could be covered.

How to incorporate:

To achieve this introduction to historical social awareness, each day the lesson plan would incorporate clips from movies/ television shows displaying views and beliefs of that time. I think from taking this class media clips can be a wonderful tool to teach students without boring lecture. Hopefully students will watch clips from movies or television programs and have a discussion about what they viewed afterwards. I don't want to use clips all the time, but I think using them sparingly will inspire and help make a visual context for learning about these times.

This project was partly inspired by looking through old "Time" and "Life" magazines seeing pictures of the past. Facets of this lesson plan would incorporate the change of media over time, showing progress of specific accomplishments of time, i.e. special effects stemming from the fifties' 3-D films to today's computer generated special effects.

A possible assignment could be to have the students find pictures or articles of past events, ads, products, etc.... And have them contrast it with the media today, finding similarities and differences. Exploring the differences between what we see today. For example marketing of cigarettes and alcohol, examining the laws put in place to regulate advertising. Other activities could involve keyword searches on the Internet, finding historical documents or QuickTime clips displaying ideologies of the times. Again comparing what we see on the net today, with those images we see of the past. Students hopefully will be drawing comparisons and thinking of how life was before these inventions. Assignments would be given such as interviewing parents and or adults about their perceptions of these times that they lived through. Possible field trips to museums and or theatres could be arranged to absorb expression on art within these times.

Intended Outcome:

It is hoped that this exposure to social ideas and feelings of prior generation will lead to a greater appreciation of what we take for granted in 2003. It is intended that students will learn a minor social context, like the etymologies of words and phrases; students will begin to see the etymology of ideas and innovations. Creating a timeline in the student's mind about when things came about. Possibly affecting the way they think and perceive present ideas and technologies.

The way in which students will be evaluated:

Students would be asked to make a project that incorporates understanding of such material relating to their lives. Or how things that happened in the past have impacted their lives. This could be done in several ways, i.e. mobiles, essays, video presentation, etc... This is where taking more teaching classes would expand my ideas on lesson plans. In conclusion, if nothing is gained by this lesson plan, each student will at least have better chances at winning Trivial Pursuit, Genius Editions 1-5.

Conclusion:

This paper may go against teaching guidelines, or overstep boundaries of some sort. I do apologize if it does so, I do lack the proper format for a lesson plan, but it is the idea that I think is important. I would wish that students take an interest in this and really think of what has got us where we are. Many of the things we don't even think about were inventions and signs of the times, i.e. barcodes, VCRs, digital cameras. If students explore the process and history of these changes in time, what stops them from improving upon them and making the world easier, while appreciating the past? Possible Worksheet

1. Name three things that happened in this time period.
2. What possibly propagated this?
3. How has it changed from then till now?
4. Has it affected the way you live your life?
5. How will it affect the future?
6. What have you taken from, or learned from, this project?

Possible Final Assignment:

Think of events (Challenger Explosion, Columbine shootings) or products (Playstation 2, Internet) that changed your life. Think of where you were when a single event happened or you were first introduced to the product. Write a detailed narrative explaining the prior activities leading up to the event. Explain the event itself. Express your feelings about the events or product, how did it make you feel, who did you talk to first about it, who was involved, where were you physically? To conclude your writing, step back and reflect on how you look at it today, is anything different?

References:

Websites I looked at while searching for ideas on paper.

The Center for Educational Technologies <http://www.cet.edu/>

Music Technology <http://www-users.york.ac.uk/~acd114/mustech/homepage.htm>

Project HappyChild <http://www.happychild.org.uk/ifs/wordsearch/framework.htm/>