

T- Balance Technology Assessment –

Student: _____

Date: _____ **Name of technology:** _____

	Pro (short term)	Con (long term)
Environment		
Human body		
Social Relationships		
Work		
Relationship with self		
Power Structure		
Education		
Other Cultures		
Future Technology		
Comments		

T- Balance Technology Assessment -- Television

	Pro (short term)	Con (long term)
Environment	News & documentaries teach about environmental diversity & warn of problems. Can provide a call to action.	What is done with old machines? Power requirements have environmental impact. Is there such a thing as pollution of the airwaves? What about film needs – much the same issues as those raised by the movie camera.
Human body	News & documentaries teach about your body, healthy life styles, etc.	Promulgation of one definition of beauty – harmful. Is a very passive medium, this could be viewed as harmful to the human brain. Promotes a brain that is always starved for novelty.
Social Relationships	Exposure to other races & cultures. Models a cultural expectation for social relationships (is this good?)	Watching TV instead of interacting with friends & family. TV as babysitter.
Work	New jobs & job types.	Surveillance of workplace.
Relationship with self	Affirmation of self when positive images & role models exist and are seen.	Comparing your self & life to those broadcast. Altering your lifestyle to mimic that shown.
Power Structure	News as a source of information – “informed voters”. Documentaries. TV personalities have a source of power (This can also be a con).	TV can provide biased information. There are two classes created – those who have the power to create and broadcast shows and those who can only receive the shows.
Education	Sesame street & like programs. History or biography programs. Source of continuing education for those who see it as such and seek it.	Non-educational programs. Passive interaction. “Dull-time” i.e. zone out watching TV
Other Cultures	Shows expose people to variety of cultures formally or informally.	Main culture is identified on TV & can suppress local actual culture. Replaces traditional cultural entertainment. Things like storytelling, etc. can be lost.
Future Technology	HDTV. Satellite. Cable. Conversion of TV and computer.	Many, many channels – how much is valuable. Existing flaws still there perhaps magnified.
Comments:	It’s a fact, TV has a major part in the lives of most Americans. We need to work on shoring up its strengths and finding ways to improve its weaknesses.	

T-Balance of the Impacts of Robotics

Aspect	PRO	CON
<i>The Environment</i>	<ul style="list-style-type: none"> ▪ In the future, the robotic nose should be able to monitor for household fumes or environmental contamination. ▪ Could clean up hazardous waste. ▪ <i>Without Computer Brains</i> – uses parts of old floppy drives, VCRs, CD players, voltmeters, pagers, and toys to build the micro robot. ▪ <i>Without Computer Brains</i> – studies insects to build robots by. ▪ <i>Without Computer Brains</i> – wants to build a robot that will deal with toxic materials or work in hazardous environments. ▪ <i>Govt. Showcases</i> – can detect deadly chemicals or bombs. ▪ <i>Govt. Showcases</i> – could detect nuclear, chemical, biological threats. ▪ <i>Govt. Showcases</i> – detects presence of radioactive material. 	<ul style="list-style-type: none"> ▪ Nothing was listed in any of the articles I read.
<i>The Human Body</i>	<ul style="list-style-type: none"> ▪ Could be used for medical diagnoses in the future. ▪ Saves lives while searching for bombs, mines and explosives. ▪ Could be designed to swim through and repair the body. ▪ Can perform eye 	<ul style="list-style-type: none"> ▪ The human element is often eliminated. ▪ Malfunctions when used for any type of surgery could result in more serious problems than the patient began with.

	<p>surgery.</p> <ul style="list-style-type: none"> ▪ <i>Govt. Showcases</i> – can monitor a terrorist’s heartbeat. ▪ Is presently used to perform dangerous tasks or tasks that would be difficult to complete due to temperature, etc. (Example – recovering voice boxes from crashed planes). 	
<i>Social Relationships</i>	<ul style="list-style-type: none"> ▪ Could give us more time to be sociable if it can have dinner prepared by the time people get home from work. ▪ Some individuals participate in robot wars for recreational purposes. ▪ <i>Robot Wars</i> – rules are complex, but this ensures the safety and entertainment value of the fights. ▪ <i>Govt. Showcases</i> – could detect smuggling of destructive weapons. 	<ul style="list-style-type: none"> ▪ The family time that is spent working cooperatively together to prepare a meal will be lost if robots prepare every meal.
<i>Work</i>	<ul style="list-style-type: none"> ▪ Is expected to compete with the automobile and computer industry in jobs. ▪ Assembles automobile parts. ▪ Can disassemble weapons. ▪ <i>Without Computer Brains</i> – wants to develop a robot that can work in a security capacity. ▪ Performs many jobs such as some welding, assisting a surgeon in delicate operations. ▪ Can perform dangerous, uncomfortable, tiring, or repetitive chores faster and more precisely than humans can. ▪ Creates more specialized jobs. 	<ul style="list-style-type: none"> ▪ The United States has fallen behind other countries on the development. ▪ Eliminates jobs.

<p><i>Relationship With Self</i></p>	<ul style="list-style-type: none"> ▪ <i>Robot Wars</i> – can take your frustration of dealing with everyday household items by the robot’s destructive powers. ▪ <i>Robot Wars</i> – “combines art, technology, sport and theatre in a way that celebrates basic life issues of survival and destruction.” ▪ Gives a person more leisure time. 	<ul style="list-style-type: none"> ▪ Takes some of the joy out of repetitive chores which a family works together to accomplish. The pride of working together and seeing what has been accomplished is diminished. ▪ Human contact is minimized, which leaves out a very important part of human relationships.
<p><i>The Power Structure</i></p>	<ul style="list-style-type: none"> ▪ Is expected to compete with the automobile and computer industry in dollars. 	<ul style="list-style-type: none"> ▪ The United States is not drawing on the resources of government agencies and coordinating the private and public investment to develop Robotics. ▪ Although Japan is ahead of the United States in this area, we gave the technology to them. ▪ Congress needs to develop policies and financial incentives to encourage industries to work together.
<p><i>Education</i></p>	<ul style="list-style-type: none"> ▪ <i>Robot Wars</i> – encourages creativity. ▪ Could be used in engineering programs at colleges. ▪ Many new programs will be developed for teaching robotics. ▪ Is very much hands-on learning. 	<ul style="list-style-type: none"> ▪ Will be expensive to implement these new programs. ▪ Could be used for educating students and further dehumanize the world. ▪ People will have to be better educated in order to acquire and maintain jobs.
<p><i>Other Cultures</i></p>	<ul style="list-style-type: none"> ▪ Will be used by people in other countries to their advantage. 	<ul style="list-style-type: none"> ▪ Could give other cultures more power that really aren’t ready for it and might use it in

		a destructive manner.
<i>Future Technologies</i>	<ul style="list-style-type: none"> ▪ Every article listed explained that Robotics was being designed and improved upon constantly in order to develop products for the future. 	<ul style="list-style-type: none"> ▪ Is going to be VERY expensive.

Electronic Town Meetings.”

Electronic Town Meetings

	Connection	Disconnection
	Electronic town meetings may broaden the consensus of individuals and bring about more positive changes in our physical environment. Individuals who do not have the time or political clout to become involved in town meetings now have a voice through the computer age.	Electronic town meetings prevent politically active persons from joining actual community meetings to make decisions.
Physical Environment?	An improved sense of self worth will certainly be felt by those who were previously ostracized from the political arenas and are now able to voice their opinions.	Community meetings may lose their social appeal as there is no longer the social atmosphere associated with the baked goods and tea and coffee following the meetings.
Human Body?	N/A	Social relationships were often affirmed at community or town meetings as people connected with individuals within their cities and towns. It was also a neat way to meet people who had similar views and goals.
Social Relationships?	N/A	N/A
Work?	The improved sense of self worth as a result of voicing an opinion and being heard.	The anonymous voice over electronic mail or the web may alienate you from who you really are as it is easy to take an identity unlike your personality when it is conveyed anonymously over the web.
Relationship w/ Self?	The power structure will be eliminated to a degree as other individuals who may not have the financial and political status is now able to contribute. This equalizes the distribution of power and facilitates a representative sampling of opinions when people polls are asked over electronic town meetings.	The individuals who offer the town meetings do not need to be a non-profit organization. Thus the need that the lay person feels to be heard is capitalized upon by the upper classes. Hence the exploitation of the lower class continues...
Power Structure?		

Electronic town meetings increase individual awareness of the issues being raised in their community. In addition, they better educate individuals regarding political officers and their platforms prior to elections.

Electronic town meetings may disseminated information based on whatever the party, company, or organization wants individuals to be privy to and nothing else.

Education?

Electronic town meetings will likely make other cultures more accessible.

Since town meetings are being conducted electronically individuals have less opportunity to be in contact with

individuals

within their own communities who are from other cultures.

Other Cultures?

Electronic town meetings is just a start. It is likely that elections, political debates and voting will be done through home computers via the web (voting I know is already offered in this capacity).

Detachment from the community and the world.

Future Technologies?

Howard Rheingold wrote in the article *The Great Equalizer*, that he thought Ben Franklin would have written the *Declaration of Independence* on the computer or Thomas Paine may have written *Common Sense* on a desktop had the technology been available. I shuddered at the thought, how sad that would be. Handwritten documents, particularly the *Declaration of Independence* allows individuals a more personal look at the lives of the participants. I used to marvel at how lovely the writing was on the Constitution and how beautiful the signatures were below signing their allegiance to the article. It would have been a travesty for our country's first documents to be on average paper, with average print, not allowing us as people to look into the lives of the forefathers of our country. The penmanship and the yellowing of the paper allow us to attach ourselves to the document that governs us today. Instead of being an average document with little character and personality as are our Word Perfect or Microsoft letters, papers, and articles that

all appear to be identical on the surface, hand written documents attach a person and a craft to the paper, letter, article or document. Indeed the art of penmanship is lost today as well. Very little care and attention is spent on the presentation of handwriting as it once was. I think that is unfortunate and the result of improved technology.