Intellectualism, Plagiarism, Ethics and Technology

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Intellectualism (noun)

- devotion to the exercise of intellect, or

- to intellectual pursuits

- **Intellectualist,** *noun or adjective*

- **Intellectualistic,** *adjective*

- **The first known use of** *intellectualism* **was in 1800**

Dictionary, Merriam-Webster, https://www.merriam-webster.com/dictionary/intellectualism.

Ethics (1)

Definition of *ethic*

1. **ethics** *plural in form but singular or plural in construction* : the discipline dealing with what is good and bad and with moral duty and obligation

2. **a**: a set of moral principles : a theory or system of moral values—often used in plural but singular or plural in construction

   b: ethics *plural in form but singular or plural in construction* : the principles of conduct governing an individual or a group

   c: a guiding philosophy

   d: a consciousness of moral importance

3. **ethics** *plural* : a set of moral issues or aspects (such as rightness)

4. rules of behavior based on ideas about what is morally good and bad

5. an area of study that deals with ideas about what is good and bad behavior : a branch of philosophy dealing with what is morally right or wrong

6. a belief that something is very important

"Ethic." Merriam-Webster.com Dictionary, Merriam-Webster, https://www.merriam-webster.com/dictionary/ethic.

Ethics (2)

– Ethics derived from the ancient Greek language "Ethikos" which means arising from habit, is the main branch of philosophy that studies the **values** or **qualities**. Later, this becomes the study of **moral standards** and **judgements**.

– Ethics includes the analysis and application of concepts such as **right**, **wrong**, **good**, **bad** and **responsibility**.

Profession

- A profession is a job that carries out its duties requiring or demanding expertise, using scientific methods, and high dedication.

- Someone who pursue a certain profession is called a professional

- Professional has a meaning that refers to the designation of the person who bears a profession and the designation of one's appearance in realizing performance in accordance with his profession.

PROFESSIONAL ETHICS

Professional ethics according to Keiser in (Suhrawardi Lubis, 1994: 6-7) is a manner of impartiality to provide professional services to community using full disciplines and expertness in term of duty call for community services.

Professional ethic codes

- Professional code of ethics is a system of norms, values and written professional rules that clearly state what is right and good, and what is not right and not good for professionals.

- The code of ethics states what actions are right or wrong, what actions should be done and what should be avoided.

- The purpose of the code of ethics is to provide the best service to their users or customers professionally.

- The existence of a code of conduct will protect unprofessional conduct.

Three function of Professional Ethic codes

1. The professional code of ethics provides guidelines for each professional member on the outlined principles of professionalism.

2. Professional code of ethics is a means for community social control over the profession concerned.

3. The professional code of ethics prevents intervention from other parties outside of professional organization regarding ethical relations in professional membership.

Indonesia's Engineer Ethic Codes

– Professional Association of Engineers / Bachelor of Engineering in Indonesia is

PERSATUAN INSINYUR INDONESIA (PII) / The Institution of Engineer Indonesia.

– Ethic Codes of Indonesia's Engineer:

– **"CATUR KARSA" : 4 Prinsip-prinsip Dasar/4 Fundamental Principles**

– **"SAPTA DHARMA": 7 Tuntunan Sikap/7 Habit Guidelines**

Catur Karsa

4 Fundamental Principles:

1. Prioritize nobility

2. Using their knowledge and abilities for being beneficial to humanity's welfare.

3. Work earnestly in the interest of the community, in accordance with their duties and responsibilities.

4. Improve the competence and the dignity based on professional engineering expertise.

SAPTA DHARMA

7 aptitude rulership:

- Indonesian engineers always prioritize public safety, health and welfare.

- Indonesian engineers always work in accordance with their competence.

- Indonesian engineers only state their opinions that could be accounted for.

- Indonesian engineers always avoid conflicting interests in the responsibilities of their duties.

- Indonesian engineers always build a professional reputation based on their abilities.

- Indonesian engineers always uphold the honor, integrity and dignity of the profession.

- Indonesian engineers always develop their professional abilities.

INTERACTION

– Engineers rarely work alone, usually working in a team

– Good interaction is needed among engineers themselves, engineers to community, engineers to other individual.

– Obligations of engineers: honest, scholar, professional, hard working, cautious, etc.

– Obligations of the community: provide wages for work done, maintaining the Intellectual Property Rights (IPR)

Manners

- Manners are codes of behavior and politeness how to place a fork on the dining table, how to dress properly, how to sit etc.

- Manners often change

- Violation of manners ??

- In the engineering world, respecting employees as they should be, not embarrassing colleagues, answering the telephone with a professional attitude, etc.

LAWS

- Law is a rule made by the authorities / government, society and convention

- Violation of the law: imprisonment, fines, serving the community, death penalty, banishment / exile etc.

MORAL

- Moral is an acceptable standard of good and bad deeds, usually applied to one's behavior

- Moral standards of parents, religion, friends, media, etc.

- Moral culture, religion, etc. For examples, killing and stealing, all religions and cultures declare that those are immoral acts.

- No strong enough pressure for this activity

Ethics

– Ethics contains general and abstract concepts of good and bad deeds that are derived from philosophy, theology and the professional community.

– Most professional societies have official codes (codes of ethics) to direct their members to the Engineer Code of Ethics

EXAMPLE

– A chemical companies develop a new process of waste products. the results of the company's research detected the possibility of the product causing cancer. Based on the research results, the company detected the possibility of the product causing cancer. The government will not ban this product, since it is a very new product. The company is ascertained to sale this product to market (but legally not violating).

EXAMPLE

The Challenger is one of three shuttle spacecraft launched by NASA. The shuttle spacecraft consists of a reusable delta orbiter wings, which contains the main fuel, payload, passenger compartment and cockpit. The main fuel consists of liquid hydrogen and oxygen which is supplied from an expandable external tank. The booster rockets will be dropped one by one to reduce the burden on the aircraft. The booster rockets are made of plate sheets that are united together by vulcanizing rubber and putty of zinc nitrate (then filled with fuel made from aluminum / potassium chloride / iron oxide, which produced by Morton-Thiokol). at The spacecraft was launched 11.38 AM, 76 seconds later over an altitude of 50,000 feet the aircraft exploded.

Ethics problem

– On January 28, 1986, the night temperature was below freezing.

On the launching → Discuss:

Ice → to impair the orbiter or fuel thank

Booster ring → perilous if the temperature 53^0 F

Conflict of Interest:

      Company Morton-Thiokol → rocket contract with NASA.

      NASA must launch the shuttle space

Decision:

      on 11.38 AM, the shuttle space was launched, and 73 seconds afterwards on 50,000 feet elevation, the craft was exploded.

– Should Morton-Thiokol blame NASA management for threatening the safety of the challenger's crew

– That Astronauts know that this launch was danger and they still want to take a risk to remain fly away.

– It is very unfair to blame the NASA managers only, since every flight takes an accident risk and a decision must be to be made whether to launch the shuttle space.

– Are there mistakes made by the engineers who build the Challenger?

The Engineer Manner

Professional associations usually have codes of ethics prepared for their members as guidance on ethical behavior for their members, including:

1. Protect public safety, health and safety

2. Always work in accordance with their competence

3. Honest and objective

4. Behave politely and respectfully

5. Continuing understanding to sharpen technical ability

6. Work honestly to employees or clients

7. Inform authorities of illegal, dangerous and destructive activities

8. Involved in community and state activities

9. Protect the environment

10. Do not accept bribes, or give / reward that can affect technical decisions

11. Protect confidential information

12. Avoiding conflicts of interest