# Opinion report examples

Education, Sustainability



## Summary

In this presentation, Davies goes over the Health and Safety Executive, which is a national independent watchdog organization examining workplace health and safety. Essentially, inspectors come to businesses that bring them on to certify that they abide by health and safety regulations. If the business receives the seal of approval from them, they can guarantee a reasonable amount of safety for their customers and employees. The presentation later goes on to teach employers and business owners how to assess risks in their workplace. One particular focus of the presentation (and presumably HSE) is the damage done to the human body by electric shock and electrocution; various voltages and levels of injury are described and illustrated to show just how easily people can get hurt at work. In essence, the presentation goes into the factors that lead to improper safety conditions in the workplace, including poor safety management. Knowledge and awareness of one's surroundings are encouraged as a means to create a safer workplace that will lead to no injuries being incurred.

In my opinion, the presentation does a fairly effective job of conveying the more detailed information required in acting as an official of the Health and Safety Executive. However, the presentation spends quite a bit of time with unneeded slides of single lines of information, and expressing excitement through dozens of exclamation points takes away from the professionalism of the presentation. With that in mind, however, I feel that knowing many of the regulations inherent to the health and safety of the workplace is extremely useful, and that they should be considered when working in any workplace. Many pictures are included, but little context is given to them

apart from them being generically "unsafe" conditions. What I did like, however, was the increase in scope from the Health and Safety Executive personnel and regulations to overall principles to creating a work safe environment. The visual aids are very important and useful for conveying information, and the presentation makes a great case for consulting the HSE as the health and safety authority for anyone's company.

#### **Benefit of Future Job**

As for the presentation's benefit in a future job as an engineer, I feel that it is very useful. When operating in the fields of engineering and development, one absolutely crucial factor to consider is the safety of those who work with the devices and technologies that you create. That being said, this kind of presentation really hammers home just how dangerous improperly maintained or designed devices and technologies can be. Getting that kind of certification or oversight for something that is created by an engineer can go a long way toward creating relative safety for those who use it.

Often in the engineering world, little thought is given to safety in the initial stages of development - first, it is " how does it work?" However, by creating things that are safe and are not going to create problems for those who seek to benefit from it, the job of an engineer can become easier. Risk assessment is a vital component of engineering, and this presentation has a lot of general information, as well as tips on how the HSE can help ensure the lessening of risk.

## Summary

The speaker's presentation starts by talking about sustainable development, i. e. making engineering and construction decisions that do not negatively affect the environment or the future. Sustainable development involves a distinct interaction between the environment, the economy, and society; in order to be sustainable, it must be viewed as an objective and a process. In the beginning of the history of the world, the environment ruled all; however, with society came the economy, and society has started to engulf and consume the environment. This includes energy and other natural resources, which are running out at a fast pace.

The presentation then moves toward what would constitute a sustainable economy; the most important thing is to create an ecological footprint. The presentation argues that the efficient use of resources allows the environment to be somewhat more stable. The UK DS 1999 strategy is then described as a means to create sustainable development; its objectives are to create universal social progress while protecting the environment and using natural resources effectively. Furthermore, the economy remains at a high state of growth.

# **Opinion**

Poole's presentation is extremely informative, and includes a lot of conceptual information about what must be truly maintained and considered in a sustainable development context. A lot of care is taken to define sustainable development and establish its importance to engineers; this is very important in today's economic and environmental climate. Visual aids demonstrating the increased presence of society and how that makes the

current conditions not really sustainable go a long way toward stressing the importance of the situation. The political component that goes into engineering is an important one, and this presentation seems to help show the differing perspectives that go into economic development.

The UK SD Strategy being described heavily as part of the sustainable development process was the most effective for me. I felt as though the initiative presents real, workable components to a working strategy that can be implemented by engineers and other factors in a satisfactory way. A lot of emphasis is also placed on different decision making strategies - data-rich and actor-rich, which I enjoyed. This allowed me to know the different ways in which I could act on these sustainability initiatives as an engineer.

### **Benefit for Future Job**

Knowing the political and environmental component of engineering goes a long way toward understanding the overall context of what we do, and this presentation helps to describe how sustainability is important. The fact that different factions (politicians, environmentalists) have different ideas of what should work is vital, because then the engineer has to find a way to make that work. In essence, in this new economic and political climate, engineers have to make environmental friendliness a very important attribute. With the suggested strategies of the 'four legged table,' and attacking gaps in visions, one can make sure that a new engineering initiative or technology remains sustainable in its development. Parallels to natural development and artificial development make this presentation really appeal to those who want to make sure their engineering efforts achieve a kind of synchronicity with the environment around them. The importance of different perspective is also

emphasized here, which is helpful to remind engineers to get out of their own heads from time to time. In short, the presentation holds the benefit of showing engineers the bigger environmental picture of what they are responsible for, and so they must keep those factors in mind as they move forward with their efforts.

## Summary

This presentation covers the idea that society and technology are very tightly intertwined. Therefore, as an engineer, sociology must be considered when creating solutions to problems. As engineering is problem solving, then the considerations of the society that created the problem must be taken into account. Engineers shape society, and steps must be taken toward a net progress or improvement in society. Instead of a linear model of creation, a multi-directional model must be considered - in this design, the technological and social developments are examined based on what people did to create the solution to a given problem. Interpretive flexibility identifies the problems and their sources. One group may think there is no problem, since the problem does not exist for them. Therefore, the device in question was socially constructed for that group; however, there is room for pleasing multiple groups by creating a new solution that benefits more people. Closure of a solution is then found after the newly engineered device enters the market, and it enters a wider context as time goes on and other technologies develop from that. In essence, the presentation asks engineers to consider the social implications of what they do, and in what ways their creations and works can benefit the greatest number of people.

# **Opinion**

This presentation is short, to the point, and very good at illustrating the example of social construction of technology. The analogy of the evolution of the bike goes a long way toward making the various steps of social construction and sociology in engineering clear. When one designs a bike, or any piece of technology, one often makes it for a specific group to the detriment of another. I feel this is an important point to make, and one to consider closely. Engineering does not exist in a vacuum; at the end of the day, people have to use the things that are created. It would be best to recognize the social implications of technology, and learn how to guide technology toward a given goal.

## **Benefit for Future Job**

As an engineer, one could benefit greatly from this presentation. Looking at the social construction of technology is something that can often be lost on engineers, as they focus on the individual project themselves. This can leave them blind to the implications designing their technology in a certain way can create. Looking forward at the best course of action in the future, and planning for longevity when engineering, is the best thing to do from a social perspective. This and other assertions regarding sociology as it pertains to engineering are what make this presentation relatively useful to engineers in terms of context. If engineers were to take an analytic approach to technology, they could find a way to make technology that benefited as many people as possible.