**Guidelines for developing good seminar discussion questions**

Developing good questions is a fundamental critical thinking skill. The best seminars and lectures are often focussed on addressing a clearly articulated, high quality, thematic question. Likewise, good writing is often based around synthesising your thoughts into a clear focussed question which then becomes the basis for the argument or thesis statement or specific research questions or hypotheses. Thus, being able to develop good questions is a fundamental component of learning how to ‘think like a scientist’, but more widely, it is an important life skill for any citizen.

Seminar questions should be constructed so that they will likely lead to focussed, intelligent discussion that will move the seminar group toward some potential answer, or toward a more refined perspective on the issue/theme, or toward an even more refined question.

Study the reading material carefully, and reflect on the seminar focus question. What really interests you about it, and why? Develop questions that would take you (and your audience) *beyond* the reading’s text. Good questions are:

* Challenging – contain ideas that are new and indicate an advance on what is stated in the text
* Original – indicate clear deep thinking by the questioner, often including his/her own specific ideas
* Focussed/specific – contain enough detail that they will narrow the discussion and constrain it from vague generalisations
* Rarely can be simply answered as Yes or No, without adding some explanation.

**Some examples of really good questions based on readings in a previous version of this course are listed below**

*Managing ecosystems for sustainability – Chapin et al Chapter 15*

1. I was taken aback by one of the first sentences in this chapter. “Failure to recognise key linkages between ecosystems and society creates vulnerabilities that could be avoided by proper ecosystem management (i.e. resource management that promotes long-term sustainability of ecosystems and the delivery of essential goods and services to society)”. I disagree with the wording of this. I think that the largest gap between the activity of people and the ecological consequences of those activities is ‘state of mind’. I’ve realised in our seminars that one of the main culprits of sustainability isn’t so much the management of larger corporations, although they do have an effect, but the state of ‘ignorant bliss’ that the average citizen chooses to have when faced with major environmental issues. We need to change our viewpoint on fossil fuels, meat consumption, conventional farming, GMO’s etc. and demand change if we want to make an impact. Would you agree that including acceptance of individual responsibilities and improved education into the solution would better define how gaps between ecosystem and society could be avoided?

*How can the socio-economic constraints that deter small-scale permaculture and biodynamic agriculture adoption be overcome?*

1. The paper provided uses the term economically stable to describe the Lopez Island farm. As we discussed at the beginning of the course, is breaking even year after year an acceptable long-term outcome for an agricultural business? Is our culture too focussed on economic growth to accept a system that is at standstill? Should we be okay with ‘economic stability’? Is the need to progress up the socio-economic ladder a socio-economic barrier in itself?
2. I have always wondered why organic/permaculture/biodynamic farming systems seem to have a strong desire to ensure that each individual farm is a self-sustaining closed system. Nevertheless, not all farms share the same capacity to produce the levels of required inputs and outputs. For instance, one farm might not have sufficient amount of land to produce animal feed and thus will not be able to maintain livestock. Accordingly, do you think that closed system farming is preferable to a potential system that integrates numerous sustainable farms that each have their own production strengths?

*Is a local diet really a good alternative to reach environmental sustainability, and how can it be balanced with social and economic concerns?*

1. I like mangos. Mangos cannot be grown in Kingston as far as I know. I am a biology student, readily aware of the environmental disaster we are leading ourselves to, and yet I don’t think I would be willing to give up mangos and eat only local fruits. How can we convince people to give up foods they love in favour of local, perhaps more environmentally sustainable food sources?
2. Local food does not mean organic, and this paper shows that one region often does not have the resources to sustain a population. Consumers would be forced to buy outside of their area in order to meet demands. Do you think that it is better to buy local, conventionally farmed produce, or to venture further away and buy imported organic food? Which has the smaller carbon footprint? Which would be better for the consumer, or for society?
3. What do you think is most responsible for the disconnect between sustainable theory and sustainable practice? Based on the question you provided, economics may be your first response, but is it more than that? Do you think the psychology of me versus we may come into play more than economic cost versus gain. Is there an important interaction between the two perspectives?