Academic Programmes for Citizens of a Global society

I am actually going to talk about carrots and sausages and you can see that I have brought some tasty specimens along with me. But first of all I would like to acknowledge the privilege that I have in speaking here today. Why me and not others? This is not an easy question to answer, nor may I like some of the answers I receive. Why did my education enable me to get this far? Why does what I say matter more that of someone not invited to speak? Obviously it does not and so I would like to invite you to consider the following questions during your discussions this morning:

If we are indeed educating citizens of and for a Global society and addressing societies needs

What does global mean to us?
What would an ideal education look like for these people?
Who are these citizens?
Who makes up 'society' and how do we know what their needs are?

I shan't address the global question as I know that issues of internationalization will be dealt with much more eloquently by David Macdonald and I will only lightly touch on the others in the time available.

In order to think about these issues I would like to invite you for a few minutes to drift into an imaginary space – allow dreams to come true and real values to emerge. Question what you believe in. And for a few minutes lets not blame others for our problems (like Governments, colleagues or policies).

I'll give you my dream. I would like my students to be able to contribute to a more equitable, safe world whereby <u>all</u> citizens have an interesting and fulfilled life.
To this end as I teach in engineering I have been thinking a lot about how we can help students discover the technological needs of the whole society rather than the wants of a few members. I want to give you an example of something I'm doing right now which is the very beginning of such a process. We developed a new first year engineering class. 640 students were asked to work in interactive teams for a whole week - in groups of 20. They were asked to grapple with issues of ethics, environmental and social impact – how they as engineers will affect the way that we live in the future. For some, not only was it a new way of working, it was also a new way of thinking. They then went on to work on a project, and in groups of 20 came up with a plan to develop a sustainable society. Some of them reinvented Kingston – it looked quite different! They applied the sustainable livelihoods theory to Kingston's transportation plan and failed it in fact! Pedagogical theory, gender inclusive strategies, simulated practice and real case studies enabled 640 students to start to think about their lives as citizens of a global society.

At this point – we wake up from the dream and find that we are in fact travelling somewhere on a train and we forgot to get off.

Many students fought us hard. Why? Because we were asking them to reconsider their worldview.

I would like to quote from one student who was discussing within his group the development of a recycling factory. The group was very happy with their altruism - they were going to have a factory to recycle all the city's plastic. It was a newly developed town with not many citizens. I asked where the workers would come from, where would they live, how would they live and what sort of salary they would receive. We debated this for some time and I asked whether they might consider giving a higher salary to the workers because it wasn't a very nice job. One student replied

'Its not our fault if they didn't respond to education.'

Why did the student say this to me?

At this point I would like to introduce the carrots and quote from a dear friend of mine Elizabeth Dunn, who is an anthropologist in Boulder, Colorado. She has written an excellent paper about carrots and Polish factory workers and I am borrowing from her work to illustrate a point.

She tells us about an advert in Poland which states at the top of the poster

'We see a difference'

on the top there is a picture of a carrot just like this one

'This good looking carrot was grown on just any farm. Nobody controlled the way it was grown. Nobody checked if it grew in a good environment. If this carrot were given to a research specialist, he might discover, that despite its attractive look, it is not safe for a child's health. If you make your baby's food yourself, you might be endangering your child with food made from exactly this vegetable'

and on the bottom there is another picture of a carrot

'This beautiful carrot is delicious and healthy. The farm where it was grown was carefully selected and tested. A specially planned system of agriculture was precisely monitored. This carrot underwent laboratory research to show it was rich in nutricious substances, and its healthful qualities were measured against the highest norms. This is exactly why these fruits and vegetables are the ones that Gerber uses for the production of its products'

through the adverts Gerber constitutes itself as an entity which knows about feeding children. Its sixty years of experience, where the average mother only has afew months or years or experience in feeding children….Gerber seeks to establish scientific authority and use it to assert that it is better at feeding children than mothers are'

But whats this go to do with our topic? I have always worried about the 'sausage factory' model of higher education. In engineering we have been concerned about it for some years. This is the notion that we feed in the ingredients and we churn out sausages. They should all look the same – or they wont pass the quality control. Just like these carrots. We know exactly how they have been treated. But what do we do with the grissly sausages, the green sausages or the squashed sausages? The yellow carrots, the thin carrots, the soft carrots. We throw them away. Just like the recycling factory worker who didn't respond to education.

So the dream becomes more complicated. Not only are we trying to help students develop a world for all citizens, lets imagine educating all manner of carrots and sausages and not just those that we decide pass the quality control mechanisms. We need to widen accessibility to all. We cant simply throw bursaries at students who got the grades but don't have the funds. We need to think about what to do with students who don't get the grades because they are squashed sausages or yellow carrots and who didn't have the help to make them 'quality' products when they were young. Or indeed because they are brilliant but in ways that don't match our quality control systems.

As Leonhardt puts it ' as a result of steep tuition increases and the phenomenal effort many wealthy parents put into preparing their children to apply to the best schools'   there are obvious changes in the student body – and many Universities are worried that they are 'reproducing social advantage…in spite of (recent efforts) access for poor kids and kids of less well educated parents has not improved. And for kids in the middle its actually declined'

Spencer of Michigan SU tells us that ' the price of college has gone up and many of the truly needy will not bother to apply'

So now in our dream we have students from all of society being educated to address the needs of all of our citizens. But recent concerns of Peter Roberts might be considered at this point

'Any notion of educational processes serving a form of collective public good has all but disappeared; instead participation in tertiary education is now regarded as a form of private investment.

Is it?

 'Competition between students, staff and institutions has been encouraged. Students have been redefined as 'consumers' and tertiary education institutions as providers. Bureaucrats now talk of inputs outputs and throughputs in the education system.

I am sure that these are familiar concepts to you and once again I remind you of sausage factories

David Noble warns us that as a consequence of this 'attention is shifted from the experience of the people involved in the educational process to the production and inventorying of an assortment of fragmented course materials, lectures and exams…. As anyone familiar with higher education knows, these common instruments of instruction barely reflect what actually takes place in the educational experience, and lend an illusion of order and predictability to what is, at its best an essentially unscripted and undetermined process…'

Furthermore

'Randle and Brady' tell us that 'as students become customers with their own charter and a customer complaints procedure so the customers come to monitor and manage the classroom interaction and teachers naturally fall into behaviour calculated to avoid complaints'

How many of us, as faculty, have done that?

So lets try again to move into that dream space – and ask ourselves what an ideal education is – we need to rethink many issues but especially allow ourselves into the place which says – I wont accept as a first answer – we cant do that because it costs too much…. If we want to create the best education for our students – then lets not pretend its for the students that we make certain changes. Instead lets hold out for the ideal

We have larger and larger classes and educational developers spend their time helping faculty learn to deal with these large numbers. But as David Noble reminds us

'Education is a process that necessarily entails an interpersonal (not merely interactive) relationship between people – student and teacher (and student and student) that aims at individual and collective self knowledge' Whenever people recall their educational experiences they tend to remember ..people who changed their minds or their lives…'

US and Canadian Participants in a recent meeting at the Carnegie Institute in Washington resolved to try to reaffirm educational ideals……to reclaim this precious and unique social space as a realm of freedom, of open access, debate inquiry and learning '

Lets join with this dream and not allow the imposition of others values into what we truly understand as education of all our citizens.

We are educated, intelligent, creative people. We can apply that creative thinking to any problem – we just need to define it properly. As I say about my students – if they can be as creative with their coursework as they are about avoiding doing the work they would fly……Lets think up ways of actively addressing these issues instead of passively developing ways of putting up with them. Lets reclaim education.