## **Dr John Hinchcliff**

(Dr John Hinchcliffe, President, the Peace Foundation)

[Interviewer question to 00.13: What kinds of changes have you observed over your career?]

I suppose the speed of the way things are changing. We've had the agrarian revolution which took thousands of years; the Industrial Revolution which took hundreds of years - I think a century or so; the knowledge age which has taken 100 or whatever years; and now the virtual age is due to consume 30 years or 40 years, at most. So things are changing radically and unless we change our thinking paradigm, we're just going to be left behind and unable to control the, the ecology, the water, the global warming and a whole series of problems that face us.

[Interviewer question 00.56 to 1.01 How do we deal with the massification of education while still providing the benefits on one on one teaching?]

In my field the greatest philosopher of the 20<sup>th</sup> century was a guy called Ludwig, Ludwig Wittgenstein, who wrote a treatise on, on philosophy and he wouldn't go near the university because of the structures. The students had to come into his living room, and he only published that one book during his life. While everyone was going gaga about this brilliant philosophy, he was writing a counter punch. He was writing a contradictory statement that took him in another direction, but he was a person who'd never gone through the system. He was a hospital orderly, but because of his brilliant mind he was able to go differently. And I just wonder how many brilliant minds are excluded because they're not going through our system. That seems strange coming from someone who *has* gone through it and loved it and benefitted from it. But we've got to look at helping students first and foremost, and we should be promoting staff that do that.

[Interviewer question 2.07 to 2.12: Where are the next Wittgensteins going to come from?]

I think they're more likely to come from a smaller place like New Zealand that empowers people more. But then again, I think that when given, when students are given their head to be creative and think outside the box, they do well. But thinking outside the box is only rewarded in some schools. Thinking holistically is only rewarded in some departments.

When I was at Auckland University, it was the Engineering School which had this programme for students so they could learn from different ethics and sociology and so on. They get a holistic overview. Auckland University, while I was there, introduced a class on Ethics. They hadn't had one for a while. Where I studied in America for two years, every student had to do a course on civilisation, looking at all the components. So it's when people can look holistically and see their own field in different dimensions, they, they, they – Watson and Crick. One was a biologist and one was a chemist, and they actually, *together*, had these marvellous breakthroughs and, and they were thinking, actually differently.

[Interviewer question 3.30 to 3.35 What kinds of institutions are needed for us to think differently?]

Well, I do think we need institutions where student learning is crucial, creativity is crucial and, and teachers are given priority and promotions because they are concerned to nurture the student learning and not be forcing them to cohere with the old Cartesian model - which goes back to the Greeks where everything was ordered and structured and controlled. I think we need to go into complexity theory and willing to look at quantum physics, for example, break through that mould. And until we're ready to break out into creativity and thinking

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laterally and so on, we're, we're just gonna be stuck in a mould, except for the people that break out of it.

[Interviewer question 4.25 to 4.29: What kinds of leadership do we need?]

Well, as I say, to reward teachers that foster creativity and learning rather than getting promoted because they have research outcomes. I think that goes back to the Government funding process. We've *got* to encourage research, and I think there are some staff that (should be) just be 'taken out of learning' and given the opportunities to really do creative research.

But I do think it has to be practical, even though philosophy may seem to be irrelevant. And some philosophy is practical because it changes mindsets and challenges existing thinking. Because the world is changing so radically, because there's a paradigm shift, we need that creative thinking within a university, particularly, and at high school.

[Interviewer question 5.22 to 5.28 Are students taught to be futures thinkers?]

We've got wonderful high technology. With drones we can see things we could never.. With biotechnology we can do great things; with artificial intelligence and robots. In Japan they use robots to help elderly people and they love their robots. But they also can use for military purposes which are ultimately dangerous.

We don't introduce students to futures thinking and I think that's a crying shame. *Pragmatically*, when I go to futures conferences, it's usually people from businesses. One of the biggest groups, the last one I went to, was from the Air Force in America - because they need to know what's happening. And, and, and in business you had Shell Oil was the only one that was taking futures thinking seriously and when the oil shock happened in 1976, Shell estimates they saved themselves \$1 billion, where some of the other oil companies struggled and were seriously compromised. Hubert Humphrey, when he was Vice President of the States, set up a futures thinking tank and they made a series of observations and only one of them was wrong: they, they hadn't over-expected the, the, the oil shock. So there is a lot to, to think about and yet I don't think there's a futures programme introduced into the universities or, or secondary schools. I've heard various people trying to get it to happen but it just hasn't. And the futures thinking is one thing that enables you to think out of the box.

[Interviewer question 7.11 to 7.18: How can we introduce futures thinking into education?]

Again it always depends on who is in charge at the Vice-Chancellor's level, the Dean's level, the Head of Department's level. If they see the wisdom of this, they can usually get it incorporated in their curriculum. I think we need to talk with these people, to, to just show them the importance of futures thinking and look at some of the big corporates that focus on futures thinking who've done so well because of it. And because we need that paradigm shift, not understood, which is happening.

This virtual age is coming: the science of thinking machines, the age of spiritual machines that Kurzweil... Kurzweil is the most highly decorated scientist in American - the only one that's had two Presidential Citations - and yet he's pretty well ignored. He's looking at the future; he's looking in the fact that we are gonna be machines. Cyborg, Cyborgs are the way of the future. Artificial intelligence is going to dominate human intelligence and in the 2040s we'll be locked into a system where the machine is ultimate and if cyborgs and robots are artificially intelligent, they'll be able to control humans, because of their greater knowledge.

And there are radically new things coming across the horizon. Weapons of mass destruction, or mass extermination perhaps, are not being discussed and this is a serious future problem.

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And how we get them to consider that — I think we probably need a catastrophe. It's only when that three-year-old refugee boy was picked out of the seashore that people started really taking the refugees seriously. And there's all sorts of episodes like that where you need a sym-, symbolic marker, a symbolic incentive to change your, your paradigm and be concerned. Jesus died on the cross and created religion. It probably wouldn't have happened if he'd have died in obscurity. And you can see this through history. I've heard people say, you need someone to die before people take their words seriously. And so there needs to be a shock and I hope the heck it's not just a shock of a nuclear explosion. During the Cuban, Cuban Crisis John F. Kennedy said it's either 50% or 33% likely that we'll have a nuclear war with the Soviet Union. And that could have been the end of history.

[Musical interlude 10.10 to end]

Recording ENDS: 10.20

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