Principal's Sabbatical Report for Educational Leaders.

Chris Rooney: Principal Liston College, Auckland.
Sabbatical Period – June 12th –September 3rd.

Introduction:
The main professional development activity for this sabbatical was to attend the **Leadership – An Evolving Vision (LEV)** course at the Graduate School of Education at Harvard in Boston. I chose this course on the recommendation of several colleagues who had attended the Graduate School of Education previously. I wanted to engage in professional learning which would increase my capacity, as instructional leader of Liston College, to improve further the overall level of student achievement. An additional objective was to identify strategies to close the achievement gap for those students who do not experience the academic success of their peers.

I deliberately chose to split the 10 weeks sabbatical between the end of term two and the beginning of term three to prepare for the course. The LEV course took place from 6th to 12th July. I began my sabbatical leave in the last three weeks of term two so that I could be fully prepared for the course by completing the required reading in advance. This was partly successful as only half of the required readings were available before the start of the course. I was able to read other professional material which I had been working on.

The Harvard Course
This was a very intense academic seven-day (inclusive of the week-end) course. Typically there were presentations in the morning and early afternoon followed by group discussion for the last afternoon session. I will comment further on the structure of the course in my reflections at the end. The following is a summary of the key points of the presentations which I found either challenging, valuable or both!

Emerging Technologies and Transformative Education: Christopher Dede.
Dede argues that the current industrial-era model of education cannot be sustained either economically or educationally. He points out that in the US and in other countries there is increasing pressure to increase student/teacher ratios as a means of reducing costs. At the same time there have been significant shifts in the knowledge and skills that society values, the development of new methods of teaching and learning and a change in the characteristics of learners. He quotes the 2010 National Education Technology Plan (NETP) as the blueprint for the future and more appropriate for 21st Century learners. This document mirrors the New Zealand Curriculum (NZC) in many ways. It suggests that technology can address the critical issue that learning is no longer confined to the years at school – it needs to be life-long, life-wide and available on demand. He notes that technology provides access to a much wider and more flexible set of learning resources than is available in classrooms at present. He argues that the current model of schooling in most countries cannot effectively provide

appropriate learning opportunities for all students. What is happening in these systems are attempts to make improvements to the model to try to achieve policy requirements which cannot be fully met. Therefore we need to transform the model not simply improve it.

He showed examples of what he called Digital Teaching Platforms (DTP) which addressed three requirements of contemporary classrooms.
1. Complete, networked digital environment with interactive interfaces for both students and teachers with tools which allow for both individual and group work.
2. It provides the content of the curriculum and assessments for teaching and learning in digital form.
3. It supports real-time teacher-directed intervention in the classroom.

With DTP it is the teacher not the technology at the centre of instruction and the teacher fully controls student activities. He argues that the technology for transforming education is already available and gave several examples to demonstrate this including the use of a hand-held devise which enables an English speaking person to read and understand the Chinese road signs in Hong Kong. The technology could be applied to assist students with reading and writing difficulties.

Improving The Instructional Core: Katherine Merseth.

Merseth argues that the main influence on student achievement is the quality of the teacher. She further states that if we wish to see significant improvement in student achievement it has to occur in what is called the Instructional Core (IC) and this will only happen if one deals with all three elements of the Instructional Core. This is composed of the teacher and the student in the presence of the content. It is the relationship between the teacher, the student and the content – not the qualities of any one of them by themselves – that determines the nature of instructional practice. The instructional task is the actual work that students are asked to do in the process of instruction.

There are Seven Principles associated with the Instructional Core:
1. Increases in student learning occur only as a consequence of improvements in the level of content, teacher knowledge and skill and student engagement.
2. If you change any element in the instructional core, you have to change the other two.
3. If you can't see it in the core, it is not there.
4. Task predicts performance.
5. The real accountability-system is in the tasks the students are asked to do.
6. We learn to do the work by doing the work, not by telling other people to do the work, not by having done the work in the past, and not by hiring experts who can act as proxies for our knowledge about how to do the work.

7. Description before analysis, analysis before prediction, prediction before evaluation.
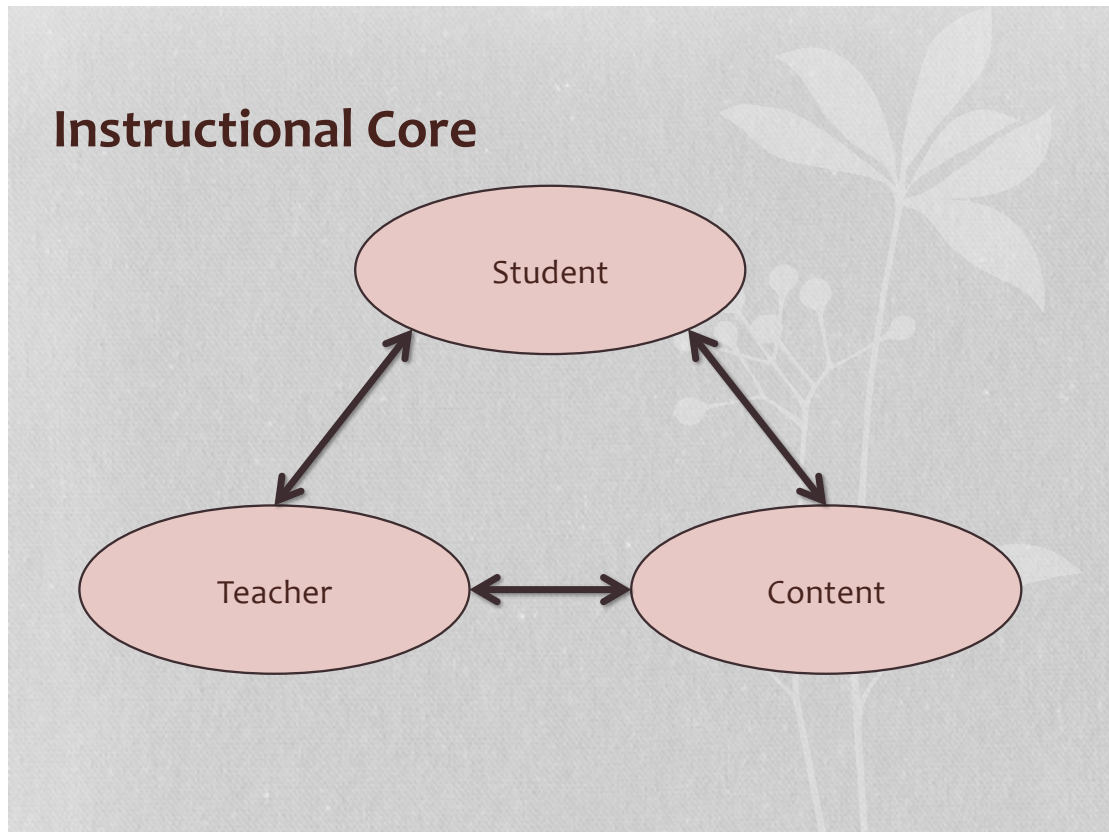
There are only three ways to improve student learning across the school.
1. Increase the level of knowledge and skill that the teacher brings to the instructional process.
2. Increase the level and complexity of the content that the students are asked to learn.
3. Change the role of the student in the instructional process.

Merseth gave an example of a four-teacher team with four different classes teaching exactly the same curriculum framework and using common lesson-planning models. There was considerable variation in the quality of the work the students produced from classroom to classroom. The explanation offered by the teachers was that prior learning was the problem and that remedial action would be the solution. All four teachers had been observed by visiting superintendents. What they didn't know was that the actual work was significantly different in each of the classrooms despite the common curriculum framework. Close examination of classroom practice showed significant variation in what the teacher was asking the students to do – i.e. the instructional task.

The students who achieved the best were in the class taught by the team-leader who explained clearly to the students not only the nature of the task but also its purpose and where it fitted into the unit of work by relating to a previous lesson. However, despite the seeming collaborative approach by the team, there was no trickle-down of best practice from the team-leader to improve the performance of the other members of the team. The reason for this was a lack of knowledge of what was actually happening in the classroom on a daily basis. This culture of autonomous practice ensured that there could be no trickle-down improvement. The key lesson from this example reinforces the critical importance of the quality of the instructional task in determining student performance.

Project Adventure Day.

This was a team-building exercise on the second day of the course in an Outdoor Education Centre, an hour's drive north of Boston. There were two basic aims of the day:

1. To help the groups who were going to be meeting daily to discuss the material from the various presenters, to bond as effective teams.
2. To help the educational leaders on the course to either become familiar with the potential of outdoor education to improve student achievement or to refresh this idea with those leaders who were already aware of it.

The key principle for the day was Challenge by Choice. The 150 participants represented a variety of fitness and experience of the outdoors and it was important to acknowledge these differences to ensure that everyone was able to contribute to the challenges without feeling pressured to experience all of them. For example with the high-ropes exercises some participants completed the full crossing, others partially completed and others could reach the first height only.

The timing of this activity on the second day of the course was particularly important as it provided an early opportunity for each of the individual groups to learn more about its members. Approximately one quarter of the time on the course was spent in group discussion and activity. To maximise the effectiveness of this activity it was important for the groups to bond as teams. While I cannot comment on the effectiveness of the project on other groups it definitely helped the group to which I belonged to quickly bond with confidence in each other and to learn from each other as a team.

While reflecting on the Project Adventure experience I can see the obvious benefits of team-building activities. It also gave everyone the opportunity to move beyond his or her comfort zones. Whether or not they did so was for the individual to decide. The activities provided good opportunities for participants to improve their listening skills and to have practical exposure to some aspects of Experiential Learning. As an Educational leader I found the process of the exercise valuable for reflecting on my own leadership strengths and weaknesses.

Inclusive Education: Norman Kunc.

The essence of this presentation was to have us reflect on our policies and practices for including students with disabilities into our schools. Kunc suffers from cerebral palsy and asked why schools vary so much in their inclusion of students with disabilities. He argued that the traditional model of Maslow's 'hierarchy of needs' requires modification to reflect what he believes is a general loss of ritual in Western society. This has led to a loss in the sense of belonging as society has become more self-centred at the expense of community. He argues that we now need to work on building a sense of belonging for students in schools. This is something we have taken for granted but is something which he feels is missing for many students.

The challenge for me from Kunc's presentation is to examine what we are doing to ensure all students have a sense of belonging to Liston College. He expressly focused on students with physical disabilities to illustrate his argument. But his premise applies to all students who may be disabled in many other ways.

Optimising Diversity: Universal Design for Learning David Rose

Rose argues that in any classroom group there will be significant individual differences as all humans are on a continuum from

Gifted ⟵————————————⟶ **Disabled**

whatever the activity. Following Kunc's presentation, this reinforces the need to look at learning opportunities for students as individuals. Rose believes that to do this successfully lessons should be student-centred for all students in the class. He uses the medical analogy of anti-biotic prescription to illustrate his point. A doctor cannot prescribe the same anti-biotic to all patients who are suffering from a bacterial infection. The prescription has to be refined to deal with the combination of the illness and the characteristics of the patient who may be allergic to particular ant-biotic drugs. If a doctor has to be this precise why then would a teacher teach 'to the middle' and expect all students to achieve?

Rose argues that it is possible to have a genuine student-centred curriculum with the use of Universal Design for Learning (UDL). He gives the analogy of architecture, where it is more cost-effective and equitable to design and construct buildings which are accessible for the widest range of people than it is to retro-fit them. He gave the example of TV captions to illustrate how technology has evolved to meet the changing demands of society. All TV programmes now have captions as an option making these programmes accessible to many more people who don't understand the language or are hearing impaired.

He states that UDL can fulfil the key requirement of student-centred curriculum i.e. ensuring that the means of learning are accessible for all students to succeed. UDL has three essential principles:

1. Provide multiple means of representation.
2. Provide multiple means of action and expression.
3. Provide multiple means of engagement.

Rose further contends that these principles address three critical features of any teaching and learning environment:
1. The means by which the information is presented to the learner.
2. The means by which the learner is required to express what he/she knows.
3. The means by which students are engaged in learning.

He pointed out that print is still the primary technology for communication and instruction in the vast majority of schools and yet it is not a good platform for student-centred learning. It is fixed, inert and is a 'one size fits all' technology which makes it less suitable for dealing with the challenge of diversity. The US Congress has now used the term "Print Disabilities" to describe barriers to learning caused by the use of print as the medium of instruction.

He demonstrated the use of audio and visual techniques to replace and/or enhance written information and noted that there are numerous ways to improve written presentation through the manipulation of digital images.

He also noted some caution with the use of digital technologies:
1. Poorly designed digital learning tools give the illusion of progress when they are simply replicating the 16th century technology of print.
2. The impact of access to technology at home may increase disparity among students and this is an issue which needs to be addressed back at school.
3. There is significant cost to schools and education systems in providing the resources which are available.

He reinforces the key theme of the role of quality teaching at the heart of improving student achievement.

Engaging in Our Own Immunity to Change: Robert Kegan.
Kegan argues that the reason we are resistant to change is that we have an in-built immunity system which works automatically to resist change and operates in a similar way to our body's immune system and illness. He states that our immunity to change is the result of our reinforcement of our assumptions which drive our behaviour. To prevent the immunity to change continuing we have to surface and test our key assumptions.

He pointed out that we could solve some problems by increasing our skills and knowledge to accomplish the task. However, there are other problems which cannot be solved by applying these informative problem-solving skills. He calls this using technical means to solve problems and is appropriate in solving technical problems. He used the analogy of a vessel to demonstrate the difference in professional learning required in problem solving. For technical problems we can add to the vessel by improving our skills or knowledge. However, there are problems for which we do not have a solution – what he calls adaptive problems. To solve these problems we need to increase the capacity of

the vessel. Simply filling it up with more of our current knowledge will not work. The challenge is to recognise the problem as one which requires increased capacity to seek solutions beyond our current understanding. This is what he calls transformative problem solving.

Effective Use of' During The Year' Assessments: Kim Marshall.
Marshall presented the idea that to make significant improvements in student achievement teachers need to teach a little and test a little on a regular basis. He calls this interim assessment and suggests that if it is done properly it is a powerful means of identifying gaps in students' knowledge and provides the teacher with the opportunity to re-teach to address the gaps before moving on to the next part of the curriculum. He argues that the underlying purpose of interim assessments is to shift the conversation to results rather than what has been taught. He suggests that this take place every four to nine weeks and provides three powerful insights:
1. Initial teaching, no matter how good, cannot bring all students to proficiency because of differences in prior knowledge, attention and motivation.
2. We shouldn't wait until the end of the year to find out who is confused.
3. If we put our mind to it we can fix learning problems before they snowball.

He believes that Interim Assessment can have a ripple effect in that they can help teachers plan better, teach better, use 'in the moment' assessments better and make powerful use of interim data to help close achievement gaps during the year. The challenge is to get teachers to slow down, reflect on what's working and what's not and organise a process of self-improvement on the basis of the assessment data.

In essence he is reinforcing what Hattie in Visible Learning has reported on the importance of feedback and feed forward in improving student achievement.

Leading Educators in Using Data Wisely: Kathryn Parker Boudett.
Parker Boudett follows on from Marshall on the effective use of assessment data and argues that analysis of the achievement data should emphasise the individual student. Data should be discussed collaboratively and the conversation should focus on how teaching has to be modified in the light of the data.

She gave several examples of achievement data presentation which were primary school oriented but did have some lessons for secondary schools. She also presented an 8-point model for improving the use of achievement data.

She demonstrated real-time 'in the moment' assessment using clickers. This was a valuable lesson on immediate feedback for the teacher. It provides an 'on the spot' opportunity for the teacher to re-teach to individuals or groups depending on the feedback data.

Social Perspective Taking: A Fundamental Tool for Effective Leadership. Hunter Gehlbach.
In this presentation Gehlbach argues that it is important for educational leaders to accurately understand others by closely observing those with whom we engage to better understand how they behave. This is true of both students and teachers. Understanding the behaviours can assist leaders to make effective interventions to improve student achievement.
1. Teachers are highly motivated to think efficiently and as intuitive scientists are fraught with mistakes. Teachers will be motivated to find evidence to confirm their theory – e.g. this class is dumb. If the teacher seeks alternative or additional evidence he/she might acknowledge that he/she does not have a good understanding of the class achievements. The same is true for students. They have a theory about which information is valuable and will prepare a test accordingly. If they get it wrong and fail the test they may not accept this, as it is an admission that they lack savvy as students.
2. Positive teacher/student relationships are important in developing competencies of attention, motivation, problem solving and self-esteem. What does teacher do when he/she notices a sudden deterioration in a student's achievement?

Gehlbach engaged the group in an exercise to try and understand the behaviour of someone who did not make sense to us. It was both challenging and rewarding to think more deeply about the possible reasons for the behaviours. The key to understanding these behaviours was to take careful note of the many signals being presented by the individual.

Leading The Learning: Becoming The Change You Want To See. Robert Peterkin.
Peterkin presented the story of a Superintendent, Deborah Jewell-Sherman, who turned around a failing school district in Richmond Virginia. She made key appointments and ensued that Intentionality her prime objective. She put improving instruction as her key objective and directed her resources towards this. It was a useful case study in how a Superintendent was able to turn around a failing school district. While there is no direct application to the New Zealand education system, the strategic decisions she made have relevance to Principals and Boards who have to deal with schools which are not meeting their achievement goals.

Reflections for Next Steps:
I found the LEV course stimulating and thoroughly enjoyed the academic challenges of the seven days. The programme was put together in such a way that each presenter contributed to a greater or lesser degree to the idea that as Educational/Instructional Leaders, we are responsible for improvements in student achievement through our leadership and administrative organisation. The current model of schooling in most countries is an industrial-era model which does not meet the learning demands of 21st Century learners. The challenge for Principals is to continue to make improvements to the current model while planning to make the transformational changes which will make education student-centred.

A key part of the course was the emphasis on students as individuals as an essential means of raising student achievement. There were several presentations which demonstrated the potential of technology to ensure that the curriculum is genuinely student-centred – reflecting the theme of Viviane Robinson's book *Student-Centred Leadership.* By focusing on individual performance schools can improve curriculum design and modify teaching practice to better meet the learning needs of the student. This was a theme which was expressed by a number of the presenters. We are fortunate in New Zealand because our NZC provides a sound framework for delivering a 21st Century education.

The importance of knowing what is actually happening in class on a daily basis is fundamental to ensuring that the goals of improving student achievement are met. This reinforces the findings of John Hattie in his research – *Visible Learning* - that the single most important element in raising student achievement is the quality of the teacher. Ensuring that all students have access to the opportunities for success requires paying closer attention to what the student is being asked to do during the instruction time. With increasing diversity in the student population this becomes more important.

It was clear from the course that teaching can no longer be an autonomous activity where individual teachers plan, teach and assess as independent practitioners. In NZ NCEA has provided an opportunity for collaboration through planning and moderation. By working more collaboratively across the school, teachers will be able to learn more from their colleagues and become genuinely more reflective.

Challenges:
There are a number of challenges which will have to be faced to successfully make the necessary transformational changes to provide the 21st Century education which is genuinely student-centred.
1. It is going to require more resources if schools are to take advantage of the technology opportunities.
2. There will have to be a cultural change in most schools in the way teachers work. This is going to take considerable time.

3. Those organisations responsible for providing teacher education are going to have to equip the new generation of teachers with the transformational skills to take advantage of the new technologies and pedagogy.