What we Need to Know About Learning and Teaching

WA Primary Principals’ Association
Burswood
15th June 2017

Professor Stephen Dinham OAM
Associate Dean (Strategic Partnerships)
Professor of Instructional Leadership
“The chains of habit are too weak to be felt until they are too strong to be broken.”

Dr Samuel Johnson

- Much of what we do in education is the result of taken-for-granted routines, habits, mind-sets, ideologies, superstitions and untested assumptions and beliefs.
- However, more than ever before we are now in an age of evidence and data and we need to ask some hard questions (what?, how?, why?, effects?).
LEADING LEARNING and TEACHING
Stephen Dinham

"If educators are to LEAD learning and teaching, then this is the must-read book."
Professor John Hattie

Covered by Professor Viviane Robinson

By the author of How to Get Your School Moving and Improving
Contents

Part A   Research Evidence on Teaching for Learning
Part B   The Importance and Impact of Educational Leadership
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How to Get Your School MOVING and IMPROVING

Steve Dinham
“Up until the mid-1960s, the prevailing view was that schools made almost no difference to student achievement. What students could achieve in their education was largely predetermined by heredity, where they lived, their socio-economic background and family circumstances. Measured ‘IQ’ was considered a powerful predictor of student achievement and seen as largely innate and fixed by the time young people got to school.”

(Dinham, 2016)
• *Equality of Educational Opportunity Study (1966)* [Coleman]  
http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/06389  
“…concluded that the quality of schooling was responsible for only about 10 per cent of the variance in student achievement. The powerful conclusion drawn from this study was that schools could exert only a small influence on student accomplishment.”  
(Dinham, 2016)
• Heavy investment in education post WWII.
• Concern over the varying performance of students and schools.

“When ‘like’ schools were compared, despite similar clientele, resources, curricula and administration, some schools were clearly more successful than others when it came to student performance on standardised measures. Whatever was responsible for this disparity, it wasn’t just the students, and it wasn’t just resources.” (Dinham, 2016)
“While attention was focused for a time at the school level – including the influence of leadership … as researchers began to ‘drill down’, it was becoming apparent that student achievement also varied considerably within seemingly successful schools, and in fact within all schools. It was found that the differences within schools were actually greater than the overall differences in student achievement between schools. (This phenomenon remains true in most schools to this day.) … By the late 1980s, the belief that schools, and by implication teachers, made no difference to student achievement had been powerfully refuted.” (Dinham, 2016)
Prof John Hattie (UoM): Meta-analysis of Studies

Major sources of variance in student achievement:

- **Student**: accounts for 50% of variance in student achievement
- **Home**: 5-10%
- **School**: 5-10% (principals, other leaders an influence)
- **Peer Effects**: 5-10%
- **Teachers**: 30%
‘... the most important factor affecting student learning is the teacher. ... The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor’.

As a result, there has been a major international emphasis on improving the quality of teachers and teaching since the 1980s.

We now know how teacher expertise develops and we know what good teaching looks like. However we also know that teacher quality varies within schools and across the nation.

A quality teacher in every classroom is the ultimate aim, but how to achieve this is the big question and challenge.
“Thus, the major challenge in improving teaching lies not so much in identifying and describing quality teaching, but in developing structures and approaches that ensure widespread use of successful teaching practices: to make best practice, common practice.” (Dinham, Ingvarson & Kleinhenz, 2008).
What is Teaching?

Thomas Edison

Thomas Edison invented the phonograph in 1877. He predicted recordings would make teachers redundant.
“Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.”

Bill Gates
Four Fundamentals of Student Success (Dinham, 2008; 2016)

- **Focus on the Student (Learner, Person)**
- **Leadership**
- **Quality Teaching**
- **Professional Learning**
What works in teaching?: Evidence, myths, ideologies, habits, fads and fashions.
“Science must begin with myths and with the criticism of myths”.

Sir Carl Popper (1957)
• SES and home environment do have moderate/large effect sizes (= 0.52)

• SES *is* about:
  – Foundations/advantage
  – Opportunity
  – Support
  – Role models and encouragement

• SES *is not* about:
  – Innate ability
  – Social-biological determinism
  – Potential
Reading Score vs SES (PISA Aus)
SES and School Performance [WA 2007]  
(numeracy, reading spelling, writing; grades 3,5,7)
• There is a strong positive relationship between academic outcomes and socioeconomic status scores (on average, a 10 point increase in socioeconomic status scores is associated with a 6 percentage point increase in the pass rate).

• However, there is also considerable dispersion around this line, with the linear relationship between socioeconomic status scores and test results explaining only 28 per cent of the variation in student test scores.

Poor student performance is spread across the SES spectrum

Schooling represents an obstacle course. Some students have certain advantages and others have obstacles.

“Life isn’t fair, but good teaching and good schools are the best means we have of overcoming disadvantage and opening doors of opportunity for young people.”

(Dinham)
“This is a working class school in a working class area. Don’t expect too much and you won’t be disappointed”.

- Principal to new teacher (2013)
“… one of the most damaging things we can do to people is to put them into categories and treat them accordingly.”
(Dinham, 2008: 2)

(Not labelling students ES = .61)
School puts bright pupils in different coloured uniforms

A SECONDARY school is 'streaming' pupils based on ability in an attempt to attract those from well-off families.

From the age of 11 all pupils are segregated – taught in separate colour-coordinated buildings, play in fenced-off areas and eat lunch at separate times.

Pupils are ranked as they leave primary school and placed into one of three mini schools at Crown Woods College, Greenwich.

The gifted and talented go to Delamere and wear purple ties and purple badges. The rest go to Ashwood, which wears blue, or Sherwood, which wears red. These two schools are more mixed ability but are still streamed into three tiers.

Critics yesterday warned the move is demoralising for pupils and would merely increase competition and animosity between them rather than raise standards.

But headteacher Michael Murphy insists the measure is the only way to attract pupils of well-off parents.

Mr Murphy is one of the highest-paid headteachers in England, last year earning £171,483. When he took over Crown Woods it was in special measures and he claims was ‘losing out’ to grammar schools in nearby Bexley and the selective schools in Bromley. Now Mr Murphy claims the school is oversubscribed for the first time and bright pupils no longer have their lessons disrupted by badly behaved youths.

Mr Murphy said the school would not have survived without streaming. He said: ‘I felt if we made explicit the provision for high-ability children we would be able to attract those children and their parents who would rather not put them in to a grammar,’ he said. ‘Mrs Thatcher said you can’t ignore the market, you have to respond to it.’

Streaming existed on the school’s previous site but was less rigorous. And pupils did not wear different uniforms and were not taught in separate buildings. Kevin Courtney, deputy secretary of the National Union of Teachers has condemned the practice.

He said: ‘The idea of taking a large school and turning it into three mini schools is likely to be good for [the school’s] relationships, but streaming is a step backwards. It leads to competition for children rather than improvement in teaching.’

• **Harmful, invalid beliefs:**
  1. Students with high ability are more likely to display mastery-oriented qualities.
  2. Success and school directly fosters mastery-oriented qualities.
  3. Praise, particularly praising a student’s intelligence, encourages mastery-oriented qualities.
  4. Students’ confidence in their intelligence is the key to mastery-oriented qualities.
• The theory of fixed intelligence – some people believe that their intelligence is a fixed trait. We call this an ‘entity theory’ of intelligence.

• The theory of malleable intelligence – other people have a very different definition of intelligence. Their intelligence is not a fixed trait that they simply possess, but something they can cultivate through learning. We call this an ‘incremental theory’ of intelligence because intelligence is portrayed as something that can be increased through one’s efforts.
‘The one thing 14-year-old Moshe Kai Cavalin dislikes is being called a genius.

All he did, after all, was enrol in college at age eight and earn his first of two Associate of Arts degrees from East Los Angeles Community College at age nine, graduating with a perfect 4.0 grade point average.

Now, at 14, he’s poised to graduate from UCLA this year. He’s also just published an English edition of his first book, *We Can Do*.’

– Read more:
1. How do students understand new ideas?

- Students learn new ideas by reference to ideas they already know.

- To learn, students must transfer information from working memory (where it is consciously processed) to long-term memory (where it can be stored and later retrieved). Students have limited working memory capacities …

- Cognitive development does not progress through a fixed sequence of age-related stages. …
2. How do students learn and retain new information?
- Information is often withdrawn from memory just as it went in. We usually want students to remember what information means and why it is important, so they should think about meaning when they encounter to-be-remembered material.
- Practice is essential to learning new facts, but not all practice is equivalent.

3. How do students solve problems?
- Each subject area has some set of facts that, if committed to long-term memory, aids problem-solving by freeing working memory resources and illuminating contexts in which existing knowledge and skills can be applied.
- Effective feedback is often essential to acquiring new knowledge and skills.
4. How does learning transfer to new situations in or outside of the classroom?

- The transfer of knowledge or skills to a novel problem requires both knowledge of the problem’s context and a deep understanding of the problem’s underlying structure.
- We understand new ideas via examples, but it’s often hard to see the unifying underlying concepts in different examples.

5. What motivates students to learn?

- Beliefs [often wrong] about intelligence are important predictors of student behavior in school. Self-determined motivation (a consequence of values or pure interest) leads to better long-term outcomes than controlled motivation (a consequence of reward/punishment or perceptions of self-worth).
-The ability to monitor their own thinking can help students identify what they do and do not know, but people are often unable to accurately judge their own learning and understanding.

-Students will be more motivated and successful in academic environments when they believe that they belong and are accepted in those environments.
6. What are Common Misconceptions about how Students Think and Learn?

Cognitive Principles:

* Students do **not** have different ‘learning styles.’
* Humans do **not** use only 10% of their brains.
* People are **not** preferentially ‘right-brained’ or ‘left-brained’ in the use of their brains.
* Novices and experts **cannot** think in all the same ways.
* Cognitive development does **not** progress via a fixed progression of age-related stages.

See

http://www.deansforimpact.org/the_science_of_learning.html
http://www.deansforimpact.org/the_science_of_learning_video.html
What about self-esteem?

• Self-esteem or self-concept has been found to predict student achievement (moderate-large effect size). However self-esteem boosting through easy success and empty praise, coupled with failure avoidance, is counter-productive.

• Self-esteem is not something we give people but something that results from genuine success and progress. This then sets up a cycle of effort, success, growth in self-esteem ...

What about ‘learning styles’?

- Since the 1970s
- More than 70 models in varied settings (EC to higher ed)
- A highly lucrative industry (instruments, manuals, videotapes, in-service packages, web sites, publications and workshops)
- Psychologists and neuroscientists believe there is little efficacy for these models which rest on dubious grounds
- Confusion with teaching strategies (as with ‘constructivism’ – see over); conflation with multiple intelligences, Myers-Briggs, etc.
- Numerous publications; few subject to peer review.
- (Hattie, 2009: 197). 'It is hard not to sceptical about these learning preference claims'
Problems with Learning Styles

- No clear concept of LS.
- No valid and reliable way to assess students.
- No clear evidence to support the effectiveness of matching teachers’ TS to students’ LS:
  - “The reason researchers roll their eyes at learning styles is the utter failure to find that assessing children’s learning styles and matching to instructional methods has any effect on their learning.” (Stahl, 1999: 1)

- **Problems** caused by categorisation, labelling, limiting learning experiences; potential harm

- See:
  - Dinham, S. (2016). ‘Students are not hard-wired to learn in different ways – we need to stop using unproven, harmful methods’, *The Conversation*, September.:
  - http://www.youtube.com/watch?v=slv9rz2NTUk&feature=player_embedded#at=32
“I learned that an entire state in Australia had adapted an education programme based in part on MI theory. The more I learned about this programme, the less comfortable I was. … much of it was a mishmash of practices, with neither scientific foundation nor clinical warrant. Left-brain and right-brain contrasts, sensory learning styles, ‘neuro-linguistic programming’, and MI approaches commingled with dazzling promiscuity.”


– See

http://www.youtube.com/watch?v=vdJ7JW0LgVs&feature=related
“Millions of people worldwide take personality tests each year to direct their education, to decide on a career, to determine if they'll be hired, to join the armed forces, and to settle legal disputes. ... the sheer number of tests administered obscures a simple fact: they don't work. Most personality tests are seriously flawed, and sometimes unequivocally wrong. They fail the field's own standards of validity and reliability.”

“As constructivism has become the dominant view of how students learn, it may seem obvious to equate active learning with active methods of instruction. Thus, educators who wish to use constructivist methods of instruction are often encouraged to focus on discovery learning – in which students are free to work in a learning environment with little or no guidance. Under the banner of social constructivism, the call for discovery learning remains, but with a modest shift in form – students are expected to work in groups in a learning environment with little or no guidance. … The research in this brief review shows that the formula constructivism = hands-on activity is a formula for educational disaster.”

1. Carefully explain to students an assignment or learning activity, including key terms and directions.

2. Provide students with the assessment rubric, including criteria and the marking/assessment scale/method for each item/criterion.
   - **Optional:** Jointly discuss and determine criteria to be used.

3. Students complete the activity (individually or in groups), using rubric as a guide.
4. Students assess their work using the rubric.
   ➢ **Optional:** Students assess another student’s work, discuss with student concerned.

5. Teacher assesses each student’s work, providing feedback using rubric.

6. Student and teacher discuss/compare their assessments.
   ➢ One-to-one conferences are powerful
‘In a nutshell: The teacher decides the learning intentions and success criteria, makes them transparent to the students, demonstrates by modelling, evaluates if they understand what they had been told by checking for understanding, and re-telling them what they had been told by tying it all together with closure.’ (Hattie, 2009: 205-206).

- It is a major mistake to confuse direct instruction/explicit teaching with didactic teaching.
Spaced versus mass practice (ES=0.71)

“If you can’t go slow, you can’t go fast.’... Research shows the value of deliberate practice across fields such as music to athletics: ' ... whether the subject is baseball or biology, piano or palaeontology, medicine or math, children and adults need deliberate practice in order to achieve their objectives ...
The components of deliberate practice include performance that is based on a particular element of the task, expert coaching, feedback, careful and accurate self-assessment, and – this is the key – the opportunity to apply feedback immediately for improved performance.”

– Reeves, D. (2010). *Transforming Professional Development Into Student Results*. ASCD.
“Look at learning or mastery in fields as diverse as sports, the arts, languages, the sciences or recreational activities and it’s easy to see how important feedback is to learning and accomplishment. An expert teacher, mentor or coach can readily explain, demonstrate and detect flaws in performance. He or she can also identify talent and potential, and build on these.

In contrast, trial and error learning or poor teaching are less effective and take longer. If performance flaws are not detected and corrected, these can become ingrained and will be much harder to eradicate later. Learners who don’t receive instruction, encouragement and correction can become disillusioned and quit due to lack of progress.”

(Dinham, ‘Feedback on Feedback’, 2008)
The Need for Feedback

(Feedback ES = .75)

The four questions of Students:

1. What can I do?
2. What can’t I do?
3. How does my work compare with that of others?
4. How can I do better?
“I really hate it when you wait for weeks to get back some piece of work and then it says ‘Well done. B’, and there are a few scribbles here and there. You don’t know what you’re supposed to do to get any better.”

(Student, 14, Improving Student Achievement, p. 53)
80% of feedback students receive about their work in primary school comes from other students.

80% of this student-student feedback is incorrect.
I suggest that you begin a professional conversation about feedback by asking eight questions:

1. What are our present approaches – formal and informal – to student feedback? Conduct an audit.

2. Are our assessment methods and criteria clear, valid and reliable? Identify the links between assessment and feedback.

3. Do our students understand what is meant by feedback?

4. Is the feedback our students receive infrequent, unfocused, unhelpful, inconsistent or negative? OR

Some Questions to Ask
5. Is the feedback we provide focused, comprehensive, consistent and improvement oriented, addressing the four key questions raised above? (especially *How can I do better?*)

6. How does the feedback our students receive relate to parental feedback through reports, interviews and parent nights? Is feedback to students and parents consistent?

7. How can we provide our students with improved feedback?

8. How will we know if it works? What evidence will we need?
   - The answers to these questions will provide an important foundation for improving the quality of teaching and student achievement in our schools.
   - *However, feedback is only one part of the equation. It is not a substitute or remedy for poor teaching.*
The teacher and the quality of his or her teaching are major influences on student achievement, along with the individual student and his or her prior achievement (all have large effect sizes).

School-based influences (beyond the classroom) have weaker effects on student achievement.

Structural and organisational arrangements (open vs traditional classrooms; multi-age vs age graded classes; ability grouping; gender; class size; mainstreaming) have negligible or small effects on student learning. It is the quality of teaching that occurs within these structural arrangements which is most important.
Examples of ‘active teaching’ (reciprocal teaching; feedback; teaching self-verbalisation; meta-cognition strategies; direct instruction; mastery learning; testing) have large to moderate effects on student achievement.

Effect sizes are negligible or small for ‘facilitory teaching’ (simulations and games; inquiry-based teaching; individualised instruction; problem-based learning; differentiated teaching for boys and girls; web-based learning; whole language reading; inductive teaching).

Strategies to promote and remediate literacy figure prominently. Literacy is the foundation of student achievement.
Implications

• No instant recipe for teaching success, yet much can be learned from successful teachers and faculties – a framework for reflection and action

• “Overall, the quality of the teacher and the quality of teaching (large effect sizes) are much more important than structural or working conditions (negligible or small effect sizes), demonstrating the futility and waste of ‘fiddling around the edges’ of schooling without sufficiently addressing the quality of teachers and the quality of teaching within schools and classrooms.” (Dinham, 2008)

• “Quality teaching matters and it’s time we started acting like it.” (Dinham, Ingvarson & Kleinhenz, 2008)
“The biggest equity issue in Australian education today isn’t computers, new buildings or equipment. It’s each student having quality teachers and quality teaching in schools supported by effective leadership and professional learning in mutually respectful local community contexts.”

1. Can we say that every student in our school is known as a *learner* and a *person*?
2. What are our *processes* to ensure this occurs and our *evidence*?
3. How do we *act* on this evidence?
4. Any *implications* from the above?
Leading Learning and Teaching

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Professor Stephen Dinham OAM
Associate Dean (Strategic Partnerships)
Professor of Instructional Leadership
“I came to the realisation that there was a major disconnect between leadership and teaching, and between teaching and learning. I realised I needed to know more about learning, how teaching facilitates this, and how teaching can be supported by leaders, whose main function shouldn’t be management.” (Dinham, 2016)
Four Fundamentals of Student Success (Dinham, 2008; 2016)

1. LEADERSHIP
2. QUALITY TEACHING
3. FOCUS ON THE STUDENT (Learner, Person)
4. PROFESSIONAL LEARNING
“...the focus of every school, every educational system and every education department or faculty of education – [should be] student learning and achievement.” Dinham, 2008: 1).
The Declaration articulates two important goals for education in Australia:

- **Goal 1**: Australian schooling promotes equity and excellence
- **Goal 2**: All young Australians become:
  - successful learners
  - confident and creative individuals
  - active and informed citizens.
Australia’s International Test Results

- **TIMSS** (*Trends in International Mathematics and Science Study*) [2015]
  - Year 4 Maths: 28th out of 49 countries
  - Year 4 Science: 25th out of 47 countries
  - Year 8 Maths & Science: 17th out of 39 countries

- **PIRLS** (*Progress in International Reading Literacy Study*) [2011]
  - Year 4 Reading: 27th out of 48 countries
## PISA Scientific Literacy (2015)

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Not significantly different from Australia:

- Sweden
- Denmark
- France
- Belgium
- Portugal
- United Kingdom
- Chinese Taipei
- United States
- Spain
- Russian Federation
- B-S-J-G (China)

OECD average: 493, 492–493, 315, 20, 72, 8
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<th>SE</th>
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Reading Literacy

1. Aust *mean* 528 [2000] *fell* to 503 [2015]
2. Germ *mean* 484 [2000] *rose* to 509 [2015]
3. USA *mean* 504 [2000] *fell* to 497 [2015]
4. OECD *mean* 496 [2000] *fell* to 493 [2015]
Math Literacy

1. Aust *mean* 524 [2003] *fell* to 494 [2015]
2. Germ *mean* 503 [2003] *rose* to 506 [2015]
3. USA *mean* 483 [2003] *fell* to 470 [2015]
4. OECD *mean* 500 [2003] *fell* to 490 [2015]
Science Literacy

1. Aust *mean* 527 [2006] **fell** to 510 [2015]
2. Germ *mean* 516 [2006] **fell** to 509 [2015]
3. USA *mean* 489 [2006] **rose** to 496 [2015]
4. OECD *mean* 498 [2006] **fell** to 493 [2015]
How Do We Compare on International Measures?

• It can be seen above that on every aspect of TIMSS, PIRLS and PISA (with the exception of PISA Reading Literacy where Australia narrowly leads Germany and with the difference in performance not significant), German students outperform their Australian counterparts.

• Germany is now in the position where its PISA results have shown marked, steady improvement since 2000. That is not the case for Australia however, where PISA results have been in decline and measures such as PIRLS and TIMSS have recorded primary school results that are inferior in comparative terms to Australia’s secondary TIMSS and PISA results (Dinham, 2014).
Only Finland was significantly ahead of Australia in 2000. All but New Zealand significantly ahead of Australia in 2012.

There were 9 significantly ahead of Australia in 2012 – the 4 above, 2 that were significantly behind in 2000 and 3 that did not participate in 2000.
The teacher is the major in-school influence on student achievement. While research has given a clear picture of what good teaching looks like, teacher quality varies widely, and more so within than between schools.

Wright, Horn and Sanders have noted (1997):

‘... the most important factor affecting student learning is the teacher. ... more can be done to improve education by improving the effectiveness of teachers than by any other single factor.’

Ensuring a quality teacher in every classroom is vital in terms of equity and improving the life chances of every student.
“Learning and leadership are indispensible to each other.”

John F. Kennedy
How have our views on leadership changed through history?

- ‘Great Man’/trait theory
- Administration/Management
- Bureaucracy
- Leadership styles/typologies
- Contingency theories
- Instructional Leadership [phase 1]
- Transformational Leadership
- Distributive/distributed leadership
- Leading Learning Communities
- Instructional leadership [phase 2]
‘… leadership is the ‘big enabler’ in successful schools. You can have good teaching without having a good school, but you can’t have a good school without good leadership … professional learning is the lever that helps leaders create the conditions in which teachers can teach effectively and students can learn.”’ (Dinham, 2010)
In improving the quality of teaching and student learning, pre-service education is critical but is not sufficient.

On-going professional learning and informed, committed leadership are required to improve teaching practice within schools and to lift student achievement.
• There is growing recognition that teachers need to be able to ‘diagnose’ individual student learning and provide appropriate ‘prescriptions’ for improvement i.e., to be clinical, evidence-based, interventionist practitioners in the manner of health professionals.

• Teachers have been told for decades that they need to cater for individual student differences and to ‘personalise’ learning, yet generally, have not been shown or taught how to do this.
Darling-Hammond and Baratz-Snowden (2005) have noted that successful clinical teacher education programs exhibit:

- Clarity of goals, including the use of standards guiding the performances and practices to be developed.
- Modelling of good practices by more expert teachers in which teachers make their thinking visible.
- Frequent opportunities for practice with continuous formative feedback and coaching.
- Multiple opportunities to relate classroom work to university coursework.
- Graduated responsibility for all aspects of classroom teaching.
- Structured opportunities to reflect on practice with an eye toward improving it.
Clinical Judgement for Teaching: The Melbourne approach

- What is the learner ready to learn and what evidence supports this?
- What are the possible evidence/research-based interventions?
- What teaching strategies are preferred and how will they be implemented?
- What is the expected impact on learning and how will this be evaluated?
- What happened and how can this be interpreted?
Three Types of Knowledge are essential:

- Knowledge of particular subject content
- Knowledge of pedagogy
- Knowledge of the individual student

When combined, this produces Pedagogic Content Knowledge (Shulman, 1987).
• Marzano, Waters and McNulty found (2005):

> A highly effective school leader can have a dramatic influence on the overall academic achievement of students. ... a meta-analysis of 35 years of research indicates that school leadership has a substantial effect on student achievement and provides guidance for experienced and aspiring principals alike.

• Yet Hallinger (2005) observed that despite interest in instructional leadership - leadership of and for teaching and learning - arising from research into effective schools going back as far as the late 1970s (2005):

> During the mid-1990s, however, attention shifted somewhat away from effective schools and instructional leadership. Interest in these topics was displaced by concepts such as school restructuring and transformational leadership.
• However findings from international research have caused a re-examination of the worth of instructional leadership. Robinson, Lloyd and Rowe concluded from their work on the impact of various leadership approaches (2008):

*The comparison between instructional and transformational leadership showed that the impact [on student outcomes] of the former is three to four times that of the latter. The reason is that transformational leadership is more focused on the relationship between leaders and followers than on the educational work of school leadership, and the quality of these relationships is not predictive of the quality of student outcomes. Educational leadership involves not only building collegial teams, a loyal and cohesive staff, and sharing an inspirational vision. It also involves focusing such relationships on some very specific pedagogical work, and the leadership practices involved are better captured by measures of instructional leadership than of transformational leadership.*
• While original conceptions of instructional leadership focussed predominantly on the principal, the notion of distributed leadership – the leadership practices and effects of others in formal leadership positions in schools.

• Attention is increasingly turning to the impact of teaching and leadership on student outcomes along with teacher leadership – has become prominent.

• Hattie found (2009):

‘School leaders who focus on students’ achievement and instructional strategies are the most effective … It is leaders who place more attention on teaching and focused achievement domains … who have the higher effects.’
• Robinson, Lloyd and Rowe (2008) offered a similar view:
  ‘The more leaders focus their influence, their learning, and their relationships with teachers on the core business of teaching and learning, the greater their influence on student outcomes.’

• Barber et al. (2010) found:
  ‘High-performing [‘top’ 15%] principals focus more on instructional leadership and developing teachers. They see their biggest challenges as improving teaching and curriculum, and they believe that their ability to coach others and support their development is the most important skill of a good school leader.’
However penetrating the often closed classroom door remains a challenge for principals and other leaders. Wahlstrom and Louis have commented (2008):

‘In the current era of accountability, a principal’s responsibility for the quality of teachers’ work is simply a fact of life. How to achieve influence over work settings (classrooms) in which they rarely participate is a key dilemma.’
A Case Study of Instructional Leadership

The AESOP Project

• Principals and other leaders facilitate quality teaching, student achievement and school renewal and improvement through:
1. External Awareness and Engagement

- Openness to Change and Opportunity
- Develop Productive External Links
2. A Bias Towards Innovation and Action

- Using Discretion, Bending Rules, Procedures
- Bias to Experimentation, Risk Taking
3. Personal Qualities and Relationships

- Leaders have positive attitudes which are contagious
- Intellectual Capacity
- Moral Leadership
- Assist, Feedback, Listen to Staff
3. Personal Qualities and Relationships

- Treat staff, others professionally
- Expect high standard of professionalism in return
- Model professionalism
- Others don’t want to “let down”
- Provide professional, pleasant facilities
Other Personal Qualities

- High level interpersonal skills
- Generally liked, respected, trusted
- Knows, use names, shows personal interest
- Demonstrates empathy, compassion
- Available at short notice when needed
- Epitomises the “servant leader”, yet unmistakably in control
- Work for school, students, staff, education, rather than for themselves.
4. Vision, Expectations, Culture of Success

- “Expect a lot, give a lot”
- Clear, agreed, high standards
- The standard things done well
- Recognition of student, staff achievement
- Creates a culture, expectation of success
5. Teacher Learning, Responsibility and Trust

- Investment in Teacher Learning
- All Teachers can be Leaders
- Responsibility recognition, empowerment, staff development
- Trust an aspect of mutual respect
6. Student Support, Common Purpose, Collaboration

- Centrality of Student Welfare
- Support by leaders essential
- Leaders Find Common Purpose
- Pockets of like-minded staff, collaboration
Focus on students as people (personal, academic, social)
Teaching and learning prime focus of school
Creates an environment where teaching and learning can occur.
7. Focus on Students, Learning and Teaching

- Leadership Takes Time
- Leaders Build on What is There
- Consistency, Yet Flexibility in Policy
- Stand for Something!
Two aspects to leadership:
- Highly **responsive** to people and events
- Highly **demanding** of self and others

Principals and other leaders help create conditions, climate, where success can occur.

Characteristics both **product** (output) and **process** (input) variables leading to upwards cycle of success.
RESPONSIVENESS

AUTHORITARIAN LEADERSHIP

AUTHORITATIVE LEADERSHIP

UNINVOLVED LEADERSHIP

PERMISSIVE LEADERSHIP

DEMANDINGNESS

LOW

HIGH

THE EVOLUTION STARTS HERE
1. Establishing goals and expectations
   - Effect Size: 0.42

2. Resourcing strategically
   - Effect Size: 0.31

3. Planning, coordinating and evaluating teaching and the curriculum
   - Effect Size: 0.42

4. Promoting and participating in teacher learning and development
   - Effect Size: 0.84

5. Ensuring an orderly environment
   - Effect Size: 0.27
Core Beliefs of Instructional Leadership

1. Instructional leadership is learning-focused, learning for both students and adults, and learning which is measured by improvement in instruction and in the quality of student learning.

2. Instructional leadership must reside with a team of leaders of which the principal serves as the "leader of leaders."

3. A culture of public practice and reflective practice is essential for effective instructional leadership and the improvement of instructional practice.
4. Instructional leadership addresses the cultural, linguistic, socioeconomic and learning diversity in the school community.

5. Instructional leadership focuses upon the effective management of resources and of people — recruiting, hiring, developing, evaluating — particularly in changing environments

– [http://info.k-12leadership.org/4-dimensions-of-instructional-leadership](http://info.k-12leadership.org/4-dimensions-of-instructional-leadership)
• There is a challenge for educational leaders to deal with situations where learning has atrophied.
  
  – McBeath has noted (2006: 19):
    
    “It is hard for teachers to shed an outer skin which has calcified over many years in the classroom where dialogue is a rare commodity no matter how hard teachers strive for it, and in which ‘instruction’ is the norm”.
  
• Building a learning community is not about ‘fixing’ teachers.
• Quality teaching lies at the heart of attempts to raise student outcomes and to close achievement gaps associated with factors such as socio-economic status, family background, geographic isolation, non-English speaking background and Aboriginality.

• Research findings are increasingly compelling on the relationship between instructional leadership, effective teaching and student outcomes yet much work remains to be done.

• As teaching becomes more evidence-based, clinical and interventionist in nature, it is imperative that school leaders are equipped to guide, support and lead teachers in this process. This central role is recognised in the Australian Professional Standard for Principals in Australia.
• Twenty First Century educational leaders need to be able to ‘talk the talk’ and more importantly, ‘walk the walk’ on approaches that place the individual student and his or her advancement at the centre of the school.

• In order to make best teaching practice common practice (Dinham, Ingvarson & Kleinhenz, 2008), preparation for and the enactment of instructional leadership must be congruent with teachers’ initial and ongoing professional learning to ensure evidence-based, clinical professional practice occurs in every classroom and for every student.
Professional Certificate in Instructional Leadership [two subjects – Hattie & Dinham]

Master of Instructional Leadership [eight subjects]

• http://education.unimelb.edu.au/study_with_us/professional_development/course_list/instructional_leadership
“The biggest equity issue in Australian education today isn’t computers, new buildings or equipment. It’s each student having quality teachers and quality teaching in schools supported by effective leadership and professional learning in mutually respectful local community contexts”.

- Thank You -