

RESEARCH AREA & SOURCE	DESCRIPTION & MAIN FINDINGS / ARGUMENTS
<p>Leadership</p> <p><i>School Leadership and Management</i> 26 371-395</p>	<p>Gurr, D. Drysdale, L. & Mulford, B. (2006) Models of successful principal leadership.</p> <p>A summary of two related series of case studies in two Australian states carried out in 14 schools. The case studies were conducted only in schools that had achieved outstanding results on state-wide tests and also positive school reviews. The data was collected using documents illustrating school achievements and interviews with people at all levels of the schools.</p> <p>Main Findings:</p> <p>The Tasmanian case studies identified the following themes: 1. context 2. principal values and beliefs 3. providing individual support and building individual capacity 4. building school capacity 5. towards a shared school vision 5. school outcomes 7. evidence-based monitoring</p> <p>The Victorian case studies identified the following themes: 1. principal's contribution to success 2. values and beliefs 3. personal characteristics 4. styles of leadership 5. understanding the context 6. leadership interventions in various areas.</p> <p>The authors combine the findings with previous research findings to create a model of school leadership focused on student outcomes.</p>
<p>Leadership</p> <p><i>Educational Administration Quarterly</i> 42, 620-651</p>	<p>Ylimaki, R. (2006) Toward a new conceptualization of vision in the work or educational leaders: cases of the visionary archetype.</p> <p>Drawing on a series of cases studies on curriculum directors, where data was collected mostly using narrative inquiry interviews, Ylimaki suggests a new conceptualization of 'vision' in the context of educational leadership. The traditional definitions as either a leader's image of the future or specific change goals do not adequately capture the contextual complexity of true vision and can also be inherently undemocratic. Ylimaki tells the story of three of the case study participants using three metaphors - stepping stones over a river, a view from a bridge and a view from the heart. She relates elements from each narrative back to three qualities of the visionary archetype - 1. tells the truth without blame of judgment 2. knows and communicates own creative purposes 3. honors the four ways of seeing - intuition, perception, insight and holistic seeing (vision). The three cases are compared with a fourth curriculum director who demonstrates a more typical kind of vision. The definition arrived at is that vision is " a dynamic interaction among inner human resources (eg. Insight, intuition and perception), an outward perspective and the context of a particular vision.</p>
<p>Curriculum Implementation</p> <p>+</p> <p>Assessment</p>	<p>Jones, A. & Moreland, J (2005) The importance of pedagogical content knowledge in assessment for learning practices: a case-study of a whole school approach.</p> <p>A case study of the implementation of a new technology curriculum in a New Zealand Primary School. The researchers found that teachers did not have sufficient pedagogical content knowledge to implement the new curriculum and as a result of this were providing technology 'activities' with no conceptual substance and were unable to give feedback to students beyond praise-based feedback.</p>

<p>The Curriculum Journal 16, 193-206</p>	<p>Interventions included reflection on case studies of classroom practice, using a specific planning framework, workshops, classroom support, teacher agreement meetings, using student portfolios.</p> <p>Main Findings:</p> <ul style="list-style-type: none"> ● There was significant change in teacher practice over the three years of the study including a shift from an ‘activity’ focus to providing for specific learning outcomes. This enabled teachers to give more specific feedback which in turn enabled students to identify their own knowledge gaps. ● As teachers understood the subject and the intended outcomes better they were able to provide more relevant and specific feedback to students. ● The use of specific planning frameworks forced teachers to articulate intended learning outcomes, and over time this helped them develop a framework for decision making. ● Communicating clear purposes to students communicated to students what was important in the subject and helped them know whether they were meeting intended outcomes. ● Teachers were keen to become involved as they saw other teachers achieving results and being recognized for it. ● The ongoing reflection / action research was crucial to the success. ● The long time frame of three years allowed for the development of relationships and for the ongoing reflection necessary to bring about change.
<p>Assessment</p> <p><i>Educational Psychologist</i> 31, 133-140</p>	<p>Baxter, G., Elder, A. & Glaser, R. (1996) Knowledge-Based Cognition and Performance Assessment in the Science Classroom.</p> <p>This piece of research was undertaken in a science classroom using a particular performance task. It describes how students’ performance on that task can be used to determine to what extent they have developed the underlying cognitive structures necessary to perform the task. Four criteria were used: quality of explanation, adequacy of problem-representation, appropriateness of solution strategies and frequency and flexibility of self-monitoring. Though all children had some relevant knowledge, most were unable to use it flexibly in a reasoning situation. The performance task and the way it was assessed helped highlight possible instructional interventions that would help students build the cognitive structures necessary to transfer the knowledge that they all had to some extent.</p>
<p>Teaching Strategies Language</p> <p><i>Journal of Educational Psychology</i> 98,</p>	<p>Biemiller, A & Boote, C (2006) An Effective Method for Building Meaning Vocabulary in Primary Grades.</p> <p>- This article covers two studies of vocabulary acquisition with students from Kindergarten to grade 2. 50% of the population of students in the classes studied were learners from non-English speaking backgrounds. The method involved the teacher reading stories to children. Conditions where words were explained were compared with a no explanation condition. Only brief word explanations were given. Conditions with two and four readings were compared where different vocabulary items were explained at each reading. In the second study a review of the words explained was added at the end of each day as well as a final review day where words were reviewed using different context from those in the story. Study 2 also contained a no intervention group. The format was pre-test /</p>

<p>44-62</p>	<p>post-test.</p> <p>Main Findings:</p> <p>Pre-study</p> <ul style="list-style-type: none"> ● Students in were distracted and annoyed if word explanation interrupted the initial reading of a book but not on subsequent readings so explanations were only included in subsequent readings in the studies. <p>Study 1</p> <ul style="list-style-type: none"> ● Overall students acquired 12% of unexplained vocabulary items and 22% of explained items meaning that adding explanations resulted in a gain of 10% ● There was no significant difference between reading a book two times or reading it four times in grade one and two, but for Kindergartners the extra readings resulted in a 6% increase in vocabulary learned. <p>Study 2</p> <ul style="list-style-type: none"> ● With reviews added vocabulary acquisition increased to 41%. ● There was little difference in accuracy between testing words using old or new context sentences. ● Scores on a delayed post-test were higher than on the immediate post-test, indicating that perhaps the story readings had sensitized students to the vocabulary so that they could continue learning for 4 weeks after the study. ● The no intervention group gained only 6% of word meanings. <p>The authors quote statistics which suggest that by the end of Grade 2 average children have acquired 600 root word meanings, but the gap between the highest (8,000) and lowest (4,000) groups at this point is significant and most primary school classrooms do not systematically teach enough vocabulary to lower this gap, leading to a potential 'slump' in reading comprehension around Grade 4. At the end of the article the authors do their sums to determine whether this method would lead to a significant enough increase in vocabulary to make it worth implementing and conclude that from K-2 an additional 1,000 -1,500 word meaning could be added making the strategy worthwhile, since it would account for a meaningful proportion of the 2,000 root word difference between the lowest quartile and the average student at the end or Grade 2.</p>
<p>Teaching Strategies – General</p> <p><i>Learning and Instruction 15, 539 - 556</i></p>	<p>Seidel, T., Rimmele, R. & Prenzel, M. (2005) Clarity and coherence of lesson goals as a scaffold for student learning.</p> <p>These researchers looked for correlations between clarity and coherence of lesson goals and (1) students' perception of the supportiveness of the learning conditions (2) students' learning motivation (3) types of cognitive learning activities (4) the development of student competence in physics over a one year period and (5) the development of students' interest in physics.</p> <p>Clarity and coherence or lesson goals was measured by analyzing videos of lessons and rating the criteria on a Likert scale using specific indicators for both criteria. Student competence was measured using a pre-test / post-test format and the other variables were</p>

	<p>assessed using self-reporting measures by students.</p> <p>Main Findings:</p> <ul style="list-style-type: none"> ● A strong correlation was found between clarity and coherence of lesson goals and all of the other variables except for student interest in physics. ● In terms of types of cognitive learning activities, the correlation between clarity and coherence and ‘organizing activities’ (information reduction by integrating ideas and selection of main ideas) was high, but no significant correlation was found with what the authors call basic elaborations (activities to process and understand information) and deep elaborations (activities to further embed information into existing knowledge structures).
<p>Curriculum Evaluation</p> <p><i>Journal of Curriculum Studies 37, 525 - 559</i></p>	<p>Schmidt, W., Chi Wang, H. McKnight, C. (2005) Curriculum coherence: an examination of US mathematics and science content standards from an international perspective.</p> <p>This study looked at sets of content standards in US states and compared them with countries that were in the A+ group in the TIMMS study in an attempt to explain the relatively poor performance of US students on the tests. In particular they were looking for what they called ‘coherence’, which they define as a curriculum which evolves from particulars (eg. Simple mathematics facts and routine computational procedures) to deeper structures. In order to analyze curriculum coherence, they listed the topics taught in common in maths and science by A+ countries and those recommended by US states.</p> <p>Main Findings:</p> <ul style="list-style-type: none"> ● When mapped out across Grades 1 – 8, the maths topics for A+ countries showed a three tier structure with more complex topics being introduced later and simpler topics being completed earlier. ● When mapped out in the same way the recommendations of US states showed no discernable structure. Often complex topics were introduced as early as grade 1, which the authors contend implies an arbitrary, laundry-list approach to curriculum standards. ● In science the A+ countries showed a similar 3 tier structure except that some foundational topics were continued right through the 8 Grades. ● The US science topics showed a similar pattern to the US math topics. ● In Science, US states recommended inclusion of 30 out of 41 topics at Grade 3 level compared with only 12 topics in the A+ countries. ● The shift in topics in A+ countries from elementary maths and science topics to more formal aspects came in the middle grades, precisely the grade levels where the US fell behind the other countries in achievement. ● Often the US standards were clustered into bands, which could potentially confound the comparison (eg. G 1 – 3). The TIMMS data on teacher coverage suggests, however that when written in this way, teachers at each Grade level tend to interpret the

	<p>standards as needing to be taught at their Grade.</p> <ul style="list-style-type: none"> ● The authors recommend that for standards to be coherent, they must specify topics, including the depth at which the topic is to be studied as well as the sequencing of the topics, both within each grade and across the grades. They believe that if this is not done, the result will be rote-memorization of particulars without deeper understanding.
<p>Brain Research</p> <p><i>Engaging Minds. (Chapter 1 p. 1-47 Mahwah, NJ: Lawrence Erlbaum Associates</i></p>	<p>Davis, B, Sumara, D. & Luce-Kapler, R. (2000) Knowing Looks</p> <p>This chapter has to do with consciousness, our ability to perceive and the implications of what we know about perception for the classroom. Interesting definitions used by the authors:</p> <ol style="list-style-type: none"> 1. learning - has to do with prompting learners to notice certain aspects of their worlds and to interpret those elements in particular ways. 2. information - consists of variations, irregularities, and so on that are significant enough to impinge on the senses. <p>Main Arguments / Facts:</p> <ul style="list-style-type: none"> ● Our sense organs combined can register in the range of 11 million bits of information each second, but only a small portion of these sensory possibilities ever reaches consciousness. A typical person can be consciously aware of only 10 to 40 bits of information per second. ● Those sensations that do not impinge on consciousness still affect our learning. ● Much of what we have learned unconsciously can fall apart when conscious attention is drawn to it. ● For sensation to makes sense in the context of a human culture, the sensing person must interpret, and that interpretation will affect what is allowed to impinge on consciousness in future experiences (examples are give of research with people who lost their sight as children and regained it as adults - they literally cannot 'see' - meaning they cannot pull coherent images out of the visual 'noise'.) ● Well before we become aware of a perception or a thought, complex non-conscious processes have sorted through and discarded information so that what enters consciousness has already been rendered meaningful. ● Initial research into Artificial Intelligence suggested that computers would one day be able to outperform humans on school-related tasks. This has not happened, because AI researchers made the mistake of regarding conscious knowledge (rules) as more important than the complex web of experiences and interpretations that support conscious thought. AI researchers have now moved away from teaching computers rules toward the provision of examples and experiences. <p>Implications:</p> <ul style="list-style-type: none"> ● Teaching and learning should embrace the breadth of human sensation. Teachers should provide rich, open sorts of activities and work to direct their students' attention toward particular aspects of those activities. ● Strategies for focusing attention include: repetition, well-timed questions, highlights, practice, not-taking, discussion,

	<p>resymbolization or rephrasing of ideas.</p> <ul style="list-style-type: none"> ● Activities to be avoided include: elaborate explanations, extended instructions, decontextualised formulations. ● Teaching is about maintaining a balance of richness of detail and narrowness of focus. ● Mindful practice relies on well developed abilities to let other worries slide into the background - so skills necessary for performance need to become automatic or else they will take up too much of working memory when performing a complex task. ● Learners can often make no sense of abstractions without the bodily sensations that are the root of our experience in the world. ● Teaching is less about teaching student what they don't know and more about helping them notice what they haven't noticed. ● Teachers must understand what kind of discernments in perception are important to a given concept and what sorts of artifacts and events might be useful in highlighting those distinctions.
<p>Brain Research <i>The Australian Educational Researcher</i>, 31, 87 – 104)</p>	<p><i>MacNaughton, G. (2004). The Politics of Logic in Early Childhood Research: A Case of the Brain, Hard Facts, Trees and Rhizomes.</i></p> <p><i>This article takes claims that have been made as a result of brain research about the importance of Early Childhood Education as a foundation for later learning and argues that though it is politically tempting as an EC educator to swallow these whole, one should be very wary of any claim that Brain Research can be generalized due to the complexity of human beings and human society and culture.</i></p>
<p>Teaching Methods - Language <i>Curriculum Perspectives</i> 26, 34 - 43</p>	<p><i>Berry, R. (2006) Activating learners using the learner autonomy approach: An action research on the relevance of teaching to classroom practice.</i></p> <p><i>A Hong Kong case study comparing curricula written and implemented by student teachers. They are compared in terms of the success of implementation of 'The Learner Autonomy approach'. Two useful taxonomies are given:</i></p> <ol style="list-style-type: none"> <i>1. Student readiness for autonomous learning depends on both psychological readiness and capability readiness.</i> <i>2. Teachers who want students to be autonomous need to play the following roles: informants, providers and facilitators.</i>