Pedagogy:
Beyond E-Learning
The six R's of Teaching for Effective Learning

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Introduction

Teachers are now being told that E-Learning is way of the future. Adaptable teachers will be excited by new and creative ways to use technology effectively, and by the promise of unlimited possibilities. This does need to be balanced by the premise that the role of schools is to effectively integrate students into the dynamic social systems we call communities as positively productive and contributing citizens. As such, while technology is a wonderful tool for:

- Connectivity
- Access
- Information
- Entrepreneurship

we need to guard against its capacity to speed up, isolate, de-humanise, potentially skew intellectual and social development, and (albeit unintentionally) sacrifice children's need for time for:

- Reflection
- Interpretation
- Assimilation
- Conversation

Our influence on students is immense. Teaching is an awesome responsibility that directly affects students in myriad ways. Student learning is the key focus of teaching. Effective teaching stands at the centre of student learning.

Nearly everyone believes he or she could be a good teacher. After all, most people spent 12 years of their life in school. This naieve view of teaching and learning reflects a common misperception of what effective teaching requires. It's one thing to spend 12 years in school. An entirely different matter to take responsibility for helping 150 or so students per day learn a complex subject like English or mathematics. To teach 25 primary students the foundations that will encourage a love of learning and create lifelong learners is not easy. (adapted from Theodore Sizer 'Horace's Compromise') To create entire new learning environments that may involve the extended community and new technologies are challenging. All of this without the overlays of curriculum, assessment and reporting.

People rarely underestimate the difficulties of learning. Having had to learn, we know it's a complicated and unpredictable business. Many of us, educators and lay people alike, however, tend to underrate the complexity of teaching. It often tends to be treated mechanistically- as something someone does to somebody else that can be easily measured, and on which macro-decisions tend to be made.

Teaching is, in fact, extremely complex. Teaching well requires practice, skill development and refinement, constant reflection, persistence, striving in spite of conditions that may encourage mediocrity or discouragement, tenacity, organisational abilities and insights required of few other professions.

This level of refinement takes time and genuine support. One rarely becomes a great teacher in a single school year.

Outstanding teachers recognise their fundamental obligation is to help each student learn as effectively as possible and to support the ongoing learning of their peers. No matter how many times they become discouraged or want to give up, they persevere. This willingness to continuously strive to help their students make connections, and their capacity to self renew are hallmarks of a master teacher.

Teachable moments when a young child realises they can read, or explain their thought processes; when a teacher focussing on maths can demonstrate beauty of an equation, or a student can create and explain new learning for themselves and their teacher, occur on a regular basis for excellent teachers, and are what feed a teacher's self renewal as well as student learning.

The science of teaching increases process and strategy repertoires through the creation of a skill base, with personal conceptual and practical frameworks to draw upon in a wide variety of situations and contexts.

The art of teaching aims to provide every class and every student with a fresh, innovative approach to their learning through creating new opportunities and experiences, expanding the student's learning and application repertoire, and enabling them to make new linkages across their own understanding of themselves, their lives, others and the world.

Daily, teachers must confront the disparity between what they aspire to do with the students and what they can actually accomplish. Narrowing this gap is a career-long endeavour. At the same time, each day a good teacher works to bring greater understanding and skill to their classes, and themselves. To do this is a way which excites the students love of learning, renews the teacher's own passion for learning and teaching, and which effectively utilises a complex repertoire of skills, concepts, attitudes, knowledge and contexts, is the key to Teaching for Effective Learning.

Great teaching transforms pedagogy and subject matter into the joy of learning. Great teaching is transformational, encouraging and enabling students to become more than they are, by discovering who they might be.

'When you teach you must know when to forget formulas, but you must have learned them yourself first, in order to forget them.' (adapted from Josiah Royce - a teacher from the 19thCentury- original source unknown)

BELIEFS AND ASSUMPTIONS ON WHICH THIS FRAMEWORK IS BASED

1. Educational leaders have framed a learner centred, constructivist- connected approach to teaching and learning based on research based innovation.

2. Respect for teachers professional voice, judgement and autonomy.

3. Teachers have a powerful commitment to equity, justice, the affective domain, democratic classrooms, and do not view teaching as purely technical.

4. Communities value and integrate Early Childhood Education.

5. Teachers appreciate that knowledge and learning are not simplistic but are highly contextualised.

6. Teachers have developed a sophisticated language of learning and teaching. This framework is written plainly, specifically so that all teachers can understand the components of the framework, and others might better understand and appreciate their professional voice and daily challenges.

Purpose

The purpose of this framework is to clarify and demystify some of the key elements of teaching. While its goal is to assist Teaching for Effective Learning it does not contain Learning Frameworks, Curriculum Frameworks, Assessment Frameworks, or Professional Development Frameworks-however alignment across all of these is an essential component of becoming an effective teacher. A model of how this can be achieved is shown in the attached graphic. This framework is designed to provide five things:

1. An overview set of 6 key principles (the 6 R's) so that teachers can contextualise their planning and implementation with students, with examples of interpretation. These 6 principles are also designed to be used in a reflective and cyclic manner as shown in the examples provided.

2. A view of how these key principles enable the alignment of environment, teaching and learning, curriculum and assessment.

3. The key elements of Teaching for Effective Learning which may then be expanded through the addition of detail and may form the basis of an accountability process.

4. An introduction to the concept of Continuums of Capacity, which recognise a range of levels of Professional Maturity of each teacher.

5. To introduce the concept of Purposeful Teaching. ie to embed the idea that, as teachers, we need to be continuously questioning our purpose in everything we do with students:

Key Principles: The 6 R's

Teaching for Effective Learning needs to be:
>**Rigorous**
>**Relevant**
>**Resourceful**
>**Relational**
>**Responsive**
>**Reflective**

These 6 key cyclic principles are carefully considered and designed to guide your thinking about your teaching. These are written to assist individual teachers in developing their own Principle-Based approach to Teaching within the context of State and National directions, and to enable the most effective learning outcomes (both measurable and non-measurable) for students. Each principle is provided with:

a. a brief explanation which may form the basis of a professional conversation among your staff,

b. a macro- reflection question to guide your overall thinking,

c. an example of how this principle might apply to your own specific planning.

1. RIGOROUS
As teachers we need to retain a commitment to high academic, intellectual and social standards in both our students and each other. This requires a continuous refocus on an attitude and practice of high expectation of ourselves and others - not simply a reflection of academic capacity. This includes attention to:
- High expectations of staff and students
- Creation of appropriate boundaries for behaviour
- Creation of challenging and supportive democratic learning environments
- Commitment to high and achievable academic and intellectual standards
- Commitment to the effective alignment of learning environment, curriculum, teaching for effective learning, and assessment.
- High expectations of each other as professionals
- Ability to link goals and evidence to assist student direction
- Maintenance of accurate and useful data and evidence to guide student learning
- Modelling professionalism

Macro- Reflection Question e.g.: Is this a high intellectual challenge which can be described through evidence of real achievement to a range of people?

2. RELEVANT

For learning to be useful, a student needs to be able to see how it both fits into and expands their world. This includes consideration of:
- Clarity of purpose
- Background knowledge
- Cultural context and knowledge
- Skills of discernment
- Current situation
- Future opportunities
- Connectedness across fields
- Concrete realities of student's lives while helping them expand their opportunity base
- Learning location
- Coherence and explicitness of teaching
- Pattern and learning map making
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Macro- Reflection Question e.g.: Is this relevant to all my students and how will it extend their opportunity range?

3. RESOURCEFUL

Being organised, able to plan effectively, and having a broad range of strategies, structures and experiences to draw from is an essential building block for all teachers. This includes attention to:
- Thorough Planning and Organization
- Effective use of content, context and background knowledge
- Flexibility of teaching delivery, learning context and learning environment
- Access to, and mastery of multiple strategies and organisers
- Access to a high-level understanding of a repertoire of learning processes and how to apply these
- Sourcing of a broad range of resources in the classroom, school and community
- A contemporary understanding of specific field (e.g science, maths, art) including content, language, process and applicability.

Macro-Question: What resources can I access from myself as a teacher, others in my school, the community, technology and other sources to assist my student's learning?

4. RELATIONAL

An effective teacher recognises the interconnectedness of teacher behaviour and language on student learning; subject content in expanding understanding within and across learning areas; strategic connection and the ripple effect of effective learning and contextualisation. Highly capable teachers are also conscious of their impact on students and are committed to their own professional wellness. This requires a sophisticated understanding of:
- Creation of respectful co-learning relationships, a democratic learning culture and learning environments
- Ability to create social support for learning (equity, inclusion,)
- Helping students make macro-connections from their learning within and across operational fields (eg science, medicine, literacy…).

- Consciousness regarding prior and future learning to contextualise current work.
- Seeking to expand, appropriately, each student's view of themselves, their world, and their possible futures.
- Establishing collegial support and challenge to extend teaching practice.
- How to accommodate the dynamics of class, race, gender, ability
- The usefulness/appropriateness of curriculum content and assessment

Macro- Reflection Question: How does this fit, and benefit our classroom learning community, the school and the broader community?

5. RESPONSIVE

Adapting to accommodate changes in environment, context, situation and even student mood requires being able to draw from a range of strategies and abilities. This requires the following capabilities

- Responsible ie have the capacity to respond to students, contexts, situations, theories,
- Based on solid theory and contemporary research to advise learning direction
- Use of teachable moments and creation of opportunities
- Able to interpret context and curriculum content to challenge learning
- Management of intellectual and social conflict
- Balancing 'serious' and more 'playful' learning appropriately
- Ability to meld a variety of strategies into an effective learning continuum
- Recognition of individual needs and situations of students
- Attention to student voice
- Flexibility with changing political, social and policy demands

Macro- Reflection Question e.g.: In what ways might I need to respond more flexibly to student learning requirements?

6. REFLECTIVE

An effective teacher constantly notices the impact of their language, strategies, processes and learning challenges and environment on students and adapts accordingly. This requires:

- Promotion of student self-regulation (behavioural and academic) through self reflection and interaction.
- Fostering of substantial conversations around professional practice and learning with students and peer teachers
- Continuous professional learning and teacher self reflection to enable adjustment of practice, expansion of knowledge, skill, strategy, and process repertoires, and professional confidence to build.
- Awareness of changes at all levels which impact a child's current and future world.
- Commitment to teaching consciously and mindfully.
- Commitment to being a learner as well as a teacher

Macro- Reflection Question: How is this meeting my student's learning needs and enabling me to become a better teacher?

Environmental Elements of Teaching for Effective Learning

1. Physical Learning Environment requires attention to:
    - Planning and Organisation
    - Choice of learning location
    - Room/location and equipment setup
    - Clarity and explicitness of instructions
    - Safety- physical, emotional and intellectual

2. Academic Environment requires consideration of:
    - Learning goals
    - Learning challenges – individual, collaborative, competitive
    - Learning conversations
    - Curriculum choices (student and teacher) and knowledge construction methodologies
    - Multiple entry and exit points
    - Content design and delivery choices
    - Attention to building on prior learning/experience (scaffolding)
    - Context choice- location, social/cultural, content
    - Feedback, Assessment and evaluation methods to be used

3. Intellectual Environment requires development of:
    - Repertoire of learning strategies including skills, approaches, techniques, capacities
    - Repertoire of learning processes and models
    - Problem solving and conflict resolution capabilities
    - Learning styles, modes, intelligences, sensory learning, literacies, and dispositions
    - Individual and Collective Inquiry skills and processes
    - Questioning skills
    - Teacher and student language including specialist language
    - Teaching format- eg. Exposition, dialogue, group discussion
    - Opportunities for meaning to be generated
    - Curriculum and Assessment content, context, processes, strategies (not included in this framework)

4. Social Environment requires explicitness with:
    - Student seating /arrangement
    - Appropriate Grouping
    - Acceptable behaviour parameters, including self- management
    - Social goals
    - Shared norms, values and social skills
    - Student engagement- collective and individual focus
    - Student inclusion
    - Teacher/student learning language
    - Attention to student voice
    - Attention to student and teacher wellness

5. Technological Environment requires expliciteness with:
   - purpose
   - developmental appropriateness
   - balanced usage
   - interpretive capacity
   - technology knowledge
   - technology proactice
   - creativity
   - connectivity
   - access
   - information
   - entrepreneurial usage

MICRO- Reflection QUESTIONS e.g. Goal Setting

Rigourous: How do I express high expectations as specific goals to make them achievable? Are my communications to students coherent and consistent?

Relevant: Are these goals relevant to the student's needs?

Resourceful: In what ways might we approach these goals? What resources will we need and where will we access them?

Relational: How do these goals reflect the future needs of students?

Reponsive: How might these goals need to be adjusted to accommodate students with special needs?

Reflective: How will we know these goals have been achieved?

MICRO- Reflection QUESTIONS e.g. Classroom Organisation

Rigourous: What specific Planning and Preparation do I need to do?

Relevant: What academic and social goals do we need to set?

Resourceful: What will be included in the learning parameters and where will we access the resources

Relational: How does this/these learning challenges connect to our overall year plan/school plan/state plan?

Reponsive: What additional strategies/resources may be useful to have on stand-by?

Reflective: What happened? What worked? What would I change next time?

Continuums of Capacity

This concept recognises that teachers will be different stages in their professional maturation process and require different support and challenge at each stage.

Example: *Teaching Strategies*

BEGINNING
Competent at using a narrow range of strategies for student learning

ESTABLISHED
Able to describe, and competently use, a wide range of learning strategies. Able to use multiple strategies simultaneously to accommodate individual student learning needs

ACCOMPLISHED
Able to flexibly choose and seamlessly interlink a range of learning strategies over a lesson and a year for individual students, groups and the entire class

LEADER
Able to model and articulate a capacity to adapt, transform and map strategies for use over multiple classes, in a variety of contexts to enable student and teacher meta-learning.
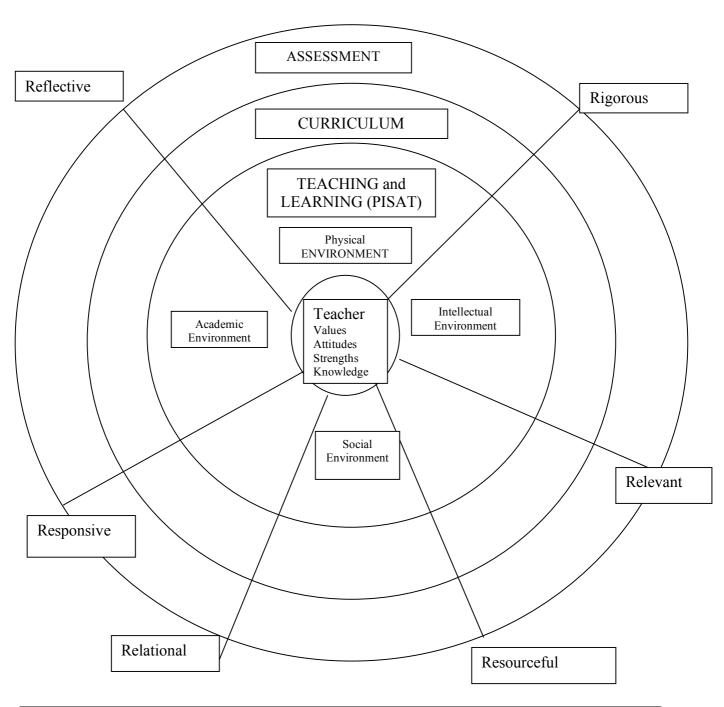
SENSAI
Able to develop and simply describe a complex interpretation of learning processes as they pertain to each student in the context of the teacher's own principled approach to teaching.

TEACHER LEVEL	CURRICULUM FOCUS	RELATIONSHIP	OUTCOME
Beginner	Activities	Dependence	Efficacy
Established	Content	Independence	Flexibility
Accomplished	Processes	Interdependence	Craftsmanship
Leader	Mind States	Coach	Consciousness
Virtuoso/Sensai	Ideals	Expert Mentor	Orchestration

(Julie Boyd, 1994)

Graphic Framework of TEACHING FOR EFFECTIVE LEARNING

Teaching for Effective Learning requires the teacher to have an understanding of his/her own language, attitudes, skills, knowledge and abilities couched within a personal values framework which understands and integrates school, district and state attitudes toward learning. These attitudes, skills, knowledge, language and abilities, will grow, evolve and become more comprehensive with experience and opportunity to practice as a teacher, involvement in ongoing professional learning, reflective practice and research which guides teacher and students learning.