

Topic 1 What is Reflective Practice?

- Teaching should value reflection and evaluation of their own practice and their continuing professional teachers.
- There is one quality above all that makes a good teacher-the ability to reflect on what, why and how we do things and to adopt and develop our practice.
- Most teachers spend time thinking about what they did in class but they don't always take it a step on their actions and make plans to do things differently.
- What is the implication of this for reflective practice?
- In a professional setting, reflection is:
 - Deliberate
 - Purposeful
 - Structured
- A process which links theory to practice □ Deep learning.
- John Moon says:
 - —**Reflection is a form of mental processing that we** use to fulfill a purpose or achieve some anticipated outcome.
 - applied to gain a better understanding of relatively complicated or unstructured ideas and is largely based on the reprocessing of knowledge, understanding and
 - possibly, emotions that we already possess. (Moon, 2005:1)

Topic 2 Why the interest in Reflective Practice?

It encourages us to understand our learners and their needs and abilities

Stephen Brookfield (1995:92) believes that of all the pedagogic tasks teachers face, getting inside students' heads is one of the trickiest. It is also the most crucial.

Reflective teachers are more likely to develop reflective learners

Why the interests in Reflective practice?

- Finally and most importantly, reflective practice is the key to improvement.

Why Reflect?

- Reflective practice leads to:
 - Higher quality practice and better outcome for learners
 - Awareness of value and beliefs
 - More likely to challenge and change practices
 - Leads to inclusive environment

Why Reflect?

Reflective practice leads to:

- Leads to seeking research, resources and advice
- Promotes collaboration between professionals □ Why is Reflective practice so important?
- Research shows that reflective practice is a crucial way of learning and extending professional understanding.

Why reflect?

Reflection and critical reflection are highly personal processes that require the professional to take daily experiences, internalize them, turn them over in their mind and filter these new thoughts through previous lived experiences and personal values and biases before deciding how best to proceed.

Why is Reflective Practice so important?

Research also shows that teacher who regularly reflect on what they do, why they do it and how this new knowledge can be used to improve their practice achieve the best outcomes for students.

The Place of Reflective practice in Teaching

Consider this task to help you understand the place of reflective practice in teaching:

- a) Make a list of teaching strategies that you have used over the last 2-3 weeks(e.g small group work, lecture, demonstration). Consider this task to help you understand the place of reflective practice in teaching:
- b) Analyze each teaching strategy: what is your role, what is the role of the learners, what tasks are used? Consider this task to help you understand the place of reflective practice in teaching:
- c) Examine one teaching occasion which went ‘badly’, list the unexpected factors and try to explain them. Discuss with a colleague- how could you change your practice?

A culture of Reflective practice is essential. Further research demonstrates that in order to provide high quality teaching there must be a commitment to on-going learning, professional development and reflective practice (Comer, 2008: Howard, 2003).

This is not necessarily tied to specific training or in-service courses but instead can begin with looking at daily practice and being able to say, —that hasn’t gone well, why might that be?

Reflective practice is a process by which you stop and think about your practice, consciously analyze your decision making and draw on theory and relate it to what you do in practices.

Critical analysis and evaluation refocuses your thinking on your existing knowledge and helps generate new knowledge and ideas.

Topic 3 What is to be Gained from Reflected Practice

It provides a real shift in power over who determines what counts as knowledge what counts knowledge.

The move is from a deterministic or even patriarchal mentality to one where there is considerable scope for genuine dialogue about the nature of our work.

Achieving Best Practice:

- From David Halberstam’s novel —The Reckoning
- Hal Sperlich, an executive of Ford Motors, on one of his visits to Japan in the early 1970s, notices that there were no repair bays for defective cars:
 - — Where do you repair your cars? Sperlich asked the engineer with him.
 - — We don’t have to repair our cars, the engineer answered.
 - — Well, then Sperlich asked — where are your inspectors?
 - — The workers are the inspectors, his guide answered.

(Halberstam, 1986: 716)

During the last two decades, the slogan of reflective teaching has been embraced by teachers, teacher educators and educational researchers all over the world.

The move toward seeing teachers as reflective practitioners is also a rejection of top-down forms of educational reform that involve teachers only as conduits for implementing programmed, curricula and ideas formulated elsewhere.

On the surface the reflected practice movement involves a recognition that teachers should be active in formulating the purposes and ends of their work. And that they need to play leadership roles in curriculum development and school reforms.

Most importantly, **reflection helps us to develop our own learning and teaching framework.**

Stephen Brookfield (1995) proposed the following framework:

What is to be gained from reflected practice?

Stephen Brookfield (1995) proposed the following framework:

- RP allow us to consciously develop our own repertoire of strategies and techniques to draw upon in our teaching which are relevant to our particular context and discipline.
- RP helps us take informed actions that can be justified and explained to others and that we can use to generate answers to teaching problems.
- RP allows us to adjust and respond to issues and problems. For instance, rather than being upset by a poor teaching evaluation. It allow us to investigate and understand what underlies these evaluations and to take appropriate action, which might be to adjust our teaching.
- RP helps us to become aware of our underlying beliefs and assumptions about learning and teaching so we understand why we do what do and what might need to change.
- RP helps to promote a positive learning environment. Through reflection, our teaching becomes responsive to student feedback and needs which can serve to build trust in students when they see their feedback is valued and taken seriously through changes to teaching.
- RP helps us to locate our teaching in the broader institutional and social context and to appreciate the many factors that influence student learning. IN this way reflection helps us to keep our perspectives and to avoid blaming ourselves for every problem that arises in our classrooms.

Topic 4 Advantages and Drawback of Reflective Practice

Critique of Reflective Practice

Schon (1983) coined the term reflective practice in his book — The Reflective Practitionerll.

Reflective practice has been adopted in a wide range of professional group.

A number of critiques of the theory of reflective practice have been articulated.

Lack of conceptual clarity

Too much focus on the individual

Failure to acknowledge on going discourses in practice

Failure to understand the complexities of practice We shall look at each of these in turn.

Lack of Conceptual Clarity

What do we mean by reflective practice and indeed what is reflection?

Van Manen (1995) says the nature of reflection is changing and may refer to a complex array of cognitively and philosophically distinct approaches and attitudes. Bleakley (1999) says that reflective practice is becoming a catch-all term for an illdefined process.

- Different authors frame reflective practice and its applications differently, emphasizing one aspect of the theory and ignoring others.
- Similarly in practice the theory is interpreted and applied in many ways, with different institutions and by various professions.
- This all leads to confusion.
- Consequently the concept remains elusive □ -ill-defined.
- It is open to multiple interpretations
- .It is applied in a wide variety of ways in practice environments.

Focus on the Individual

The theory places too much emphasis on the individual

Sandwell (1996) discusses the limits of reflection saying that the other (i.e. the wider educational community, including students) is excluded in every aspect of reflection (p 240).

- In Sandwell's views, an emphasis on individual reflection fails to consider the accounts of others within the community within which reflection occurs.
- Taaylor and White (2000) note that reflective practice opens up uncertain ambiguous and complex world and tends to close much of this down again by obscuring student perspectives and freezing as true representations of what happens.
- Schon's theory does not acknowledge the problematic nature of language as discourse within practice environment.
- Practitioner accounts are non-problematically viewed as true and no effort is made to foster reflection on language use or on the manner in which discourse constructs means for us to name, describe and depict and manage our perceptions.

Discourses in Practice

Lather (1991) draws attention to the language which we use to frame our thinking. When such an understanding of language is applied to practice this raises the question of whose account is put forward

Where is the other?

There is a danger of treating those with whom we are reflecting (our students or colleagues) as objects or things.

Without a proper consideration of human encounters we are in danger of confronting others as a thing to be objectified and manipulated (Gardiner 1999: 64).

Topic 5 Why is Reflective Practice Important?

Reflecting critically allows us to synthesise different perspectives (from others or literature) to help explain, justify or challenge what we have encountered in our practice. It may provide evidence to support our views or practices or it may explicitly challenge them.

Critical reflection also allows us to analyse what we have learned and how we have learned to enable us to take control of our own development. It is in light of these two functions that a great deal of importance is placed on critical reflection in the professional development of teachers.

Many teachers already think about their teaching and talk to colleagues about it too.

You might think or tell someone that —my lesson went well or —my students didn't seem to understand or —my students were so badly behaved today.

Why it is important?

However without more time spent focusing on or discussing what has happened, we may tend to jump to conclusions about why things are happening.

We may only notice reactions of the louder students for example reflective teaching therefore implies a more systematic process of collecting, recording and analyzing our thoughts and observations as well as those of our students and then going on to making changes. If a lesson went well we can describe it and think about why it was successful.

If the students didn't understand a learning point we introduced, we need to think and why it may have been unclear.

If students are misbehaving-what were they doing when and why?

Working in this reflective way allows us to take control of our learning and development and to make changes in our practice that will develop our overall competence.

This preparation allows us to be prepared should the same events or others similar occur in future.

How RP can develop your work further

Addressing students' needs

- By thinking about the way you have responded to your students individual needs, you can develop new/better strategies.

Working with colleague

- Reflecting on the way you interact with colleagues can help you to create better relationship
- This can help you to enjoy your work more

Your role with your students

- By thinking about the effectiveness of the way you work with student, you can tailor your approach to suit their needs and interests

Planning students learning

- By considering the effectiveness of your plans, you can help to develop new systems of planning and recording that are faster and more effective.

Working with external agencies/parents

- By thinking through how you work with external agencies or parents, you may be able to develop strong working relationships and lines of communication.

Over to you

- Consider how you have used reflective practice previously and how the reflection changed your outcomes.
- Think about how your practice improved and any impact this ad on others around you.

Topic 6 How can reflection be used for practice

Principles of RP

1. RP is problem oriented: problem posing as well as problem solving.
2. RP is based on action research. Action research is a powerful tool for change and improvement.
3. RP ensures that teaching and learning are research-led.
4. RP is data-driven ownership of the data is central to professional development.

If reflection is thinking – How is the thinking done?

It is important to consider how the thinking is done (the cognitive process), why it has occurred and what it involves (the stimulus) as well as learning and changes in practice (the outcomes).

How is the thinking done?

Hatton and smithe (1995) say that three specific types of reflection can develop.

3 specific types of reflection can develop:

Technical rationality (behavior and skills)

Reflection on action (involving descriptive reflection, description and justification, exploration multiple perspectives and factors.

Reflection-in-action (thinking in the moment).

Topic 7 Definition

Reflection

The term :reflective practice derives from the work of Dewey (1910,p6) wrote that reflective practices is —the active persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support itll.

This means you will have a questioning approach you will consider why things are as they are and how they may be.

Dewey went on to say that being reflective enables us to direct our actions with foresight... it enables us to know what we are about when we act. This is important in teaching.

What you do in the classroom and how you behave should have been carefully planned, informed by theory and experience and be purposeful.

Schon (1983) presents a slightly different view. He regards reflection as having two aspects: reflection in action and reflection on action.

Reflection in action refers to the quick thinking and reaction that occurs as you are doing, for example in the classroom you may be teaching a topic which you can see the pupils are not understanding.

Your reflection in action allows you to see this consider why it is happening and respond by doing it differently.

Reflection on action is what occurs outside is what occurs outside the classroom when you consider the situation again. You may think more deeply about why the pupils did not understand, what caused the situation what options were open to you, why you chose one option and not another.

Your responses will depend on you existing level of knowledge and experience you understanding of theories and your values.

In reflective practice practitioners engage in a continuous cycle of self-observation and self-evaluation in order to understand their own actions and the reactions they prompt in themselves and in learners. (Brookfield, 1995: Thiel, 1999).

The goal is not necessarily to address a specific problem or question defined at the outset as I practitioner research but to observe and refine practice in general on an ongoing basis. (Curriculum, 2001).

—Practitioners frame the problem of the situation they determine the features to which they will attend the order they will attempt to impose on the situation, the directions in which they will try to change it.

In this process, they identify both the end to be sought and the means to be employed. ll (Schon, 1983).

Consider these questions:

- Which definition do you prefer and why?
- Based on these definitions which elements do you think are most important for reflection?
- Is there something missing that you think should be included in a definition of reflection?

Topic 8 Types of Reflection

Hatton and Smith (1995) distinguish between dialogic reflection and critical reflection and the level of engagement associated with each.

Dialogic Reflection

Dialogic reflection refers to a less intensive approach that involves discourse with the self to explore a given event or incident.

It involves considering the decision and judgments made and possible reasons for these. An example of dialogic reflection is the basic model proposed by Brockbank and McGill (2000).

The individual thinks about what they are going to do in their teaching about the information they'd like to convey, the methods they intend to use the level of engagement and so on in advance of the delivery of the class.

Afterwards they then consider how well they achieved their intended goals and which aspects require further attention.

As with all forms of reflection this approach is based in constructivism and required the individual to re-evaluate their own personal view of education, teaching and learning.

Have I been innovative and creative to engage and sustain student's interest?

While this is an important first step and may lead to increased confidence or sense of pride awareness alone doesn't necessarily result in an improvement of the situation (Moon, 2004).

Critical Reflection

This refers to efforts accounting for the broader historic, cultural and political values in framing practical problems to arrive at a solution (Hatton and Smith, 1995). This process has been described by Boyd and Fales (1983) as :

—the core difference between whether a person repeats the same experience several times becoming highly proficient at one behavior or learns from experience in such a way to be cognitively or affectively changed. (1983 p, 100)

Therefore critical reflection facilitates transformational learning that can happen either gradually or from a sudden or critical incident and alter the way people see themselves and their world.

What do these considerations mean for RP

- RP is non-judgmental collaborative
- Should allow for flexibility open mindedness
- To be an effective reflective practitioner you must recognize that learning from what does not work is on the same path as learning what does work. There must be room for failure in the reflective process.

Topic 9 Critiques of Reflective Practice

- There are cultural and personal risks involved in RP and not everyone ends up feeling empowered (Brookfield 1994, 1995).
- Moreover busy over stretched professionals are likely to find reflective practice taxing and difficult. Bland mechanical routinized and unthinking ways of doing reflective practice are too often the result.
- Ash (2002) agrees that teachers can —choose not to reflect on their practice constructively and critically preferring to fall back on preconceived understanding of how they and their pupils should conduct themselves in the classroom. (cited Hobbs, 2007, p. 406).

- Similarly, Bond and Walker (1998) say that reflection can be turned into a recipe –following checklists which they work through in a mechanical fashion without regard to their own uncertainties questions and meaning (1998, p. 193).
- **Ethical concerns**
- The teaching and application of reflective practice have generated a range of ethical concerns.
- These relate to confidentiality right to privacy informed consent and professional relationships.
- Practitioners who are engaging in reflective practice need to be aware of the risks and also of the potential for conflicts of interests.
- A further problem to do with the impact on the individual reflector is the way reflection can involve constant striving for self-improvement. It can lead to feelings of self-disapproval and self-rejection (Quinn, 1988/2000). Further, if an individual understands the word critical to mean negative, they can end up in an unduly negative frame of mind.

Professional Concerns

Professional concerns come to the fore when reflective practice is done badly, ineffectively or inappropriately. In such cases, the point of RP is missed and its value goes unrecognized. Then RP may simply rationalize existing practice.

If applied uncritically, reflections can reinforce prejudices and bad practice, leading practitioners unwittingly to collude with dominant cultural assumptions.

Reflective practice at the level of the individual practitioner can also be a means by which organizations divest themselves of responsibility.

Fostering good practice here becomes matter for the individual rather than the organization.

Pedagogical concerns

Reflective teaching raises two main pedagogic concerns

Developmental readiness and

The extent to which forcing teachers to reflect may prove counter-productive.

Developmental readiness

Teachers need to be developmentally ready to engage in critical reflection and that some individual may be incapable of doing so. The respective abilities of novices and experts are relevant here.

There is evidence that novices by definition lacking practical mastery are inclined to follow models mechanically and also that such reliance on models lessons with experience.

Forced RP

Teacher reflection can end up being superficial strategic and guarded if teachers are forced to undertake RP rather than making a personal choice. Where appraisal follows, any genuine honest, critical self-examination may well be discouraged.

Conceptual concerns

A problem is posed by the way practitioners appropriate and embrace models of RP in uncritical piecemeal and reductionist ways. Often ideas are transplanted without sufficient care across philosophical disciplinary and cultural boundaries in the process becoming distorted or diminished.

Conceptual concerns

It can be understood in multiplicity of ways, according to the aims and functions of the exercise at stake and the theoretical /methodological traditions engaged (Finlay, 2003).

Conceptual concerns

Some may see it primarily as a personal confessional account while for others it is a means to deconstruct socially situated action.

Topic 10 Formal and informal Reflection

Informal Reflection

- Involved self-questioning
- Develop our awareness our own assumption

Formal Reflection

- Draws on research & theory
- Provides guidance & framework for practice

This relies on experiential learning.

Such an approach is:

- Often dysfunctional, always incomplete
- Reliant on using present experience to test our beliefs, correcting the misinterpretations we have made.
- Often manipulated to fit our beliefs
- Biased as we usually see and hear selectively
- Can be planned or unplanned but usually conscious awareness that learning is taking place
- A by-product of some other activity usually unintentional, unexamined and embedded in closely held systems
- Requires becoming aware of conscious learning in a non-routine situation as people reflect on experience
- Requires an awareness of learning to surface which make tacit assumptions explicit. This is call mindfulness.

Learning from formal reflection:

Formal reflection requires models or framework which provide a specific and structured approach
All formal models rely on the following parameters

Formal Reflection Learning

Behavior	Visible behavior
	Function: teaching, maintaining professional relationships
Reasoning/ Judgment	Students oriented understanding
	Function: problem solving
Professional thinking	Critical appraise of literature and own practice
	Function: optimizing teaching based on experience
Personal reflection	Awareness, exploring
	Function: balance

Topic 11 What do professionals reflect on?

1. Philosophy
2. Value and beliefs
3. Practice
4. Practice that are taken granted
5. Reflecting on your

Reflecting on your philosophy

- Your perceptions of children, parents and families and yourself as a professional
- Children's rights and the extent to which children's views are taken into account in practice
- Professional roles in children's and families lives
- Professionals influence in children and families lives\
- Your perceptions of children, parents and families and the extent to which your practices reflect cultural competence: that is your understanding of and respect for families and children's cultures and communities
- How to give children opportunities to express their own thoughts and feeling and support their sense of agency
- Your own prejudices and biases
- Your beliefs and values
- Yourself e.g. I am student-oriented, I see myself as providing a service, I have professional expertise
- Families e.g Families e.g Families are the most important people in children's lives, families are the problem'

Reflecting on beliefs

- Children e.g . children are capable: children are interested learners from birth, children are needy and vulnerable

Reflecting on values

Inform decisions

- Come from life experiences, especially early ones within the family and community
- Come from professional study and experience
- Can be shared values and belief in every setting e.g. How children learn and develop

Professionals reflecting

It is important to be aware of your own assumptions, values and beliefs and their impact on your practice.

Topic 12 Assumptions

Assumptions 1:

The reflection takes place in the classroom, conducted by and for the teacher.

Research is contextualized and private.

Assumption 2:

Teachers reflect and act on what they observe Considered as research

PLUS action.

Assumption 3:

Understanding requires dialogue (Kemmis and MC Taggart, 1992: Wells 1999, Vygotsky, 1999)

A social constructivist model of learning

Assumptions

A social constructivist model of learning:

The mind is mediated by language

Understanding is jointly constructed through dialogue

Knowledge is socially derived

Learning occurs through collaborative effort.

Assumptions and reflective practice

RP is therefore about becoming aware of our own assumptions, how these assumptions govern our practice, how these assumptions must shift to embrace change.

Understanding resistance to assumption shift and finally to change assumptions to support a better state of affairs.

Assumption

The Reflective practitioner is therefore someone who lives reflection in everyday practice.

Becoming a Reflective Practitioner takes time commitment, responsibility and discipline.

Key points about our assumptions

Reflective teaching involves discovering and researching own assumptions.

Our assumptions can be revealed and explored through four lenses.

Autobiographical writing

Student feedback

Discussion with colleagues

The literature

Stephen Brookfield identifies these lenses:

Teaching in a critically reflective way involves teachers trying to discover the assumptions that frame how they teach. Teachers have four complementary lenses through which they view their practice.

The lens of their own autobiographies as learners, the lens of student eyes, the lens of colleagues perceptions and the lens of educational literature. Brookfield (2002:32)

Why these lenses are important?

Reviewing practice through these lenses helps surface the assumptions we hold about pedagogic methods, techniques and approaches and the assumptions we make concerning the conditions that best foster student learning.

Topic 13 Achieving best practice

Why best practice?

The 21 st century is different from the one in which we were educated

To survive in a new globally competitive world, children will need creativity problem-solving abilities a passion for learning , a passion for learning, a dedicated work ethic and lifelong learning attributes.

Through RP the teacher can provide the required opportunities and achieve best practice.

What does best practice?

Look like for the reflective practitioner?

Students are engaged and focused on their work

Teacher use collaborative and authentic tasks which place students at the center of learning. There is a joyful feeling of purposeful movement, industrious thinking and a vital and vibrant atmosphere and environment.

Core Best Practices

□ The teacher:

- Educates the whole child
- Teaches based on knowledge of how children develop and learn
- Prepares children for success in school and for life
- Provides an enriched environment
- Creates active participants rather than passive observers.
- Provides challenge.
- Employs rigorous assessment of learning.

Core Worst Practices

□ The teacher:

- Plans and teaches in isolation
- Teaches to the test
- One size fits all
- Teaches without assessing student needs □ Teaches the text.
- Stays within a comfort zone of subjects.
- Applies student-centered/ activity-based approaches in name only.

Operationalizing best practice

- How might we summaries our understanding of those honored with the title and status of teacher as a skill reflective practitioner?
- Be concerned with the consequences of education, as well as what might be called technical proficiency.
- How might we summaries our understanding of those honored with title and status of teacher as a skill reflective practitioner?
- Be prepared to experiment with the unfamiliar and learn from their experiences
- Be committed to professional dialogue in collaboration with colleagues in school and beyond.
- Have working patterns characterizes by a process of action evaluation and revision.
- Assume as life long learners, responsibility for their ongoing professional development.

Topic 14 Implications for achieving best practice

To achieve best outcomes for children teachers need to reflect in practice as well as on practice. The evidence demonstrates the importance of reflection in practice (thinking on your feet and reflection on practice (thinking after the event) if teachers are to achieve the best outcomes for children.

Implications for achieving best practice

Reflecting on one's own values and attitudes must accompany reflection on wider issues of practice such as the effect of child-adult relationship on children's overall learning outcomes. Teachers need guidance and structure if RP is to bring about positive change. To make changes teachers need to deepen their understanding of their own and others value base. For this to happen formal guidance and structure should be in place.

Studies indicate that without structured tools e.g. recording formats guided questions or example of others reflections and how they linked to improvements in practice- there can be a lack of commitment to reflective practice from staff.

Reflection also needs to be embedded as part of normal day-to day practice.

Collaboration with others.

Evidence suggests that while guidance and structure are important factors in engaging a professionals long term commitment to reflect practice, reflection is substantially more effective when the process involves others. Another professional can bring a different perspective to the reflection and encourage a teacher to think about what values they hold, why they hold them and what works best for children and their learning

Regular Learning Networks

Reflecting regularly with other professional comfortable and predictable world has been proven to create reflective teaching hubs.

Such hubs focus on policy development learning and pedagogy sharing best practice and challenging taken-for- granted practices.

Time and Space for Reflection

Research emphasizes that without tangible leadership commitment to reflective/ practice and time regularly set aside for staff to reflect, met or attend local learning

Network, reflection is viewed as little more than a time-consuming exercise. Research tells us that effective reflective practice is regular and included both reflection in practice and reflection on practice.

Informed by contemporary research

The one off in service training calendar which training calendar which dominates many professional development opportunities required refocusing moving away from single, isolated workshop towards more strategic and collaborative suite of longer term inter-related professional development programs.

Comparison with traditional models of teacher learning

The traditional model of teacher learning focuses on giving and receiving public knowledge that is available to all and that is not personal or based on individual experience.

The primary assumption is that acquisition of shared knowledge will lead to behavioral change. Theory, thoroughly understood and carefully applied, means good practice. The traditional approach to professional development then reflects an underlying assumption that information is a stimulus for behavioral change. That individual receiving knowledge will use it to improve performance.

Topic 15 The Reflection Process

Modern teachers can use to support reflection all follow the same basic remises:

- Reflection is cyclical
- Reflection is iterative

The Reflection process

The Cyclical Nature of Reflection Collecting Information

- Talking to children colleagues, parents others
- Observing colleagues as they teach

- A colleague observes your teaching and gives feedback
- Observing your own teaching (Video recording)
- Reviewing lesson plans (yours and others)
- Review your lesson evaluations

Question/Analysis

- Looking for a solution to correct a problem (single-loop learning)
- Examination of assumptions and theories –in use (double-loop learning)
- View things from different perspectives □ Asking why?

Plan

- Develop hypotheses
- Reflective practice strategies: Reflective journals or diaries; meeting with mentor or critical friend; reflective practice blog; Action research; video or observation □ Theory to practice □ Asking so what?

Act/Do

- Testing assumptions
- Engaging in behavioral experiments □ Asking now what?

Review

- Asking what happened?
- Van Manen, process three major
- Hierarchical levels at which reflection:

Review

Technical Reflection is the most basic level of reflection. It focuses on what works in the classroom.

At this level, teachers are concerned with applying knowledge to achieve instructional outcomes and actions taken are evaluated on the basis of their success or failure in the classroom.

Practical Reflection is the next level of reflection. It focuses on the learning experience of the student.

It goes beyond technical-rationality into investing, questioning and clarifying the end objectives and the assumptions behind teaching activities designed to achieve those objectives.

Critical Reflection is the highest level of reflection. It focuses on what knowledge is of value and to whom.

At this level, teachers are not simply concerned about the goals, the activities and the assumptions behind them but they reflect upon the larger context of education and question and question their practices critically, particularly in connection with ethical and moral issues.

Topic 16 Reflexivity

Reflexivity for professionals means engaging in both personal reflection and broader social critique

What are the skills which underpin teacher's reflexivity?

The Reflective Teacher

Skills underpinning Reflexivity

Critical thinking having roots in skepticism and critical theory-identifying and challenging assumptions, challenging the importance of context to imagine and explore to imagine and explore alternatives which leads to reflective skepticism.

Types of Reflexivity

- Where reflexivity is seen as introspection we can consider:
- Hyper- reflexivity that is the deconstruction of praxis
- Systematic reflexivity, that is looking at our suppositions theories and methods

Types of Reflexivity

Where reflexivity is seen as introspection we can consider:

Epistemic reflexivity that is the exploration of our belief and assumptions

Consequently reflexivity situates reflective practice into our day-to-day experience in the classroom

17 Topics for critical reflection

Pedagogy and how it connects with the practice principles and learning and development outcomes, how practices and the physical environment acknowledge and encourage children's sense of agency.

Topics for critical reflection

Induction and orientation for families who are new to the setting and the extent to which they set the stage for partnerships. The variety and effectiveness of communication with families sense of agency who is not attending?

Why? What strategies might change that? The physical environment and possible improvements. The extent to which the environment reflects the cultures, communities and lives of the families and children. Practices that are taken for granted.

30 critical Questions

Modeling reflection with students:

1. Was this activity successful ...why or why not?
2. If we do this again what can I do differently to help you learn more?
3. Did this activity help you learn more than other we have done? Why?

Classroom culture questions to ask about your rules and relationship:

4. Are the relationships that I have with my students helping or hindering their ability to learn?

Classroom culture questions to ask about your rules and relationships:

5. Could the problems I solved by pre-teaching my expectations or developing rules/procedures to deal with these issues?
6. Was my demeanor and attitude towards my class today effective for student learning?
7. Am I excited to go to work today?
8. Are my students excited to come to my class today? (How much does #6 impact #7?)
9. What choices have I given my students lately?
10. Can I explain at least some thing about each of my student personal lives?
11. Does my assessment accurately reflect student learning?

Does my assessment is really reflecting learning or merely task completion or memorization skills?

13. Why did I really choose this particular lesson to cover this objective?
14. What evidence do I have my students are learning?
15. What new strategies have tried lately that might benefits student I am struggling with?
16. In what ways am I challenging students who are clearly being in my classroom?
17. What do I do when students aren't learning in my classroom?
18. Which students benefited from this activity?
19. Which students did not benefit from this activity?
20. IN what area can I still improve professional?

What' s areas can I still improve professionally?

21. What's stopping me from improving in these areas?
22. In what ways can I support my colleagues in their student's learning?
23. Do my actions as a teacher show my belief that all students can learn at a high level?
24. DO my actions as a teacher show that I take pride in my work?
25. Are the relationships I have my colleagues conducive to creating a collaborative culture focuses on learning?

26. Are the relationship I have with my student's parents conducive to improving? 27. What new ideas have I tried in my classroom lately to keep myself energized about teaching?
28. What have I done lately to relieve stress and focus on my own health, to ensure I remain an effective teacher?
29. What thing am I currently doing that I could realistically make less of a priority in my professional?
30. How much time have I spent with my friends and family in the last two weeks?

18 Learning from Reflection

Reflection as a learning to gain further understanding and add meaning to our daily lives.

Reflection is associated with learning that has occurred through experience and is an activity that helps you make sense of and learn from situations.

Reflection therefore is a means of assisting us to think to explore our thoughts and feelings and to work through an experience,

It is the active consideration of and learning from our thoughts and actions together with the further use of these thoughts and actions As a means of developing reflective thinking.

The most important aspect of engaging in reflection for your on-going personal and professional learning is that you are able to demonstrate your profession towards achievement of standards of proficiency.

The process of reflective writing leads to more than just a gain in our knowledge, it should also challenge the concepts and theories by which you make sense of knowledge when you reflect on a situation, you do not simply see more you see differently.

This different way of viewing a situation is reflected in statements about a commitment to action. Action is the final stage of reflection.

What do you know about and how confident are you about: The roles and responsibilities of a teacher

- Learning styles
- Planning a course
- Planning a lesson
- How people learn

Learning from Reflection

- What do you know about and how confident are you about:
- Lifelong learning
- Communication skills
- Presentation skills
- Demonstration skills
- Questioning and explaining
- Using a range of teaching methods
- Designing and uses resources
- Using ICT
- Assessing learning
- Reflection
- Subject knowledge and skills

Learning from Reflection

Reflective practice assumes a holistic approach to learning beginning with individual behavior, anything related to it becomes part of the process. At the very least, this includes the individual's background and cultural context.

The concept of cognition also expand from a narrow emphasis on information gathering or recall to the development of analytic and conceptual skills that enable the individual to create knowledge needed to respond to the diverse demands of practice.

This means that in reflective practice learning is cooperatively based.

Collaboration extends beyond the learner- facilitator relationship to include all of the individuals in an interdependent learning process.

19 Method of Reflection

Reflecting in and on practice

Dewey was among the first to identify reflection as a specialized form of thinking. He considered reflection to stem from doubt, hesitation or perplexity related to a directly experienced situation.

Dewey argued that we think the problem through in order to formulate hypotheses in trial an error reflective situations and then use these to plan action and to test out our ideas.

Dewey's ideas provided the basis for the concept of reflective practice which gained influence with Schon's work on —The Reflective Practitioner: How

Professionals Think in Actionll (1983)

His main concern was to facilitate the development of reflective practitioners. One of the most important and enduring contributions from this was to identify two types of reflection:

Reflection-on-action

After-the event thinking

Reflecting-in-action

Thinking while doing

Reflection-on-action

Teachers consciously review, describe, analyze and evaluate their past practice with a view to gaining insight to improve future

Teachers examine their experiences and responses as they occur

Reflective in and on action

In both types of reflection, teachers aim to connect with their feelings and attend to relevant theory.

Teachers seek to build new understandings to shape their action in the unfolding situation.

The Core of Reflection

For Schon, reflection-in-action was the core of professional artistry

He contrasted this with the 'technical rationality' favored by positivist theorists.

In Schon's view technical rationality failed to resolve the dilemma of rigor versus relevance which teachers face.

Schon explained this by saying that teachers have to do morethan follow set procedures

Teachers need to draw on both practical experiences and theory as they think on their feet and improvise.

Teachers act intuitively and creatively

Reflection-in-action and reflection-on-action allows teachers to revise , modify and refine their expertise.

20 Level of Reflecting

Grushka, Hinde- McLeod and Reynolds (2005)

Distinguish between ‘reflection for action’ ‘reflection on action’ and ‘reflection in action’.

They offer a series of technical, practical and critical questions for teachers to engage with, for example: under ‘reflection for action’ teachers are advised to consider their resources and how long the lesson will take (i.e technical) For example: how to make the resources relevant to different learning styles (i.e practical)

Teachers questioning why they are teaching in a particular way (i.e critical)

Zeichner and Liston (1996)

Differentiate between five different levels at which reflection can take place during teaching. For example

Rapid Reflection

- Immediate
- On-going
- Automatic action by the teacher

Repair

In which a thoughtful teacher makes decisions to alter their behavior in response to student’s cues

Review

When a teacher think about discusses or writes about some element of their teaching

Research

When a teacher engages in more systematic and sustained thinking over time, perhaps by collecting data or reading research.

R-theorizing and reformulating

The process by which a teacher critically examines their own practice and theories in the light of academic theories

Topic 21 Guided Reflection

Johns (1994) developed the concept of guided reflection.

This involves engaging with a series of questions that help the teacher to explore and reconsider their motivation or rationale for actions.

These can be designed by the teacher or by another (e.g school directorate or principal)

These can be designed to form a reflective diary with one side of the page consisting of the descriptive material and the other consisting of the reflection and exploration.

Examples of questions that guide reflection

1. Maughan and Webb (2014)
2. What is most important/ interesting/useful/relevant about the object, event or idea?
3. How can it be explained (e. with theory)?
4. How is it similar to and different from other issues/events?
5. What does this mean for my future teaching?
6. Biggs and Tang (2007)
7. What was the problem? What went wrong? What is the evidence for the problem? How did you deal with the problem then?
8. Biggs and Tang (2007)

9. How did your solution to the problem relate to your theory of teaching and learning?

Guided Reflection and Bloom"s Taxonomy

Questions which support guided reflection can be structured to parallel Bloom"s taxonomy.

What questions might teachers ask themselves as they move from lower order reflection to higher order reflection?

First, let"s reflect on Bloom"s taxonomy of reflection:

A Taxonomy of Reflection Bloom"s remembering :

What did I do?

Teacher Reflection

What was the lesson? Did it address all the content? Was it completed on time?

How did students —scorell on the assessment?

Bloom"s understanding: what was important about what I did? Did I meet my goals?

Teacher reflection: Can I explain the major components of the lesson? Do I understand how they connect with the previous/ next lesson?

Where does this fit into the curriculum? What instructional strategies were used?

Did I follow best practices

Topic 22 Action Research

- Reflective practice can be more formally encouraged and directed as action research. Action research involves systematically changing your teaching using on the ground evidence that suggest the changes you make are in the right direction and enhancing student learning.
- The target of action research is the teacher not the change that is being implemented.
- Educational Action Research as a Critical Social Science- carr and Kemmis
- Carr and Kemmis say action research is a form of research carried out by practitioners into their own practices.
- Action research is a participatory, democratic form of educational research for educational improvement.
- Action research emphasizes practices a committed action or praxis
- Action research expresses a commitment to the improvement of practices not to argue for or against a theory.
- Action research is seen as a form of practical enquiry characteristised by a self- reflecting spiral of cycles of planning, acting, observing and reflecting.
- Some Suggestions for thinking about practice
- Bryant states that there are many themes and aspects of practice to question about action research before even looking at any theories.
- They are:
- Setting (where the activities are taking place)
- Play (looking at ideas in terms of a game where there are rules: these rules can be both enabling and constraining).

Topic 23 The Critical Friend

The critical friend's process focuses on developing collegial relationship and encouraging reflective practice.

This process is based in cooperative adult learning.

It also addresses a situation in which many teachers find themselves working as Independent units certified as knowing all that is needed to know: feeling like the continuation of professional learning is not essential to the creation of an exciting rich, learning environment.

It is currently in use by an estimated 35000 teachers, principals and professors in over 1500 schools and universities.

Providing an effective balance between informal supportive friendship and critical analysis.

Asking ‘why’ things are being done in particular way seeking to gain a sense of the context within which the teacher works and challenge assumptions.

Thinking creatively and encouraging others to do so.

Key contribution from the critical friend

- Facilitating friendly, honest and critical analysis, shared professional reflections and horizon scanning.
- Using their skills to ask ‘naive’ questions which promote reflection and self-evaluation.
- Providing advice and practical suggestions

Critical Friend Ethos

- Maintaining a —close distance.
- Critical friends help others to be reflective but do not hold the role of evaluator.
- Critical friends must be knowledgeable about the subject the teacher teaches.
- Critical friends identify challenges but have no responsibility for overcoming them instead; they support objective and reflective debate to find solutions
- Critical friends maintain confidentiality frankness, sensitivity and independence.

Topic 24 Participatory Methods for Reflection

- Putting aside time regularly for focused discussion about practice with colleagues helps to ensure that reflection becomes regular practice.
- Important to have a facilitator who uses critical questions to stimulate discussion and deep thinking and to record the discussion and the action that arise.
- Conversation and debate with
 - Colleague
 - Other professionals working in the same setting
 - Professionals working in another setting
 - A professional network
 - Families and children

Method

- Careful description
- Thoughtful listening
- Questioning feedback

Types of questioning feedback

- Warm feedback consists of supportive appreciative statements
- Cool feedback offers different ways to think about teaching and raises questions
- Hard feedback challenges and extends thinking and raises concerns.

The participatory process

Participating with others in RP allows colleagues and others to share issues and seek suggestions for positively overcoming them

Best in small groups where teachers feel comfortable sharing complex issues

Hard feedback challenges and extends thinking and raises concerns

25 John Dewey

What is reflective practice?

- It is ongoing, dynamic process of thinking honestly, deeply and critically about all aspects of professional practice □ What is reflective practice?
- It occurs spontaneously as well as in planned reflection activities
- Reflective practice leads to action

Routine action Vs Reflection Action

Dewey's models is based on the fundamental difference that he sees between routine action-guided primarily by tradition, instruction and imitation (quoted in Furlong and Maynard: 31)

Which action amount to prejudices that is pre-judgments proper that rest upon a survey of evidencell. (Dewey 1910: 4-5), and Reflection action.

Reflective action is instead based on active, persistent and careful consideration (1910: 6), based on the need to solve a problem. For Dewey, it is in problem solving that we find —the steadying and guiding factor in the entire process of reflection and without which the course of suggestions flows on at fandum.

Reflection as Rationality

Teacher John Dewey, saw reflection as a further dimension of thought, and as such in need of education: while we cannot learn or be taught to think, we do have to learn to think well, especially acquire the general habit of reflectionll (Dewey, 1933).

For Dewey, reflection is a rational and purposeful act, an active persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it leads it includes a conscious and voluntary effort to establish belief upon a firm basis of evidence and rationality (Dewey 1933)

Reflection as rationality

Interestingly, from a modern educational perspective, Dewey's reference to different forms of belief and knowledge may reveal his willingness to apply objective rationality to m ore affective and emotional concerns.

Dewey"s 5 Stage Model

1. We identify a problem that is perplexing and felt
2. We observe and refine the identified problem to create a fuller understanding
3. We develop a hypothesis or an understanding about the problem, its origins and possible solutions. We subject the hypothesis to scrutiny and reasoning, we test the hypothesis or understanding in practice
4. Dewey placed great emphasis on reflective thought and saw it as an important part of a cycle that enabled us to learn from experience.
5. He believed that reflective thought began when we found ourselves having an experience that raised some difficulties or dilemmas.

26 Donald Schon, 1983

Reflecting in and on practice

As we have seen, Schon developed the notions of reflecting in action and reflecting on action

This can be represented in the following way:

First step

Teaching and learning session

- Reflection in action
- Observation yourself
- Monitoring
- Writing notes immediately on completion of the session

Second step

Planning the next session

- What can I incorporate from my reflections?
- Shall I try something new?
- What works with these learners on this course?

Third step

Reelection an action

- Time to ponder mull over what happened why things happened: how does it relates to theory, what have I learned, what can i use in future planning?

Forth Step

Teaching and learning session

- Reflection in action
- Observing yourself
- Monitor
- Writing notes immediately on completion of the session

Development of Schon „s Model

Schon believed that reflection begins in working practice with confusing situations. Teachers may have the theoretical knowledge (technical rationality) on their subject or the practice of teaching, it but this does not explain how their practice actually is.

From teachers real life experience in the classroom, teachers can develop tacit knowledge a synthesis of theory and practice which they have developed for themselves.

27 Kolb's Reflective Cycle (1984)

This model is based directly on Kolb's experiential learning cycle where active experimentation leads to a transfer of learning from current cycle to a new cycle

Components of Kolb's Modle Applied to RP

The experiential learning cycle can be detailed for RP:

1.concrete experience

Doing having an experience
(what happened)

2.Reflective observation

Reviewing , reflecting on the experience
(why did it happen that way includes taking feedback)

3.Abstract conceptualism

Concluding,learning from experience
(what can I learn from this?)

4.Active experimentation

Planning, trying out what you have learned
(How I plan to improve

Components of Kolb's Model Applied to RP

Concrete experience

This relates to the incident or event prompting the reflection and involves the physical act of being involved in or having hands-on experience.

Although in theory you can enter the model at any stage this tends to be the main point of entry.

Reflective Observation

After the event comes the initial reflection. This entails stepping back and viewing the event or incident from an objective perspective.

This should provide some insight into what you did and why you did it.

Abstract conceptualization

The initial reflections are then explored in greater detail.

Conceptualization involves interpreting events and actions looking for connections between these and the process of applying some theoretical.

Active Experimentation

Once this deeper understanding has been established, the individual translates it into predictions about what is likely to happen next or what actions should be taken to refine the way similar events may be handled in future.

28 Greenaway's 3-Stage Model (1995)

Greenaway outlined three simple steps to help learn from experience- these are plan-do-review and are seen as reflective cycle:

Do: Have an experience

Review: Review what happened and what can be learned

PLAN: Plan a way to approach the next round of experience

Benefits of Greenaway's 3-Stage Model

Easy to apply

Being experiential it is grounded in teachers' everyday practice. Not time-consuming.

Can be the foundation for more complex models.

Can be easily applied to many aspects of the teacher's role in school.

When to use „Plan-Do-Review“

- As a model for continuous improvement
- When starting a new class
- When developing a new or improved approach
- When defining a repetitive work process
- When planning data collection and analysis in order to verify and prioritize problems or root causes.
- When implementing any change.

The Plan-Do-review procedure

Plan: recognize an opportunity and plan a change.

Review: Analyze the results and identify what you've learned.

Then test into wider changes. Use what you learned to plan new improvements beginning the cycle again.

Questions to ask for planning

- What data indicates a change is required?
- What changes is to be made?
- How do you know the planned change is appropriate? What other alternatives are there?
- What sequence of steps is needed to implement this change?
- Who will be responsible for carrying out each step?
- Who will need to be consulted?
- Who will be the change affect?
- How long will the change take?

29 Roth (1989)

Roth (1989) summarizes reflective practice processes as follows:

Questioning what, why and how one does things and asking what, why and how other do things

- Seeking alternatives
- Keeping an open mind
- Comparing and contrasting
- Seeking the framework, theoretical basis and or underlying rationale
- Viewing from various perspectives □ Asking what if?
- Asking for others ideas and view points
- Using prescriptive models only when adapted to the situation
- Considering consequences
- Hypothesizing
- Synthesizing and testing
- Seeking and resolving problems

Roth describes 24 procedures of a reflective practitioner. The procedure range from those that correspond to cognitive models of reflection and teaching techniques to an embracing of uncertainty like adapt and adjust to instability and change to more formal

procedure like —hypothesize, synthesize and test

The Griffith and Tans (1992) provide a very comprehensive way of categorizing reflective processes that considers both time frame and purposes.

They identify the dimensions of rapid reflection, repair, review, research and theorizing, contending that all are cognitive accomplishment.

Topic 30 Peter (1991)

Peters (1991) described a four-step process called DATA:

- Describe
- Analysis
- Theorize
- Act

1. Describe

In the first step the critical aspect of practice is described. This is a detailed and honest account. This involves paying attention to what happened, who was involved and their thoughts feeling and emotions as they related to the incident.

2. Analyze

The second step includes the identification of assumptions that support practitioners. Current approaches and underlying beliefs, rules and motives, governing teaching and learning. Here the

teacher explores why this practice operates as it does examines the underlying values, beliefs and assumptions that maintain the practice and consider what sources of information they draw on to make sense of situation.

3.Theories:

In the third step, practitioners theories about alternative ways to approach learning , taking theory developed from the previous step and creating a new theory.

This requires teachers to think about new or additional sources of knowledge that may be helpful to make sense of what happened.

4. Act

In the fourth step, the practitioner tests the new theory. Success occurs only through additional thought an reflection. In the final stage of this model, the teacher put their new way of thinking into practice by trying out a new or a different way of doing things in order to enhance and I improve their practice.

Teachers can use this model as part of a cycle of on-going learning and continuous improvement.

Goal: To integrate scientific and practical theory (or application of theory), one must reflect on one's practical theory.

Topic 31 Brookfield's Critical Lenses

Brookfield (1995) suggests that we employ four —critical lenses through which to view and reflect upon our practice. These are:

1. Our own view (autography)
2. That of our students:
3. That of our fellow professionals:
4. The various theoretical perspectives found in educational literature.

Brookfield's critical Lenses:

- Self-lens
- Student lens
- Peer lens
- Theory lens

Despite the fact that teachers personal experience might be dismissed as anecdotal Brookfield asserts that our autobiographies are one of the most important sources of insight into teaching to which we have access (1995 p.31).

Teachers should consider whether the learning experience was inclusive and motivational: This is why.... The most fundamental meta-criterion for judging whether or not good teaching is happening is the extent to which teachers deliberately systematically try to get inside students head and see classrooms and learning from their point of view (Brookfield, 1995).

Reflection becomes critical when teachers consider:

- a) How power supports and also distorts the educational process
- b) How to challenge our own untested assumptions to uncover practices that appear to make teaching easier but actually work against our own long-term interests.

Applying the four Lenses

Among the strategies suggested by Brookfield which enable teachers to engage in critically reflective practice:

- A) The critical incident questionnaire (CIQ)
- B) Critical Practice Audit (CPA)
- C) Brookfield's CIO which guide journal writing as reflective practice

Critical incident questionnaire

- A) At what moment in class did you feel most engaged with what was happening?
- B) At what moment in class were you most distanced from what was happening?
- C) What action that anyone (teacher or student) took did you find most affirming or helpful?
- D) What action that anyone took did you find most puzzling or confusing?
- E) What surprised you the most? (This could be about your own reaction to what went on, something that did, or anything else that occurs).

Topic 32 Johns Model for Structured Reflection (2000)

The model requires looking in on the situation which includes focusing on your and paying attention to your thought and emotions.

It then advises looking out of the situation and writing description of the situation based on five sources of knowledge, each of which has a number of cues:

Look in

- Find a space to focus on self
- Pay attention to your thoughts and emotions
- Write down thoughts and emotions that are significant in realizing desirable work.

Look out

Write a description of the surrounding your thoughts and emotions What issues seem significant?

The description can be focused in the following ways:

Aesthetics

What was I trying to achieve?

Why did I respond as I did?

Personal

Why did I feel the way I did within this situation?

Ethics

Did I act for the best?

What factors were influencing me?

Empirics

What knowledge did or could have informed me?

Topic 33 Rolfe, Freshwater and Jasper (2001): The What Model

They advocate using three simple questions to reflect on a situation

- What?
- SO what?
- Now What?

The Levels

In the first level the individual reflects on the situation in order to describe it.

In the second level they construct their own personal theory of understanding about the event incident in order to learn from it.

In the final level they reflect on action, about what can be done to improve the incident and about the consequences of such action.

The Descriptive Level of Reflection

What....

-is the problem /reason for being stuck etc.?
-was my role in the situation □ Action did I take?
-were the consequences for me? For the students?

So what....

- ...does this tell me/imply about my teaching etc.?

-did I base my action on?
-should I have done?
- ...is my new understanding of this incident?

Now what...

-do I need to do to improve situation/prevent recurrence?
- ...are the broader issues?
-are the consequences?
- can I do to transfer this learning from other contexts?

Topic 34 Rodgers (2002)

The reflective cycle by Rodgers encompasses Dewey's conception of reflective thought.

Rodgers illustrates reflection as a cyclical process comprised of four phases:

1. Presence in experience: learning to see
2. Description of experience: learning to describe and differentiate
3. Analysis of experience: learning to think from multiple perspectives and form multiple explanations
4. Experimentation: learning to take intelligent action

According to Rodgers teachers move forward and backward through the reflective cycle, especially between description and analysis.

Presence in Experience

The more a teacher is present , the more he can perceive, the greater the potential for an intelligent response. Presence as inclusive of several acts that together comprise the whole process of reflection seeing, differentiating its parts giving it meaning and responding intelligently in the moment and from moment to moment.

Description of experience

It is the differentiation and naming of an experience's diverse and complex elements so that it can be looked at, seen and told from as many different perspectives as possible. It should be clear from the discussion of presence that what a teacher is able to describe is largely dependent upon what he has been able to apprehend in the experience.

Topic 35 Gore and Zeichner (1991)

They propose that each of the following four types of reflection is important. They indicate four major aspects of your professional work. You need to ask and reflect on pertinent questions about each of these aspects in order to develop a deep understanding of your classroom interactions. The purpose is to gain a holistic understanding of your professional work and your role in supporting successful learning by your students.

Academic Reflection

Do I know my content really well? Am I using appropriate pedagogical strategies for my students needs? Am I well-organized and resourced in readiness to teach? Have I sequenced the content suitably for my student's needs and the defining characteristics of my discipline? Have I completed the planning cycle with suitable, relevant assessment strategies to evaluate student learning? Have I been innovative and creative?

Developmental Reflection

Am I providing teaching and learning contexts, tasks and instruction that are suitable and appropriate for my students from a developmental perspective? Have I evaluated my students skills and thinking to determine the stages at which each of them is able to engage in different learning contexts?

Have I planned suitable instructional and task modification to accommodate the difference in the students' thinking, emotional and physical capacities? Have I designed teaching and learning activities that are interesting for diverse groups of students? Have I taken into account and effectively utilized students various interests to design lessons and curriculum?

Social Reconstructionist (Critical) Reflection

What do I believe to be the purpose of education? Do I have specific philosophical beliefs or viewpoints about the values, purposes and function of education?

Topic 36 Gibbs Reflective Cycle (1988)

This model encourages the teacher to think about different aspects of a given situation or event to evaluate it , and establish an action plan for dealing with such a scenario should it arise again.

It helps the teacher to consider how they think and respond within a given situation and provides insight into self and practice.

Model of Gibbs Reflective Cycle

Description: What happened?

Describe in detail the event you are reflecting on.

Include: Where were you: who else was there: why were you there; what were you doing; what were other people doing; what was the context of the event; What was your part in this: what parts did the other people play; what the result.

Feeling: What were you thinking and feeling?

- Try to recall and explore those things that were going on inside your head;
- Include: How you were feeling when the event started; what you were thinking about at the time; how did it make you feel;
- How did you feel about the outcome of the event; what do you think about it now?

Evaluation: What was good and bad about the experience?

Try to evaluate or make a judgment about what has happened.

Analysis: What sense can you make of the situation?

Break the event down into its components parts so that can be explored separately.

Analysis: What sense can you make of the situation?

- Include: what went well; what did you do well; what did others do well; what went wrong or did not turn out how it should have done.

Conclusion: what else could you have done?

- Different from the evaluation stage in that you have explored the issue from different angles and have a lot of information to base your judgment.
- Detailed analysis and exploration in the earlier stages means valuable opportunities for learning are not missed. What else could you have done?
- Ask what you could have done differently.

Action Plan: If it arose again what would you do?

During this stage you should think yourself forward into encountering the event again to plan what you would do. Would you act differently or would you do the same thing?

Topic 37 Boud's Triangular Representation

There are many different models of reflection as we have seen. Using models or at least being aware of their similarities and differences, can help you to deconstruct experiences, ensuring you are accessing the deeper level reflective questions and issues and ultimately providing a way to structure your learning from situations.

David Boud (1987) has defined reflection as:

- — A conscious activity in which we engage to explore our experiences and develop new understanding and conceptualizations. ||
- (Boud, 1987)
- David Boud (1987) has defined reflection as:
- Learning from experience is one of the most fundamental forms of learning.
- Many models are cyclical in nature representing the idea that reflection leads to learning. Cyclical learning is never completed nor transferable without reflecting further in different contexts.

The simplest model can be seen in **Boud's Triangular Representation**

Boud's Triangular Representation Learning + Reflection = Experience

- This model, although capturing the essentials (that experience and reflection leads to learning), has limitations.
 - It doesn't guide us as to what reflection might consist of or how the learning might translate back into experience.
1. Return to an event incident or experience and record it
 2. Consider it in detail at an emotional and cognitive level
 3. Re-evaluate the event in the light of experience, knowledge and experimentation. Seek to understand the meaning of the experience
 4. Plan for what you might change.

Topic 38 Atkins and Murphy Model

Atkins and Murphy (1993) address many of the criticisms identified by Boud with their own cyclical model:

Stage 1:

Awareness of uncomfortable feelings (usually due to new unfamiliar or negative situations)

Stage 2: Examination of components of the situation

Stage 3: Analysis of the components of the situation

Stage 4: Summary of outcomes of reflection

- This model explicitly supports the deeper level reflection that was described previously. This is not to say that the other models aren't useful but it is important to remain alert to the potential to provide superficial responses as the critical, questioning and challenging elements of critical reflection are not as explicit as they are here.
- Atkins and Murphy suggest that for reflection to make a real difference to practice, we need to follow reflection with a commitment to action.

- The problem with such models of reflection is that they do not take account of the importance of reflection before action.
- This is when the teacher plans out before acting what s/she wants to do **Self-awareness (mindfulness)**
- Insight into personal sensations, emotions, thoughts and actions
- Acceptance/ownership of responses
- Recognition/ acceptance of emotions sensations, thoughts in others involved
- Involved honest examination of how the situation has affected the individual and how the individual has affected the situation

Description

- Comprehensive account of the situation either verbally or in writing
- Involve the ability to recognize and recollect accurately salient events and key features of an experience

Critical analysis

- Involve examining the components of a situation
- Identity personal cognitive and emotional schema
- Identify existing knowledge
- Identify biases and assumptions
- Imagine/explore alternatives

Synthesis

- Integrating new understanding
- Predict likely consequences of actions

Topic 39 John Smyth"s Framework for Reflection on action (1993)

Smyth's framework takes the teacher through a number of phases

- A descriptive Phase
- A Reflective Phase
- An emancipator Phase

The Descriptive Phase

- Descriptive accounts and narrative

The Reflective Phase

- Reflective analysis against adopted theories
- Reflective analysis of the situation
- Reflective analysis of intentions

The Emancipator Phase

- Critique of practice regarding conflicts distortion an inconsistencies
- Engagement in emancipatory and change processes
- Self-critique and emancipation

Smyth operationalizes these phases of reflection for teachers as a set of activities developed from question cues:

Activity: describe

Cue: What did I do?

Smyth proposes reflection for teachers as a set of activities developed from question cues:

Activity: Inform (analysis)

Cue: What does this mean?

Smyth proposes reflection for teachers reflection for teachers as a set of activities developed from question cues:

Activity: confront (self-awareness)

Cure: How did I come to be like this?

Topic 40 Agyris and Schon 1978

Agyris and Schon pioneered the idea of single loop and double loop learning. The theory is built around the recognition and amendment of a perceived fault or error. Single loop learning is when practitioner or when a practitioner or organization, even after an error has occurred and a correction is made, continues to rely on current strategies, techniques or policies when a situation again comes to light. In contrast, double loop learning involves the modification of personal objectives, strategies or policies so that when a similar situation arise a new framing system is employed (i.e. new approaches are used to solve it).

From Theory to Practice

i. Single Loop learning

Involve connecting a strategy for action with a result. For example, if an action we take yields results that are different to what we expected through single-loop learning, we will observe the results, automatically take in feedback and try a different approach.

ii. Double Loop Learning

The cyclical process of applying a new strategy applying a new strategy to achieve an outcome may occur several times and we may never succeed. Running out of strategies may push us re-evaluate the deeper governing variables that make us behavior the way we do. Re-evaluating and reframing our goals, values and beliefs is a more complex way of processing information and involves a more sophisticated way of engaging with an experience. This is called double-loop learning and looks at consequences from a wider perspective. In situation where teachers employ double loop learning, not only will we evaluate our own goals and beliefs but also those of the people we interact with. To have a constructive outcome, we may need to modify and adapt some of these variables to create an attitude that is open to many cultural values and application methods.

Topic 41 Mezirow (2000)

Mezirow (2000) argues that reflection only leads to learning if it leads to learning if it leads to transformation. Merizow suggests that transformation occurs where the original starting point causes a dilemma that needs to be addressed and then suggests that there are a series of possible phases which may be gone through:

Mezirow"s Transformational Learning

- A disorienting dilemma loss of job, divorce, marriage , back to school or moving to a new culture
- Self-examination with feeling or fear, anger, guilt or shame
- A critical assessment of assumptions
- Recognition that one's discontent and the process of transformation are shared
- Exploration of options for new roles relationships and action
- Implementing one's plans
- Provisional testing of new roles
- Building competence and self-confidence in new roles an relationships
- A reintegration into one's life on the basis of conditions dictated by one's new perspective

- What is particularly striking about Merizow's ideas is the emphasis on conscious, self-managed learning.

Learning is not a direct result of the experience, it happens because the individual takes charge of their critical reflection and explicitly plans and carries out steps to learn from it.

The following is a sequence for reflectivity draw from Mezirow's model:

- A disorientating dilemma
- Picture the event
- Critical assessment of assumptions
- What does it mean to you to feel this?
- What advice are you giving yourself in the picture
- How do you interpret what is happening
- Critical assessment of assumptions □ What is your intention? Exploration of new roles
- How would you prefer this to be different?
- When this begins to occur for you, what will be different about you?
- How do you interpret what is happening?
- What is your intention?

Topic 42 Criticisms of Reflective Practice

- A number of writers discuss key concerns of RP in terms of its problematic side:
- Brookfield (1994, 1995) explains the cultural and personal risks involved
- Ash and Moore (2002) say that new teachers can choose not to reflect constructively and critically, falling back on pre-conceived understandings There are four areas of concern about reflective practice:
- Ethical
- Professional
- Pedagogic
- Conceptual

Ethical criticisms of RP

Concerns relate to confidentiality, rights to privacy, informed consent and professional relationships

- Practitioners

Engaging in RP need to be aware of the risks and the potential for conflicts of interest

A further problem is the way reflection can involve constant striving for selfimprovement

It can lead to feelings of incompetence and self-disapproval

When an individual understands the word critical to mean negative, they can develop a negative frame of mind.

Professional Concerns

- Relevant when RP is done badly or inappropriately In this case the value of RP is missed and it simply rationalizes existing practice
- It can reinforce prejudices and bad practice
- The inappropriate use of RP may devalue teachers professional work instead of promoting it
- Where teachers follow RP models in mechanical, routinized or instrumental ways they fall into the trap of engaging neither critical analysis or their emotions

- At the level of the individual teacher it can be means for organizations to ignore their responsibilities so that fostering good practice is a matter for the teacher rather than the organization
- 2 key concerns relate to developmental readiness and the extent to which forcing student teachers to reflect may prove counter productive

Pedagogic Concern: Developmental Readiness

- Teachers need to be developmentally ready to engage in critical reflection and some individual may not be capable (ready) for reflection.
- The respective abilities of novice and expert are relevant here novices tends to follow models mechanically and experts tend not to rely on models.
- As compulsory element of teacher education courses or of organizational requirements, RP ends up being superficial, strategic and guarded.

Conceptual concerns

- Problems are posed with the way teachers embrace RP in uncritical and reductionist ways
- Often ideas are transplanted without sufficient care across philosophical, disciplinary and cultural boundaries
- Reflexivity is concept which is easily miscommunicated: it can be understood in many different ways according to the aims and function of the RP activity

Criticism of RP

Regarding these issues therefore, care needs to be taken to recognize complexity and problematic what is involved in RP rather than accepting it as fact or as self-evident. The ethical professional pedagogic and conceptual concerns presented here neither condemn RP nor suggest that it should not be used.

Topic 43 Introduction to Critical Thinking Part 1

In this lecturer we will explore the following question- □ What is critical thinking?

- How do you know when you are thinking critically?
- What are the characteristics of teachers who are good at critical thinking?

Critical thinking involves:

- Analyzing
- Conceptualizing
- Defining
- Examining
- Inferring
- Listing
- Questioning
- Reasoning
- Synthesizing

What is Critical reflection?

With a purpose to evaluate information in a disciplined way to help us evaluate and refine our thinking. As reflective practitioners we must want to be better at thinking, to seek out and be guided by knowledge and evidence that fits with reality:

1. Belief

2. If shown to be unfounded
3. Leads to a change of position and an appropriate response

Critical thinking involves reasoning:

Based on sound, consistent logic not on emotions or social pressure, truth is not determined by the emotions that accompany them nor on the beliefs of social groups

Topic 44 Introduction to Critical Thinking Part 2

In this lecture we will explore the following question- What are the major mechanisms involved in critical thinning? The thinking process is as followed

1. Biological process
2. Psychological process
3. Cognitive process
4. Communication process

Other types of thinking, or non-critical thinking:

- Habitual thinking
- Brainstorming
- Creative thinking
- Prejudicial thinking
- Emotive thinking

Other types of thinking, or non-critical thinking:

- Thinking based on past practices without consideration of current data
- Saying what comes to mind without edit, judgment or evaluation
- Putting facts, concepts, ideas and principles together in new and original ways
- Responding to the emotion of a message rather than the actual information presented.

WE are thinking critically when we are:

- Rely on reason rather than emotion
- Require evidence ignore no known evidence and follow evidence where it leads and are concerned more with finding the best explanation than being right
- Are analyzing apparent confusion and asking questions.
- Self-aware so that we Weigh the influences of motives and bias and recognize our own assumptions, prejudices biases and point of view.
- Honest so that we recognize emotional impulses, selfish motives, immoral purposes or other modes of self- deception.
- Being open-minded so that we evaluate all reasonable inferences.
- Consider a variety of possible viewpoints or perspectives, remain open to alternative interpretations.
- Being open-minded so that we accept new priorities in response to a re-evaluaion of the evidence or re-assessment of our real interests and do not reject unpopular views out of hand.
- Disciplined so that we are precise, meticulous, comprehensive and exhaustive □ Resist manipulation and irrational appeals and avoid snap judgments.
- Able to make good judgment so that recognize the relevance and merit of alternative assumptions and perspectives □ Recognize the extent and weight of evidence A non-critical thinker:
- See things in black and white

- Sees questions as yes or no with no subtleties.
- Fails to see linkages and complexities in information and situations.

Topic 45 Core Ideas about Thinking Skills

Critical thinking skills are extremely important in developing as a successful reflective practitioner

What are the major mechanisms involved in critical thinking for the reflective practitioner?

Core Critical Thinking Skills

1. Analysis
2. Inference
3. Explanation
4. Interpretation
5. Self-regulation
6. Evaluation

1. **Interpretation**

What it means: Having the ability to understand the information you are being presented with and being able to communicate the meaning of that information to others. As a teacher you will be presented with a variety of information in many different types of situations. Interpretation skills will enable you to better decode information and add clarity to what you have discovered which in turn will help you better understand your students.

2. **Analysis**

What it means: Having the ability to connect pieces of information together in order to determine what the intended meaning of the information was meant to represent. Having this skill will better provide you with the ability to read between the lines and help you do will impact on your students and your organization.

3. **Inference**

What it means: Having the ability to understand and recognize what elements you will need in order to determine an accurate conclusion or hypothesis from the information you have at your disposal.

Core Ideas about Thinking Skills

It's important for you to be able to understand what additional information you may need in order to determine what happens. The ability to understand the information or already have and determine what you may still need to find is an important skill.

4. **Evaluation**

What it mean: Being able to evaluate the credibility of statements or description of a person's experience, judgment or opinion in order to measure the validity of the information being presented. You will need this skill to evaluate your students responses, so you can determine if the information you receive is valid and whether or not it needs to be further looked into.

Your ability to clearly explain your ideas while keeping in mind who you interact with is important for making sure the information is understood and well received.

Topic 46 Critical Thinking Development: A Stage Theory

The developing critical thinker goes through a sequence of stages:

- **Stage 1- The unreflective thinker**
- **Stage 2- The Challenged thinker**
- **Stage 3- The beginning thinker**
- **Stage 4- The practicing thinker**
- **Stage 5- The advanced thinker**

- **Stage 6- The accomplished thinker**

Stage 1

Unreflective thinkers are largely unaware of the determining role that thinking is playing in their lives and of the many ways that problems in thinking are causing problems in their lives, implications, points of views etc.

Stage 2

Thinkers move to the challenged stage when they become initially aware of the determining role that thinking is playing in their lives and of the fact that problems in their thinking are causing them serious and significant problems, requires deliberate reflective thinking about thinking (in order to improve thinking).

Stage 3

Those who move to the beginning thinker stage are actively taking up the challenge to begin to take explicit to begin to take explicit command of their thinking across multiple domains of their lives. Thinkers at this stage recognize that they have basic problems in their thinking and make initial attempts to better understand how they can take charge of and improve it.

Based on this initial understanding, beginning thinkers begin to modify some of their thinking, but have limited insight into deeper levels of the trouble inherent in their thinking. Most importantly, they lack a systematic plan for improving their thinking, hence their efforts are hit and miss.

Stage 4

Thinkers at this stage have a sense of the habits they need to develop to take charge of their thinking. They not only recognize that problems exist in their thinking, but they also recognize the need to attack these problems globally and systematically. Based on their need to practice regularly they are actively analyzing their thinking. However, since practicing thinkers are only beginnings to approach the improvement of their thinking in a systematic way, they still have limited insight into deeper levels of thought, practicing thinkers unlike beginning thinkers are becoming knowledgeable of what it would take to systematically monitor the role in their thinking of concept, assumptions, inferences, implications, points of view, etc. Practicing thinkers recognize the need for systematicity of critical thinking and deep internalization into habits. They clearly recognize the natural tendency of the human mind to engage in egocentric thinking and self-deception.

Stage 5

Thinkers at this stage have now establishes good habits of thought which are —paying off based on these habits, advanced thinkers not only actively analyses, their thinking in all the significant domains of their lives but also have significant insight into problems at deeper levels of thoughts. Advanced thinkers have good general command over their egocentric nature. They continually strive to be fair-minded. Of course, they sometimes lapse into egocentrism and reason in a one-sided way. Advanced thinkers have keen insight into the role of egocentrism and sociocentrism in thinking.

Stage 6

Accomplished thinkers not only have systematically taken charge of their thinking but also continually monitoring, revising and rethinking, strategies for continual improvement of their thinking. They have deeply internalized the basic skills of thoughts so that critical thinking is, for them, both conscious and highly intuitive.

Topic 47 Importance of Critical thinking

Critical thinking

- Is the ability to think clearly and rationally?
- Includes the ability to engage in reflective and independent thinking.
- Is not a matter of accumulating knowledge- a person with a good memory and who knows a lot of facts is not necessarily good at critical thinking.
- Is being able to deduce consequences from what is known to solve problems.
- Understanding the logical connections between ideas, identify, construct and evaluate arguments.
- Detect inconsistencies and common mistakes in reasoning
- Solve problems systematically
- Identify the importance and relevance of ideas
- Reflect on the justification of one's own beliefs and values
- Is very important in the new global knowledge economy
- The teacher has to be able to deal with changes quickly and effectively, the modern era places demands on flexible intellectual skills and integrate diverse sources of knowledge.
- Enhance language and presentation skills
- Thinking clearly and systematically can improve the way we express our ideas
- Promote creativity
- To come up with a new solution to a problem involves not just having new ideas
- Critical thinking plays a crucial role in evaluating new ideas, selecting the best ones and modifying them if necessary
- Is crucial for self-reflection
- Teacher need to justify and reflect on their values and decision.

Topic 48 A Schema for critical Thinking and Reflective Practice

Venn Diagrams and the reflective Practitioner

It is possible for the reflective practitioner to frame Venn Diagrams as a tool for thinking about practice. A simple Venn Diagram for RP only has 2 circles. This represents the structure of professional learning. The diagram presents a concrete experience and the teacher conceptualizing the meaning of that experience.

The circle on the left represent —self structurell. We can more easily understand this as the learning already held by the teacher from previous experience and even perhaps from formal professional learning. This areas represents the entire perceptual experience of the teacher.

Venn Diagrams and the reflective practitioner including the self-concept that the teachers has, as well as the teacher's individual characteristics and relationships. It represents the individual value, beliefs and assumptions that the teacher has about self- other and society. In this field, we can see that, for this example there are three elements of internal understanding-labeled here as 1, 2 and 3. Of course in realty , there would be more than 3-and for any specific aspects of critical thinking and reflective activity, these would be very focused on only certain aspects of the individual teacher's self-concept. For example, if we imagine that a teacher is taking a class in elementary level mathematics-perhaps on introductory algebra- elements 1 may be the teacher's own competence with algebra, element 2 could be the teacher's own feelings of low self-confidence doing algebra and element 3 may be the teacher's ability to communicate simply the ideas and mechanics of algebra.

Topic 49 Bloom's Taxonomy and critical Thinking

How does critical thinking fit into Bloom's taxonomy (unrevised)? The cognitive domain comprises

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Knowledge

- Knowledge of specifics
- Knowledge of terminology
- Knowledge of specific facts
- Knowledge of ways and means of dealing with specifics
- Knowledge of conventions
- Knowledge of trends and sequences
- Knowledge of classification and categories
- Knowledge of criteria
- Knowledge of methodology
- Knowledge of principles and generalizations
- Knowledge of theories and structures

Comprehension

- Translation
- Interpretation
- Extrapolation

Application

- The use of abstractions in particular and concrete situations
- The abstractions may be in the form of general ideas, rules or methods

Analysis

- Analysis of elements
- Analysis of relationships
- Analysis of organizational principles

Synthesis

- Production of a unique Communication
- Production of a plan or proposed set of objectives
- Derivation of a set of abstract relations

Using Bloom's Taxonomy for Critical Thinking

The cognitive processes characterized as essential to higher-order thinking (that is analysis, synthesis and evaluation in the unrevised taxonomy) are integrative of the basic critical thinking concepts: assumption, fact, concept, value, conclusion, premise, evidence, relevance, irrelevance, consistency, inconsistency, implication, fallacy, argument, inference, opinion, bias, prejudice and hypothesis.

Topic 50 Techniques for Critical Thinking

Here are 16 basic techniques of critical thinking:

1. **Clarify:**

2. State one point at a time. Elaborate, give examples, ask others to clarify or give examples.

Unclear. —How can we fix education?||

Clear. How can teachers better prepare students for the future?

3. **Be accurate:**

- Check your facts.

Inaccurate: —Most students don't know how to learn||.

4. **Be precise:**

Ensure you are able to check accuracy. Avoid generalizations and other ambiguities.

Imprecise: —Maliha is problem student||.

Precise: —Maliha has an attention deficit problem||.

5. **Be Relevant:**

Stick to the main point. Pay attention to how each idea is connected to the main idea.

Math is an important skill. I like to teach math's because it's an important skill for my student||.

6. **Know your purpose**

What are you trying to accomplish? What's the most important thing here? Distinguish your purpose from related purposes.

7. **Identify assumptions:**

All thinking is based on assumptions.

Assumptions not identified: —Girls are no good at sciencell.

— science is only a subject like any other.

If my female students are not succeeding in my science class than there must be something in the way I teach which is not working for them||.

8. **Check your emotions:**

Emotions only confuse critical thinking. Notice how your emotions my be pushing your thinking in a certain direction.

9. **Empathize:**

Try to see things from others perspective. Other imagine how they feel. Imagine how you sound to them.

10. **Know your own ignorance**

Each person knows less than 0.0001% of the available in the world., even if you know more about relevant issues than your students or a colleague, you still might be wrong. Educate yourself as much as possible but still be humble.

11. **Be independent:**

Think critically about important issues for yourself. Don't believe everything you read.

Don't conform to the priorities, values and perspectives of others.

12. **Think through implications:**

Consider the consequences of your viewpoint.

Not thinking through implication: Not planning my lessons is wrong.

—If my lessons are unplanned then I cannot be sure of the journey my students are taking in their learning. I need to consider planning as my road maps to help them reach their destination.

13. **Suspend Judgment:**

Don't make a decision and then use critical thinking to back it up.

We are here to promote the school plan for curriculum reform. What arguments can we construct in its favor?

Suspend judgment:

—What do we want from our curriculum? Let's use critical thinking to find the best ways to do this.

14. **Consider others Points of view:**

Listen to other viewpoints. Seriously consider their most persuasive arguments.

Narrow-minded: Reading some research and letting it persuade you.

Open-minded: Reading the research, then reading other research that argues the opposite point.

15. **Recognize cultural assumptions:**

People from different cultures think much differently than you do.

Why is your perspective better than that of everyone else in the world today and throughout history?

16. **Be fair, not selfish:**

Each person's most basic bias is for themselves.

Selfish: — I can know everything. It's not my fault I made a mistake.

Fair. — I can't know everything, but I could easily have done some basic research before attempting that strategy in my teaching.

Topic 51 The 5- Step Model of Critical Thinking

Step 1:

Determine goals/ objectives

Define behavior/skills you need to exhibit

Target those behaviors

Step 2:

Learn through seeking answer to specific questions

Develop appropriate questions Engage in discussion with colleagues

Step 3:

Practice before you assess

Choose activities that promote active learning Utilize all components of active learning.

Step 4:

Review, refine and improve

Monitor activities in the classroom Collect feedback from students/others

Step 5:

Gather and review feedback and assessment of learning

Review feedback

Create opportunities for self-assessment

Utilize feedback to improve instruction

The 5- Step Model of Critical Thinking

Implementing critical thinking through this framework clearly requires a commitment to active learning which at least initially may be somewhat unfamiliar and uncomfortable to teachers.

Topic 52 Halpern's Framework for Critical Thinking

Halpern process a framework based on different kinds of critical thinking:

Thinking and Language

Argument Analysis

Hypothesis Testing

Halpern proposes a framework based on different kinds of critical thinking: Dealing with probability and uncertainty

- Decision-making
- Problem-solving
- Creative thinking
- Memory Skills

Thinking and Language

- Recognizing persuasive language
- Mis-use of definitions
- Leading questions
- Paraphrasing
- Using Multiple representations Argument analysis:
- Identifying premises, counter-arguments and conclusions
- Judging credibility of information
- Difference between opinion, judgment and fact
- Avoiding common fallacies

Creative Thinking:

- Re-defining a problem
- Generating possibilities
- Seeing multiple perspectives
- Taking risks

Hypothesis Testing

Predicting and confirming hypotheses

- Operational definitions
- Controlling variables
- Sampling and generalizations □ Limits of correlational reasoning

Dealing with probability and Uncertainty:

Estimating probabilities

- Risk assessments
- Using baseline data
- Decision-making
- Framing a decision
- Generating options
- Predicting Consequences
- Weighing pros and cons
- Recognizing bias

Topic 53 Critical Incident Analysis

CIA helps teachers focus on the extent to which critical analysis is evident in their practice. The term critical incident refers to any work teachers do that involves analyzing situations, reflecting on past experience making judgment and decision and taking actions without the benefit of a standard protocol or uniform response that takes care of each and every problem they encounter.

The following are the steps needed for a teacher to undertake a critical incident analysis (CIA).

As a teacher you should ideally do a weekly audit to understand more about your practice.

In particular, it will help you to understand the assumptions that underpin how you analyses situations, make decision and take actions.

Think back over the last week

- Identify the critical incident that have happened during that time.
- A critical incident is an event that can be called to mind easily and quickly because you remember it vividly.
- We usually consider events to be critical when they are unexpected- a surprise
- They can be positive high or demoralizing lows

Choose the most memorable 2 or 3 critical incidents

For each incident do the following

1. Write a brief description of the incident, including details of what happened who was involved, where and when it took place and what made the incident critical to you. 2. List the assumptions you have as a practitioner that were confirmed by this incident. What was it about happened that led you to think that the assumptions you uncovered were accurate and valid?

3. List the assumptions you have as a practitioner that were challenged by this incident. What was it about what happened that led you to think the assumptions you uncovered might be inaccurate or invalid?

4. How did you try to check the accuracy of your assumptions that were challenged? If you were not able to check them out at the time, how could you check them in the future? What sources of evidence could you consult?

What different perspectives could be taken on the incident? As you think about it through the eyes of the other people involved, are there different ways the situation could be seen or that your behavior could be interpreted?

Topic 54 Examining Your Personal Filtering System

This screening process leads to differing perceptions of circumstances and events resulting in different interpretations and subsequently in different responses.

When we critically examine our screens, we can become more aware of how our screens may be filtering out potentially more effective responses to classroom situations.

Topic 55 Learning Through Conceptual Innovation

Learning through conceptual innovation Involves:

- Seeing farther
- Understanding deeper
- Making the right decision

It is not about

Working harder

Getting more resources

Increasing our collection of methods and tools

Conceptual Learning

It is more about the reflective practitioner:

Re-Thinking: What is already known.

Renewing the concepts: We use for understanding.

Getting Wiser.

Learning through conceptual Innovation

Benefits of a concept- based Model:

- Facilitates synergistic thinking- the interplay between factual and conceptual levels of thinking.
- Requires deeper intellectual processing as students relate the facts to key concepts and principles.
- Develops conceptual structures in the brain to relate new knowledge to prior knowledge and to illuminate the patterns and connections of knowledge.
- Facilitates the transfer of knowledge at the conceptual level.
- Provides opportunities for personal meaning making through processes of thinking, creating and reflecting.

Topic 56 Technical and conceptual Learning

- We are more trained in learning new methods and techniques than for learning new concepts.
- One reason for this is that new methods impact on productivity almost immediately.
- But by limiting our learning to technical issues:
- We are not flexible enough when we are confronted by complex situations But by limiting our learning to technical issues:

We are not flexible enough when we are confronted by complex situations

We, and our techniques get out of date in a short period of time We get over learned in a few years, our curiosity decreases.

According to Dewey Schon and others concepts are cognitive tools for coping with the world and for solving problems.

- We are not flexible enough when we are confronted by complex situations
- We and our techniques get out of date in a short period of time
- We get over – learned in a few years, our curiosity decreases

Topic 57 Concept and Frames

We are more trained in learning new methods and techniques than for learning new concepts.

One reason for this is that new methods impact on productivity almost immediately.

Concepts determine the way a situation is perceived and framed.

Donald Schon says, — while a given situation can be conceived in a variety of ways, it is always a concept- structured situation.

- Concepts enable Perception and understanding

Concepts and Frames

With only a small number of concepts to draw on the reflective practitioner sees only a small part of what is actually being looked at:

Reality leads to sense making, the elements of reality that are not perceived and elements of reality that are perceived.

The process of concept formation has three important phases:

1: Perception: Experience or learning in any form is the starting point of the process of concept formation.

2. Abstraction: The mind analyses the perceived images and synthesizes what is common to all, neglecting what is not needed.

3. Generalization: After making such observation in the form of abstraction for a number of times we are able to form a general idea about common properties because of these we will develop a concept.

58. New Realities

Once we detect that something is new, we try to make sense of it by making analogies with others thinks we already know. We do that using old concepts and brining back our past experiences.

Gradually we go through the process of extending and changing the old concepts and in some moment a new concepts emerges.

The interaction with new concepts triggers learning processes:

- The assimilation/incorporation of new concepts disturbs and transforms the knowledge we have about the world and ourselves.
- The emergence of new concepts changes the way we perceive and understand the world.
- New concepts emerge as new questions are made.
- Conceptual innovation is like reframing but deeper.

Reframing is a way of:

- Improving our understanding of a situation
- Solving conflicts and inventing new strategies
- Conceptual innovation enables you to rethink a whole group of situations
- It brings up a new set of possibilities

59 Paradigm Shift

A paradigm shift brings a new set of concepts:

- From things to people
- From product to process
- A paradigm shift brings a new set of concept:
- From teacher to student
- From standardizing to managing diversity
- From replication to inspiration
- From controlling to managing change and uncertainty

We represent the paradigm shift for the reflective practitioner in the following diagram:

New understanding lead to paradigm shift and emergent knowing

Paradigm shift= different kinds of learning

Single loop learning (Following the rules)

- Rigid strategies
- Spend time detecting and correcting deviations from the rules

Double –loop learning (changing the rules)

- Reflect on whether the rules themselves need to change
- Requires thinking outside the box

Triple-loop learning (learning about learning)

- Learning how to learn
- Searching for meaning and understanding

60. Theories-in-Use or Espoused theories

Action is not always consistent with formal beliefs.

- Theory-in-use is embedded in the logic of the action, it is the theory that commands the thinking of the action.
- Action is not always consistent with formal beliefs.

- Espoused theory is that theory used for arguing about the actions, it is the theory used for explaining the action to others but not necessarily for conducting the action.
- Frequently the theory –in-use and the espoused theory have important differences between them.
- Espoused theories are explicit but most theories in use are tacit.
- How to combine the espoused theories and experience for creating solutions?
- Reflective practice is about ownership of knowledge
- Reflective practice is about awareness of the knowledge we use, how we use it and how we can improve our action in real time.
- Reflective practice is about how our minds work and how we use and create theories in practical situations.
- It is about invisible and visible, tacit and explicit, blindness and sight.
- Reflective practice is about flexibility adaptation and effectiveness.

Topic 61 What is reflective writing?

Reflective writing is evidence of reflective thinking:

- Looking back at something (something that happened or an idea or a project) Reflecting writing is evidence of reflective thinking:
- Analyzing what happened (thinking in depth and from different perspectives)
- Thinking carefully about what it means for you as a professional

Reflecting writing is more personal than other kinds of academic writing.

We all think reflectively in everyday life but not to the same depth as that expected in good reflective writing for a reflective practitioner.

We already know that reflective writing:

- Describes
- Links theory to practice
- Questions experience
- Has a focus on improvement

Let's take a look at an example of reflective writing:

Example of basic reflective writing

Specific tasks were shared out amongst members of my team. Initially, however the tasks were not seen as equally difficult by all team members. Cooperation between group members was at risk because of this perception of unfairness. Social interdependence theory recognizes a type of group interaction called 'positive interdependence' meaning cooperation (Johnson and Johnson 1993).

Topic 62 A Structure for Reflective Writing

A structure for reflective writing

Reflective thinking especially if done in discussion with others can be very free and unstructured and still very useful.

Even reflective writing can be unstructured for example when it is done in a personal diary.

Reflective writing however is normally carefully structured.

Description

- What happened?
- What is being examined?
- Keep this part short

Interpretation

- What is most important/useful/relevant about the object/event/idea?
- How can it be explained? From literature on the subject?
- How is it similar to and different from others?

Outcome

- What have I learned from this?
- What does this mean for my future?

Remember the following 4 key points

Reflection is an exploration and an explanation of events not just a description of them. Genuinely reflective writing often involves revealing anxieties errors and weaknesses as well as strengths and successes. This is fine, as long as you show some understanding of possible causes and explain how you plan to improve.

It is necessary to select only the most significant parts of the event or idea on which you are reflecting.

Do not try to tell the whole story, this would be description rather than interpretation.

It is often useful to reflect forward to the future as well as reflecting back on the past.

Topic 63 Vocabulary for Reflective Writing 1

The following are a few suggestions for words and phrases that might be useful in reflective writing.

- Description:
- Because the range of events, ideas and objects can be so great it is not possible to suggest specific vocabulary to help you reflect.
- Remember
- We tend to talk of events using the past tense
- We tend to discuss theories or models using the present tense

Topic 64 Vocabulary for Reflective Writing 2

Reflective writing involves an exploration and explanation of an event. It may feel particularly difficult and more challenging than other forms of academic writing as it involves thinking and writing about anxieties and errors as well as successes in your interactions with an individual or when carrying out a practical task. Try to stand back from the situation and be as objective as possible. Although you are writing about your own experiences and feelings, you need to be as rigorous and thorough as you would be for any other assignment.

Key Features of Reflective Writing

Reflective writing is a way of processing your practice-based experience to produce learning. It has two key features:

- 1) **It integrates theory and practice.** Identify important aspects of your reflections and write these using the appropriate theories and academic context to explain and interpret your reflections. Use your experiences to evaluate the theories - can the theories be adapted or modified to be more helpful for your situation?
- 2) **It identifies the learning outcomes of your experience.** So you might include a plan for next time identifying what you would do differently, your new understandings or values and unexpected things you have learnt about yourself.

Using academic evidence in reflective writing:

You are aiming to draw out the links between theory and practice. So you will need to keep comparing the two and exploring the relationship between them.

Analyse the event and think about it with reference to a particular theory or academic evidence. Are your observations consistent with the theory, models or published academic evidence? How can the theories help you to interpret your experience? Also consider how your experience in practice helps you to understand the theories. Does it seem to bear out what the theories have predicted? Or is it quite different? If so, can you identify why it's different?

- **Be selective:** Identify challenging or successful parts of the encounter. Reflect deeply on a few significant aspects and learning points.
- **Discuss** your reflections with others to deepen your insight, improve your ability to express your ideas and help to explore a range of perspectives.
- **Collect evidence** - There are two sources of evidence which need to be used in reflective writing assignments:

- 1) **Your reflections** form essential evidence of your experiences. Keep notes on your reflections and the developments that have occurred during the process.
- 2) **Academic evidence** from published case studies and theories to show how your ideas and practices have developed in the context of the relevant academic literature.

Topic 65 Limitation of Self-Reflection

Habermas (1974) suggested that reflection requires a level of detachment and objectivity which can be confused by self-deception.

Look at the example which explores this:

Dr. Brown is worried about his class. He knows that if he does not stick to the time allocated for each section he will run out of time and the material at the end won't be covered.

	Perception	Reality
Problem	Poor time management	Can't relinquish control
Reflection	Questions reduce time to cover material	Time management because the problem and the disguise
Solution	Better lesson plans: don't allow question	Not discovered via reflection

This concern is then that there may be much that you keep from yourself (consciously or otherwise) and some of the thinking about your own process may remain unknown and unexplored.

A future concern relates to memory bias.

We tend to remember disturbing/ bad incidents more readily than the good ones. This means that more weight is given to reflection on what the teachers perceives as bad and this can impact on the accuracy of perceiving what happens in the classroom.

66 Strategies for Overcoming Barriers

There are always barriers before, during and after any reflective practice.

Some of these barriers are self-imposed. Others originate within an institution. We look at common barrier and what can be done to overcome them.

Lack of Time and Space to Reflect:

Using the journey to and from your workplace is a chance to reflect

Using the first 20 minutes after you learner have left for the day while events are still fresh I you mind.

Jotting down notes in a journal to reflect on when you have time later.

Talking with a trusted and honest colleague over lunch

A group discussion with several colleagues at the beginning or end of the week-perhaps this could be scheduled into the timetable?

Negative ideas about reflection:

It is common to find negative

Preconceptions about reflective practice.

This is because it can be a difficult and time-consuming process.

If you have negative3 preconception, discuss them with colleague who use reflective practice

Also consider trying it for yourself for a period of time, such as a term and see whether you can identify changes to your own practice.

Organizational culture

- Some organizations are supportive of reflective practice and your management might model reflective behavior. Others may not.
- At the level of the individual practitioner the aim of RP is not about changing the culture of your organization but about changing your own practice and skills. Do not be put off by a culture which does not embrace this. □ Be resilient

Fear:

RP can be an intimidating idea as it requires a critical honest and open view of yourself. This can be difficult.

If you find it difficult to be honest with yourself, see whether you can find a trusted and honest colleagues who can become your critical friend and help you identify situations or skills which could be improved.

Lack of knowledge and experience of RP

This can be a problem for new and experienced practitioner alike.

You need practice to be able to do it well.

Re-read about some of the theories discussed about RP and use some of the techniques to practice
See what works for you.

67. Professional competences 1

Professional competence can be categorized into three broad headings.

1. Professional values and practice
2. Professional knowledge and understanding
3. Professional skills and application

1. Professional values and practices

The reflective practitioner should demonstrate a commitment to a personal code of values What would you consider to be core values for the teaching professional?

- Trust
- Respect
- Integrity
- Honesty
- Fairness
- Tolerance
- Commitment
- Equality
- Service

Developing competences

- A commitment to serve lies at the heart of professional behavior.
- Teachers need to exemplify these values in their relationships with their students.

Profession competences

In applying their values in a commitment to learners, reflective practitioners must exemplify these values in their relationships with their students.

Motivate and inspire students with a view to helping each realize his or her potential.

Developing Competences

Work with colleagues to create a professional community

Ensure that relationships with parents are characterized by trust and respect.

68. Professional Competences 2

Professional knowledge and understanding

- The reflective practitioner must ensure knowledge and understanding of the subjects they teach.
- Develop an understanding and knowledge of social and policy contexts for education.
- Develop knowledge and understanding of a range of strategies to promote and maintain positive behavior.

Developing competences

- The reflective practitioner must enhance skills for communicating effectively with students and colleagues.
- Develop knowledge and understanding and understanding of how to use technology to support student learning.
- Develop a knowledge and understanding of students social and community contexts and address the implications for learning arising from these.

69. Professional competences 3

- Professional skills and application
- In planning and leading the reflective practitioner must

- Set appropriate learning objectives/outcomes intentions, taking account of what students know, understand and can do.
- Plan and evaluate lessons that enables students to meet learning objectives /outcome/ intentions

Professional skills and application

- In planning and leading the reflective practitioner must manage workloads effectively and efficiently and maintain a work/ life balance.
- In teaching and learning the reflective practitioner must create and maintain a safe interactive and challenging learning environment.

Developing Competences

Use a range of teaching strategies and resources which maintain pace within lessons.

Employ strategies that motivate and meet the needs of students.

Secure and promote a standard of behavior that enables all students to learn, dealing with poor behavior in the context of school policies and best practice.

In teaching and learning the reflective practitioner must contribute to the life and development of the school.

Monitoring student's progress, giving constructive feedback to help students reflect on and improve their learning.

Select from a range of assessment strategies and use this information in their planning to make their teaching more effective.

70. Professional competences 4

- Professional competences 4
- Dimensions of Development:
- Developing Competences

As reflective practitioners progress in their careers they will encourage different challenges and expectations. This means

- Their condition grows
- They learn from experience
- As a consequence of this progression-
- The reflective practitioner becomes a more sophisticated teacher □ What is the framework for this reflection?

Dimensions of Development and developing competences o Greater complexity in teaching (e.g handling a large degree of diversity in the classroom).

- Use of a wider range of teaching strategies.
- Basing teaching on a wider range of evidence, reading and research.

Dimension of Development

Extending impact beyond the classroom and fuller participation in the life on the school.

- The capacity to exercise autonomy, to innovate and to improvise.
- A clear capacity for self-criticism and self-improvement.
- The ability to impact on colleagues through mentoring and coaching .
- Modeling good practice.

71. The Provisional Model 1

This model attempt to combine the strengths of the various approaches to reflective practice.

At the heart of the model are 4 core components

Developing competences

- Knowledge/ cognitive competence (i.e work-related knowledge and the ability to put this into use)
- Fundamental competence
- Personal/behavior (adopting appropriate behavior in work related situations)
- Values/ethical competence (making sound judgments in work-related situations)

The provisional Model 1

The core components are brought together in a coherent framework by an over-riding principle:

1. Meta-competences which include
2. Communication
3. Self-development
4. Creativity
5. Analysis
6. Problem-solving

72. The Provisional Model 2

Each of the 4 components is made up of

Let's look at each of these in turn:

a number of constituents, these are group of individual competences.

Knowledge/ Cognitive competence			
Tacit/practical this is knowledge linked closely to functional/ personal competences, linked closely to schon's reflection –in- action	Technical theoretical , this relates to underlying knowledge bases including their application, transfer, synthesis etc	Procedeure- this consists of the how what, when etc of the more routine tasks of teachers	Contextual- this is general background knowledge about educational/ teaching.
Functional Competence			

Occupation specific- these are the teaching specific tasks	Organizational/ process- these planning, organizing, managing, monitoring	Cerebral- these are mental activities like thinking	Psychomotor these are physical in nature like dexterity
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Personal/ Behoove competence	
Social/ vocational these are things like self- confidence, task focus, stamina etc	Intreprofessioanl- these are behavior that are behavior that relate to interaction with other professions.
Values/ ethical competence	
Persoanl- these include such things as being directed by personal moral/ religious codes etc	Professional – including being directed by professional codes. Student-centeredness etc.

Outcomes

The metacompetences and the 4 core components (and their constituents) produce a range of outcomes:

Micro- Outcomes

- These are the broad overall results of professional activity
- These are the outcomes of very specific activities under any of the core components.
- These are the result of a partially completed activity.

Topic 73 Right Mental Attitude

The reflective practitioner must have the right mental attitude.

An analysis of Dewey’s paradigm of reflective thought reveals that 3 attitudes are required in the process of reflective thinking. These are:

- Open- mindedness
- Responsibility
- Whole-Heatedness
- Open-mindedness is the most significant
- It refers to the ability to remain open to multiple, alternative possibilities.
- This means that the open minded teacher continuously question routine and practices their validity and value.
- In order for reflection, the teacher must have certain values and beliefs about learning that will lead to reflection.
- Therefore the reflective practitioner does not believe in one single truth or in one right way to teach and develops ways of knowing and patterns of reasoning.

Topic 74 The Professional Development Journal (PDJ) 1

- This is a written record of your experiences or and feeling about planning, preparing and delivering lessons.
- It wills certain general accounts of learning and will identify critical incidents.
- The PDJ is subjective – it is written by you and for you, So it provides a dialogue with yourself.
- The PDJ is also a place where you relate theory to practice.
- One of the most valuable functions of the PDJ is to help you identify development points for action planning.
- You should review your journal regularly for recurring themes
- It is important to get into the habit of written and to do it as soon as possible after the event.

- When you start writing, don't think too hard. Let the writing flow and try to capture the experience and some critical incidents.
- Little and often is a good rule.
- Share your reflections with colleagues- it can be very helpful to find that colleague is experiencing the same uncertainties or difficulties.
- You can include diagram and drawings.
- To the description (what happened?) you need to add analysis (how, why?) evaluation (how effective was it?) and conclusion (suggestions for future practice).

Topic 75 The Professional Development Journal (PDJ) 2

Driscoll and Teh (2001) provide a simple but very useful framework for reflection based on three questions:

- What?

Description of the event □ So what?

- Analysis of the event

Now What?

- Proposed actions following the event
- They also provide a list of trigger questions

What?

- What happened?
- What did I see/do?

So what?

How did I feel at the time?

What were the effects of what I did (or did not) do?

Now what?

What are the implications of what I have described and analysed?

How can I modify my practices?

Layout:

- You can design your own template for your PDJ
- Using the following categories (headings) can help
- Description
- Analysis and evaluation
- Conclusion for future practice
- Use split page or two page approach (LHS to record description and RHS for reflection)

Topic 76 Critically Incidents

These are specific occurrences within teaching and learning which you consider significant or important

Critical incident may be positive or negative

They could be described as light bulb moments a sudden realization

Examples:

Being faced with behavior difficulties with learners

A refusal by a student to engage in an activity □ You might realize that you have been talking for too long How can Critical Incidents be used?

Reflecting on critical incidents is a process to aid analysis and increase the potential for positive outcomes

Analysis of a critical incident can take place at any point

Congratulations and affirmations

Immediate action

Not resolved

No action but the you feel better for talking about it

Can be used in different ways to produce narratives based on the recall of an experience

For example, critical incident reflection can be of a one-off event/ experiences about the same issue/focus.

Topic 77 Reflective action planning

This involves being helped to:

- Select a specific target (effective rules ad routines or widening our range of strategies)
- Plan a program of discussion and observation over a fixed period
- Evaluate your effectiveness

This involves being helped to:

- Plan a program of discussion and observation over a fixed period
- Evaluate your effectiveness

This is about

- Identifying opportunities to discuss, reinforce and develop practice
- Deciding what evidence of planning and practice goes into professional development

An effective action plan is one that:

- Build on your career entry profile
- Has been discussed and agreed with your manager
- Is precise

An effective action plan is one that:

Answer the following questions-

- What is my priority and what do I want to achieve?
- What am I going to do and when?
- Who/what will help me?
- How will I collect evidence
- How will I know if I have been successful?
- This is the area for development
- What do I want to do with greater confidence and more effectively?

What am I going to do and when?

- This is action
- For example, — I will discuss school expectations with my head of departmentll.
- Support arrangement
- I will lesson planning with my colleagues

Topic 78 Indicators of Reflective Practitioner

- There are key learning and teaching practices which contribute to effective pedagogies
- These identify the key attributes of the effective reflective practitioner
- Intellectual quality
- Higher order thinking
- Deep understanding
- Substantial conversation
- Meta-language

These can be operationalized with the following questions:

Intellectual Quality

These can be operationalized with the following questions:

How do I use student prior understanding and experiences to support new understanding and experiences?

How do I encourage my student to be agents of their own learning?

How do I move students higher order thinking?

- Supportive classroom environment
- Student direction
- Social support
- Active
- Engagement
- Co-construction of learning
- Self-regulation

How do I collaboratively plan aspects of the curriculum with my students?

How do I motivate learning?

Engagement with different

Cultural/ contextual knowledge

Group identity

Narrative

These can be operationalized with the following questions:

How do I acknowledge respect and value student diverse and complex identities?

Topic 79 5-Key Features of Reflection

Teaching is a complex activity, in which decisions are made in complex contexts. In addition, there are theoretical perspectives to consider and the process of reflection brings all these aspects together.

There are some key features of reflection that are widely considered

1. Reflection results in learning- through changing ideas and your understanding of the situation.
2. Reflection is an active process and is more than thinking or thoughtful action
3. Reflection involves problematizing that practice is not without dilemmas and issues.
4. Reflection is not a linear process but a cyclical one where reflection leads to the development of new ideas which are then used to plan the next stages of learning.
5. Reflection encourages looking at issues from different perspectives, which helps you to understand the issue and scrutinize your own values, assumptions and perspectives.

Therefore when the term critical reflection is used, it refers to a combination of the analytical, questioning (Or critical thinking) and reflective approaches.

Topic 80 Ensuring Reflection Leads to Learning

There is a distinction between surface level reflection (routinized) bland and unthinking and a deeper level (conscious control, self-analysis metacognition). Many theories make a distinction between common sense thinkers and those who are pedagogical thinkers. This distinction gets to the heart of how to ensure reflection is an effective learning tool.

Laboskey defines common sense thinkers as those who reflect in an unconscious way, suggesting they are happy to use a trial and error approach to learning to address short term issues that are context specific.

Pedagogical thinkers are more conscious of their action asking the questions what is my intuitive response to this and why am I feeling or action this way? Laboskey suggests that it is by taking conscious control that pedagogical thinkers take a long term view of how to solve problems .. remaining open to learning ... recognize there are no simple answer and the conclusion they reach are likely to be tentative) Laboskey in Cartwright, 2010).

4 principals for learning

1. Continuous reflection
2. Connected reflection
3. Challenged reflection
4. Contextualized reflection

Continuous reflection

- This ensure that reflection is an on going component in learning. Often short-term experiences can leads to more complex long term involvement which gives the teacher extensive material for observation, reflection and experimentation.

Connected Reflection

- This is essentially the component that links experimental learning to formal training

Challenging Reflection

- .This is the teacher being prepared to pose questions and propose unfamiliar or even uncomfortable ideas for making changes

Contextualized Reflection

- .This ensures that the reflection activities or topic are appropriate and meaningful in relation to the experiences of the teacher.

Topic 81 Tools for Reflection

Reflective Journals

- Most frequently used
- Involves teachers in self-assessment, collaborative critique, self-reflection and goal setting
- May become a shared dialogue with a colleague
- May be an individual journey of professional self-reflection
- May be supported by a framework (list of questions/checklist etc)

Tools for Reflective Journals

- Reading response Journal
- Teachers reads recommended content and then record responses in the journal Double entry Journal

- Involve a statement of context on the left hand side and reflections and proposed actions on the right hand side.
- Based on Smith's (1989) 4 phase model of describe, inform, content, confront and reconstruct.
- Interactive Journal
- The teacher share the journal writings with an audience
- Provides encouragement and deepening reflection
- Dialogue Journal
- Supports the process of deconstructing and reconstructing experience.
- Helps teachers make sense fo the conceptual and theoretical understandings about teaching
- Narrative journal
- The teacher reflects on the various and beliefs which form the essence of teaching
- Teachers can draw inferences from experience
- Practicum Journal
- Provides guiding questions about teaching
- Enables teachers to critique and modify their teaching
- Self- assessment framework help to develop reflective skills
- There are many different self- models which teachers can use

Portfolio

- A collection of structured professional artifacts that demonstrate accumulated knowledge, skills and practice
- Paper-based or electronic
- Teachers can portray higher level cognitive thinking and selfreflective growth

Topic 82 Social Criticality

Being socially critical means starting with reality, with seeing injustices and contradictions and beginning to overturn reality by reasserting the importance of learning.

- Only when teachers take an active reflective stance are they able to challenge the dominant —factoryll metaphor of the way many schools are conceived, organized and enacted.
- In theorizing practice and practicing theory, teachers are able to see reflection as embedded deeply in our teaching, rather than something that we do to it afterwards
- Social development is based on:
 - (a) Received knowledge- the intellectual content of the profession
 - (b) Experiential knowledge classroom experience PLUS reflection
- Dialogue and discussion are central to development
- Articulation of ideas is crucial to shaping pedagogical thinking.
- Cooperative development involves another
- Self-development is based on social constructivism:
 - (a) The mind is mediated by language
 - (b) Understanding is jointly constructed through dialogue
 - (c) Teachers are guided to higher planes of understanding through dialogues they have with other professionals
 - (c) Knowledge is socially derived

Self –development is based on social constructivism:

E)Learning takes place in ZPD) zone of proximal development)

- The process of reflection allows reflective practitioners to develop an —inquiry stancell on their practice and construct their own knowledge base and their own professional skills.
- Teachers advance their effectiveness through **reflective practice** by challenging uncritically accepted assumptions.

Topic 83 Hegarty"s Reflective Framework

The framework consists of a template that you can follow t structure your reflective writing in three steps. This encourages you to move beyond basic description about your experience to analyze your actions, learning and emotional reactions an thus examine your practice more critically and from different perspectives

- **Take notice an describe the experience-** pay attention and record what happened: What did you do , know , feel, think, need? What decisions were made?
- Analyze the experience- what were the actions and decisions and why these actions and decision? What was your reaction?
- Reflect, take action- what did you learn? How will you use this learning?
Plan how you will apply this learning

Topic 84 Personal Practical Theory (PPT)

Researchers exploring the relationship between teacher beliefs and their classroom practices found that teachers experiences impact what they believe teaching should be like and that teachers form their own theories in teaching.

- PPT is the systematic set of beliefs (theories) guiding teachers practices (practical) that are based on their prior life experience (personal).
- What does this mean for the reflective practitioner?

- Surfacing their PPT enables teachers to be more aware of their rationale for on-going decision making and empowers them to become reflective practitioners.
- Develop your own PPT
- You can use the following chart
- There are no right or wrong answers

Topic 85 Professional Identity

What is it?

- A more or less conscious apprehension of what constitutes good and professional teaching and learning (Huggen 2005)
- Develop through participation in professional communities in cooperation with others on concrete tasks (Wenger 1998)
- Knowledge and skills are transmitted through language and communication (Vygotsky 1978)
- Theoretical perspectives and the habit to reflect must be experienced by teachers as normal teaching activities.
- Reflection in Teacher Development
- Practice oriented reflection (practice as training)
- Based on experiences and what works
- Theory is not important
- Professional reflection (practice as education)
- Critical reflection, self-reflection □ Theory is an important tool.
- Professional reflection is necessary to educate authoritative independent teachers
- Reflection in advance
- Central to intellectual and professional growth
- Reflection is mostly instrumental/practice oriented, focusing on —technical

Aspects and what the students could have done better.

Topic 86 Developing Professional Identity

- Meaning is constructed through communication and cooperation in concrete situations
- By participating in normal teacher activities together with competent others as legitimate peripheral members
- Mentors are competent teachers serving as models for the reflective practitioner.
- Professional growth, thus implies that reflective practitioners meet mentors who focus on professional aspects of teachers work
- Experience critical reflection / thinking and pedagogical argumentation as part of professional teaching practice □ Assumption are verbalized and challenged.
- Experiences with theory based practice will inform the reflective practitioner that critical reflection and theoretical perspectives are normal parts of professional competence.
- Such experiences will, thus be expressions of competence and good teaching (professional identity)
- The construction of a professional identity and its development are individual maturation processes
- It begin when one enters training for the professional as a novice and these processes evolve through many development stages, Until finally one perceives one's professional identity

Topic 87 Multiple Intelligence Theory and the Reflective Practitioner 1

The benefits of utilizing (MI) theory in educator professional are multifold

1. It emphasizes the process of learning in delivering desired outcomes
2. It promotes thoughtful consideration of learning experienced in a variety of diverse modalities
3. It generates a broad survey of experiences across levels and disciplines
4. It encourages development of strategies beyond the strengths and interests of the teacher
5. It provides a varied pacing of activities throughout the development experience
6. It fosters authentic, real-world experiences that promote deeper understanding
7. We can represent the multiple intelligences diagrammatically.

Topic 88 Multiple Intelligence Theory and the Reflective Practitioner 2

- There are now nine MIs
Multiple
Intelligence
Theory and the reflective practitioner
- How does the reflective practitioner's approach their professional identity growth when applying MI theory?
- Let's Consider each path to Growing professional identity
- Path to growing professional identity
- Visual/Spatial: Learning visually and organizing ideas spatially. Seeing concepts in action in order to understand them.

The ability to —seell things in one's mind in planning to create a product or solve a problem.

Verbal/Linguistic

- Learning through the spoken and written word. This intelligence was always valued in the traditional classroom and in traditional assessment of intelligence and achievement.
- Mathematical/Logical

Learning through reasoning and problem solving. Also highly valued in the traditional classroom where students were asked to adapt to logically sequenced delivery of instruction.

- **Bodily/kinaesthetic** learning through interaction with one's environment. This intelligence is not the domain of overly active learners. It promotes understanding through concrete experience.
- **Musical/rhythmic** learning through patterns, rhythms and music. This includes not only auditory learning but also the identification of patterns through all the senses.
- **Intrapersonal learning** through feeling, values and attitudes. This is a decidedly affective component of learning through which we place value on what we learn and take ownership for our learning.
- **Interpersonal learning** through interaction with others. Not being simply talkative or overly social. This intelligence promotes collaboration and working cooperatively with others.
- **Naturalistic learning** through classification categories. The naturalist intelligence picks up on subtle differences in meaning. It is not simply the study of nature. It can be used in all areas of study.
- **Existential learning** by seeing the big picture. Why are we here? What is my place in my family, school and community? This intelligence seeks connections to real world understanding and application of new learning.

Topic 89 Multiple Intelligence Theory and the Reflective Practitioner 3

How does multiple intelligence translate into activities/actions for the reflective practitioner?

Verbal

Lecture, reading, writing, reporting, presenting, reciting, discussing, online discussion

Logical

Problem-solving, brainstorming, hypothesizing, investigating, experimenting, Socratic method, online searching.

Visual

Observing, symbolizing, drawing, outlining, conceiving, imagining, visualizing, video.

Kinesthetic

Building, imitating, performing.

Musical

Listening, patterning, mirroring, repeating

Intrapersonal

Supporting, advising, advocating, characterizing, defending, evaluating, judging, challenging

Interpersonal

Sharing, leading, helping, managing, collaborating, influencing, team-building

Naturalistic

Categorizing, contrasting, classifying, organizing, semantic/concept mapping, graphing

□ For any sort of identity-building activity, you should focus on at least three intelligence but no more than five intelligence.

Topic 90 Making professional identities through a Mentor

- Finding a mentor in your work place can have a significant effect on both the mentor and mentee regarding professional identity and development
- Under a formal mentoring process the mentee not only reaches the competency level of the mentor but grows beyond the established baseline along with the mentor.
- The mentor may share materials but also goes beyond the sharing and moves into the development of materials within a collaborative relationship. This requires reflective practice and collaborative planning coupled with a joint action plan by the mentor and mentee.
- Through this process both mentor and mentee (the reflective practitioner) can soar to new heights of professional growth and competence.

Seeking a Mentor? Know the functions of Mentoring

- **Teaching**

Teaching the skills that teachers practice on a daily

- Sponsoring someone who can identify your strengths and advise as to what activities would be most successful. Sponsoring then requires the mentor to support you when you attempt a new practice.

- **Encouraging**

Encouraging is a key mentor function. By helping you see the positive side of your teaching practice and building on those reflections, the mentor is supporting and encouraging your growth.

- **Counseling**

Counseling is the fourth function of mentoring. You need sound advice regarding teaching practice, professional conduct and the culture of the school and community. □ Briefing

The fifth function of mentoring is befriending, you need someone to whom you can speak freely.

Topic 91 How does Reflective Practice support professional practice?

- Consider the conscious competence model

1. **Unconscious Incompetence**

Not aware of the skill (and lack of skills) and its relevance

The Conscious Competence Model

2. **Conscious Incompetence**

(awareness of the existence and relevance of the skill)

3. **Conscious competence**

Can perform a skill at will

4. **Unconscious Competence**

The skill is so practiced that it becomes second nature

The Competence Model

1. Demonstrates how the teacher moves through different levels of awareness
2. The teacher can repeat any stage of the model given the right circumstances

e.g. Teaching a new subject = unconscious incompetence.

The model highlights two factors that affect our thinking as we learn a new skill: Consciousness (awareness) and skill level (competence).

According to the model we move through the following levels as we build competence in a new skill:

Unconsciously unskilled –we don't know that we don't have this skill or that we need to learn it.

Unconsciously unskilled we know that we don't have this skill. We know that we have this skill.

Unconsciously skilled- we don't know that we have this skill (it just seems easy).

This creates the ladder of learning:

Referring to the model either as a matrix or as a ladder helps the reflective practitioner in a number of ways.

Topic 92 Applying the conscious competence Model of Level 1 Unconsciously Unskilled

- At this level, you are blissfully ignorant, you have a complete lack of knowledge and skills in a specific area and you're unaware of this. Your confidence therefore far exceeds your abilities.
- To move out of level 1, use tools like a personal SWOT analysis Training Needs Assessment to identify your strengths and weakness and to understand which skills you need to learn.
- As part of this, ask other people for their input, so that you can uncover weaknesses and skill needs that you might otherwise miss.
- Also make sure that you understand your learning objectives there's no point learning skills in areas that don't align with your personal or work goals.

Level 2- Consciously Unskilled

- By this stage, you have discovered that you need to learn new skills. You realize that others are much more competent than you are, and that they can easily do things that you are struggling with.
- This level can be demoralizing, causing you to lose confidence or even give up on your learning efforts. Therefore, it's important to stay positive at this stage.

Level 3. Consciously Skilled

- At this level, you know that you have acquired the skills and knowledge you need. You put your learning into practice regularly and you gain even more confidence as you use your new skills.
- You still need to concentrate when you perform these activities but as you get more practice and experience these activities become increasingly automatic,

Level 4. Consciously Skilled

- At this level, you use your new skills effortlessly and you perform tasks without conscious effort. You are completely confident of success.
- Once you master one set of skills, it's important to learn more if you want to continue to grow.
- A good way to do this is to teach these new skills to others in your organization.
- This will keep information fresh in your mind, deepen your understanding and give you a rewarding way to pass this knowledge on to others.

93. Learning to Learn

- Ability to pursue and persist in learning
- To organize one's own learning
- Effective management of time and information, both individually and in groups
- Awareness of one's learning process and needs.
- Identifying available opportunities
- Ability to overcome obstacles in order to learn successfully.
- Grouping, processing and assimilating new knowledge and skills as well as seeking and making use of guidance.
- To build on prior learning and life experience in order to use and apply knowledge skills in a variety of contexts
- Motivation and confidence are crucial to an individual's competence

Learning Perspectives

□ Learning orientations

1. Individual
2. Group or team
3. Organizational

Learning Approaches

- Causes of situations
- Not subjects

94. The Jo-Hari Window (Self- Evaluation in Practice)

- The Johari Window is a communication model that is used to improve understanding
- For individuals
- Between individuals
- The work —Joharill is taken from the names of Joseph Luft and Harry Ingham, who developed the model in 1955.
- That you can build trust with others by disclosing information about yourself.
- There are two key ideas behind the tool:
- That, with the help of feedback from others you can learn about yourself and come to terms with issues.

Explaining The Jo-Hari Window

- The Johari Window is shown as a four quadrant grid, which you can see in the following diagram.
- 1. Open area (quadrant 1). This area represents the things that you know about yourself and the things that others know about you. This includes your behavior, knowledge, skills, attitudes and public history.
- Blind area (quadrant 2). This area represents the things that you aren't aware of but are known by others. This can involve simple information that you do not know or it can include deeper issues.
- Hidden Area (quadrant 3) This area represents the things that you know about yourself but that others don't know.
- Unknown area (Quadrant 4) This area represents the things that are unknown by you and are unknown by others.
- The ultimate goal of the Johari Window is to enlarge the open area.

95. Using The Jo- Hari Window

- The Johari Window is a communication model that is used to improve understanding
- For individual
- Between individuals

The process of enlarging your open area involves self-disclosure. Put simply, the more you open up your thoughts, feelings, dreams and goals, the greater will be your self-awareness. There will also be greater trust within the team.

An importance aspect of enlarging your open area is accepting feedback from others.

This feedback helps you learn things about yourself that others can see but that you can't.

This is important for professional growth.

Self-assessment is an integral part of a teacher's professional growth and development. It encourages the teacher to identify his or her own strengths and weakness.

Prepares teachers for a discussion on performance and improvement. Could lead the teacher to collaborative planning of goals for continued professional growth.

The objectives of teacher self- evaluation are teacher's satisfaction an excellence in education.

96. The Jo-Hari Window in the Team Context

- You have to keep in mind that established team members will have larger open areas than new team members.
- New Team Members start smaller open areas because they haven't yet had the opportunity to share much information about themselves.

Feedback

- The main importance of feedback in this process can't be overstated. It's only by receiving feedback from others that your Blind area will be reduced and your open area will be expanded.
- Group members should strive to help other team members to expand their open area by offering constructive feedback.
- The size of the open area can also be expanded vertically downwards into the Hidden area, as people disclose information and feelings to the group.
- Your open area is expanded vertically with self-disclosure and horizontally with feedback from others on your team.
- By encouraging healthy self-disclosure and sensitive feedback, you can become part of a stronger and more effective team.

97. Theory, Pedagogy and Reflection

Research shows us that critically reflective teaching practices encourage teachers to:

- Regularly evaluate their approaches to teaching
- Understand more about the positive impacts of high-quality effective pedagogies on children's learning.
- Draw on alternative teaching strategies to help children to learn when familiar methods fail.
- Co-construct learning with children and other partners so it is responsive to the child family and community.
- It involves analyzing your own learning and teaching practices that contribute to effective pedagogies.
- These are:
 - Understanding children
 - Building relationships
 - Establishing flexible learning environments
 - Creating contexts for learning
 - Exploring what children learn
- This means that teachers hold roles and view children through various lenses and recognize that their personal and professional identities are continually evolving
- This raises questions for how you link theory, pedagogy and reflection.

98. Application

Common sense tells us that

- Reflection is about questioning the given to bring about clarity in unclear situations
- A difficult process especially when it support changes in behavior and it is something that needs to be taught
- Often linked with criteria associated with wisdom.

Unconscious incompetence

- Not knowing what you don't know

Conscious incompetence

- Recognizing the gap in your knowledge

Conscious competence

- Being able to do things that you couldn't do before but needing to think these things through carefully

Unconscious competence

- Being able to do something skillfully without having to consider everything closely
- Teaching is a complex profession. It is never static and the work which practitioners undertake is by no means mechanistic.

99. Reflective Practice and Professionalism

What constitutes professionalism

Autonomy

- There is a conflict between the unpredictable nature of the contexts we teach in and centralization of control in education.

Professional Knowledge

- Subject specialist knowledge
- Pedagogic knowledge

Responsibility

- Accountability
- Professional values

RP and Professionalism

Rigor and Relevance

The most relevant problems for students and for society are in messy and swampy situations where the research –based theories do not apply. (because of a new problem or problems are not well defined, there is no theory or contradictory theories).

If professionals remain in the high grounds where they can apply their research based theories then their work will be non- relevant.

Most of the important problems our society is facing are new and not well- defined.

To tackle these problems professionals will need a lot of artistry They will need to apply a set of skills that go far beyond their theoretical base.

Topic 100 Good Professional Standing

Commitment to Learners □ Teachers will:

Maintain professional relationships with those learners entrusted to those learners which respect the learner as a person as a person and encourage growth and development

Acknowledge and respect the uniqueness, individuality and specific needs of each student and thus provide appropriate learning experiences.

Aims to motivate and inspire students with a view to helping each realize their potential.

Wok with colleagues and others to create a professional community that supports the social, intellectual, spiritual/moral emotional and physical development of students.

Promote collegiality among colleague by respecting their professional standing and opinions and in that spirit be prepared to offer advice and share professional practice with colleagues.

Cooperate where appropriate with professionals from other agencies in the interest of students.

Ensure that relationships with the parents, in their capacity as partners I the educational process are characterized by respect and trust.

Respect confidential information relating to students or colleagues gained in the course of professional practice, unless the well-being of an individual requires disclosure.

Topic 101 Personal Challenges to Effective Relative Practice

Personal Challenges to Effective Relative Practice

- Misplaced experiences
- Pre-conceived notions
- Misconceptions
- Personal preferences
- Egotism
- Pride
- Educational Philosophy
- Life

Over-coming Personal challenges to Effective Reflective Practice

Misplaced Expectations

- Be honest with yourself
- Ask colleagues as critical friends
- Pre-conceived notions
- Refer to the literature
- Refer to a mentor experience colleague
- Misconceptions
- Use checklists
- Develop checklist with colleagues
- Use colleagues as critical friends
- Personal Preferences
- Be honest
- Learn to learn from failure
- Be flexible – watch colleagues to see how they teach
- Egotism
- Try to be realistic- you can't be perfect
- Observe other teachers
- Ask teachers to observe you and feedback
- Pride
- Identify and confide in a critical friend at work
- Educational Philosophy
- Always take time to discuss with others you beliefs and assumptions about teaching and learning

Topic 102 Questioning

It is useful to explore some key questions to help you move from theory and discussion to practice and application.

- Be backward-looking
- How much did you know about the subject before?
- What process did you go through to plan your lesson?
- Have you done a similar kind of work in the past?
- In what ways have you become better at teaching?
- In what ways do you think you need to improve?
- What problems did you encounter while you were working on this piece?
- How do you feel about your work? What parts of it do you particularly like?
- Dislike? Why? What did/do you enjoy about it?
- What were your beliefs that informed your teaching?
- Did you meet your standards
- What were your goals for the lesson? Did your goals change as you taught?

Be Outward-looking

- Did you teach in the way other people teach?
- In what ways did you do it differently.
- In what ways your approach similar?
- If you were manager, what comments would you make about your teaching?
- What grade would you give it? Why?
- One thing I would like to improve upon is
- What would you change if you had a chance to teach over again?
- What will you change in the next lesson?
- What's one goal you would like to set for yourself for next time?
What would you like to spend more time on in school?
- What might you advise a new teachers to do?

Topic 103 What are Frames

Frames help us perceive, understanding and describe situations.

What are Frames?

- Frames are particular ways of making meaning of the complexity of situations
- Frames are structures of beliefs, perceptions, values and appreciations about a situation, most of them underlying conscience..
- From the multiple components of a situation we select a particular set with which we try to understand the situation and to transform it.

The Process of Framing

- The starting point is a vague image of a reality named by John Dewey as a — problematic Situation//
- This situation is named and framed selecting a few salient /features and relations multiple elements of the complex reality
- These elements receive a coherent organization, and are used for describing what is correct and what is wrong with the situation or what is the problem
- The direction for the transformation of the situation will come from the elements established in the frame.

- Rhetorical and Action
- Rhetorical frames are related with espoused belief and are used for arguing about a situation
- Action frames are related to policies in use. They are used for dealing with the situation.

Frames and Metaphors

Frames frequently use metaphors as a way to develop and or to communicate their particular logic. Metaphors are of great utility for explaining and for thinking with a particular frame.

- Based on a metaphors, the action look more familiar and consistent with the requirements of change of the situation.
- There is a double-sided interaction between frames and interests.
- The teacher's interests influence the way they frame the situation
- But the frames of the teachers also shape the way they perceive their interests
- These both relation tend t be tacit and invisible for the teachers.
- Circularity of Frames
- In conflicting frames there is no way of falsifying a frame with valid data.
- When we arrive to situations where different frames are resistant to critique we are in a situation that is not normal.
- Frames are mostly tacit
- — The frames that shape policies are usually tacit, which means that we tend to argue from our tacit frames to our explicit policyll
- — We are usually unaware of their roles (of the frames) in organizing our actions, thoughts and perceptionsll

Topic 104 Frames 2

In most cases, we are not working with problems but with messy situations

- The process of going from the messy situation to the problem is the process of framing
- The names we give things are important – they determine how we will work with them in our mind
- Then we organize them and we describe what the problem is
- Frames 2
- In the same way that Schon talks about espoused theories and theories in use , he talks about rhetorical frames (espoused polices) and action frames (policies in USA)
- Rhetorical frames are weapons used to attach other frames and convince people that our frame is a good one
- The frame that wins is the one that can expose the weaknesses in other frames, while hiding its own weaknesses.
- Frames work with metaphors
- When we create a frame for a situation, we always use a metaphor
- Frames are not things that emerge from scratch, they are always connected to a metaphor
- Changing the metaphor is a very powerful way of changing the frame.
- The way we frame a problem affects how we perceive our interests.
- It s difficult to discover the limits of our thinking – we always believes our framing is consistent. It usually is not possible to convince someone that their frame is inconsistent by giving them more information, since that information will be processed into the existing frame.

Frame 2

- The frame is able to digest information
- So basically more data won't ever change frames and we need to engage people at the level of their assumption.
- The frame gives meaning to the information by its own logic. Most frames are tacit we are not aware of the way we frame situation or of the way other people are framing the same situation
- The way to solve this difficulty is to try to make the frames explicit
- Finally, when we are discussing other frames, we need to bring their meaning to own frame.

Frame 2: Try this activity in framing a problem

- 1. Define the problem? (
- 2. Why is it a problem? (this is about your reasoning in defining the problem)
- 3. What are the factors that contribute to problem? We can talk here about causes, context, conditions that allow the problem to exist
- 4. What do you see as the impact of the problem □
- 5. Analyze for consistency and completeness.

Topic 105 Analyzing Frames 1: Discovering underlying assumptions and values in frames

- Look at the following example Barrier
- No Licensure: We need to remove the inconsistencies between different education providers
- Quality of Teachers Education: We need to ensure that teachers are being prepared according to uniform standards
- Common Inspection Framework: We need to have a system of checking the quality of education across all providers
- Assumptions
- Assumptions are belief about the world
- 90% of students are happy in our school
- Education improves the quality of life
- The first type of assumption is situational
- The second type of assumption is theoretical
- If a belief is tacit in our thinking we name it as — assumption, once it is made explicit it becomes a hypothesis.
- What are values
- Values are criteria that we use for deciding if a situation is desirable or undesirable or if an idea is a good one or a bad one:
- Being secure or insecure (security)
- Being treated fairly or unfairly (justice)
- Every time we frame or evaluate situation we apply values.

Frequently values are tacit.

What are Values?

- In the example quality of Teachers Education: We need to ensure that teachers are being prepared according to uniform standard, the quality of teaching is a value

In the example — common inspection Framework: We need to have system of checking the quality of education across all providers, how schools provide education is a value.

Frames, Assumption and the Thinking Box

- Every time we frame a situation we base elements of our frame in belief about the world, but we are not aware of them
- The discovery of assumption is easier when we are out of box. People who disagree with our frames are more acute for identifying our assumptions.

Topic 106 Analyzing frames 2: Discovering Assumptions

- Assumptions are beliefs that are behind the causal relation of our frames
- If —assumption A then B generates C.
- A possibility for discovering assumption is to go through the components and the causal relations of the frame asking :why, they are stated in that particular way.
- The assumptions should be falsifiable . It means that it should be possible to get information for verifying if an assumption is real or not.
- Exploring assumptions

- If a situation is framed as a problem generated by a group of factors and a scenario that is resulted from the problem then the exploration of assumptions may go back through the causal relations of the frame.
- Let's look at this in diagram form
- Why___ Problem, _____ Future Scenario

Questions for Exploration

- Why the scenario or one component of it is generated by the problem or a component of it?
- Why the factor A contributes to the problem?
- Which condition is required for the work of causal relations?

Values

- Why do you think it is a problem?
- Which values are threatened by the problem or by the scenario?
- Which motivations are behind the way the situation were framed?

Topic 107 Interpolating Concepts and Ideas

Theories –in-use- are means

- For exploring concepts
- Developing ideas

Schema of Theory and Action

- A theory of a action is a set of interconnected propositions that have the same referent (the subject of the theory)
- For example if you want to achieve consequence c, under assumptions a1, a2, aa3, an , do action a
- Theories are vehicles for explanation, prediction or control.
- Theory- in-use
- Agyns an Schon say that theory-in-use is.
- Existing theories people have that already determine practice. We call these operational theories of action theories in –use to distinguish them from the espoused theories that are used to describe and justify behavior.
- Agries and Schon say that theorie in-use
- Help teachers remain blind to the actual degree of their ineffectiveness.
- There is a theory –in-use of building design (for architects)
- There is a theory in –use for diagnosis and treatment of disease (for physicians)
- Theories in-use are means for getting what we want.

How to Make Theory in- use- visible

- We can construct someone's theory in-use from observations of behavior
- This includes recognizing general characteristics.
- The governing variable
- The action strategies
- The principal assumptions

Interpolating concepts the Theory and Ideas

- Clues for discovering the Theory-In-Use
- Reconstruct the espoused theory and /or the action strategy
- Look for the assumptions through the — Cahin of Whysll □ Look for the relations among the assumptions.
- Discover the governing variables of Espoused theory and
 - /or the action
- Construct the theory in-use based on these elements
 - Requirements for Discovering the theory-in-use

Internal commitment to discovery

- Public testing of theory assumptions and data
- Clear distinction between the self and assumption (nondefensiveness)
- Look for valid information
- Aptitude for reframing

Topic 108 Promoting reflective practice through inductive action planning

- As a teacher you will be learning every day.
- Knowing what you have learned or what you want to learn from practice and experience needs some planning □ This will be helped by inductive action planning Essentially this involves:
- Selecting a specific target (e.g. effective rules and routines in class, widening your range of strategies, effective use of ICT etc)
- Plan a program of discussion, observation and training over a fixed period

- Evaluate your effectiveness
- Reflect on your own development and select further targets.

Inductive action planning is therefore about

- Identifying opportunities for you to discuss, reinforce and develop your practice
- Helping you decide what information/data of your planning and practice you can use as evidence of your development

Promoting RP through Inductive Action Planning

An inductive Action Plan will be one that

- Builds on your career profile is precise
- Answer the following questions
- What is my priority and what do I want to achieve?
- What am I going to do and when?
- Who will help me?
- How will I know whether what I have done has been worthwhile?
- How will I collect information?
- In detail, an inductive action plan will
- Identify your priorities
- At this stage of the year what precisely do I want to be able to do with greater confidence and more effectively?
- Eg. Motivate the class?
- Plan, manage and evaluate the teaching or learning
- Identify what you will do and when
- E.g I shall discuss school policy and expectation with my principal, I can attend a course which will help me think more deeply about my practice: I shall see school policy in practice by observing colleagues and discussing issues with them.
- Identify who can support you
- E.g I shall enlist the support of my head of department, I shall engage in some background research.
- Identify Success Criteria by identifying
- What has been worthwhile
- My planning now demonstrates
- Through being observed and discussing the lesson I am clearer about my strengths and priority areas for development in
- Identify how you can demonstrate your development
- I have examples of the new lesson planning that I am doing
- I have examples of the resources I am using
- A copy of my appraisal report
- Responds to and support your day to day teaching activity
- It is directed by you.

Topic 109 The Reframing Matrix 1

- Things look different when you change the perspective
- When you are stuck on a problem it helps to look at it from another perspective □ This can be all that you need to do to come up with a great solution.
- However, it is sometimes difficult to think what these perspectives might be.
- Using a reframing matrix relies on the fact that different people with different experience are likely to approach problems in different ways.
- Reframing helps to put you in the minds of different people- imagine how they would face these problems and explore their solutions.
- Step 1: Draw the Grid
- Start by drawing a simple four-square grid □ Leave a space in the middle to describe your problem □ The boxes are for your different perspectives.
- Step 2: Decide on perspectives
- Decide on 4 different perspectives to use in your matrix.
- Use the 4ps approach:
- The 4P;s
- The product perspective
- Is there something wrong with your teaching?
- Does it respond to the needs of your learners?
- Do you adapt your teaching to the circumstances in the classroom?
- How would you improve the learning outcome?
- Is the students grades were to go up how would that affect the problem?
- How are others doing the same work as you?

Topic 110 Reframing 2: Professions Approach

- This approach helps you to look viewpoint of different specialists, or stakeholders
- For example, the way a medical doctor is different to what a civic engineer might use.
- This approach is particularly useful when you are trying to solve a problem which involves many different types of people.
- It is useful when you need to step away from you usual way of thinking so that you can be more creative.
- Step 1 Brainstorm Factors
- Brainstorm the factors related to your problems from the four perspectives viewpoint
- Product perspective
- Planning Perspective □ Potential perspective
- People perspective
- Example of Reframing
- IN the following example you will see how a teacher has used th 4ps approach to explore problems in class.
 1. **Product perspective**
The subject is complex
 2. **Planning perspective**
The students are very comfortable with technology
 3. **Planning perspective**
My planning follow a rigid pattern

4. People perspective
5. Students generally bored in school, student don't see the need to study.

Topic 111 Problems Statements

- The first step is to define the problem statement
- At which level should we formulate the problem, and how widely?
- If we go too deeply and try to look for final causes of everything, we may reach conclusion that are not useful for the problem.
- Select a level where you have enough knowledge about the problem and then act in a timely way
- As reflective practitioner we should always be working with unsatisfactory understanding of the problem
- The reflective practitioner works with unsatisfactory because s/he has to combine the action with improving understanding
- What method you actually use depends on the knowledge you have, the condition and other factors
- You need to design your own cognitive strategy in each case.
- The reflective practitioner has two levels.
- The action level
- The cognitive level
- Consequently, we need to combine knowledge from our own experience with knowledge from other people's experience.
- Conceptual innovation
- The connections we have in our brains are related to the concepts we use
- When we change our concepts, we create new areas of relations in our brains.
- Concepts are abstractions of situations – the patterns that emerge when we have seen many situations.
- Without concepts we cannot perceive reality
- With concepts we can think more deeply about reality

Topic 112 Concept Based Teaching and Learning

- Concept –Based Teaching and Learning
- Enables the ability to transfer knowledge
- Promotes emotional engagement and motivation
- Thinking which draws on critical, creative, reflective and conceptual abilities.
- Facilitates _ synergistic thinking (factual and conceptual levels of thinking)
- Requires deeper intellectual as you relate facts to key concepts.
- Develops conceptual structures in the brain to relate new knowledge and to illuminate the connections and pattern of knowledge
- Facilitates the transfer of knowledge at the conceptual level
- Provides opportunities for personal meaning making through process of thinking , creating and reflecting.

Topic 113 Benefits of concept based teaching and learning

The benefits correspond directly with the profile of the reflective practitioner:

Benefits of concept-based teaching and learning

- The reflective practitioner as enquirer

- A teacher who questions, investigates, explores and discovers.
- A teacher who has thorough grasp on their subject and a strong approach of its pedagogy.
- A teacher who ponders potential reasons, causes, effects and outcomes.
- A teacher who is able and confident enough to express to others their problems issues and concern and who is able to listen to feedback, advice and criticism.
- A teacher who holds onto opinion , judgment and conclusion even with multiple sources of information.

Topic 114 Pedagogical Shifts

The reflective practitioner relies on:

- Synergistic thinking
- Is essential to intellectual development
- Is a cognitive interplay between the factual and cognitive levels of mental processing
- Assumes that thinking our this factual / conceptual interaction cab be shallow.
- Transfer of knowledge and skills
- Facts do not transfer-they are locked in time, place an situation
- Knowledge transfer at the conceptual level as concepts , generations and principles
- The ability to use the conceptual level of thinking to related new knowledge to prior knowledge.
- Social constructivism of meaning
- Quality thinking is hard work
- Reflective thinking requires collaboration to enhance thinking and problem-solving
- Different provide support and generate new ideas and solutions.
- |Focus in the learner (students learning strategies, their interests, their developmental readiness).
- Focus on practical aspects (journal writing, surveys and questionnaires', observation etc).

Topic 115 Reframing in 4-Step

- Reframing in 4 steps
- The approach to reframing is a four step process □ Step 1:
- Determine your core belief
- Step 2
- Map your supporting beliefs □ 3.
- Find opposites for each of your supporting belief
- Step 4
- Construct a reframed core belief, based on your new supporting beliefs
- Reframing uncovers, challenges an overturns assumptions

Topic 116 3-Dimentional Instruction

- The goal of reflective practice is 3- dimensional instruction. □ This includes:
- Increasing conceptual understanding supported by factual knowledge and skills and the transfer of knowledge across multiple contexts.
- Facilitating student enquiry into important interdisciplinary and issues using one or two key concepts.
- Instruction and learning experiences that use concepts along with factual content to ensure synergistic thinking.

- The teacher encouraging group work to facilitates shared enquiry collaboration, synergistic thinking and problem – solving across contexts.
- The teacher uses inductive teaching to draw the statement of conceptual understanding from students.

Topic 117 Conceptual Learning

What is conceptual learning?

- Conceptual learning is a process by which the reflective practitioner learns how to organize information in logical mental structures.
- Conceptual learning focuses on learning organizing principles the pockets in which the mind organizes facts into ideas.
- Conceptual learning is a catalyst for challenging the reflective practitioner to think at more advance levels.
- Focuses on broad categories of problems
- Fosters systematic observations
- Fosters understanding of relationship among events or conditions that impact situation
- Focus on teaching actions

Teacher model of reason

- Noticing
- Interpreting
- Responding
- Reflecting

Topic 118 Epistemic Stances

These are ways of knowing and reflection

- These processes are developmental
- The quality of reflection changes as we mature and new epistemic stances emerge
- Epistemic stances cab be categories into 4 stages
- Absolute knowing
- Transitional knowing
- Independent knowing
- Contextual knowing
- Absolute knowing
- The teacher who seeks to learn by receiving knowledge from others (experts)
- Transitional knowing and independent knowing
- These are intermediates stages
- Contextual knowing
- The teacher judges all information on the basis of evidence within context
- Highly critical in pursuing understanding
- Examine both data and own perceptions and values
- Absolute knowers only find and accept information from some authority.

Topic 119 Taxonomy of Reflective Thought

To examine reflective thinking, researchers and theorists have developed taxonomies to explain qualitative aspects of reflection and have identified critical reflection as the deepest level of reflectivity.

- For teachers critical reflection is the type of reflective thought most closely associated with Dewey's definition, explained earlier and involves reflection on the teaching practices as they relate to moral and ethical issues in society.
- The taxonomy categorizes thinking into levels explaining the different qualitative aspects of the process.
- Three levels of reflective thought:
 - Non-reflective action
 - Reflective action
 - Premise reflection

Topic 120 The Ripples Model

The Ripples model can be used by the reflective practitioner to consider how to consider how their teaching addresses certain questions:

- How do you enhance your learner desire to learn?
- How do you help learner develop ownership of the need to learn?
- Do you help learner learn by techniques such as practical activities, trial and error tasks and repetitive activities?
- Do you ensure learners receive quick and useful feedback, both from you and from their peers?
- What activities do you provide where learners can make sense of what they have learned?
- True learning and understanding states from the center and radiates outwards like ripple on water encompassing other aspects of learning.

Topic 121 Reflective Teaching Practices: Criticality

Framing reflection in external constraints

- RP does not take place in a vacuum
- It occurs complicated social field with competing habits and constraints that naturally affect teachers in the school environment.
- There will be certain rules of being a teacher both written and unwritten , they will constrain or bias the reflective that occurs.
- Teacher do not exist in a vacuum: all their experiences are different because of the school environment they exist in the colleagues they work with and their own habits they bring to their education are all different.
- To understand teachers reflective practice there must be an understanding of the social environment they exist in.

Topic 122 Critical Reflection= Critical Thinking

Models of thinking and reflection involve three fundamental processes

- **Retrospection**
- Thinking back about a situation or experience
- Models of thinking and reflection involve three fundamental processes
- **Self- evaluation**

- Critically analyzing and evaluating the actions and feeling associated with the experience, using theoretical perspectives.
- Reorientation
- Using the results of self-evaluation to influence future approaches to similar situations and experience.
- Part of critically is to transform problems into constructive ideas
- Try to translate the processes of reflection into questions that challenging you further.
- Did the analysis look broadly enough?
- Is the recognized by students?
- Does the improvement proposal address the original issue?

Topic 123 Critical Reflective Enquiry: Critically Philosophy

From the critical philosophy perspective teaching practice is viewed as a form of social life in which different forms of domination, distortions and misunderstanding are possible.

- Hence any study of practice needs to incorporate an emancipatory focus through which social life can be freed from domination and distortions.
- Critical reflective enquiry consists of three phases
- Descriptive
- Reflective
- Critical/Emancipatory
- Critical/ Emancipatory phase in detail:
- This phase, moving from the reflective phases, is oriented to correcting and changing and changing less- than good or ineffective practice or moving forward to future assimilation of new innovations emerging from practice.
- It involves discourses about the nature and sources of distortions, inconsistencies between (a) Values/ Belief and practice (b) Intentions and actions.
- (c) Students needs and teachers actions, which have been identified in the reflective phases.

124. Critical Analysis 1

One way of deepening your ability to engage in critical reflection is to engage in complex analysis of incidents

- There are different levels of analysis
- Ethno- methodological analysis
- Examining taken-for granted assumptions and rules of everyday social behavior.
- Hermeneutic Phenomenological analysis
- Reflecting on interpreting of both the learner's experience and the phenomena being experienced so as to move beyond the partiality of previous understanding.
- Discursive Analysis
- Probing how speech and texts construct social truths.
- Where models are presented, they should be offered in context and it should be emphasized that each is simply one of a range of tools.
- Models should be used to trigger broader reflection rather than an ends in themselves.
- We should not be presented with just one model, the implication being that this is the way reflective practice is done.
- Teachers need to grasp that different models engage different levels of complexity and therefore need to be used selectively and carefully.
- Students should also be helped to see something of the strengths offered by the different models and methods of reflection

125. Critical Analysis 2 Part One

Analysis involves breaking down information into its components parts and examining the relationship within these parts and with the whole.

- By doing this teacher shows the ability to differentiate and distinguish between components or elements of their experience.
- All critical analysis is formed around one basic assumption

Applying theory to practice

Theory and Practice

The information need cycle

Need, map, formulate question, source, find, evaluate, apply then again it comes to need.

Need: Determined by learning outcomes/information

c) —I have an assignment for which I need to find research.

Map: Map all the possible conceptual pathways to developing a question which will provide an answer. This is a keyword generation, critical creative thinking and language skills.

Formulate questions (the ability to give focus to questions):

I need something on group work becomes : I need information on the teacher role in effective group work.

Source: Which information sources will provide the answer to my question?

Involve critically choosing the appropriate information sources.

Find:

Require the development of a search strategy.

Strategies will vary according to the information source but developed in line with a standard framework.

Evaluate.

Does the information found answer the question?

Apply

How can the information be used to answer my question?

What conclusion can I draw?

126. Critical Analysis 2 Part 2

Analysis involves breaking down information into its component parts and examining the relationships within these parts and with the whole.

- By doing this the teacher shows the ability to differentiate and distinguish between components and elements of their experience.
- All critical analysis is formed around one basic assumption:
—Applying theory to Practicell.

The information-need cycle

Need

Need is determined by learning outcomes/ information. For example:

- a) I need something on smoking.
- b) I have an assignment for which I need to find the best evidence to support an intervention.
- c) I have an assignment for which I need to find research.

Map

Map all the possible/potential conceptual pathways to developing a question which will provide an answer.

This is a keyword generator and uses reflection, critical creative thinking and language skills.

Formulate questions (the ability to give focus to questions):

- a) I need something on group work

becomes

I need information on the teacher's role in effective group work.

Source:

Which information sources will provide the answer to this question?

It involves critically choosing the appropriate information sources.

Find:

It requires the development of a search strategy.

Strategies will vary according to the information source but developed in line with a standard framework.

Evaluate:

Does the information found answer the question?

Apply:

How can the information be used to answer my question?

What conclusion can I draw?

Critical analysis will be influenced by:

- Level of support in the work environment.
- Time of critical analysis.
- Tools available for critical reflection.

Critical Analysis Strategies:

- There are different forms of reflection in different context.
- Busy practitioners might rely on reflection-in-action.
- Work in dialogical team context (to hear different perspective)
- Use critical incidents, case studies, reflective journals, practical exercises

Four Competences that Characterize the Critical Thinker:

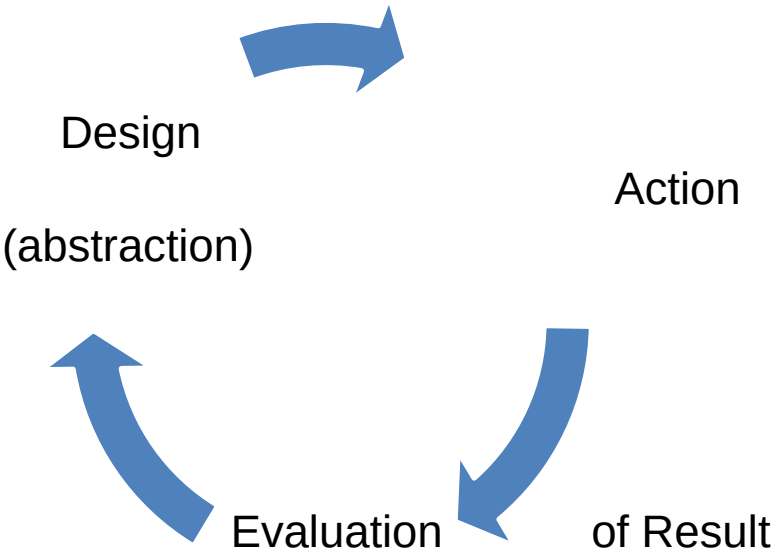
- First competency is called —Clarificationll. It means to identify the focus, analysis arguments, ask and answer questions of clarification, define terms, judge definitions, deal with equivocation and identify unstated assumptions
- Second competency is —Basisll. It means to judge the credibility of a source, make and judge the observations.
- Third competency is —inferencell. It means to deduce, judge deductions, induce, judge inductions, make and judge value judgements.
- Forth competency is —Metacognitionll. It means reason from premises, assumptions and positions with which one disagrees or doubts without inferring with one’s thinking and integrating the other abilities in making and defending a decision.

127. Experimentation

The main purpose of the activity is to generate positive results (i.e. to make things work).

- There may be abstraction but it is functional to the effort of design.
- Most of the technological advancement until the 17th Century was achieved through experimentation.

Experimentation



Speculation

- When we try to think beyond our current knowledge frontier, we are speculating.
- The theorem is a formal method of speculation developed by the Greeks.
- The core of the theorem is: if A then B; a is a hypothesis and B should be proved.
- Speculation can be very important for generating hypothesis.

128. Nurturing Relationships

Critically reflective learning is nurtured by relationships between teacher and learner.

- Powell (2004) identified the optimal relationships above. These relationships are described as;
- Mutual
- Open
- Challenging
- Contextually aware
- Characterised by dialogue

Picture

With time, the teacher can move from high levels of support for development to self directed development. With time the teacher moves to more intuitive processes for development.

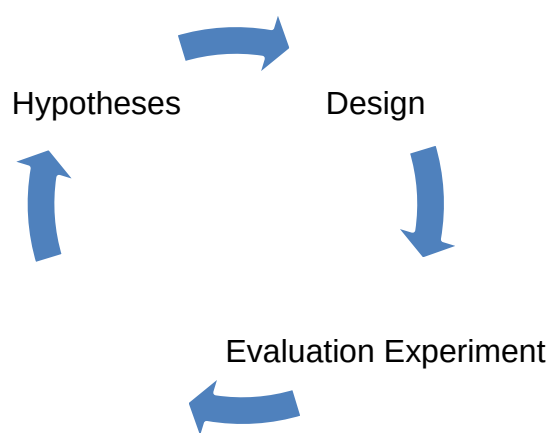
Self- directed learning

- Individual take initiative and responsibility of learning.
- Individual select, manage and assess their own learning.
- Motivation is critical.
- Independence in setting goals and defining what is worthwhile to learn.
- Peers provide mentoring and advice/collaboration.

129. Scientific Method

The purpose of the scientific method is to falsify theoretical hypotheses through experience.

- It is possibly the single most important cognitive innovation in history. Scientific Method

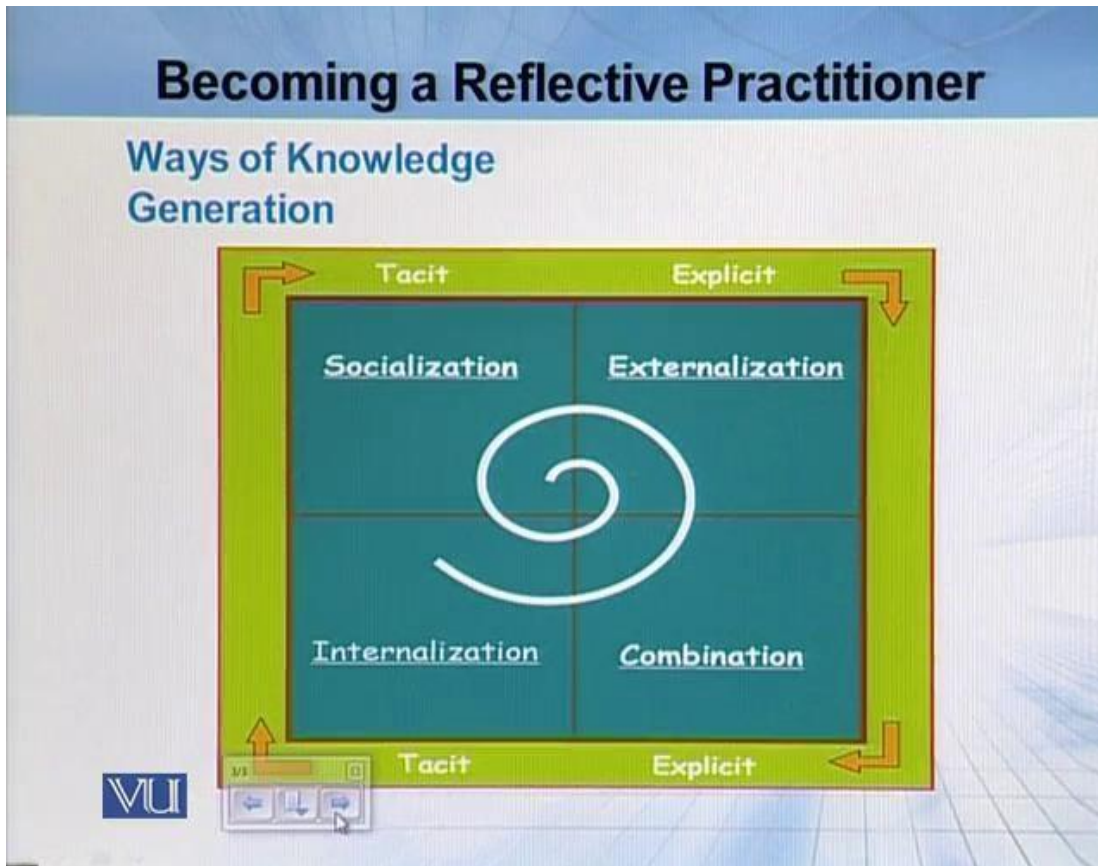


Statistical Analysis

- It is a method for establishing the relation among variables, or verifying a model based on the observation of samples of an universe.
- The data results come from observation of reality without changing it.
- Statistical analysis is the key when it is not possible to experiment with the object of research, such as human being.

Topic 130 Cycle SECI

- The cycle SECI was developed by Nonaka and Hirotaka Takeuchi as a way of generating knowledge by transforming it, from tacit knowledge to explicit and vice versa.



- If we have looked at the bottom, Knowledge is generated and internalized by the reflective practitioner. It just required experience but through discussions with colleagues and through further experiences within the context. The knowledge through socialization starts to become much clearer to us. The reflective practitioner through dialogues and socialization begins to externalize the knowledge. It becomes explicit within the context if the work externalizing the knowledge actually make it more clear and helps us understudied in the right depth and detail and as we think more about it and externalize the knowledge through the socializing process. We began to find out points of comparison and contract with the knowledge.

Topic 131 Modeling and Conceptual Innovation

- Modelling can be used for two main purpose:

1. Theory validation

It is a practical way of working that helps reduce stress, enhance dignity and increase happiness. Validation is built on an empathetic attitude and a holistic view of individuals. When one can "step into the shoes" of another human being and "see through their eyes," one can step into the world of disoriented very old people and understand the meaning of their sometimes bizarre behavior.

2. **Forecasting:**

Forecasting is the process of making predictions of the future based on past and present data and analysis of trends. A commonplace example might be estimation of some variable of interest at some specified future

date. Prediction is a similar, but more general term. Both might refer to formal statistical methods employing time series, cross-sectional or longitudinal data, or alternatively to less formal judgmental methods. Usage can differ between areas of application: for example, in hydrology, the terms "forecast" and "forecasting" are sometimes reserved for estimates of values at certain specific future times, while the term "prediction" is used for more general estimates, such as the number of times floods will occur over a long period.

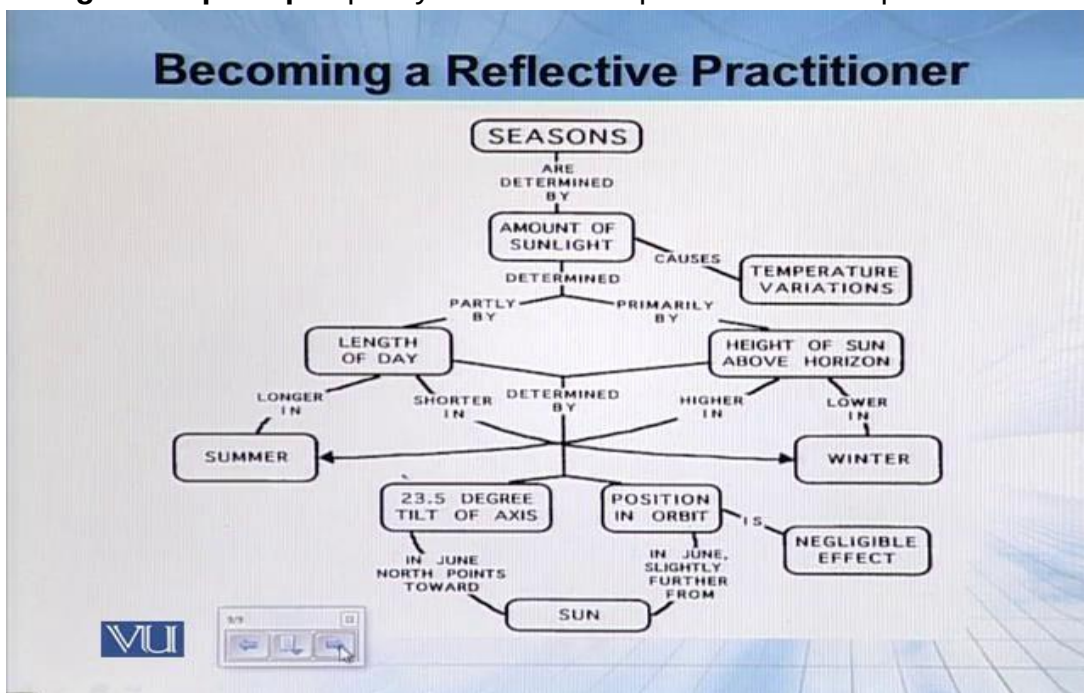
Modelling and Concept Mapping

- In 'A New Kind of Science' and 'Mathematic' uses Wolfram uses modelling for exploring in nature.
- The importance of modelling will increase in the future of education.
- By modelling practitioner will built theories of practice whose foundations will be in the theories of teaching and learning.

Using Concept Maps

- Concept maps are a graphic representation of knowledge.
- Creating concept maps can provide you with insight into how to organise and represent knowledge.
- Concept maps include concepts, usually enclosed in circle or boxes, and relationships between concepts, indicate by a connecting line, Words on the line words and.....

Using Concept Maps specify the relationship between concepts.



Topic 132 Design

- Designs are artifacts that contain great amounts of knowledge embedded in them.
- Designs are generated in a dialogue with the situation and with stakeholders.
- The design process is an interaction between an idea (with values imbedded in it), the characteristics of the situation and the expectations of stakeholders.
- The knowledge contained in Designs is more visible for the 'expert' in the same discipline.
- The capacity of reframing is decisive for the process of design.