Handouts of Critical Thinking and Reflective Practice (EDU406)

Lecture 1

The Place of Reflective Practice in Teaching

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Reflective teaching means looking at what you do in the classroom, thinking about why you do it, and thinking about if it works - a process of self-observation and self-evaluation. By collecting information about what goes on in our classroom, and by analyzing and evaluating this information, we identify and explore our own practices and underlying beliefs. This may then lead to changes and improvements in our teaching.

Reflective teaching is therefore a means of professional development which begins in our classroom.

1. Why it is important
2. Beginning the process of reflection
3. Teacher diary
4. Peer observation
5. Recording lessons
6. Student feedback
7. What to do next
8. Think
9. Talk
10. Read
11. Ask
12. Conclusion

Why it is Important

Teachers may 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."

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. Reflective teaching therefore implies a more systematic process of collecting, recording and analysing our thoughts and observations, as well as those of our students, and then going on to making changes.

1. If a lesson went well we can describe it and think about why it was successful.
2. If the students didn't understand a language point we introduced we need to think about what we did and why it may have been unclear.
3. If students are misbehaving - what were they doing, when and why?

Benefits of Reflective Practice

The primary benefit of reflective practice for teachers is a deeper understanding of their own teaching style and ultimately, greater effectiveness as a teacher. Other specific benefits noted in current literature include the validation of a teacher's ideals, beneficial challenges to tradition, the recognition of teaching as artistry, and respect for diversity in applying theory to classroom practice. Freidus (1997) describes a case study of one teacher/graduate student struggling to make sense of her beliefs and practices about what constitutes good teaching. Her initial pedagogy for teaching was based on the traditions and practices of direct teaching. Her traditional socialisation into teaching made it difficult for her to understand that her views of good teaching were being challenged in her practice, but the opportunity for exploration through

reflective portfolio work enabled her to acknowledge and validate what she was learning.

Roffey-Barentson and Malthouse (2009) introduce 10 useful ‘benefits of reflective practice’ (p 16) which are summarised below:

1. Improving your teaching practice

If you take the time to reflect on your teaching, and reflect on how different parts of what you do work well, where aspects of your teaching can be improved, and how problems which arise could be solved, that is bound to help you to improve your teaching.

2. Learning from reflective practice

There is a good range of evidence that purposeful reflection helps ‘deep’ learning take place, and for you as a teacher, it will help you to make connections between different aspects of your teaching and what goes on around your teaching. Reflective practice will help you gain new learning and use it in your teaching.

3. Enhancing problem solving skills

When starting off with reflecting on your teaching you may tend to concentrate on problems which arise. By carefully and honestly considering and analysing those problems, you will improve your own capacity to find solutions.

4. Becoming a critical thinker

Critical thinking is about ‘thinking well’, and ‘taking charge’ of your own thinking (Elder and Paul, 1994), and reflective practice will help you recognise and adjust what you think to take account of changes in circumstances, and by doing that help you to be better equipped to find solutions which work.

5. Making Decisions

As you reflect on your practice, you will find you need to make decisions about what to do (or not to do) next. You may well have a number of choices which you have to weigh up, and deciding which one to take can be difficult. If you regularly reflect on your teaching in depth, you are regularly going to come across the need to make decisions, but the results of your reflective practice will help you to make those decisions in a more informed, thoughtful and objective manner.

6. Improving your own organizational skills

You will notice as this section progresses that the benefits of reflective practice can reaching into every aspect of your professional work as a teacher. If you are thinking carefully about what you are doing, identifying possible actions and choices, trying out solutions, and adjusting what you do to take account of the results, this involves a good deal of organization. By breaking down issues and problems into steps or stages, you will get better at organizing your time and your activity to concentrate on the important, 'solution-focused' actions.

7. Managing personal change

Working in education involves managing regular, rapid, pressured and often confusing change, which can be one of the most difficult aspects of being a teacher. If you are using the techniques of reflective practice, which involves, calm, thoughtful, honest, critical and organised thinking and action, this should introduce a calming and less emotional response to that change. As reflective practice is itself focussed on seeking positive improvements and solutions, managing change more effectively should take place.

8. Acknowledging personal values

There will be things which take place within your professional situation as a teacher which you will wholeheartedly agree with, and others which will worry or alarm you. This is because they may agree or disagree with your own personal values such as what you believe in, and what you think is wrong or right. How these are affected by teaching will vary, but you will almost certainly come across major clashes of values as part of your work. Reflective practice is an excellent way of acknowledging and recognising that those values exist and have an effect, but which concentrates on helping you to choose approaches and actions which can help you to resolve those clashes without it adversely affecting the professional balance of your work as a teacher.

9. Taking your own advice

Teachers are often more critical of their own teaching than anyone else, and it could be possible for this to develop into an attitude about teaching which is negative and destructive. The techniques and approaches of reflective practice will place you in a position where you are an informed, positive agent in your own development and improvement and one where you can ‘take your own advice’ with a confidence tht it is reflective, focused and informed advice.

10. Recognizing emancipatory benefits

If you reflect on the nine benefits of reflective practice which have so far been described, you will clearly see that this is a model of practice which represents the teacher as someone with influence over their own teaching and their own destiny as a teacher. This is what is at the heart of reflective practice, and as such it should help considerably to free you from some of the burdens which can weigh teachers down, and refresh your confidence and your teaching.

Why the Interest in Reflective Practice?

There are a number of major changes occurring across a range of professions and professional groups that are having a profound impact on the shape and nature of professional knowledge. For teachers, perhaps the major factor has been the 're-visioning' of traditional (i.e. didactic forms of teaching) forms of teaching and their replacement with much more flexible approaches of teaching and learning, and ways of responding to students needs and interests. The effect of this has been that rigid, teacher-centric forms of education are no longer the 'one-size-fits-all' answer to teaching children in schools. Since the latter stages of the 20th Century we have had a dramatically changed set of conditions. Donald Schon (1991) captured the essence of these changes for education when he indicated that disciplined-based forms of knowledge, which in the past had been used to try and construct grand theories of the way the world works, are no longer relevant. What we have in their place, are much more locally-based theories that recognize the idiosyncrasies of specific circumstances and diverse contexts, and that acknowledge the integrity and worth of knowledge acquired by teachers as they engage in their day-to-day professional activities. This represents a major shift in perceptions about what constitutes knowledge. The view that there are researchers and experts in our society whose responsibility it is to develop knowledge for and on behalf of teachers, has endured for a long time. What characterizes contemporary needs-responsive approaches is the much more negotiated (even devolved) ways, in which teachers are given a much more significant stake in it. As Schon (1991) put it in his most recent work, what we have is a "reflective turn", in which practitioners are allowed to give voice to the reasons that lie behind what they do. What this means, essentially, is that teachers have to grapple with a changed role - namely, how to work, and how to work with

other practitioners, in a way to observe and describe what it is they do, and with what effect. Schon (1991) puts it in terms of "exploring the understandings revealed by the patterns of spontaneity that take up practice" (p.5). The teacher's role, therefore, becomes one of helping students and other teachers make sense of experience, often in quite strange and puzzlingly new sets of circumstances - rather than telling them what these experiences ought to look like.

Some Advantages and Drawbacks

Reflective practice has both advantages and disadvantages: it can positively affect professional growth but is time consuming and may involve personal risk. Engaging in practice requires both knowledge of practice and awareness of professional and personal philosophy. Furthermore, because teaching take place in settings characterized by ambiguity, complexity, variety and conflicting values, teachers must make choices and make changes about the nature of practice problems and how to solve them.

However, before professionals' theories or ideas about practice can be changed, they must be identified. In skillful 'knowing-in-action' much of the "skillful action reveals a knowing more than we can say," - a tacit knowledge (Schon 1983, p. 51). In other words, professionals are not able to describe what they do to accomplish an activity. However, Osterman (1990) maintains that an important part of reflective practice is developing the ability to articulate that tacit knowledge in order to share professional skills and enhance the body of professional knowledge.

The values, assumptions, and strategies supporting theories and ideas about practice need to be examined by the teacher therefore, and this adds a degree of difficulty that makes reflective practice a tough undertaking. If this clarification does not occur, professionals may find themselves in the position of espousing one theory but using

another in practice, that is, their actions are not consistent with their intent. In reflective practice, teachers can expose their actions to critical assessment to discover the values and assumptions underlying their practice. As professionals become more aware of their theories-in-use, they become more conscious of the contradictions between what they do and what they hope to do (Osterman 1990; Schon 1988). Reflective practice, therefore, can positively affect professional growth and development by leading to greater self-awareness, to the development of new knowledge about professional practice, and to a broader understanding of the problems that confront practitioners (Osterman 1990). However, it is a time-consuming process and it may involve personal risk because the questioning of practice requires that practitioners be open to an examination of beliefs, values, and feelings about which there may be great sensitivity (Peters 1991; Rose 1992). Engaging in reflective practice requires both knowledge of practice and awareness of professional and personal philosophy. Reflection without an understanding of the rules or techniques that constitute good practice may lead to a repetition of mistakes, whereas reflection without philosophical awareness can lead to a preoccupation with technique (Lasley 1989). Schon (1988) suggests that teachers learn to reflect in action by first learning to recognise and apply standard practice rules and techniques, then to reason from general rules to problematic cases characteristic of the profession, and only then to develop and test new forms of understanding and action when familiar patterns of doing things fail.

Lecture 2

Definitions and Types of Reflection

Definitions and Types of Reflection

Reflective practice has a number of interpretations. The definitions range from the technical to the holistic. This holistic interpretation of reflective practice takes into account the role of reflexivity and criticality. The external factors that affect the ability of the teacher have a large part to play in the reflective abilities of the teacher, and for this reason reflexivity is an important part of teaching.

What is reflection?

Most of us would probably think of '**what we see when we look in a mirror**' as the answer to this question. The Oxford Dictionary does indeed have a definition very similar to that, but also includes 'serious thought or consideration' (OUP 2009). This suggests something which is more than what we see or think about on the surface, and we believe that deeper, more thoughtful reflection is the key to Reflective Practice. This does not suggest that there is one type of reflection which is the only one which works.

Here are some ideas and definitions about reflection from a variety of writers:

Moon (2004 p82), has coined the term 'common sense reflection' to describe one basic level of thinking. Roffey-Barentsen and Malthouse (2009: p4) also explain common sense reflection, describing it as below:

"It is the thoughts that occur to us during our day-to-day living, perhaps following a different lesson or a particularly challenging student. It is the thoughts we cannot put down after a difficult encounter with an aggressive student or the muses we choose to have when we feel we could do better and try to work out exactly how. After these events you may think about the situation in terms of what went well and what did not.

You could consider the behaviour of the students or how well a particular exercise went.

If you were to reflect on something in this way you may describe what happened, what you did, what others did in response and what you did after that, and then describe how you felt about it."

Boud, Keogh and Walker (1985: p43) suggest reflection can yield more when it is more purposeful:

"Reflection is an important human activity in which people recapture their experience, think about it, mull over and evaluate it. It is this working with experience that is important in learning."

Andrew Pollard continues to emphasise a more focused form of reflection when he refers to one of the best known 20th Century education thinkers, John Dewey.

"Dewey (1933) contrasted 'routine action' with 'reflective action'. According to Dewey routine action is guided by factors such as tradition, habit and authority and institutional definitions and expectations. By implication it is relatively static and is thus unresponsive to changing priorities and circumstances.Reflective action, on the other hand, involves a willingness to engage in constant self appraisal and development. Among other things it implies flexibility, rigorous analysis and social awareness."

(Pollard 2005: p13)

Crawley (2005) uses Hillier (2002) to develop this idea of reflection with more purpose and structure, using the term 'critical reflection'.

"Without critical reflection, teaching will remain at best uninformed, and at worst ineffective, prejudiced and constraining" (Hillier 2002: p xi)

“There are two main reasons for using critical reflection:

- We can question our routine, convenient, every-day practices and ask questions about what really does and doesn’t work.

- We can challenge some of our deeper social and cultural thoughts, feelings and reactions, or what Hillier (2002: 7) calls our ‘taken for granted assumptions’.”

(Crawley 2005: p 166)

Donald Schon emphasises that there is an instinctive, and in many ways creative aspect to this type of reflection

“Reflection in action concerns thinking about something whilst engaged in doing it, having a feeling about something & practicing according to that feeling.”

Although there are various ways in which different people have defined and explained reflection in teaching and learning overall, the most positive views appear to agree that it is both intuitive in nature, and considered in depth. At its best it is genuinely capable of helping teachers to develop, improve and change their teaching.

Types of Reflection

Superficial (= descriptive reflection)

Reflection at this level is very basic – some would say it is not reflection at all, as it is largely descriptive. However the description should not just be of what happened but should include a description of why those things happened. Reflection at a superficial level makes reference to an existing knowledge base, including differing theories but does not make any comment or critique of them.

Medium (= dialogic reflection)

At this level of reflection, the person takes a step back from what has happened and starts to explore thoughts, feelings, assumptions and gaps in knowledge as part of the

problem solving process. The teacher makes sense of what has been learnt from the experience and what future action might need to take place.

Deep (= critical reflection)

This level of reflection has the most depth. This level of reflection shows that the experience has created a change in the person – his/her views of self, relationships, community of practice, society and so on. To do so, the teacher needs to be aware of the relevance of multiple perspectives from contexts beyond the chosen incident – and how the learning from the chosen incident will impact on other situations.

Informal and Formal (Structured) Reflection

Reflection is an everyday process. We reflect on a range of everyday problems and situations all the time: What went well? What didn't? Why? How do I feel about it?

Informal Reflection

For such reflection we don't usually follow a formula for this, it just happens as feelings, thoughts and emotions about something gradually 'surface'. We might choose to do something differently, or not, as a result of reflecting, but reflection is essentially a kind of loose processing of thoughts and feelings about an incident – any event or experience at all.

Formal Reflection

This is a more structured way of processing in order to deal with a problem. This type of reflection may take place when we have had time to stand back from something, or talk it through with a colleague.

Structured reflection

If we consciously reflect there tends to be a rough process of 'How did it go? What went well? Why? What didn't? Why? What next?' In this kind of reflection, the aim

is to look carefully at what happened, sort out what is really going on and explore in depth, in order to improve, or change something for next time.

Key elements of reflection

Reflection contains a mixture of elements:

1. Making sense of experience

We don't always learn from experiences. Reflection is where we analyse experience, actively attempting to 'make sense' or find the meaning in it.

2. 'Standing back'

It can be hard to reflect when we are caught up in an activity. 'Standing back' gives a better view or perspective on an experience, issue or action.

3. Repetition

Reflection involves 'going over' something, often several times, in order to get a broad view and check nothing is missed

4. Deeper honesty

Reflection is associated with 'striving after truth'. Through reflection, we can acknowledge things that we find difficult to admit in the normal course of events.

5. 'Weighing up'

Reflection involves being even-handed, or balanced in judgement. This means taking everything into account, not just the most obvious.

6. Clarity

Reflection can bring greater clarity, like seeing events reflected in a mirror. This can help at any stage of planning, carrying out and reviewing activities.

7. Understanding

Reflection is about learning and understanding on a deeper level. This includes gaining valuable insights that cannot be just 'taught'.

8. Making judgments

Reflection involves an element of drawing conclusions in order to move on, change or develop an approach, strategy or activity.

Lecture 3

The process of reflection

The Process of Reflection

Reflection consists of thinking critically about an experience and learning from it by:

1. exploring that experience in terms of feelings and significant features
2. processing the significant features and identifying learning
3. finding new solutions to dilemmas
4. using the process as a tool to help develop future clinical practice
5. This can be broken down into five stages:
6. actively focusing attention on an event or a situation
7. being aware of the range of feelings and thoughts that emerge
8. analyzing the situation (acknowledging students' interests, balancing both positive and negative aspects, analyzing who gets what and why, examining power relations)
9. engaging in interpretation and creating further options
10. engaging in innovation and action with a commitment to change

Some activities a teacher might engage in to achieve more effective reflective practice include:

1. develop self
2. awareness by taking time to consider and understand own thoughts and actions
3. reflect on critical events on a regular basis, so that it becomes integral to thinking
4. practice new skills and apply methods of reflection to develop learning experience
5. gain new knowledge of reflective practice through reading
6. learn from feedback from supervisors
7. address particular challenges which may arise through discussions

8. discuss informally the experiences of reflective practice with colleagues.

The basic skill involved in reflection is to develop self-awareness based on attending to feelings and attitudes by dealing with negative feelings and building on the positive. Furthermore, this is a cyclical process.

Reflection and Reflexivity

Teachers need to be reflective about reflective practice and to consider, for example, that it may not invariably or entirely be a good, wholesome, positive activity. The meanings of reflective practice similarly need to be subject to a reflective and critical scrutiny. It is argued that reflective practice involves complex processes that allow teachers to see things in new ways, viewed through the lenses of different models for understanding teaching and learning. However, questions arise about how teachers do this reflecting, why they do it, who it is for and, importantly, who looks at, inspects or even assesses their reflective practice. These specific contexts can cause distortions and illusions in reflective practice. Critically, as reflective practice increasingly becomes a requirement of professional practice, it can also be seen to contain elements of surveillance, inquisition and a form of required 'confessional' about practice (Bleakley 2000; Taylor 2006). Perhaps even more problematic, is when reflective practice becomes designated as a required measurable 'competence' and teachers need to demonstrate skill and adherence to principles of reflective practice. It is thereby not simply, or even predominantly a neutral, unbiased process but also needs to be analyzed and critiqued as an activity in its own right.

A key concept giving momentum to the idea of reflective practice involving both personal reflection and social critique is reflexivity. Reflexive practitioners engage in critical self-reflection: reflecting critically on the impact of their own background, assumptions, positioning, feelings, behaviour while also attending to the impact of the

wider organizational, discursive, ideological and political context. The terms reflection, critical reflection and reflexivity are often confused and wrongly assumed to be interchangeable. Finlay and Gough (2003, p. ix) find it helpful to think of these concepts forming a continuum. At one end stands reflection, defined simply as 'thinking about' something after the event. At the other end stands reflexivity: a more immediate and dynamic process which involves continuing self-awareness. Critical reflection lies somewhere in between. There are five overlapping variants of reflexivity with critical self-reflection at the core: introspection; inter-subjective reflection; mutual collaboration; social critique and ironic deconstruction (Finlay, 2002, 2003). These variants can similarly be applied to distinguishing between the types of reflection practitioners could engage in when reflecting on practice. Reflective practice as introspection involves the practitioner in solitary self-dialogue in which they probe personal meanings and emotions. Inter-subjective reflection makes the teacher focus on the relational context, on the emergent, negotiated nature of practice encounters. With mutual collaboration, a participatory, dialogical approach to reflective practice is sought - what Ghaye (2000) calls a 'reflective conversation'. Here, for example, a mentor and teacher, or members of a team, seek to solve problems collaboratively. Reflective practice as social critique focuses attention on the wider discursive, social and political context. For instance, the teacher may think about coercive institutional practices or seek to manage the power imbalances inherent in education/practice contexts. Finally, reflective practice as ironic deconstruction links into post-modern and post-structural imperatives to deconstruct discursive practices and represent something of the ambiguity and multiplicity of meanings in particular organizational and social contexts.

Learning through Reflection

Reflection has many facets. For example, reflecting on work enhances its meaning. Reflecting on experiences encourages insight and complex learning. We foster our own growth when we control our learning, so some reflection is best done alone. Reflection is also enhanced, however, when we ponder our learning with others. Reflection involves linking a current experience to previous learning (a process called scaffolding). Reflection also involves drawing together cognitive and emotional information from several sources: visual, auditory, kinesthetic, and tactile inputs. To reflect, we must act upon and process the information, synthesizing and evaluating the data. In the end, reflecting also means applying what we have learned to contexts beyond the original situations in which we learned something.

Valuing Reflection

Teachers who are reflective are fully engaged in the process of making meaning. They organize their practice so that they are the producers, not just the consumers, of knowledge. Such teachers monitor their progress, construct meaning from the content learned and from the process of learning it, and apply the learning to other contexts and settings. Learning becomes a continual process of engaging the mind that transforms the mind.

Lecture 4

Methods of reflection

Methods of Reflection

Edgar Schon, an influential writer on reflection, described reflection in two main ways: reflection-in-action and reflection-on-action. Reflection on action is looking back after the event whilst reflection in action is happening during the event. To complicate matters there are different interpretations of reflection on action.

Reflection in action means, "To think about what one is doing whilst one is doing it; it is typically stimulated by surprise, by something which puzzled the practitioner concerned"(Greenwood, 1993). Reflection in action allows the practitioner to redesign what he/ she is doing whilst he/she is doing it. This is commonly associated with experienced practitioners. However, it is much neglected.

Reflection on action is defined as:

"The retrospective contemplation of practice undertaken in order to uncover the knowledge used in practical situations, by analyzing and interpreting the information recalled." (Fitzgerald, 1994: 67). We can see here that reflection on action involves turning information into knowledge, by conducting a cognitive post mortem.

Alternatively Boyd and Fales suggest reflection on action is, "The process of creating and clarifying the meanings of experiences in terms of self in relation to both self and world. The outcome of this process is changed conceptual perspectives." (Boyd and Fales, 1983: 101). We see here that Boyd and Fales focus more on self development. Here reflection does not only add to our knowledge but challenges the concepts and theories we hold. Furthermore as a result we do not see more, we see differently.

Atkins and Murphy (1994) take this idea one step further and suggest that for

reflection to make a real difference to practice, we must follow this with a commitment to action as a result.

The problems with these views of reflection on action are that they do not take account of the importance of reflection before action. This is when we plan out before we act what we want to do.

Levels of Reflection

Hatton and Smith (1995) identified four levels in reflection:

1. Descriptive

This is a description of events or literature. There is no discussion beyond description. The writing is not considered to show evidence of reflection.

2. Descriptive reflective

This is basically a description of events, but shows some evidence of deeper consideration in fairly descriptive language. However, there may be no real evidence of the notion of alternative viewpoints.

3. Dialogic reflection

In this level of reflection there is a 'stepping back' from the events and actions which leads to different levels of discussion. There is a sense of 'mulling over' events, a dialogue with oneself and an exploration of the teacher's role in events and actions. There is evaluation of judgments and a consideration of possible alternatives for explaining them and hypothesizing about them. The reflection is analytical or integrative, linking factors and perspectives.

4. Critical reflection

This level of reflection takes into account the views and motives of others and considers them against the individual's own. There is recognition that the frame of reference with which an event is viewed can change according to the acquisition of

new information, the review of ideas and the effect of time passing. Such reflection shows evidence that the teacher is aware that actions and events may be ‘located within and explicable by' multiple perspectives, and are located in and influenced by multiple and socio-political contexts.

Guided Reflection

Guided reflection is grounded in individual practice, and can provide deeply meaningful insights into self-development and professionally. The process of guided reflection results in a reflexive narrative, which highlights key issues for enhancing practice.

Teacher reflection means interpreting "one’s own interpretations, looking at one’s own perspectives from another perspective, and turning a self-critical eye onto one’s own authority as interpreter and author" (Alvesson and Sköldberg, 2000, p. vii). Hence, the reflective approach has two basic characteristics: careful interpretation and reflection. This approach should lead to the development of teachers’ professional skills. The development takes place within two dimensions: attitudinal development modifies teachers’ attitudes to their work, whereas functional development means the process whereby teachers’ teaching practice is considered to have improved (Evans, 2002, p. 15). These two aspects of reflection are interconnected. Thus, the reflective approach to teaching should have the potential to incorporate both the attitudinal and functional development of teachers.

Reflection is believed to be a genuine way of fostering change in teachers’ professional action. However, the problem is how teachers extract meaning from their experiences. Earlier studies have suggested that teacher reflection on a general level has not been as effective as it had promised to be. In addition, the methods of teacher reflection have been insufficiently developed to foster an encouraged and

differentiated professional learning process (Reiman, 1999; Zeichner, 1996). This is because, in practice, reflective analysis does not come naturally; it requires dialogue with the help of a particular method.

Guided reflection is more than encouraging teachers to bring something to their minds. According to the Deweyan perspective, actions, thoughts, and feelings must also be considered - unexamined experiences lose their potential for (growth and) teacher development (Dewey, 1933; Rodgers, 2002). This means that teacher reflection can be initiated and further developed as part of the social interchange that exists amongst teachers. From this starting point and perspective, spoken discourse between teachers offers tools needed for reflection. By using approaches and methods to guide the formulation of spoken discourse, teachers can fashion their interpretations in ways that can encourage deeper reflection and, consequently, provide direction for their professional development.

Teacher-as-Researcher

The teacher can use action research as part of reflecting on practice. This puts the teacher at the center of knowledge production in the professional context of the classroom. Reflexivity is a central part of such teacher-as-researcher investigations. It is important that teachers engage in critical processes of reflexivity to question the assumptions they bring to their work. Reflexivity involves critical reflection but takes this process further to include an interrogation of the taken-for-granted assumptions that teachers bring to their own practice. The teacher-as-researcher role helps to develop teachers' understanding of pedagogical practices and relations at a deeper level and in the context of their teaching. This helps to illuminate their own positions in educational processes and to highlight the ways that they can contribute to enhancing learning.

The Critical Friend

The Critical Friends process focuses on developing collegial relationships, encouraging reflective practice, and rethinking leadership. This process is based in cooperative adult learning, which is often contrary to patterns established in work environments. It also addresses a situation in which many teachers find themselves – trained to work 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; and that they are simply supervisors in the teaching role. Critical in the context of the group is intended to mean "important" or "key" or "necessary." Those who have used this process have found that many teachers are clumsy at being "critical." They have further discovered that many teachers are trained to talk around and avoid difficult issues, not carefully confront them. The Critical Friends process provides an opportunity both to solicit and provide feedback in a manner that promotes reflective learning.

As originally developed, the three "occasions" for reflection using the Critical Friend approach are: (1) peer observations; (2) reviewing a teaching artifact and (3) consulting about an issue. Each activity in the Critical Friend process contains elements of careful description, enforced thoughtful listening, and then questioning feedback – which may well be the basic elements of reflection. The feedback arrived at through the discussions also has been grouped in these ways: "Warm" feedback consists of supportive, appreciative statements about the work presented; "Cool" or more distanced feedback offers different ways to think about the work presented and/or raises questions; and "Hard" feedback challenges and extends the teacher's thinking and/or raises concerns. In general, this process utilizes time limits and

agreed-upon purpose and norms help reduce interruptions in discussion and the rush-to-comment approach that teachers' busy lives seem to promote. The basic format for collegial dialogue is the same for each protocol: facilitator overview; presentation of observations, work or issue; clarification questions; feedback/discussion by participants (discussants); teacher reflection; debriefing of process. The questions and issues that teachers offer typically spring from feelings of concern, from moments in work without closure, and from issues they have not been able to find a solution through solitary thinking.

Participatory Reflection

The interactive involvement of many people in differing institutional contexts has promoted innovation, and there are many variations in the way that systems of inquiry have been put together.

Common Principles

This diversity and complexity is strength. Despite the different ways in which these approaches are used, there are important common principles uniting them. These are as follows:

A defined methodology and systematic learning process: the focus is on cumulative learning by all the participants and, given the nature of these approaches as systems of inquiry, their use has to be participative.

Multiple perspectives: a central objective is to seek diversity, rather than characterize complexity in terms of average values. The assumption is that different individuals and groups make different evaluations of situations, which lead to different actions. All views of activity or purpose are heavy with interpretation, bias and prejudice, and this implies that there are multiple possible descriptions of any real-world activity.

Group inquiry process: all involve the recognition that the complexity of the world will only be revealed through group inquiry. This implies three possible mixes of investigators, namely those from different disciplines, from different sectors and from outsiders (professionals) and insiders (local people).

Context specific: the approaches are flexible enough to be adapted to suit each new set of conditions and actors, and so there are multiple variants.

Facilitating experts and stakeholders: the methodology is concerned with the transformation of existing activities to try to bring about changes which people in the situation regard as improvements. The role of the expert is best thought of as helping people in their situation to carry out their own study and so achieve something. These facilitating experts may well come from the community, and thus be stakeholders themselves.

Leading to sustained action: the inquiry process leads to debate about change, and debate changes perceptions of the actors and their readiness to contemplate action. Action is agreed, and implementable changes will therefore represent an accommodation between the different conflicting views. The debate and or analysis both defines changes which would bring about improvement and seeks to motivate people to take action to implement the defined changes. This action includes local institution building or strengthening, so increasing the capacity of people to initiate action on their own.

Lecture 5

Foundation models of reflection

Foundation Models of Reflection

Dewey – Reflection as rationality

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 reflection” (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). 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 more affective and emotional concerns.

The starting place in Dewey's philosophy and educational theory is the world of everyday life. Unlike many philosophers, Dewey did not search beyond the realm of ordinary experience to find some more fundamental and enduring reality. For Dewey, the everyday world of common experience was all the reality that man had access to or needed. Dewey was greatly impressed with the success of the physical sciences in solving practical problems and in explaining, predicting, and controlling man's environment. He considered the scientific mode of inquiry and the scientific systematization of human experience the highest attainment in the evolution of the mind of man, and this way of thinking and approaching the world became a major feature of his philosophy. In fact, he defined the educational process as a "continual reorganization, reconstruction and transformation of experience" (1916, p. 50), for he

believed that it is only through experience that man learns about the world and only by the use of his experience that man can maintain and better himself in the world. Dewey was careful in his writings to make clear what kinds of experiences were most valuable and useful. Some experiences are merely passive affairs, pleasant or painful but not educative. An educative experience, according to Dewey, is an experience in which we make a connection between what we do to things and what happens to them or us in consequence; the value of an experience lies in the perception of relationships or continuities among events. Thus, if a child reaches for a candle flame and burns his hand, he experiences pain, but this is not an educative experience unless he realises that touching the flame resulted in a burn and, moreover, formulates the general expectation that flames will produce burns if touched. In just this way, before we are formally instructed, we learn much about the world, ourselves, and others. It is this natural form of learning from experience, by doing and then reflecting on what happened, which Dewey made central in his approach to schooling.

Reflective thinking and the perception of relationships arise only in problematical situations. As long as our interaction with our environment is a fairly smooth affair we may think of nothing or merely daydream, but when this untroubled state of affairs is disrupted we have a problem which must be solved before the untroubled state can be restored. For example, a man walking in a forest is suddenly stopped short by a stream which blocks his path, and his desire to continue walking in the same direction becomes a problem. He considers possible solutions to his problem - finding or producing a set of stepping-stones, finding and jumping across a narrow part, using something to bridge the stream, and so on - and looks for materials or conditions to fit one of the proposed solutions. He finds an abundance of stones in the area and decides that the first suggestion is most worth testing. Then he places the stones in the water,

steps across to the other side, and is off again on his hike. Such an example illustrates all the elements of Dewey's theoretical description of reflective thinking: A real problem arises out of present experiences, suggestions for a solution come to mind, relevant data are observed, and a hypothesis is formed, acted upon, and finally tested.

Schon – Reflection and the professional

Schon, however, concentrated on the use of rational reflection within the understanding and development of professional practice. Schon argued that the application of theory within practice is driven by reflection, the use of such a process ultimately leading to a state of expertise. His goal was therefore to make the tacit knowledge which epitomizes expertise explicit so that it could be considered and improved, and that reflection-on-action, the retrospective analysis of experience, would drive that process. Interestingly, Schon also proposed a form of reflection-in-action, in which reflection is seen as part of active thought. He suggested that the capacity to reflect on action so as to engage in a process of continuous learning was one of the defining characteristics of professional practice. He argued that the model of professional training which he termed "Technical Rationality"—of charging student-teachers up with knowledge in training schools so that they could discharge when they entered the world of practice, perhaps more aptly termed a "battery" model—has never been a particularly good description of how professionals "think in action", and is quite inappropriate to practice in a fast-changing world. The cultivation of the capacity to reflect in action (while doing something) and on action (after you have done it) has become an important feature of professional training programmes in many disciplines, and its encouragement is seen as a particularly important aspect of the role of the mentor of the beginning professional. Indeed, it can be argued that “real” reflective practice needs another person as mentor or professional supervisor,

who can ask appropriate questions to ensure that the reflection goes somewhere, and does not get bogged down in self-justification and self-pity.

Kolb's Reflective Cycle

Kolb (1984) provides one of the most useful (but contestable) descriptive models available of the adult learning process. This suggests that there are four stages in learning which follow from each other: Concrete Experience is followed by Reflection on that experience on a personal basis. This may then be followed by the derivation of general rules describing the experience, or the application of known theories to it (Abstract Conceptualisation), and hence to the construction of ways of modifying the next occurrence of the experience (Active Experimentation), leading in turn to the next Concrete Experience. All this may happen instantaneously, or over days, weeks or months, depending on the topic, and there may be a spiral process at the same time - Kolb proposed that an individual learner moves through a spiral of immediate experience which leads to observations and reflections on the experience. These reflections are then absorbed and linked with previous knowledge and translated into abstract concepts or theories, which result in new ways and actions to adjust to the experience that can be tested and explored.

Kolb labeled the four stages in the cycle of experiential learning as:

1. Concrete Experience - (CE)
2. Reflective Observation - (RO)
3. Abstract Conceptualization - (AC)
4. Active Experimentation - (AE)

Concrete Experience (CE)

This stage of the learning cycle emphasizes personal involvement with people in everyday situations. In this stage, the learner would tend to rely more on feelings than

on a systematic approach to problems and situations. In a learning situation, the learner relies on the ability to be open-minded and adaptable to change.

Reflective Observation (RO)

In this stage of the learning cycle, people understand ideas and situations from different points of view. In a learning situation the learner would rely on patience, objectivity, and careful judgment but would not necessarily take any action. The learner would rely on their own thoughts and feelings in forming opinions.

Abstract Conceptualization (AC)

In this stage, learning involves using theories, logic and ideas, rather than feelings, to understand problems or situations. Typically, the learner relies on systematic planning and develops theories and ideas to solve problems.

Active Experimentation (AE)

Learning in this stage takes an active form - experimenting with changing situations. The learner would take a practical approach and be concerned with what really works, as opposed to simply watching a situation.

Greenaway and Roth

Greenaway is recognized for developing the simple “PLAN-DO-REVIEW” approach to reflection.

Roth (1989) describes twenty four procedures of a reflective practitioner. The procedures 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 procedures like "hypothesize," "synthesize and test" (p. 32). The list reads much like the upper levels from Bloom's taxonomy, and while it does seem to take into account the notion of different time frames, it does not locate the processes in the day-to-day work that constitutes professional practice.

Peters on Reflection

Peters (1991: 91-95) describes a process called DATA that consists of four steps: Describe, Analyze, theorize, Act. First, the problem, task, or incident that the tutor desires to change is described. The tutor identifies the context in which current practice takes place and the reasons for changing it. Next, through analysis, factors that contribute to current practice are identified. An important part of this stage is to identify the assumptions, underlying beliefs, rules, and motives governing teaching and learning. The third step of the DATA process involves theorizing about alternative ways of approaching teaching by taking the theory derived from the previous step and developing it into a new one. Finally, the teacher will try out the new theory.

Qualities of Good Teachers

Peter Beidler lists 10 qualities vital to success in reflective practice. Most important, says Beidler, is the desire to be a good teacher - one who succeeds in every aspect of teaching, just as teachers recognize students who really try to be good students, students also recognize teachers who really want to be good teachers. Second, good teachers take risks. A third quality of successful teachers is their positive attitude. Beidler believes that the teacher who falls into the trap of cynicism or victimization will never be positive about teaching. Good teachers meet all challenges with a positive attitude. Fourth, good teachers never have enough time and never finish their work, but they don't complain about the long hours because they love what they do. Fifth, good teachers think of teaching as a form of parenting. Beidler says that teachers use principles of good parenting in many situations, including caring about their students' welfare, knowing when to be firm and when to give in, and apologizing when necessary. Good teachers, like good parents, know their students' problems,

insecurities and potential. Sixth, successful teachers give their students confidence. They realise that what the students learn is less important than the learning process itself. Learning instills confidence. Seventh, a good teacher is able to keep his or her students off balance. Complacent students are bored students. Teachers encourage learning when they try new techniques and introduce risks. Eighth, good teachers try to motivate students by working within their own incentive system. Teachers who know their students' likes, dislikes, problems and personal issues are more likely to be able to "push the right button" and motivate students to learn. Every group of students has its own characteristics and unique incentive system. The good teacher stays aware of trends and uses this information to modify motivational techniques. According to Beidler, good teachers "try to understand what makes students tick, and then they build on that knowledge to make them tock." At first reading, the ninth and 10th qualities of good teaching seem to contradict each other. The ninth quality, according to Beidler, is "don't trust student evaluations of your teaching," but the 10th quality is "listen to your students." Beidler makes an interesting distinction between the two. First, he notes that student evaluations can be deceiving. Good teachers tend not to believe the positive evaluations and agonize over the one or two mediocre ones, continually trying to improve their teaching. Mediocre teachers do the opposite -- they trust the good evaluations and brush off the negative ones. Beidler believes strongly that the best teachers are those who listen to what their students say about good teaching in general rather than about any one particular teacher.

Lecture 6

Critical models of reflection

Critical Models of Reflection

Brookfield: Using the Four Lenses

Brookfield (1995) argues that we need a specific focus - a critical incident - if we are to understand what is involved and what the benefits are of becoming a critically reflective teacher. Hunting out the many assumptions in what we do during this particular incident is a key place to start, he suggests. We should do this by seeking as many unfamiliar angles as possible, but he notes that this is often very difficult to do unassisted: "we are all prisoners trapped within the perceptual frameworks that determine how we view our experiences." (p 28).

Each of Brookfield's Four Lenses offers tools and practices to support good and excellent teaching. Teachers striving for excellence may wish to engage more deeply with a range of evidence, using not only student and self lenses but other tools and lenses as needed.

The self-lens: Teachers may focus on their experiences as a teacher in order to reveal aspects of their pedagogy that may need adjustment or strengthening. "Consulting our autobiographies as learners puts us in the role of "other"" suggests Brookfield. It also very much involves a 'felt' experience, one that touches our emotions in a substantive and remarkably common (shared) way. In this way we can begin to see our practice from the point of view of what our students experience. Investigating out autobiographies as teachers, is a logical first reflective step - it often brings into focus the instinctive reasoning at work; the previously untested assumptions that may bear further examination.

The student lens: Engaging with student views of the learning environment can lead to more responsive teaching. Evaluations, assessments, journals, focus groups and/or interviews can each provide cues to improve teaching and learning. Seeing ourselves from our students' perspectives can lead to many welcome and not so welcome surprises. We may be reassured: students are interpreting and learning in just the way we anticipated. Equally, we may be quite startled; with students finding a plethora of ways to interpret our actions and make meanings where we anticipated just one. Receiving useful feedback from students can also sometimes be challenging to achieve and, even supposing that we are successful in our efforts, we then need to be prepared to listen to what they have to say.

The peer lens: Peers can highlight hidden habits in teaching practice, and also provide innovative solutions to teaching problems. Further, colleagues can be inspirational and provide support and solidarity. Fostering critical conversations about our teaching with trusted colleagues ('critical friends') can yield useful insights. It helps break down the 'shroud of silence in which our practice is wrapped' suggests Brookfield. Their experiences will often be broadly similar even while they differ from ours in detail. A sense of diversity will become apparent that can only be helpful to us in exploring alternatives and opening new ways of seeing and thinking about practice.

The literature lens: Teaching theory provides the vocabulary for teaching practice, and offers different ways to view and understand your teaching. Here you'll find ways to utilise scholarly literature in your teaching and critical reflection. The literature and 'theory' can often equip us with an enlarged vocabulary to describe and understand our practice. It offers multiple perspectives on familiar situations. According to Brookfield, consulting the literature can become 'a psychological and political

survival necessity, through which teachers come to understand the link between their private troubles and broader political processes' (p37-8).

Johns' Model of Reflection

Johns' model is based on five cue questions which enable the teacher to break down experience and reflect on the process and outcomes. Essentially the cue questions are: Describe the experience and what were the significant factors; what was I trying to achieve and what are the consequences; what things like internal/external/knowledge affected my decision-making; what other choices did I have and what were those consequences; what will I change because of this experience and how did I feel about the experience.

Rodgers on Reflection: Learning through enquiry

Rodgers believes in the importance of the teacher setting the stage for a mindset of enquiry by posing the problems and giving assistance - making it possible to achieve discoveries independently. He likens the process to that used by scientists and historians, with the teachers seeking answers to real questions, discovering the pitfalls and joys involved. He points out that they would develop an appreciation of learning as a structured and cumulative search for answers. For Rodgers there are a number of useful approaches:

Peer teaching

Activities such as peer teaching have many advantages in Rodgers' view, both for the teacher who was being helped and for the older or more experienced teacher who was supporting.

Collaborative learning

Where teachers avoid group activities then development is seriously impeded. Teachers can miss out on opportunities for engaging in meaningful dialogue.

Self-assessment

Rodgers felt it important that some degree of self-assessment was built into any attempt to enable learning from experience. He believed that the evaluation of one's learning was the main way individual-led learning also became responsible learning. When the individual has to take some responsibility for deciding the extent to which s/he has achieved particular goals or criteria, then s/he learns to take responsibility for him/herself.

About Gibb's Model of Reflection

Gibbs' reflective cycle encourages the teacher to think systematically about the phases of an experience or activity, and provides headings to structure the teacher's reflection.

Stage 1: Description of the event

Describe in detail the event you are reflecting on. Include e.g. 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 happened; what was your part in this; what parts did the other people play; what was the result.

Stage 2: Feelings

At this stage try to recall and explore the things that were going on inside your head, i.e. why does this event stick in your mind? Include e.g. how you were feeling when the event started; what you were thinking about at the time; how did it make you feel; how did other people make you feel; how did you feel about the outcome of the event; what do you think about it now.

Stage 3: Evaluation

Try to evaluate or make a judgement about what has happened. Consider what was good about the experience and what was bad about the experience or didn't go so well

Stage 4: Analysis

Break the event down into its component parts so they can be explored separately. You may need to ask more detailed questions about the answers to the last stage. Include e.g. 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; in what way did you or others contribute to this

Stage 5: Conclusion

This differs from the evaluation stage in that now you have explored the issue from different angles and have a lot of information to base your judgement. It is here that you are likely to develop insight into you own and other people's behaviour in terms of how they contributed to the outcome of the event. Remember the purpose of reflection is to learn from an experience. Without detailed analysis and honest exploration that occurs during all the previous stages, it is unlikely that all aspects of the event will be taken into account and therefore valuable opportunities for learning can be missed. During this stage you should ask yourself what you could have done differently.

Stage 6: Action Plan

During this stage you should think yourself forward into encountering the event again and to plan what you would do – would you act differently or would you be likely to do the same?

Lecture 7

From theory to practice in reflection

From Theory to Practice in Reflection

Boud: Returning to Experience – Attending to Feelings

Boud notes that experience alone is not sufficient for learning and poses the following questions: What is it that turns experience into learning? What specifically enables learners to gain the maximum benefit from the situations they find themselves in? How can they apply their experience in new contexts? Boud suggests that structured reflection is the key to learning from experience, and that reflection can be very difficult. "Perhaps if we can sharpen our consciousness of what reflection in learning can involve and how it can be influenced then we may be able to improve our own practice of learning and help those who learn with us" (emphasis added, Boud et al. 1985, 8).

Boud ties the timing of reflective activities to the three stages in experience-based learning: preparation, engagement, and processing, underscoring the importance of including reflective activity at each stage. In the preparatory phase, teachers examine what is required of them and the demands of their roles; during the experience, they process a variety of inputs arising from their work; finally, they must consider and consolidate what they have experienced.

The great strength of the Boud Model of Reflection is that it addresses emotions. Reflection is an activity in which people ‘recapture their experience, think about it, mull it over and evaluate it’. The stages of the model include:

1. Returning to experience - that is to say recalling or detailing salient events.
2. Attending to (or connecting with) feelings – this has two aspects: using helpful feelings and removing or containing obstructive ones.

3. Evaluating experience – this involves re-examining experience in the light of one's intent and existing knowledge etc. It also involves integrating this new knowledge into one's conceptual framework.

This way of approaching reflection has the advantage of connecting with common modes of working. For example, teachers are often encouraged to attend to these domains in the process of supervision and journal writing. However, there is a tendency to focus on reflection-on-action.

Atkins and Murphy on Reflection

Murphy and Atkins' model can be seen to explicitly support the kind of deeper level reflection that the notions of reflective practice aspire to. This is not to say that the other models aren't useful, far from it, but that 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. Atkins and Murphy (1994) take the idea of Schon's reflection-in-action and reflectgion-on-action one step further and suggest that for reflection to make a real difference to practice we follow this with a commitment to action as a result.The problems with these views of reflection on action are that they do not take account of the importance of reflection before action. This is when the teacher plans out before acting.

It is a cycle of reflection but can best be seen as:

1. Reflection before action
2. Reflection in action
3. Reflection after action.

Stages of Atkins' Reflective Process

Atkins and Murphy provide the following stages for the reflective process:

1. Stage 1 = awareness of uncomfortable feelings (usually due to new, unfamiliar or negative situations)
2. Stage 2 = examination of components of the situation and exploration of alternative actions
3. Stage 3 = summary of outcomes of reflection or learning
4. Stage 4 = action resulting from reflection

Smyth on Reflection

Smyth, writing about developing 'socially critical educators' in Boud and Miller (1996) suggests that when reflecting on practice, teachers should engage in four actions, linked to four questions. These questions are in some ways similar to Kolb's 'learning cycle' but look at this in a slightly different way linked to practice.

Describe...what do I do? This involves describing concrete events or situations, possibly in a journal or reflective diary which can be used in the portfolio as part of a reflective approach to your own leadership development. You can note down useful ideas, describe some 'critical incidents', complete the activities and exercises and develop a record which can be used as part of your CPD.

Inform....what does this mean? This is where you take the description of the events or situations and start to analyse it in order to uncover what this means and to identify the underlying principles of what it is that you are doing.

Confront....how did I come to be like this? This stage goes deeper and starts to question some of the assumptions we make as leaders, making critical reflection about the assumptions that underlie management methods and organisational practices. A series of guiding questions for this stage might be:

1. What does my day to day practice say about my assumptions, values and beliefs about education?

2. Where did these ideas come from?
3. What social practices are expressed in these ideas?
4. What is it that causes me to maintain my theories?
5. What views of power do they embody?
6. Whose interests seem to be served by my practices?
7. What is that constrains my views of what is possible?" (Smyth, in Boud and Miller (1996) p. 53)

Reconstruct....how might I do things differently? This stage involves taking an active reflective stance about your own role as a leader and incorporating 'learning about leading'.

Reflection for Agyris and Schon

Argyris and Schon (1974) assert that people hold maps in their heads about how to plan, implement and review their actions. They further assert that few people are aware that the maps they use to take action are not the theories they explicitly espouse. Also, even fewer people are aware of the maps or theories they do use (Argyris, 1980). To clarify, this is not merely the difference between what people say and do. Argyris and Schon suggest that there is a theory consistent with what people say and a theory consistent with what they do. Therefore the distinction is not between "theory and action but between two different "theories of action" (Argyris, Putnam & McLain Smith, 1985, p.82). Hence the concepts of Espoused Theory and Theory-in-use:

Espoused Theory - The world view and values people believe their behaviour is based on

Theory-in-use - The world view and values implied by their behaviour, or the maps they use to take action.

They are suggesting that people are unaware that their theories-in-use are often not the same as their espoused theories, and that people are often unaware of their theories-in-use.

They assert that these theories of action determine all deliberate human behaviour. An example from Argyris' (1987, p93) research may serve to clarify this distinction. When asked about how he would deal with a disagreement with a client, a management consultant responded that he would first state his understanding of the disagreement, then negotiate what kind of data he and the client could agree would resolve it. This represents his espoused theory (or the theory behind what he says) which is of joint control of the problem. A tape recording of the consultant in such a situation however, revealed that he actually advocated his own point of view and dismissed the client's. This indicated his theory-in-use (or the theory behind what he did), which more closely approximates his unilateral control of the problem and a rejection of valid information exchange.

Argyris (1987, p93) suggests that one reason for insisting that what people **do** is consistent with a theory, is the contention that what people do is not accidental. People design the action that they take and are therefore responsible for the design. His assertion is that although they design the action they are often unaware of the design and of its difference from their espoused design. This raises the question, if teachers are unaware of the theories that drive their action (Theories-in-use), then how can they effectively manage their behaviour? Argyris (1980) suggests that effectiveness results from developing congruence between Theory-in-use and Espoused theory.

The models and conceptualizations developed by Argyris and Schon are for the purpose of helping teacher to be able to make more informed choices about the action they design and implement.

Mezirow's Transformational Learning

The study of transformational learning emerged with the work of Jack Mezirow (1981, 1994, 1997). Transformational learning is defined as learning that induces more far-reaching change in the learner than other kinds of learning, especially learning experiences which shape the learner and produce a significant impact, or paradigm shift, which affects the learner's subsequent experiences (Clark, 1993). Numerous authors have published papers on various aspects of transformational learning, and they have collectively identified factors which produce transformational learning in adult students. Characteristics of the instructor, student, course content, learning environment, and instructional activities as they influence transformational learning have been discussed and examined. To date, there has not been a comprehensive compilation of these factors in one publication, and there are additional factors which appear to be overlooked or ignored by writers on transformational learning. Two fundamental questions arise from these observations.:

First, what factors contribute to transformational learning?

Second, what challenges arise for the instructor who teaches in transformational learning environments?

Criticisms of Reflective Practice

i) Lack of conceptual clarity

One problem frequently raised in the literature concerns the lack of conceptual clarity surrounding the term 'reflective practice', and indeed around the notion of reflection itself. Van Manen (1995) has pointed out that the notion of reflection is challenging

and may refer to a complex array of cognitively and philosophically distinct methods and attitudes. Bleakley (1999) has suggested that reflective practice is in danger of becoming a catch all term for an ill-defined process. For instance, different authors frame reflective practice and its applications in distinctly different manners, emphasizing one dimension of the theory, while ignoring another. Likewise, in practice the theory is interpreted and applied in many ways, within different institutions, and by various professions. Confusion among practitioners and educators is rife (Bengtsson, 1995; Eraut, 1994; Mackintosh, 1998; McLaughlin, 1999, Newman, 1999; Zeichner, 1994). Thus, a major challenge with the theory of reflective practice is the lack of conceptual clarity. The concept remains elusive, is open to multiple interpretations, and is applied in a myriad of ways in educational and practice environments.

ii) Focus on Individual

A second critique has to do with the theory's focus on ‘individual’ reflection. Relevant to this discussion is the work of Barry Sandywell (1996) who has written an ambitious study examining the history of reflection and reflexivity. Central to his critique of the limits of reflection is his argument that the 'Other' is excluded in every project of reflection (p. 249). Sandywell notes that cognition appears as a type of ‘inner contemplation’ conducted by the solitary meditator and that it is distinct from older dialogical views of existence. He suggests that such dialogical views have been displaced in favour of a proprietal conception of ‘objects’ constituted through acts of introspective cognition (Sandywell, 1999). In his view, an emphasis on individual reflection fails to consider the accounts of ‘Others’ within the community within which reflection occurs. Along these lines, Taylor & White (2000) have noted that while reflective practice opens up the possibility of a more uncertain, ambiguous and

complex world, it tends to close much of this down again by obscuring the client's perspectives and freezing practitioners' accounts as true representations of what happened. Such a privileging of the practitioner perspective can be as dangerous as an uncritical privileging of technical rationality.

iii) Discourses in practice

A third critique is that Schon's theory fails to acknowledge the problematic nature of language and discourse within practice environments (Taylor & White, 2000). Practitioner accounts are non-problematically viewed as 'true', and no effort is made to foster practitioner reflection on language use, or on the manner in which discursive systems construct what can be talked about. Rich (2001) highlights the power of language noting that language is the vehicle through which we name, describe, and depict, and that through its corruption, language can also be used to manage our perceptions. Lather (1991) draws attention to the power of language to "organize our thought and experience" and to 'frame the issues' to which we address our attention. When such an understanding of language is applied to practice, the question of "who" frames the issues, and whose account is put forward is raised. While reflective practice brings practitioner accounts to the table as a counterbalance to a traditional emphasis on technical rationality, the question of whether those accounts can be taken as non-problematic reflections of reality is never posed. In this way reflective practice assumes what Alvesson & Skoldberg (2000) refer to as a so-called realistic view of language, which treats utterances as relatively unambiguous entry points to the understanding of actions, ideas or events. The potentiality of discursive systems to suppress certain accounts and to infuse others with power reveals an important dimension of practice that is not considered within Schon's reflective practice.

iv) Where is the 'Other'?

A fourth and related critique is Schon's failure to consider the inter-subjective dimensions of practice. One potential implication of such, is the danger of treating the client or the coworker as an "object", as a "thing". Philosopher Richard Kearney (1988) has pointed out that in ethical relationship, the face of the other calls out to us for response before epistemological and ontological concerns, in what Levinas has termed the ethical relation of the "face to face". Another in need makes the ethical demand on me - where are you? We are responsible for the suffering of the other in that face to face moment (Kearney, 1988, p. 362). Without an adequate consideration of human encounters, we are in danger of confronting "the other as a thing, as a raw material to be objectified and manipulated in accordance with an egocentric self-interest" Gardiner, 1999, p. 64). This is contrasted with a Bakhtinian view of the other "as a unique and singular being, in which a dialogical relation is reciprocal and mutually enriching" (Gardiner,1999, p.64). The question raised is whether reflective practice goes far enough in the consideration of inter-subjectivity and the promotion of ethical relationships, and whether Schon's reflective practice carries with it the danger of treating service users and colleagues as simply 'objects' of practitioner reflections.

Lecture 8

What is critical Reflection

What Is Critical Reflection?

Critical thinking is the ability to think clearly and rationally. It includes the ability to engage in reflective and independent thinking. Someone with critical thinking skills is able to do the following :

1. understand the logical connections between ideas
2. identify, construct and evaluate arguments
3. detect inconsistencies and common mistakes in reasoning
4. solve problems systematically
5. identify the relevance and importance of ideas
6. reflect on the justification of one's own beliefs and values

Critical thinking is not a matter of accumulating information. A person with a good memory and who knows a lot of facts is not necessarily good at critical thinking. A critical thinker is able to deduce consequences from what he knows, and he knows how to make use of information to solve problems, and to seek relevant sources of information to inform himself/herself.

Critical thinking should not be confused with being argumentative or being critical of other people. Although critical thinking skills can be used in exposing fallacies and bad reasoning, critical thinking can also play an important role in cooperative reasoning and constructive tasks. Critical thinking can help us acquire knowledge, improve our theories, and strengthen arguments. We can use critical thinking to enhance work processes and improve social institutions.

Some people believe that critical thinking hinders creativity because it requires following the rules of logic and rationality, but creativity might require breaking rules.

This is a misconception. Critical thinking is quite compatible with thinking "out-of-the-box", challenging consensus and purusing less popular approaches. If anything, critical thinking is an essential part of creativity because we need critical thinking to evaluate and improve our creative ideas.

It entails the examination of those structures or elements of thought implicit in all reasoning: purpose, problem, or question-at-issue; assumptions; concepts; empirical grounding; reasoning leading to conclusions; implications and consequences; objections from alternative viewpoints; and frame of reference. Critical thinking — in being responsive to variable subject matter, issues, and purposes — is incorporated in a family of interwoven modes of thinking, among them: scientific thinking, mathematical thinking, historical thinking, anthropological thinking, economic thinking, moral thinking, and philosophical thinking.

Critical thinking can be seen as having two components: 1) a set of information and belief generating and processing skills, and 2) the habit, based on intellectual commitment, of using those skills to guide behavior. It is thus to be contrasted with: 1) the mere acquisition and retention of information alone, because it involves a particular way in which information is sought and treated; 2) the mere possession of a set of skills, because it involves the continual use of them; and 3) the mere use of those skills ("as an exercise") without acceptance of their results.

Critical thinking varies according to the motivation underlying it. When grounded in selfish motives, it is often manifested in the skillful manipulation of ideas in service of one’s own, or one's groups’, vested interest. As such it is typically intellectually flawed, however pragmatically successful it might be. When grounded in fair-mindedness and intellectual integrity, it is typically of a higher order intellectually, though subject to the charge of "idealism" by those habituated to its selfish use.

Critical thinking of any kind is never universal in any individual; everyone is subject to episodes of undisciplined or irrational thought. Its quality is therefore typically a matter of degree and dependent on, among other things, the quality and depth of experience in a given domain of thinking or with respect to a particular class of questions. No one is a critical thinker through-and-through, but only to such-and-such a degree, with such-and-such insights and blind spots, subject to such-and-such tendencies towards self-delusion. For this reason, the development of critical thinking skills and dispositions is a life-long endeavor.

Conceptualizing Critical Thinking

Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. People who think critically consistently attempt to live rationally, reasonably and empathically. They are keenly aware of the inherently flawed nature of human thinking when left unchecked. They strive to diminish the power of their egocentric and socio-centric tendencies. They use the intellectual tools that critical thinking offers - concepts and principles that enable them to analyze, assess, and improve thinking. They work diligently to develop the intellectual virtues of intellectual integrity, intellectual humility, intellectual civility, intellectual empathy, intellectual sense of justice and confidence in reason. They realise that no matter how skilled they are as thinkers, they can always improve their reasoning abilities and they will at times fall prey to mistakes in reasoning, human irrationality, prejudices, biases, distortions, uncritically accepted social rules and taboos, self-interest, and vested interest. They strive to improve the world in whatever ways they can and contribute to a more rational, civilized society. At the same time, they recognize the complexities often inherent in doing so. They avoid thinking simplistically about complicated issues and strive to appropriately consider the rights

and needs of relevant others. They recognise the complexities in developing as thinkers, and commit themselves to life-long practice toward self-improvement.

Why Critical Thinking?

Everyone thinks; it is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed or prejudiced. Yet the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought.

The Result of Critical Thinking for the Teacher:

1. raises vital questions and problems, formulating them clearly and precisely;
2. gathers and assesses relevant information, using abstract ideas to interpret it effectively comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;
3. thinks open-mindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications, and practical consequences; and
4. communicates effectively with others in figuring out solutions to complex problems.
5. Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities.

Critical Thinking Defined by Edward Glaser

In a seminal study on critical thinking and education in 1941, Edward Glaser defines critical thinking as follows “The ability to think critically, as conceived in this volume, involves three things: (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's

experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods. Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends. It also generally requires ability to recognize problems, to find workable means for meeting those problems, to gather and marshal pertinent information, to recognise unstated assumptions and values, to comprehend and use language with accuracy, clarity, and discrimination, to interpret data, to appraise evidence and evaluate arguments, to recognise the existence (or non-existence) of logical relationships between propositions, to draw warranted conclusions and generalisations, to put to test the conclusions and generalisations at which one arrives, to reconstruct one's patterns of beliefs on the basis of wider experience, and to render accurate judgments about specific things and qualities in everyday life.

Lecture 9

Critical analysis

Critical Analysis

Bloom's Taxonomy and Critical Thinking

Thinking skills enable teachers to turn their experience into learning. We need to focus on ‘knowing how’, rather than ‘knowing what’: learning how to learn. They are the foundation of personal development as well as making an important contribution to education development. They help teachers to think and act creatively, to meet challenges positively and effectively, and show initiative and enterprise in how they think and learn.

Bloom's Taxonomy divides the way people learn into three domains. One of these is the cognitive domain which emphasises intellectual outcomes. This domain is further divided into categories or levels. The key words used and the type of questions asked may aid in the establishment and encouragement of critical thinking, especially in the higher levels.

This breakdown provides a useful, incremental framework of complexity in demonstrating mastery of teaching skills. The verbs include the skills that demonstrate each:

Knowledge:

To know something means to be able to remember or recall facts or bits of information, though one can "know" something without understanding it or being able to put it into a higher context. This process is illustrated by recall of sequences and lists, of events and dates; landmarks on a route; pictures and their graphic details; songs and lyrics; titles and names; even memorised definitions and explanations. It

includes being able to remember to move a certain way, as for an athlete or dancer, or ritualized procedures for greeting and meeting people.

Verbs include: choose, define, describe, enumerate, identify, label, list, locate, match, memorise, name, quote, recall, recite, recognize, reproduce, select, show, state

Comprehension:

To comprehend a fact or piece of information is to understand what it means, and be able to provide new examples or instances of the concept. The key is that the learner demonstrates a subject from a personal, internalized perspective, rather than a formal externally driven one.

This process is illustrated by describing or defining words or situations in one's own words, or perhaps illustrating a concept with pictures or words or actions, or describing a main theme or best answer, or rephrasing an idea.

Verbs include: associate, convert, classify, create analogies, diagram, distinguish, draw out, estimate, generalise, graph, explain, illustrate, map, match, outline, predict, relate, paraphrase, relate, restate, summarise, systematise

Application:

To apply information means to use it according to principles and rules.

This process is illustrated by being able to derive new examples from principles, as in answering "how" a person would apply what they have learned. For example, being able to add examples from your own life or experience to those studied that demonstrate a principle, or even being able to change a condition and give an example that fits the new situation.

Verbs include: apply, assemble and construct, calculate, change, collect and organise, complete, defend, demonstrate, diagram, discover, dramatize, forecast, illustrate, interpret, make, prepare, produce, relate, show, solve, translate

Analysis:

To analyse means to break information down into the sum of its parts and to see how those parts work together, and be able to organise or place it into meaningful and new patterns or relationships. This process can be illustrated a number of ways, as in making illustrations that reinforce or detail a story or concept; or acting out a story. A researcher might exemplify with an outline or apply the scientific method to a study, or create a model or plan of an object or building. A writer might detail motives or relationships, or make a distinction between parts or examples.

Verbs include: analyse; arrange, compare, categorize and differentiate, connect, distinguish and contrast; examine, explain, role-play, subdivide, research, disassemble, separate, investigate, subdivide, infer,

Synthesis:

To synthesise means to take the knowledge you have and connect it with other knowledge, or putting parts together to form a new and original whole. Application of this process could research new applications, adapt routine or studied movements into new applications, make stereotypes new and exciting, adapt conventions and rules into new products, take chance occurrences and recognize new applications, see possibilities that skirt dead-ends, draw out incites from people to encourage new ways of thinking and doing.

Verbs include: adapt, create, combine, compile, compose, design, develop, experiment, forecast, formulate, hypothesize, imagine, integrate, invent, originate, plan, predict, speculate, synthesise

Evaluation:

To evaluate means to be able to judge whether information or an argument is good or bad? Sound or unsound? This process is illustrated by defining a set of standards or

criteria and applying a situation or instance to them to evaluate whether or not it fits, or detail how it does not.

Verbs include: assess, award, commend, conclude, criticize, critique, debate, discuss, estimate, evaluate, judge, justify, opine, prioritize, rank, recommend, self-evaluate, standardize, support, weigh, value.

5-Step Model for Teachers to Move Toward Critical Thinking

Step 1.

Determine learning objectives. A teacher should first identify the key learning objectives that define what behaviours they should exhibit. To make critical thinking happen, these learning objectives, as well as the activities and assessments, must include those tied to the higher levels of Bloom's (1956) taxonomy. A well-written objective should include a behaviour that is appropriate for the chosen level of the taxonomy. Bloom's Knowledge level requires an answer that demonstrates simple recall of facts. Questions at this level require the teacher to answer who and what and to describe, state, and list. Comprehension requires an answer that demonstrates an understanding of the information. Questions at this level lead the teacher to summarise, explain, paraphrase, compare, and contrast. Application requires an answer that demonstrates an ability to use information, concepts and theories in new situations. Questions lead the teacher to apply, construct, solve, discover, and show. Analysis requires an answer that demonstrates an ability to see patterns and classify information, concepts, and theories into component parts. Questions at this level lead the teacher to examine, classify, categorise, differentiate, and analyse. Synthesis requires an answer that demonstrates an ability to relate knowledge from several areas to create new or original work. Questions at this level lead the teacher to combine,

construct, create, role-play, and suppose. Finally, Evaluation requires an answer that demonstrates ability to judge evidence based reasoned argument.

Step 2:

Questioning is a vital part of the teaching and reflective practice process. It allows the teacher to establish what is already known and then to extend beyond that to develop new ideas and understandings. Clasen and Bonk (1990) posited that although there are many strategies that can impact thinking, it is focused questions that have the greatest impact. They went on to indicate that the level of thinking is directly proportional to the level of questions asked. When teachers plan, they must consider the purpose of each question and then develop the appropriate level and type of question to accomplish the purpose. All teachers need experience with higher level questioning once they become familiar with a concept. Thoughtful preparation on the part of the reflective practitioner is essential in providing that experience.

Step 3:

In the past decade, a major shift has taken place in education; that shift is toward active learning. Teachers that have used this approach generally find that they learn more. Bonwell and Eison (1991) described active learning as involving the teacher in activities that cause them to think about what they are doing. Fink (2003) indicated that the concept of active learning supports research which shows that we learn more and retain knowledge longer if we acquire it in an active rather than passive manner. To make learning more active, we need to learn how to enhance the overall learning experience by adding some kind of experiential learning and opportunities for reflective dialog.

Step 4:

Teachers should strive to continually refine their practice to ensure that their instructional techniques are in fact helping students to learn. To accomplish this, teachers should monitor the classroom activities very closely. To track student participation, a teaching diary can be kept that identifies the students that participated, describes the main class activities, and provides an assessment of their success. Other reflective comments can also be tracked in this journal and can be very useful when revising or updating instructional activities.

Step 5:

Feedback provides the teacher with the opportunity to enhance the quality of student learning and performance, rather than to grade the performance, and, importantly, it has the potential to help themselves learn how to assess their own performance in the future. Feedback allows the teacher and students to engage in dialogue about what distinguishes successful performance from unsuccessful performance as they discuss criteria and standards.

Different Kinds of Critical Thinking (Halpern)

The Halpern Framework provides a structure for critical thinking which is purposeful, reasoned, and goal-directed.

The teacher should answer the following questions:

1. What is the goal?

First step in improving thinking is to be clear about the goal or goals. Sometimes there are multiple goals; sometimes the goal changes as we work on a problem. If the overall goal is not OPERATIONAL (i.e. "reach a good decision"), then identify operational goals (write clearly, address all elements of the assignment, evaluate the consequences of alternative decisions).

2. What is known?

Review what is known. You may know more than you realize, once you start taking a census. You may also realise that some of the apparently information is not certain at all. If you are completing an assignment or solving a problem for someone else, review guidelines for the assignment and ask yourself what the person cares about and values in a solution.

3. Which thinking skills will get you to your goal? [apply skills]

How will you get there? Generate some tactics, strategies. Diagram the problem. Analyse written materials for underlying assumptions. Consider the credibility of evidence and experts. Scrutinise words for ambiguity, emotional bias, flawed logic. What are the limitations of metaphors or analogies? Ask questions. Explain the problem to someone else to get a better grasp on it yourself.

4. Have you reached your goal?

Did you solve the problem you set out to solve? Check your solution against the criteria. Does it work? Are all subgoals addressed? Does you solution exhibit the qualities that your audience/customer/employer values?

Critical Incident Analysis

A critical incident is something that happens, either positively or negatively, that may cause someone to reflect on what has happened and maybe rethink the events. Critical Incident Analysis can help to facilitate reflective practice or reflective learning by enabling teachers to explore their feelings on a certain subject. It is a valuable learning tool that can be used as a starting point for evidence-based practice. It can also be included within a professional portfolio. A critical incident could be a poor lesson, an interaction between a student and colleague, or the circumstances surrounding students' grades. The critical incident may only be significant for the individual involved or it may affect the whole team.

Critical incident analysis involves focusing on an event, including analysing the circumstances surrounding it, the actions of those involved, responses to the event and the outcomes. The result should be a better understanding of how practice can be improved.

Critical incidents can be either positive or negative; an interesting interaction or an ordinary everyday occurrence. Sometimes, depending on the focus and the "rawness" of a critical incident, it may feel uncomfortable to undertake a critical reflection because it highlights our assumptions, views and behaviours. The critical reflection framework is a guided process to aid analysis and increase the potential for positive outcomes. Analysis of a critical reflection can take place at any point and therefore is useful particularly in development and enquiry orientated programmes (ie. learning and insights can be drawn from, fed back in and across programmes in sync with the rhythm of participant experience and need).

Possible outcomes from undertaking critical incident analysis reflection include:

1. Congratulation and affirmation. Even within a critical incident that someone frames as "unsuccessful" there is usually some part of an adverse situation that has been handled well and this should be acknowledged;
2. Immediate action;
3. Not resolved;
4. No action but the person feels better for talking about it.

Critical incident reflection can be used in different ways to produce narratives (individual and/or group) based on the recall of an experience. For example, critical incident reflection can be of a "one-off" event/experience or of different experiences about the same issue/focus. Variations in the use of critical incident reflection can be introduced through, for example:

1. the combinations of people participating in the critical reflection (eg. different roles or connections to the same experience or issue);
2. time (eg. one single incident that occurs on a regular basis; a specified time period, such as six months or at the end of each week).

Personal Filters (Teachers' Beliefs and Values)

The entire act of teaching is affected by one's assumptions and beliefs, but teachers often don't recognise their assumptions and beliefs because they have seldom if ever explicitly examined them. Teachers engaged in reflective practice will write down their assumptions and beliefs, and thereafter as a result of reading and experiences, will periodically examine those assumptions and beliefs.

Making your assumptions and beliefs explicit does not necessarily mean that they are correct, but this process does enable you to see the basis for your decision making in teaching. Below are four general areas and suggested questions/topics in each area. You do not have to limit yourself to these topics nor is an answer to every question necessary. However, you should use these questions to develop some organised statements about your beliefs and assumptions. This self-reflection and analysis will provide a foundation for developing and revising your philosophy of education.

The Nature of Learning

1. How easy or difficult should learning be for students?
2. How natural is learning? How does it occur?
3. Do students need to be active for learning to occur?
4. What percentage of a class period should teachers be talking?
5. Do students learn best when they are interested in the topic/activity?
6. Do students learn best individually or in groups?
7. How is group learning best organized?

8. How important is repetition and review in learning?

The Nature of Students

1. To what degree can students be trusted?

2. Will all your students be capable of mastering the material you will teach?

3. How motivated are students?

4. Why do students fail?

5. Are students motivated by grades?

6. How different are students? Can they really be taught as a group? What are the difficulties in group teaching?

7. Do students change in terms of their intelligence and ability relative to other students?

The Nature of Teachers/Teaching

1. Are the best teachers born that way?

2. Is teaching an art or a science?

3. How complex is teaching?

4. Can research help teachers as much as learning from the effective practice of experienced teachers?

5. How much planning should teachers do? How far should they plan in advance?

6. Are the best lessons those where the teachers simply react to the class?

Lecture 10

Conceptual learning

Conceptual Learning

Conceptual learning, or concept learning, is a learning method as well as a form of critical thinking in which individuals master the ability to categorise and organise data by creating mental logic-based structures. This process requires both knowledge construction and acquisition because individuals first identify key attributes that would make certain subjects fall in the same category or concept. Knowledge construction is a constructive learning process in which individuals use what is familiar or what they have experienced to understand another subject matter, while knowledge acquisition is a learning process wherein a student acquires knowledge from an acknowledged expert. Conceptual teaching is increasing in popularity, especially when used for math and clinical subjects, but applying the method to explain more complex concepts can be a struggle for many educators.

This learning method is often compared to procedural learning, considered the most conventional and widely used method of teaching. Procedural learning requires individuals to memorise procedures but does not require the understanding of concepts. Conceptual learning does not require any kind of memorisation, and instead focuses instead on the understanding of the concepts or structures behind different operations or procedures.

The Biology of Learning and Thought Processing

Learning is a process that has been occurring ever since the first formation of the brain cells during the embryonic stage and will continue until death. Information is stored in various locations in the brain which consists of a rather elaborate network of neurons that communicate with each other. This network has been established through

prior sensory, emotional, and intellectual experiences, even to the degree that we have learned which stimuli to perceive or ignore. Specific patterns have been established and have even become somewhat hardwired. Whenever we experience something new, the brain searches for an existing network into which to fit that information, and if that network exists, we can process and evaluate the information relatively quickly and at ease. But if we are asked to learn a new skill, additional connections among the neurons have to be made – which almost always takes some time and experience. The same is applicable to the process of thinking where old and new information is combined and evaluated, and if need be new circuits might be established. Thus thinking in ways we have already learned to think will be much easier than being challenged to think in new ways. Since the process of evaluation of signals involves the thalamus, the conclusions we reach will also have an emotional component (e.g. LeDoux 1999). The formation of concepts and belief systems is thus a rather personal and grounded experience. New behaviour patterns and new concepts CAN be learned, but it does require work (as does creating new networks and changing the hardwiring). In other words, new concepts cannot be "adopted", they have to be fitted into existing networks and go through all the emotional filtering and evaluation processes first. Even if a newly taught concept might sound logical, it can only be employed after a new network has been established. For the reflective practitioner, thinking in a familiar fashion proceeds along already existent networks. When we experience something new the brain "looks" for an existing network into which this information can fit. If the fit is good, what was learned previously is given meaning, if not some confusion may occur. The brain will then search for slightly different avenues to match the old and the new information. Developing new skills and different thinking patterns requires the formation of additional networks. In other

words, learning changes the physical structure of the brain, and with it, the functional organization of the brain.

Concept Formation

Concepts are like mental representations that, in their simplest form, can be expressed by a single word, such as plant or animal, alive or dead, table or chair, apple or orange (e.g. Carey 2000). Concepts may also represent a set of ideas that can be described by a few words. Through the use of language individual concepts can be connected to build more complex representational structures, like for example "babies crawl" or "birds fly". At other times two concepts can be combined to form a third representational structure. An example of the latter could be "density", which is the "matter" per "volume", i.e., a concept that stands in itself but is a product of two other concepts. Through the use of language, we can thus create new concepts that can stand by themselves. More complex concepts can describe a whole idea, like for example "the theory of natural selection". Similarly, though the use of math, we can build somewhat more abstract theories that in the end up representing one idea, like for example "the big bang model of the universe". In other words, within a particular representational structure, concepts help us make deductions and explain even more complex ideas. Concept can thus act like building blocks of more complex or even abstract representations.

Teachers Constructing Concepts

So then what is thinking and understanding? In the cognitive sciences the term "deep understanding" generally refers to how concepts are "represented" in the individual's mind, and most importantly how they are "connected" with each other (Grotzer 1999). Representations are generally made in the form of images in simple cases, and in the forms of models in more abstract situations. Deep understanding then means that the

concepts are well represented and well connected. An expert in a particular field does not just have more knowledge, but the knowledge s/he has is connected in a “logical and meaningful” manner. This is important because when individual facts are recalled it is as if a whole set of interconnected further concepts are accessed at the same time and whole sets of neural networks become activated. As such, deep understanding of a subject involves the ability to recall many connected concepts at once, where every single concept has a deep meaning in itself. Deep thinking then involves being able to make further connections between the webs of concepts. Deep thinking involves the construction of new concepts and is almost always based on what the individual already knows. When a learner “makes sense” of new material s/he is able to make the connections between different concepts.

Lecture 11

Reflective writing

Reflective Writing

The Challenges of Reflective Writing

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.

Selecting the Content

1) **Write a log of the event**. Describe what happened as briefly and objectively as possible.

2) **Reflect.** You should reflect upon the experience before you start to write, although additional insights are likely to emerge throughout the writing process. Discuss with a friend or colleague and develop your insight. Keep notes on your thinking.

3) **Select.** Identify relevant examples which illustrate the reflective process; choose a few of the most challenging or puzzling incidents and explore why they are interesting and what you have learnt from them.

Use **the reflective learning cycle** to structure your writing:

1. plan;
2. act;
3. observe;
4. reflect;
5. plan again etc.

This will make sure you cover the whole process and explain not just what happened, but why it happened and what improvements can be made based on your new understanding.

Getting the Language Right

As a large proportion of your reflective account is based on your own experience, it is normally appropriate to use the first person ('I'). However, most assignments containing reflective writing will also include academic writing. You are therefore likely to need to write both in the first person ("I felt…") and in the third person ("Smith (2009) proposes that …").

Produce a balance by weaving together sections of 'I thought… 'I felt,…' and the relevant academic theories. This is more effective than having a section which deals with the theory and a separate section dealing with your experiences.

Try to **avoid emotive or subjective terms**. Even though you are drawing on your experiences (and they may well have been emotional), you are trying to communicate these to your reader in an academic style. This means using descriptions that everyone would understand in the same way. So rather than writing, "The student was very unhappy at the start of the session", it might be better to write, "The student was visibly distressed", or "The student reported that he was very unhappy". This shows

that you are aware that the student's understanding of 'unhappiness' may be quite different from yours.

When writing about your reflections use the past tense as you are referring to a particular moment (I felt…). **When referring to theory** use the present tense as the ideas are still current (Smith proposes that...).

The Keeping of a Journal as a Barrier to Reflection

A journal is a recognised method of evaluating personal experience by reflecting on it. A teacher's initial difficulty can be that it is not easy to just pick up a pen and to start writing. Writing about personal experience can be profoundly difficult. Boud et al. suggest a possible reason for this in that the culture of academic and professional writing has always devalued personal experience in the 'quest for objectivity and generality'. So we can see two instant barriers that restrict personal writing, namely previous experience and the traditional nature of academic writing.

Once a teacher overcomes the initial barrier of putting pen to paper, they can struggle further because they do not have a focus. There can also be struggles with the time management skills required in writing a journal. There can be many more.

So we have one small element of reflective practice in journal writing, yet many barriers are evident within it.

Overcoming barriers by oneself

Boud and Walker identify a process for overcoming barriers starting with acknowledging that they exist. The easiest thing is to give up completely because you did not want to know. Yet by working with the problem the teacher can realise that barrier is usually with journal writing, which was an important landmark which Griffin calls 'naming' - 'the more clearly we can understand them, the more easily we can work with them' [barriers].

Overcoming barriers with the help of a group

Teachers often find that they are able to learn from the group, since their experiences of using reflection in practice are invaluable. The teacher becomes eager to persevere and not give up because they have made a commitment to participate in the group. Teachers working together can motivate each other and help sustain interest in the exercise of reflection. It’s possible for the teacher to develope a commitment to the group because the group became an invaluable part of the reflective process.

Overcoming barriers with the help of a facilitator

The experience of journal writing can be facilitated by different people. Boud and Walker refer to the importance of effective facilitation, but the teacher must remain mindful of Brookfield in which he tells us of the relevance of communication in which facilitators should 'create conditions in which authentic dialogue and communicative discourse can occur'. The relationship between the two people is fundamentally important, and there needs to be a build-up of trust. Brookfield also reminds us that 'adult educators have to resist the temptation of hurtling precipitously and mindlessly into such exercises'.

Lecture 12

Developing competence

Developing Competence

There are key principles for the reflective practitioner to consider:

Principle 1

The reflective practitioner should articulate professional knowledge, skills, and attributes essential for all classroom teachers, operating across broad phases of competency in relation to specific teaching and learning contexts as defined by students, phases of schooling and learning areas.

Principle 2

The reflective practitioner can define (design for themselves or with peers) or apply competency standards to represent the discrete generic dimensions of teachers' work. Effective teaching requires successful integration of these dimensions.

Principle 3

Classroom teachers assume roles beyond the classroom in endeavoring to maximize their students' learning. These roles include working collaboratively with colleagues and other members of the school community, and communicating with parents.

Principle 4

The reflective practitioner must frame general and recognizable aspects of professional capacity and achievement.

Principle 5

Teachers develop their knowledge, skills and practices throughout their professional lives. This development is not linear. Teachers enter the profession with varying levels of prior learning, work experience and professional preparation, working in a range of different contexts that combine to shape their professional profile.

Principle 6

There are essential attributes that people wishing to enter the teaching profession should have if they are to be effective teachers: The reflective practitioner (either individually or in a group) should seek out such attributes.

Principle 7

The actions of effective teachers are guided by their values. These values are:

1. learning, where a positive approach to learning is taken for ourselves and others
2. excellence, reflecting high expectations for students and ourselves
3. equity, where the different circumstances and needs of others are recognised
4. care, fostering a relationship based on trust, mutual respect and acceptance of responsibility.

Lecture 13

Reflecting Effectively

Reflecting Effectively

Be honest: Effective reflection requires that the teacher be honest with him/herself and with the group. This includes being honest about the limits of one's own abilities and knowledge. If the teacher doesn't know the answer to the group's questions, s/he should admit it and work on finding the answer. Honest teachers gain the trust of the group and model the importance of honesty from all participants. However, teachers should be careful not to stray from preventing a neutral stance while maintaining honesty.

Managing dual roles: There is some disagreement among expert teachers as to whether a teacher should always maintain a neutral stance, particularly if the teacher is an active member of the group and decision-making is taking place. A skilled teacher will calculate the potential impact of his or her interjections into the group and determine if it will result in a misuse of power. Sometimes, a skilled teacher will state that s/he wants to suspend his or her role as teacher for the sake of making an opinion or perspective heard. These instances should be handled with extreme caution and some forethought.

The teacher is not an expert: Teachers must keep in mind that their role in reflection is to moderate and guide communication, not make personal contributions to it, or push their own agenda. By controlling the group, teachers threaten the open sharing of thoughts and feelings, and may close themselves off from the group's feedback. Instead teachers should remain flexible and responsive to the group, and encourage evaluation of the, process. The teacher's neutrality throughout the process is crucial.

An effective way for teachers to avoid voicing their personal opinion is to reflect question back to the group.

Everyone can learn: Teachers should view reflection as a learning opportunity and should communicate this attitude to the group. This means that teachers themselves remain open to learning from others, and that everyone's contributions are treated as credible and educational. This serves to validate group members and helps to avoid arguments between them.

Other qualities of an open-minded attitude include:

1. Somewhat informal
2. Be empathetic
3. Maintain a sense of humor
4. Stay interested in group discussion
5. Be, real, direct, and genuine

Communication

Set ground rules: Ground rules establish a foundation upon which the group's communication will occur. They help to create a safe environment in which participants can communicate openly, without fear of being criticized by others. Ground rules that have been arrived at by all members are the most useful and can be repeated if tension rises during reflection. Sample ground rules follow.

1. Be honest
2. Listen, even if you disagree
3. Avoid prejudicial comments
4. Criticise the idea, not the person
5. Pass if you're not comfortable
6. Use "I" statements

7. Don't interrupt
8. Be brief
9. Everything is confidential
10. Agree to disagree

Use "vibes watchers": In order to monitor ground rules the teacher may choose to identify one or more "vibes watchers". The vibes watcher observes the reflection and takes note of group dynamics that are potentially problematic (for example, one person dominating the discussion, a participant's ideas being attacked, etc.). S/he can interrupt the discussion if the situation is particularly problematic, and explain, in a non-accusatory tone, what s/he observed. The teacher can decide if all participants should be encouraged to voice such concerns during the session. At the conclusion of the session the teacher should ask for a report from the vibes watcher, so that future session may be improved. Participants should not be forced to vibes watchers, but should volunteer. Ideally, all members of the group will become sensitive to group dynamics, and, in a sense, monitor themselves.

Promote "active listening": Staying quiet and considering others remarks can be challenging when controversial topics are discussed, but is crucial to respectful communication. Teachers should discourage participants from professing their opinions without considering and responding to others' comments. Instead, teachers should model communication in the form of a dialogue, in which participants listen and respond to each other. The type of communication used (whether "polite conversation" is favored over informal or slang conversation) can very, and should be determined according to such factors as the group's cultural background, familiarity with each other, goals for reflection, etc.

Encourage participation by all: Teachers should clearly communicate that reflection is an egalitarian process in which everyone has a right to speak, or to choose not to speak. Group members who have not spoken should be encouraged to do so, if they wish. This can be accomplished by creating a space for more introverted group members to speak. This can be accomplished by stating something like, "Let's give an opportunity to hear from some people who haven't spoken yet..."

Use "stacking": In order to promote full participation, the teacher should guide the allocation of speaking time by "stacking" (or "queuing"). This involves the teacher identifying and placing in some order those individuals who wish to speak. One example of this technique is to list the names of the four people who have raised their hands, invite them to speak in order, and then indicate that you will recognize others who wish to speak after the four people have finished. Another technique is to simply give a nod to a person who wants to speak, acknowledging that they have been noticed and will be called upon soon. Additional strategies for inclusion can be found in the "Activities" section of this manual.

Other practices for effective communication include:

DO:

1. use open-ended questions
2. ask for specifics and examples
3. paraphrase and summarise
4. acknowledge contributions
5. redirect questions to group
6. be creative
7. take some risks by posing provocative questions

DON'T:

1. refute people's ideas
2. put people on the spot
3. downplay thoughts, feelings
4. force people to speak

Group Dynamics

Create a safe space: The key to open and honest reflection is an environment in which participants feel safe and comfortable. In order for group members to express their thoughts and opinions they must feel that they can do so without fear of attack or condemnation. It is the teacher's job to create such an environment, to monitor participant's comfort levels, and to take the necessary steps to maintain safety. This includes understanding and planning for individual differences in needs, abilities, fears, and apprehensions. Participants who feel safe are more likely to make honest and genuine contributions and to feel camaraderie and respect towards other group members.

Manage disagreements: It has been said that "whatever resists will persist." Teachers must be adept at recognizing tension building in the group, and respond to it immediately. Among the most useful strategies is to repeat the ground rules established by the group, including a reminder that criticism should pertain to ideas not to people. In addition, teachers should not permit any disrespect or insults and should clarify misinformation. It is important that negative behavior be handled immediately so that participants do not get the impression that the behavior is condoned by the teacher.

Promote equality: As indicated, effective reflection is not designed around the leadership of one person. Equality of participants should be communicated and modeled by the teacher. Again, the teacher must be an alert observer, identifying signs

of a developing hierarchy, or of divisive factions within the group. S/he should not permit arguing up against any group member(s), and should not take sides in any developing debate. Such situations can be counteracted by recognizing all members, and encouraging their participation equally.

Be mindful of power, and who has it: All groups have opinion leaders or people who most others look up to. Often, these opinion leaders will set the tone for a discussion, thereby limiting active involvement of the more reserved members. Identify who these opinion leaders are and if it appears as though their power and authority is dominating the discussion, ask them, politely, to entertain other opinions. Other keys to managing group dynamics include:

1. know the group
2. keep the group on track
3. don't avoid topics
4. reflect responsibility back on group
5. be prepared for disagreements
6. encourage challenging issues

Build in diversity: Monitoring communication for expressions of bias requires the teacher's attention and sensitivity. Teachers should be aware that some language and behaviour has questionable, different or offensive meaning to some people, and they should encourage them to share their perspectives and information. Specifically, teachers should watch out for statements or situations that generalise groups. When qualifiers are used that reinforce stereotypes by suggesting exceptions to the rule, teachers should ask for clarification. Most importantly, while expressions of prejudice should be interrupted, the person who spoke should not be publicly attacked. Placing

guilt on the speaker is likely to increase the tension and stifle further exploration of the topic.

1. Express empathy.
2. Ask for more information.
3. Paraphrase the feelings you hear expressed.
4. Give information

It is important that responses to prejudice to be non-judgmental and non-confrontation, and that you express genuine interest.

Closure and Evaluation: As a challenging and meaningful reflection session draws to an end, participants may feel that their intended objectives have not been met, that questions have not all been answered, or that a plan of action has not been finalized. Nonetheless, the group needs to recognise that progress has been made and that the process must continue. It is the job of the teacher to initiate this sense of resolution, and to invite feedback so that the process may foster as it continues. Suggestions for accomplishing this include:

1. Request a closing statement from each participant about what they learned, what they plant to do next, etc.
2. Review the session with the group, recognizing participants' contributions and the necessity of further reflection.
3. Provide participants with resources, such as written material and upcoming events, to encourage their continued involvement.
4. Request written and verbal evaluations so that participants may voice those concerns and ideas that have been left unsaid, and so that teachers may understand the strengths and weaknesses of their skills.

As with any skill, the ability to reflect effectively will develop through experience, feedback, observation, and reflection.

Lecture 14

Features of reflection

Features of Reflection

The Three-Step Reflective Framework

At all steps the practitioner is encouraged to think critically about the event, and in the Hegarty framework, critical reflection is prompted since engagement at this level has the potential to change practice. Also, for some teachers, critical reflection is a necessity for reflective practice (Fisher, 2003; Fook, White & Gardner, 2006). In the framework, the first step involves describing what happened, that is, what was done, thoughts, feelings, the knowledge used and the decisions made. This step in itself is reflective because the practitioner has to 'sit up and take notice' of the situation and think hard about it to make sense of what was going on. In other frameworks the initial act of writing about the experience is not regarded as reflective. For example, Hatton and Smith (1995), believe that writing descriptively about the experience comes before any reflection about it because they regard rationalisation about the experience as reflective. This is the second step, and occurs when the experience is analysed and the reasons for any actions, decisions and reactions are explained. Reference to the literature is important in this step to provide a foundation of evidence against which the experience can be compared. During this step any learning resulting from the experience is described. It is not until the third step that any learning from the experience and how it might be used is acknowledged. Guidance for setting goals for further action is prompted at this step.

Personal Practice Theory (PPT)

Researchers exploring the relationship between teacher beliefs and their classroom practices found that teachers' experiences impact on what they believe teaching

should be like and that teachers form their own theories in teaching (Clandinin, 1986; Cornett, 1990; Cornett, Yeotis, & Terwilliger, 1990). Conett (1990) defined PPTs as the systematic set of beliefs (theories) guiding teachers' practices (practical) that are based on their prior life experiences (personal). Surfacing their PPTs enables teachers to be more cognizant of their rationale for ongoing decision-making and empowers them to become reflective practitioners (He & Levin, 2008; Levin & He, 2008).

The Nature of Personal Practical Theories

Effective professional practice is skillful action undertaken within real-world conditions and constraints that produces desired consequences. This kind of skillful action is based on the professional's interpretation or "appreciation" of the particulars of the situations he or she faces but inexperienced and untrained persons cannot do the same thing for two primary reasons (1) they are not able to perceive and interpret the professionally significant features of the situation, and (2) they lack the knowledge that enables a practitioner to choose actions that are appropriate in these circumstances for producing desired consequences. The pragmatic aim, to produce desired consequences, is inevitably a professional's intention. It is what he or she is hired for and (presumably) professionally skilled in accomplishing. But while professional aims in education are pragmatic, they cannot be value-free. On the contrary, educational decisions inherently include normative components and professional judgments about teaching effectiveness depending on normative considerations, although those judgments may be embedded in choices that might appear to be made on purely pragmatic grounds. Practical knowledge is required to perform professional tasks, a kind of knowledge Argyris has termed "theories of action." In education, that kind of knowledge is usually called professional knowledge to distinguish it from "educational theory," which some teachers presume has little

relevance for professional work. But in important ways, the professional knowledge of expert teachers is theoretical knowledge, which is vital to success in teaching. Practical theories of teaching are the conceptual structures and visions that provide teachers with reasons for acting as they do, and for choosing the teaching activities and curriculum materials they choose in order to be effective. They are the principles or propositions that provide a foundation to teachers' appreciations, decisions, and actions.

Lecture 15

From theory to practice

From Theory to Practice

Teaching as a profession, requiring qualifications and an understanding of the impact of values, beliefs and skills on professional effectiveness and the creation of professional standards. Teachers deal with a particular type of knowledge over and above their specialist expertise and specific skills. Much of this cannot be listed in a syllabus: it needs to be teased out and experienced personally by each teacher; hence the significance of reflective practice.

The following list is merely suggestive of the complexity and problematic nature of professional knowledge. It does not attempt to define it. Professional knowledge is:

1. Shared and collaborative, part of a 'tradition of conduct'.
2. Never complete, often uncertain, sometimes a mystery.
3. 'Situated' in a particular, if not unique context.
4. Ethically informed, works 'with' not 'on' students.
5. Practical above all, but relies on theory and creates new theory.

Professional knowledge in this deep perspective is derived from what teachers actually do. It has to be acquired, as if for the first time, by each new teacher. It cannot be comprehensively covered in any list of occupational skills and competences. Such knowledge is not, therefore, what most people believe or would like it to be. It is not evidence-based; it is not easily transferable; it is not based on solid and dependable factual knowledge. If they are to learn from each experience of practice, professionals must be able to theorise from their own practice. This means deep reflection in order to create a personal theory. All professionals frequently have to make judgements about what to do for the good of a client without knowing all the

facts of the case. Because they are fallible, mistakes will be made, but these are often the source of further learning and theorising. Reflection never stops. Professional knowledge also embraces a form of artistry, i.e. intuitive, tacit and sometimes inexpressible ‘knowings’. This personal artistry of practice can develop over time, as a result of the right kind of reflection.

The characteristics of professionalism include:

1. Professional education is essentially practical, whilst theorists may know something, practitioners must do something. Professionalism needs therefore to be grounded in professional practice itself. Theory is essential, but it is always in the service of practice. It is practice that determines the value of any theory, rather than theory that determines the value of any practice.
2. Professional learning is multifaceted knowledge and understanding of practice are acquired in a variety of interactive ways within complex traditions and institutions. A practice is learned first and foremost by engaging in that practice: "learning by doing and making sense of what you did". Imitation, trial and error, apprenticeship, mentorship, classroom teaching, supervision, scholarship and research all play a part.
3. Professional education, like practice, is a moral endeavour because teachers serve students interests having consequences that are open to debate as to ends and means. Professional education, like professional practice, is bound up in questions about what ought to be done as well as how to do it.
4. Professional educators as role models of personal reflection: Teachers working in the practice of their profession and in the education of the next generation of practitioners need to be self-critical, independent learners developing knowledge for themselves, as well as helping new teachers to do so. How is knowledge for

practice developed through reflective activities? Becoming deeply reflective can be compared to becoming literate in a new language. Literacy, or meaning-making, in any language is achieved through listening, speaking, reading and writing. A language for individual practice can be honed by talking about your own practice and listening to other practitioners talking about their practice, in relationships like mentorship and supervision. Reading about other people's practice and research of practice, and writing about your own practice, are also part of the process.

Some Do's of good reflective speaking and writing

1. Discuss concrete situations and real life persons and issues.
2. Use the first person singular, because third person accounts do not engage people as whole persons. Adopt a narrative style, because stories do engage and involve people as whole persons
3. Stay "in the moment" and include the intentions you, as practitioner, had during each significant "moment"
4. Demonstrate an ethical awareness and commitment to professional ideals
5. Describe your actions and the context or situation in which some action needs (or needed) to be taken
6. Illustrate how knowledge and new understandings are embedded in action, and how they can arise from reflection on action
7. Attempt to get below the surface of what has previously been taken for granted
8. Show evidence of any learning/deeper understanding that has occurred as a result of reflection

Lecture 16

Frames perceptions and interpretations

Frames, Perceptions and Interpretations

What Frames Are

Frames are cognitive shortcuts that people use to help make sense of complex information. Frames help us to interpret the world around us and represent that world to others. They help us organise complex phenomena into coherent, understandable categories. When we label a phenomenon, we give meaning to some aspects of what is observed, while discounting other aspects because they appear irrelevant or counter-intuitive. Thus, frames provide meaning through selective simplification, by filtering people's perceptions and providing them with a field of vision for a problem. Frames can significantly affect the intractability of a conflict by creating mutually incompatible interpretations of events. Because frames are built upon underlying structures of beliefs, values, and experiences, disputants often construct frames that differ in significant ways.

Fames often exist prior to conscious processing of information for decision-making and affect subsequent individual decisions. Thus, teachers are separated not only by differences in interests, beliefs, and values, but also in how they perceive and understand the world, both at a conscious and pre-conscious level.

Framing involves both the construction of interpretive frames and their representation to others. Teachers use framing not only as an aid to interpreting events, but also to promote strategic advantage. Framing can be useful for rationalizing self-interest, convincing a broader audience, building coalitions, or lending preferentiality to specific outcomes. As such, many factors affect how people frame a situation, which, in turn, influences the direction the reflection takes.

Definitions

Differing conceptual frames held by individuals form the basis on which they act. Each individual has his/her own perception and understanding of their agenda, the relevance of various issues, their priorities, and the opportunities and risks involved with different choices. This assemblage of factors can be considered as a set of lenses, or filters, through which the various parties view their situation, and is called the frame or conceptual frame.

In the English language, the word "frame" can be used both as a verb (to frame) or as a noun (a frame). As a noun, frame denotes the boundary within which the whole picture is displayed (similar to a frame placed around a picture or painting), and is used as a tool for interpreting and understanding the perceptions and underlying objectives of the various actors in the conflict. As a verb, framing refers to the creation of frames, either from a simple reading of the situation or through a deliberative, analytic, or strategic process.

The concept of frames has been developed as a tool for analysis in various fields, including psychology and sociology, business management, artificial intelligence, decision-making, negotiation, environmental conflict management as well as education. Relevant to understanding situations are definitions given by such scholars as Minsky, Tannen, and Gray, for whom frames are "cognitive structures held in memory and used to guide interpretation of new experience." Furthermore, "parties rely on these mental structures to interpret or make sense of ongoing events." Frames are also defined as "collections of perceptions and thoughts that people use to define a situation, organize information, and determine what is important and what is not." Teachers create frames to name a situation in which they find themselves, to identify

and interpret specific aspects that seem key to understanding the situation, and to communicate that interpretation to others.

Why are Frames Important?

An essential element in reflective practice is an understanding of how frames affect professional development. In the context of a development and professionalism, we create frames to help us understand why and how we do what we do, what actions are important, why the parties act as they do, and how we should act in response. Frames act as sieves through which information is gathered and analysed, positions are determined (including priorities, means, and solutions), and action plans developed. Depending on the context, frames may be used to conceptualise and interpret, or to manipulate and convince.

Putnam and Holmer hold that framing and reframing are vital to the reflection process and are tied to information processing, message patterns, linguistic cues, and socially constructed meanings. Knowing what types of frames are in use and how they are constructed allows one to draw conclusions about how they affect their development, and can be used to influence it. Thus, analysing the frames practitioners use in a given situation provides fresh insight and better understanding of the dynamics of professional development.

The Sources and Forms of Frames

Many factors influence frames and their formation. Intractable ideas and assumptions are usually associated with a complex and reinforcing set of frames about oneself, the "others," risks, what information should apply to the situation, and how decisions should be made. The frames of most importance to intractability usually include identity, characterisation, power, conflict management/process, risk/information, and loss versus gain. Their forms and most common sources are as follows:

1. Identity Frames: teachers view themselves as having particular identities in the context of specific situations. These identities spring from the individuals' self-conception and group affiliations. The more central the challenge to one's sense of self, the more oppositional one is likely to act. Typical responses to threats to identity include ignoring information and perspectives that threaten the core identity, reinforcing affiliations with like-minded individuals and groups, and negatively characterizing outsiders (new teachers in the school).
2. Characterization frames: teachers view others as having particular characteristics. Closely related to stereotyping, characterization frames may be either positive or negative. Teachers often construct characterization frames for others that significantly differ from how the other parties view themselves. Such characterizations often undermine the others' legitimacy, cast doubt on their motivations, or exploit their sensitivity. Characterization frames are also often linked to identity frames, serving to strengthen one's own identity while justifying your actions toward the other.
3. Power frames: because values and assumptions are often imbedded in struggles to alter existing institutions or decision-making procedures, teachers' conceptions of power and social control play a significant role in the dynamics of the profession. Power frames help the individual determine not only which forms of power are legitimate but also the forms of power that are likely to advance one's own position.
4. Conflict management or process frames: Conflict over how best to manage or resolve differences is central to many intractable situations for teachers. Depending on the strength of the teacher's identity, characterisation of others, perceived power, and perception of the available options, conflict frames may

require individuals to seek very different remedies in response to common problems. Because of the wide complexity of possible actions and the uncertainty of their consequences, groups with shared interests and values may draw significantly different conclusions as to the best course of action.

5. Risk and information frames: These often involve expectations about future events, in which the events are risky and the likelihood of the events occurring is uncertain. In such conditions, teachers often construct risk and information frames that yield highly variable assessments about the level and extent of a particular risk. Additionally, these frames indicate to the teacher which sources of information are reliable and which are not. Risk and information frames depend not just on the teacher's interests, but also on the teacher's training, expertise, level of exposure to the risk, familiarity with the risk, potential for catastrophic impacts associated with the risk, and degree to which the risk is dreaded.
6. Loss versus gain frames: In intractable disputes, it is common for most parties to the conflict to focus on threats of potential loss rather than on opportunities for gains. People tend to react differently to a proposed action when its expected consequences are framed in terms of losses as opposed to gains, where preventing a perceived loss is often more salient and more highly valued than capturing a commensurate gain

Many other types of frames can be constructed, but these six categories stand out as particularly applicable for the reflective practitioner.

Reframing

Within process of critical reflection or problem solving, the explicit management of frames, and the framing process may lead to important shifts in both the frames

themselves and in their impact on the practitioner. This purposive management of frames is called reframing.

Use of frame analysis and reframing processes have the following goals for the teacher:

1. to clarify or "refresh" the perception of the issues being reflected upon (in order to promote more productive information exchange and listening to ideas not previously considered, and to expand the framework of discussion and explore means of action or solutions not yet attempted);
2. to sharpen understanding of individual/ others' interests and how the modes of action chosen serve those interests;
3. to identify those subjects which can be viewed differently, even when the basis for the divergent frames are more fully understood (in order to identify opportunities for trade-offs based on clearly understood differences); and
4. to identify differences which cannot be bridged (in order to more fully evaluate the differences, to determine the degree of importance attributed to these intractable differences in frames, and to seek ways to address them).

Thus, reframing, stemming from teachers' understanding of their own as well as others' expressed frames, may pave ways for higher levels of critical thinking and therefore reflection on practice..

Lecture 17

Reframing for resolving difficult conflicts

Reframing for Resolving Difficult Controversies

A Reframing Matrix is a simple technique that helps you to look at problems from a number of different viewpoints, and expands the range of creative solutions that you can generate. The basic approach relies on the fact that different people with different experiences approach problems in different ways. This technique helps groups to put themselves into the mindsets of different people and imagine the solutions, or problems, they would come up with regards to a key question or problem.

Detailed description of the process

First, put the question to be asked in the middle of a grid. Use boxes around the grid for the different perspectives. This is simply an easy way of laying out the problem. Two different approaches to the reframing matrix are demonstrated here, but it is important to note that many different techniques can be utilised. The first approach, which is called the Four Ps, relies on looking at a problem by following the different perspectives that may exist within a development or humanitarian organisation:

1. Programme perspective: Are there any issues with the programme or service we are delivering?
2. Planning perspective: Are our business or communications plans appropriate?
3. Potential perspective: Is it scalable and replicable?
4. People perspective: What do the different people involved think?

The second approach to using a reframing matrix is to look at the problem from the viewpoints of different specialists. The way that a doctor, for example, looks at a problem would be different from the approach an engineer would use, which would be different from a teacher's perspective.

Problem Statement

If you are focusing on a problem, be sure to define and state it specifically enough that you can write about it. Avoid trying to investigate or write about multiple problems or about broad or overly ambitious problems. Vague problem definition leads to unsuccessful reflections and vague, unmanageable outcomes. Naming a topic is not the same as defining a problem.

Problem statements often have three elements:

1. the problem itself, stated clearly and with enough contextual detail to establish why it is important;
2. the method of solving the problem, often stated as a claim or a working thesis;
3. the purpose, statement of objective and scope of the action the teacher is considering.

Lecture 18

Reframing for strategic creativity

Reframing for Strategic Creativity

Race's Ripples Model

A model perhaps more suited to the experienced practitioner is Race's updated 'ripples' model (2010). This is based on the Vygotskian theory (1978) that the best way to learn is to become actively involved in the activity and that the best teachers are those who facilitate children's learning, rather than trying to pour in the learning from the top. Race (2010) places 'learning by doing' at the centre of a pool of water and shows how the ripples fan out from the centre to encompass other types of learning and reflection.

This model is similar to Kolb in that it is dynamic and based on experiential learning but it is not sequential requiring one aspect before and following another. Race describes this as intersecting systems of ripples on a pond

Teachers' Epistemic Beliefs

Perry (1970) has delineated the developmental trajectory of epistemic beliefs into four stages: (a) dualistic, (b) multiplistic, (c) relativistic and, (d) commitment with relativism. Individuals with a dualistic view of knowledge believe in right-or-wrong knowledge handed down by authority. They move on to the multiplistic stage when they begin to acknowledge the possibilities of multiple views, but they still believe that most knowledge is certain. Individuals progress to a relativistic stage when they see most knowledge as tentative and contextual. Individuals at this stage also tend to believe that knowledge is generated by the self through thinking rather than given by authorities. At the last stage, individuals may commit themselves to the belief that knowledge is uncertain and based on the weighing of accumulated evidence. This

scheme of categorisation presupposes a structural development of epistemic beliefs. Perry's developmental model has been further refined by others. For example, Belenky, Clinchy, Goldberger and Tarule (1986) have proposed a similar model comprising the following four levels for epistemological development: (a) silenced/received knowing, (b) subjective knowing, (c) procedural knowing and, (d) constructed knowing. However, Schommer (1990) contended that the developmental model may fail to capture the complexity of epistemic beliefs due mostly to its uni-dimensional nature. She proposed a multidimensional model that conceives epistemic beliefs as a system of more-or-less independent beliefs. These dimensions include beliefs about innate ability, quick learning, simple knowledge, and certain knowledge. The first two dimensions focused on beliefs about learning, while the last two on beliefs about knowledge. Based on Perry and Schommer's work, Hofer and Pintrich (1997) suggested that epistemic beliefs should be divided into two major categories: (a) nature of knowledge, which includes certainty of knowledge and simplicity of knowledge; and (b) nature of knowing, which comprises source of knowledge and justification of knowledge. Later, Hammer and Elby (2002) argued that the above models seem to regard epistemic beliefs as theories and traits that are assumed to be consistent across contexts. Hammer and Elby treat epistemic beliefs as made up of a range of epistemic resources. Individuals are believed to hold both naïve and sophisticated resources in their cognitive structures. Different epistemic resources are activated by different contexts.

Conceptual Learning

Factual learning and conceptual learning may be distinguished as follows: factual learning emphasizes the acquisition and storage of information to be retrievable on demand; conceptual learning emphasizes the kinds of things one is able to do with the

information one has acquired. A subject matter area has both a body of factual information to be mastered and a conceptual framework or structure in which the factual matter is contained and to which it contributes. What is learned in a given course is usually a function of what the teacher feels to be important. The teacher's bias may be factual, in which case the imparting and acquisition of information, or factual knowledge, is paramount; or it may be conceptual, in which case the factual material is subordinate to, and serves, a general understanding of the larger patterns and relationships which define the subject area. A conceptual emphasis entails a further dimension which is of crucial importance: it causes factual information to contribute to an end beyond itself—namely, the students' learning to advance from the particular to the general, enabling them to synthesize relationships, to extrapolate from the known into the unknown, to hypothesize, and to discover further knowledge on their own. In my opinion, it is these abilities that we should be striving to foster in our learning experiences, at all levels.

John Dewey's notion that the aim of all educational processes is "informed and intelligent action," and Alfred North Whitehead's view that knowledge has value only insofar as it is put to effective use. This is not to say that teachers should approach learning in a narrow utilitarian spirit, acquiring knowledge simply in order to apply it to some predetermined end. Rather, it is to suggest that the knowledge we acquire is to be sought and prized for its enlarging our sense of what is possible to us. It is what the teacher does with knowledge that justifies learning; and it is not the factual knowledge the teacher has acquired, but the capacity to use learning that makes educated people.

Whitehead calls this unused knowledge "inert ideas . . . that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations," and he

says further that “education with inert ideas is not only useless; it is, above all things, harmful” in that it produces “mental dry-rot.”

Factual knowledge is important to conceptual thinking; a person can’t generalize without a wealth of valid concrete data. An emphasis on conceptual learning in the reflection process will assume that the teacher will have a thorough grasp of the factual knowledge entailed by the subject matter. But factual information will be seen as a necessary means to a higher end, and not as an end in itself.

Many teachers who are oriented to information retrieval as an index of intellectual competence do not or cannot think conceptually themselves, and thus cannot undertake reflection with a conceptual orientation. Many teachers have a narrow, or specialised view of their subject and conceive their role simply as that of training people to learn specific knowledge, supplying the professional manpower needs of the society. A factual emphasis is often the result of herding students into large classes -such as the lecture sections of certain general education courses -where, because of numbers and anonymity, meaningful conceptual feedback is virtually impossible to attain. In these large classes the teacher cannot know the individual capabilities of the students, but must “level” the presentation to a mass audience, usually through the mode of the fact-filled lecture.

A fact-oriented teacher will say: “A competent student in this course should know X, Y, and Z.”, and will construct an exam to test whether the students know X, Y, and Z. In a sense, the exam structures the course, and determines what will be taught. Students who are “successful” are those who have acquired and retained the factual information that the exam requires. They have, quite literally, studied “for the exams”; but then the exams come to be an end in themselves: once they are passed, the information can be forgotten. It is easier for teachers to “evaluate” a student when

they have something concrete in mind to look for, a checklist to follow—when they can look for the presence of "the right answer" instead of involving themselves in the more time-consuming and intellectually demanding challenge of having to identify "a good answer." In such a situation, where information retrieval is emphasized, what have students learned? If "successful," they have learned "the right answer" - but not necessarily "good answers," and much less the ability to use their factual knowledge to formulate good questions of their own.

Learning from reflection should enable teachers to frame good questions and develop good answers to them. Factual knowledge should be a means to this end, which is best conceived as conceptual learning. To justify its acquisition, knowledge must be put to intelligent and effective use; an emphasis on conceptual learning, for which factual learning provides the foundation, will increase our potential for enriching the quality of teachers' lives.

Lecture 19

Reflective Teaching Practices Criticality

Reflective Teaching Practices: Criticality

The first author who brought reflection into an understanding of what professionals do was Schon (1983). Schon (1983) defined ‘reflection’ as thinking about what we are thinking, acting upon rather than reaction to a stimulus. This is viewed as being interrelated with social constructivist practices and openness to change, and it enables reflective practices (Schön,1983, 1987). Kolb (1984) also stated, in his influential argument on experiential learning, that reflection plays an important major role in the transformation of experience into knowledge. Under this fundamental principle of this scholar reflection has been placed at the core of the learning process, especially in relation to learning as a development and not merely the acquisition of information (Reynolds, 1998). “Reflection is a way of helping practitioners to better understand what they know and do asthey develop their knowledge of practice through reconsidering what they learn in practice” (Loughran, 2002:p.). It is within the context of education that the concept of critical reflection now forms a core part of teachers’ professional role. It is believed that by thinking more critically about their assumptions and actions, practitioners can develop more collaborative, responsive and ethical ways of performing their duties within the context of their work. The term ‘critical’ now broadens the perspectives of Schon’s (1983) reflection by bringing into focus the socio-structural context and historical events. This means the historical incidents and events in society that precipitate the need for critical analysis and reflection. This generates the ability for us to learn from past events and the problems involved. Solutions to these events are sorted over the time in which a lesson is learnt. Therefore, critical reflection in itself is a learning process (Allen, 1992).

Reflection on action is a process that takes place sometime after the significant event and cannot influence its outcome (Schon, 1983). The situation is unexpected and uncertain and at times leads to consultation with peers. Reflection in action can be described as interaction with a 'live' problem as it unfolds. The capacity to reflect in action assumes that the problem-solver has the capacity to surface his/her 'knowing in action', that is, the hidden or tacit knowledge that we use to deal with particular tasks (Schon, 1983; Hawkridge, 2000). This, for instance, could be the informed knowledge of school regulations in dealing with classroom latecomers. Therefore, for reflection on action and reflection in action to be effective, they have to occur in reflective teaching practice - a safe learning environment where teachers may put their rule-based knowledge into action and develop a repertoire of responses and judgements which become progressively more complex and sophisticated as they develop to cover a wider range of experiences (Schon, 1983). In the context of critical reflective practice it is argued that it constitutes an attempt to break with positivist views of 'technical rationality'. Technical rationality is a positivist epistemology of practice, 'the dominant paradigm which has failed to resolve the dilemma of rigour versus relevance confronting professionals' (Usher et al, 1997:p.143). Positivists argued that Schon (1983, 1987) looks at an alternative epistemology of practice 'in which the knowledge of inherent in practice is to be understood as artful doing'. This is because critical reflective practices required diagnostic testing and belief in personal causation. Kirby et al (1992) pointed out the elements of diagnosis in reflection: Diagnosis involves 'making sense of ' a problem through use of professional knowledge, past experiences, and the uniqueness of the setting and people involved, including expectations held by others. Once the problem is framed, the practitioner

engages in on-the-spot experimentation and reflection to test alternative solutions. Finally, the practitioner accepts responsibility for action - has the courage to act in a situation of uncertainty (Kirby et al, 1992:p.2).

The importance of action reflection also impacts on teachers' critical thinking as a process. This is an outcome of critical thinking that helps practitioners to develop the habit of mind in which 'change is regarded as the fundamental reality, forms and structures are perceived as temporary, relationships are held to involve developmental transformation and openness is welcomed' (Brookfield, 1987:p.13). The practitioner's long-term objective of critical reflection is to develop and change approaches and strategies by evaluating actions and the actions of others, thereby generating a positive relationship as a teaching practitioner.

Critical Reflection in Teaching and Professional Learning

Brookfield (1998, cited in Hillier, 2009:p.7) argued that "a critical reflective educator knows that while meeting everyone's needs sounds compassionate and learner-centered, it is pedagogically unsound and psychologically demoralizing". The fact is that all learners have varying degrees of needs. The teacher needs to reflect on the best approach to meet the needs of students. It is apparent that at the initial stage of my teaching some elements of practice are missing which need to be addressed to generate my both students' and teachers' learning processes.

Taking Proper Account of the Context of Reflection

The context in which reflection (practice or teaching) takes place has a powerful influence. It might even be "the single most important influence on learning and reflection" (Boud and Walker, 1998, p.196). Boud and Walker argue that context has been a "seriously underdeveloped" dimension of discussions on reflection, partly because it is "so all-pervasive that it is difficult to recognize its influence". Because it

is taken-for-granted, educators need to make the extra effort to explore the contextual influences which both foster and inhibit the learning of reflective practice.

While institutions and professions embody the assumptions, practices, rules and values of wider society, it is helpful to distinguish between two levels of context: the institutional and/or professional, and the wider political and cultural. At the institutional/professional level, teachers often work in busy, pressurized schools where space and time are at a premium. Of crucial importance is the value attached to reflection by an institution or profession. Within some institutions, resistance to critical reflection may be pervasive. Boud and Walker (1998) found it difficult to promote the use of reflective journals in an institutional setting which emphasised competitive, cognitively-orientated assessments. Morley (2007, p.67) describes "a complicit embrace of discourses of powerlessness" engaged in by group of school teachers with whom she was working. They were reluctant to reflect on their own autonomy and responsibility as they viewed this as "selling out and colluding with an agenda that disadvantaged the teachers and held them responsible for what they saw were the structural flaws in the school".

At a broader political and cultural level, many questions arise. To what extent can practitioners step outside the dominant ideological context? To what extent can they avoid colluding with negative stereotypes, assumptions and practices? Are they able to challenge inequality and oppression, particularly when these are enacted in subtle, unseen ways? Might not educators sometimes collude with the dominant culture by guiding students' reflection so that they avoid engaging with issues of power and control (Boud and Walker, 1998)?

A further problem is raised by the Western socio-cultural origins of reflective practice itself. People who write and talk about reflective practice often assume it to be

flexible enough to work across social and cultural differences, but this assumption needs to be interrogated further (Gardner, Fook and White, 2006). Sung-Chan and Yuen-Tsang (2006) write about their variable experience of teaching in China. They saw some students responding negatively and only then appreciated the potential incompatibility between Western ideas of reflective practice and Chinese values. They highlight the need for educators to be culturally sensitive as they seek to nurture reflective practice.

Lecture 20

The Practice of Reflection

The Practice of Reflection

How do I become a reflective practitioner?

Everyone will have their own style and preferred process of reflective practice. Each teacher has to find a model that works for them, it might also be that a model is adapted. The following basic premises should always be followed:

1. **Recall it:** this could be an event you have participated in, a project group you've been part of, a workshop you've delivered, an enquiry you have responded to…

2. **Evaluate it:** Take some time to consider these questions -

What did you learn?

What did you enjoy?

What worked well?

What, if anything, went wrong?

What would you change?

What (potential) impact could this have in your workplace?

3. **Apply it:** Take some action. What can you practically apply from the experience you have had?

Why should I bother with reflective practice?

Being a reflective practitioner does have its challenges, but it also has its rewards. Amongst other things being a reflective practitioner can:

1. Help you be more objective about experiences
2. Give you more control over your learning and development
3. Help demonstrate you are active and responsive
4. Give you a better understanding of your work

Critically reflective learning is nurtured by relationships between teacher and learner, learner and learner and between both with the subject under study. Powell (2004) identified the optimal relationship above, as mutual, open, challenging, contextually aware and characterised by dialogue. (Brockbank & McGill 1998)

Becoming a Reflective Practitioner

According to the educator Boud et al. (1985), effective learning will not occur unless you reflect. To do this, you must think of a particular moment in time, ponder over it, go back through it and only then will you gain new insights into different aspects of that situation. According to Kolb (1984) reflecting is an essential element of learning.

Professional Development Planning

This is an intentional course of action that responds to a teachers professional interests, desire to grow in the field, and the changing demands of work.

Why Participate in Professional Development Planning?

Learner outcomes are positively impacted by professionals who participate in quality professional development. A Professional Development Plan prepares you to support quality and engage in training that meets you unique needs.

A PDP is Never Finished

A PDP is not written in stone. It can—and should—be revised on a regular basis. Goals shift, people change, circumstances present new challenges and opportunities. As a growing professional, you have to remain flexible. The important thing is to simply start the process. Once you have a plan, it can be revised. Regular review is an essential component of any PDP so, as things change, you can make adjustments. A professional development plan is never complete. If you want to continue moving forward in your career, you must continue growing your skills. Learning is a lifelong

process, and your PDP is a career-long tool. As long as you are a teaching professional, your PDP will be a big component of your career progress.

Lecture 21

Ways of knowledge generation

Ways of Knowledge Generation

Constructivism: The basis for concept-mapping

The constructivist educational model is based on rigorous academic standards and expectations, and requires educators who are able to be independent learners. In using concept maps, the reflective practitioner is considered to be a knowledge expert who has a clear understanding of subject matter and his/her role is to identify self-directed learning activities to cultivate acquisition of knowledge through individual and group studies. For this, the teacher must strive to encourage positive learning habits that foster both self-directed learning styles and genuine collaboration with colleagues. It requires planning creative instructional activities that intellectually stretch themselves but do not confuse or overwhelm them (Sorden, 2005).

Constructivism is a student-centered approach that places responsibility on students to take charge of their learning experiences. As such, the reflective practitioner creates activities and assignments that foster the creation of knowledge. They challenge themselves to produce reality based products such as portfolios and journals. The constructivist educational philosophy underpinning concept mapping for the reflective practitioner operates on a basis of four major assumptions:

1. Knowledge depends on past constructions. We know the world through our mental framework and we transform and interpret new information through this framework.
2. Constructions come through systems of assimilation and accommodation into our existing mental framework. If information is incongruent with that framework, it cannot be assimilated. But we can develop a higher-level of

cognition to accommodate this new information and zones of new development.

3. Learning is an organic process of invention, not mechanical. Knowledge is more than facts or information. Reflective practitoners must be able to hypothesise, predict, manipulate, and construct knowledge
4. Meaningful learning occurs through reflection and scaffolding of new knowledge upon existing frameworks of knowledge. Cognitive developmental abilities play a key role in all four premises and the ability and evolution of each teacher's ability to learn and assimilate knowledge.

It should be recognised that researchers and writers have raised academic issues involving the application of constructivist approaches to reflective practice. There are concerns about teachers having to teach themselves vital knowledge content areas and whether they are truly understanding basic concepts. Consequently, the reflective practitioner should be selective in choosing a topic for using constructivist methods like concept maps because the key is to implement the method that most effectively meets the learning objectives. Often, the emphasis is on developing reflective thinking skills and less on learning specific professional knowledge or skills. The reflective practitioner using the constructivist model must be aware of these criticisms.

SECI Model of Knowledge Creation

The epistemological dimension is exploited in the four stage process known as SECI: Socialization – Externalization – Combination – Internalization. Each stage represents a cornerstone of the reflective practitioner’s operational knowledge dynamics.

Socialization is considered by Nonaka and his co-workers as the most important knowledge transfer of this cycle since it involves the hidden and tricky part of all knowledge created at an individual level. It is the tacit knowledge (Polanyi, 1983).

Tacit knowledge is generated by direct experience of each individual and it goes to the non-rational mind. As Nonaka and Takeuchi (1995: 8) emphasize, "Tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or to share with others. Subjective insights, intuitions, and hunches fall into this category of knowledge. Furthermore, tacit knowledge is deeply rooted in an individual's action and experience, as well as in the ideals, values, or emotions he or she embraces". Tacit knowledge contains basically two components: a technical component which reflects the know-how of professional activities, and a cognitive component which reflects mental models, beliefs and perceptions as a result of many performed similar actions. Tacit knowledge embraces also highly subjective insights, intuitions and hunches. Teachers usually make use of these fine ingredients of tacit knowledge, being able to inspire and motivate their followers. Socialization is an opportunity for participating individuals to share their experiences and to learn through a direct exchange of tacit knowledge. It is well-known the way apprentices learn from their masters through continuous observation and imitations. Socialization is conceived not only for individuals from the same team or department but also for meetings between practitioners working in other contexts. However, socialization must go beyond the everyday dialogues and exchange of neutral phrases. It must stimulate deeper layers of experiences and stored knowledge. Actually, only individuals with higher levels of understanding and knowledge richness can transfer tacit knowledge to others. At the organizational level this idea is used by promoting the best practice. The identification and the transfer of best practices is one of the most recent methods used in education management for accelerating the adaptation process of the school. However, this method is not fully efficient due to the difficulty

of exchanging tacit knowledge characterized by the internal trickiness (Szulansky, 1996; Szulansky, Jensen, 2004).

Externalization is an individual process through which the tacit knowledge is transformed into explicit knowledge. Once the knowledge becomes explicit it can be shared, disseminated and transferred to others through verbal and nonverbal languages. "Of the four modes of knowledge conversion, externalization is the key to knowledge creation because it creates new, explicit concepts from tacit knowledge" (Nonaka, Toyama, Byosiere, 2001, p. 495). However, externalization is a highly motivational process and the success of knowledge conversion depends on the capacity of using efficiently metaphors, analogies and cognitive models. Metaphors play an important role in developing new concepts and theories by making use of known ones (Andriessen, 2006; Andriessen, 2008; Lakoff, Johnson, 1999). For instance, using the metaphor of energy, Bratianu and Andriessen suggested that externalization can be compared with energy transformation from its potential form into the kinetic form (Bratianu, Andriessen, 2008). However, while in the energy domain this transformation is based on the conservation law, in the knowledge domain there is no such a law. Knowledge is not a finite matter and its conversion cannot be put into a strict mathematical formulation, yet this metaphor is very useful in understanding that through externalization, knowledge potential becomes available for codification, dissemination, storage and propagation.

Combination is a process of creating new network structures of explicit knowledge by integrating pieces of explicit knowledge into new integral structures. According to Nonaka, Toyama, Byosiere (2001, p. 496), "In practice, combination entails three processes. First, explicit knowledge is collected from inside or outside the organization and then combined. Second, the new explicit knowledge is disseminated

among the organizational members. Third, the explicit knowledge is edited or processed in the organization in order to make it more usable". Unlike externalization that is a purely individual process, combination is basically a social process based on the communicable property of explicit knowledge. Combination takes place in a specific organizational context. However, knowledge transfer can be done only from a higher level of knowing toward a lower level of knowing. For instance, if an individual would like to disseminate news which is already known by the audience, there is no knowledge transfer.

Internalization is an individual process. According to Nonaka, Toyama, Byosiere (2001, p. 497), "Internalization is the process of embodying explicit knowledge as tacit knowledge. It is closely related to learning-by-doing. Through internalization, knowledge that is created is shared throughout an organization. Internalized knowledge is used to broaden, extend, and reframe organizational members' tacit knowledge". Knowledge is internalized through an integration process in the already known knowledge. If necessary, this integration will re-structure the old knowledge. This new internalized knowledge increased the level of individual understanding and his absorptive capacity. Also, it increased the chances of individual participation in a socialization process, and in sharing the tacit knowledge contributing this way to the upward development of the knowledge spiral. Internalization is closing the circle of knowledge creation, a process which is developing through continuous social interaction. Socialization and combination are processes of knowledge transfer in a social context, while externalization and internalization are processes of knowledge conversion at the individual level.

Lecture 22

Theories, Knowledge and Practice _Reflective Practice in School

Theories, Knowledge and Practice (Reflective Practice in School)

Communities of Practice

Communities of Practice (CoP) are groups of people who share a passion for something that they do, and who interact regularly to learn how to do it better. The group can evolve naturally because of the member's common interest in a particular domain or area, or it can be created specifically with the goal of gaining knowledge related to their field. It is through the process of sharing information and experiences with the group that the members learn from each other, and have an opportunity to develop themselves personally and professionally. CoPs can exist online, such as within professional discussion groups, or in real life, such as in a lunchroom at school, or elsewhere in the education environment.

Organisations often use CoPs to share knowledge thematically, across traditional teams. While teams focus on work outputs, CoPs focus on learning.

The History of Communities of Practice

The concept and theory of CoPs was developed by Etienne Wenger and Jean Lave in the early 1990's, but the practice has been around as long as humans have gathered to swap stories and show each other how they do things.

When to use:

1. Sharing and co-learning about related practices across projects.
2. Learning while doing.
3. Support for practitioners spread across the globe.
4. Professional development.

How to use:

Communities vary greatly from each other by membership composition (e.g. very homogeneous or very diverse), dispersion (small and community-focused or international virtual networks), and purpose (very closely-defined or broad and far-reaching). The key ingredients are a **community** (a set of people) with a defined **domain** (what they care about or do) who work on the body of knowledge about their **practice** (their work).

It is tempting to mandate communities, but in many cases communities can better be nurtured into continuing existence. By creating the conditions for communities, they can flourish in an organisation. Some of those conditions include: helping people with a shared interest find and connect with each other; securing management support for the time and attention it takes to participate and lead CoPs; recognising the contributions of a CoP; and providing basic support.

The Ethics of Reflective Practice

The reflective practitioner strives to create a learning environment that nurtures to fulfil the potential of all students, acts with conscientious effort to exemplify the highest ethical standards and responsibly accepts that every child has a right to an uninterrupted education.

PRINCIPLE I: Ethical Conduct Toward Students

The reflective practitioner accepts personal responsibility for teaching students character qualities that will help them evaluate the consequences of and accept the responsibility for their actions and choices. All educators are obligated to help foster virtues such as integrity, diligence, responsibility, cooperation, loyalty, fidelity, and respect for the law, for human life, for others, and for self. The reflective practitioner, in accepting his or her position of public trust, measures success not only by the progress of each student toward realisation of his or her personal potential, but also as

a citizen of the greater community:

1. The reflective practitioner deals considerately and justly with each student, and seeks to resolve problems, including discipline, according to law and school policy.

2. The reflective practitioner does not intentionally expose the student to disparagement.

3. The reflective practitioner does not reveal confidential information concerning students, unless required by law.

4. The reflective practitioner makes a constructive effort to protect the student from conditions detrimental to learning, health, or safety.

5. The reflective practitioner endeavors to present facts without distortion, bias, or personal prejudice.

PRINCIPLE II: Ethical Conduct Toward Practices and Performance

The reflective practitioner assumes responsibility and accountability for his or her performance and continually strives to demonstrate competence. The reflective practitioner endeavors to maintain the dignity of the profession by respecting and obeying the law, and by demonstrating personal integrity:

1. The reflective practitioner applies for, accepts, or assigns a position or a responsibility on the basis of professional qualifications, and adheres to the terms of a contract or appointment.

2. The reflective practitioner maintains sound mental health, physical stamina, and social prudence necessary to perform the duties of any professional assignment.

3. The reflective practitioner continues professional growth.

4. The reflective practitioner complies with written local school policies and applicable laws and regulations that are not in conflict with this code of ethics.

5. The reflective practitioner does not intentionally misrepresent official policies of the school or educational organizations, and clearly distinguishes those views from his or her own personal opinions.

6. The reflective practitioner honestly accounts for all funds committed to his or her charge.

7. The reflective practitioner does not use institutional or professional privileges for personal advantage.

PRINCIPLE III: Ethical Conduct Toward Professional Colleagues

The reflective practitioner, in exemplifying ethical relations with colleagues, accords just and equitable treatment to all members of the profession:

1. The reflective practitioner does not reveal confidential information concerning colleagues unless required by law.

2. The reflective practitioner does not willfully make false statements about a colleague or the school system.

3. The reflective practitioner does not interfere with a colleague's freedom of choice, and works to eliminate coercion that forces educators to support actions and ideologies that violate individual professional integrity.

PRINCIPLE IV: Ethical Conduct Toward Parents and Community

The reflective practitioner pledges to protect public sovereignty over public education and private control of private education. The reflective practitioner recognises that quality education is the common goal of all, and that a cooperative effort is essential to attain that goal:

1. The reflective practitioner makes concerted efforts to communicate to parents all information that should be revealed in the interest of the student.

2. The reflective practitioner endeavors to understand and respect the values and traditions of the diverse cultures represented in the community and in his or her classroom.

3. The reflective practitioner manifests a positive and active role in school/community relations.

Lecture 23

The importance of self-awareness

The Importance of Self-Awareness

The Conscious-Competence Learning Model

The earliest origins and various definitions of the 'conscious competence' learning theory are uncertain and could be very old indeed; perhaps thousands of years. Several claims of original authorship exist for the 'conscious competence' model's specific terminology, definitions, structure, and so on.

Summary of the Conscious-Competence Model

The conscious competence theory and related matrix model explain the process and stages of learning a new skill or behaviour. The concept is most commonly known as the 'conscious competence learning model', or 'conscious competence learning theory'; sometimes 'conscious competence ladder' or 'conscious competence matrix'. Occasionally in more recent adapted versions a fifth stage or level is added to the conscious competence theory, although there is no single definitive five-stage model, despite there being plenty of very useful and valid debate about what the fifth stage might be. Whether four or five or more stages, and whatever people choose to call it, the 'conscious competence' model remains essentially a very simple and helpful explanation of how we learn, and also serves as a useful reminder of the need for staged approaches to learning.

The Reflective Practitioner Learning in Stages

All learners begin at stage 1 - 'unconscious incompetence'.

They pass through stage 2 - 'conscious incompetence', then through stage 3 - 'conscious competence'. Ideally ending at stage 4 - 'unconscious competence'.

Perhaps the simplest illustration of importance of appreciating the need for staged learning is that **we can wrongly assume ourselves to be at stage 2, and focus effort towards achieving stage 3, when often we are still at stage 1.** Here the Reflective Practitioner assumes the trainee is aware of the skill existence, nature, relevance, deficiency, and that there will be a benefit from acquiring the new skill. Whereas Reflective Practitioners at stage 1 - unconscious incompetence - have none of these things in place, and will not be able to address achieving conscious competence until they have become consciously and fully aware of their own incompetence. **This is a fundamental reason for the failure of a lot of teaching and learning.**

If the awareness of skill and deficiency is low or non-existent – i.e. the Reflective Practitioner is at the unconscious incompetence stage - the Reflective Practitioner will simply not see the need for learning. It is essential to establish **awareness** of a weakness or training need (conscious incompetence) prior to attempting to undertake professional reflection, especially where such reflection may lead to arranging training or skills which are considered necessary to move the Reflective Practitioner from stage 2 to stage 3. People only learn (respond to training) when they are aware of their own need for it, and the personal benefit they will derive from achieving it.

Conscious Competence Learning Matrix - Progression, Examples, Definitions

Here is an explanation of how learners pass from stage to stage in the conscious competence model, and definitions and meanings of each of the stages.

The progression is from quadrant 1 through 2 and then to 3 and finally to 4. It is not possible to jump stages. For some skills, especially advanced ones, people can regress to previous stages, particularly from 4 to 3, or from 3 to 2, if they fail to practise and exercise their new skills. A person regressing from 4, back through 3, to 2, will need to develop again through 3 to achieve stage 4 - unconscious competence again.

For certain skills in certain roles stage 3 (conscious competence) is perfectly adequate, and in some cases for the reasons which follow, may actually be desirable. It can be argued that learners who become skilled at level 4 - unconscious competence - cease to be learners. In one respect this is a statement of the obvious, but a more subtle appreciation of this status is that people at this stage can be vulnerable to complacency, by which learning ceases and 'unconscious competence' may in time become an ignorance of, or blindness to, new methods, technologies, etc., and the expert finds himself/herself once again unconsciously incompetent.

This aspect of 'fourth stage vulnerability' - the implication that stage 4 (unconcious competence) may become complacency or ignorance of new methods - has in part prompted suggestions to extend the 'conscious competence' model to a **fifth stage**, and understanding these ideas for a fifth stage stage is certainly helpful in addressing complacency and other weaknesses/opportunities relating to continuing development.

Interestingly, progression from stage to stage is often accompanied by a feeling of awakening - the person feels like he/she has made a big step forward, which of course they have. Very clear and simple examples of this effect are seen when a person learns to drive a car: the progression from stage 2 (conscious incompetence) to stage 3 (conscious competence) is obvious, as the learner becomes able to control the vehicle and signaling at the same time; and the next progression from 3 to 4 (unconscious competence) is equally clear to the learner when he/she is able to hold a conversation while performing a complex manoeuvre (usually some while after passing the driving test).

There are other representations of the conscious competence model besides a 2x2 matrix. Ladders and staircase diagrams are popular. The principles remain the same

though – it is a simple model and regardless of the varying formats and terminology it is always best presented and used as a basic stage-by-stage progression.

The matrix is particularly useful in addressing obstacles learners face on courses. Teachers and learners can ask themselves: "What stage is the learner at and what is preventing the learning from progressing?"

In this way the conscious competence theory helps teachers and learners to understand far better why an obstacle exists, and how best to deal with the challenge.

Furthermore, since the conscious competence theory forces analysis at an individual level, the model encourages and assists individual assessment and development, which is easy to overlook when so much learning and development is delivered on a group basis.

As learners, we each possess natural strengths and preferences, (due to brain-type, and personality, and life-stage/experience, etc) and this affects our **attitudes and commitments** towards learning, as well as our **abilities in developing competence** in **different disciplines**. People begin to develop competence only after they recognize the relevance of their own incompetence in the skill concerned. Certain brain-types and personalities prefer and possess certain aptitudes and skills. We each therefore experience different levels of challenge (to our attitudes and awareness in addition to pure capability) in progressing through the stages of learning, dependent on what is being learned. Some people will resist progression even to stage 2 (becoming aware of incompetence), because they refuse to acknowledge or accept the relevance and benefit of a particular skill or ability. Denial may also be a factor where there is a level of personal fear or insecurity. Other people may readily accept the need for development from 1 to 2, but may struggle to progress from 2 to 3 (becoming consciously competent) because the skill is not a natural personal strength or aptitude.

Some people may progress well to stage 3 but will struggle to reach stage 4 (unconsciously competent), and then regress to stage 2 (consciously incompetent) again, simply through lack of practice.

Conscious Competence Matrix

	Competence	**Incompetence**
Conscious	**3 - conscious competence** the person achieves 'conscious competence' in a skill when they can perform it reliably at will the person will need to concentrate and think in order to perform the skill the person can perform the skill without assistance the person will not reliably perform the skill unless thinking about it - the skill is not yet 'second nature' or 'automatic' the person should be able to demonstrate the skill to another, but is unlikely to be able to teach it well to another person the person should ideally continue to practice the new skill,	**2 - conscious incompetence** the person becomes aware of the existence and relevance of the skill the person is therefore also aware of their deficiency in this area, ideally by attempting or trying to use the skill the person realizes that by improving their skill or ability in this area their effectiveness will improve ideally the person has a measure of the extent of their deficiency in the relevant skill, and a measure of what level of skill is required for their own competence the person ideally makes a

	and if appropriate commit to becoming 'unconsciously competent' at the new skill **practice** is the single most effective way to move from stage 3 to 4	commitment to learn and practice the new skill, and to move to the 'conscious competence' stage
Unconscious	**4 - unconscious competence** the skill becomes so practised that it enters the unconscious parts of the brain - it becomes 'second nature' common examples are driving, sports activities, typing, manual dexterity tasks, listening and communicating it becomes possible for certain skills to be performed while doing something else, for example, knitting while reading a book the person might now be able to teach others in the skill concerned, although after some time of being unconsciously	**1 - unconscious incompetence** the person is not aware of the existence or relevance of the skill area the person is not aware that they have a particular deficiency in the area concerned the person might deny the relevance or usefulness of the new skill the person must become conscious of their incompetence before development of the new skill or learning can begin the aim of the trainee or learner and the trainer or teacher is to move the person into the 'conscious competence' stage, by

	competent the person might actually have difficulty in explaining exactly how they do it - the skill has become largely instinctual this arguably gives rise to the need for long-standing unconscious competence to be checked periodically against new standards	demonstrating the skill or ability and the benefit that it will bring to the person's effectiveness

The Jo-Hari Window Model

The Johari Window is a communication model that is used to improve understanding between individuals. The word "Johari" is taken from the names of Joseph Luft and Harry Ingham, who developed the model in 1955.

There are two key ideas behind the tool:

1. That you can build trust with others by disclosing information about yourself.
2. That, with the help of feedback from others, you can learn about yourself and come to terms with personal issues.

By explaining the idea of the Johari Window, you can help team members to understand the value of self-disclosure, and you can encourage them to give, and accept, constructive feedback. Done sensitively, this can help Reflective Practitioners build better, more trusting relationships with one another, solve issues, and work more effectively together and support each other.

Explaining the Johari Window

The Johari Window is shown as a four-quadrant grid.

The four quadrants are:

1. Open Area (Quadrant 1)

This quadrant 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.

2. Blind Area (Quadrant 2)

This quadrant represents things about you that you aren't aware of, but that are known by others. This can include simple information that you do not know, or it can involve deep issues (for example, feelings of inadequacy, incompetence, unworthiness, or rejection), which are often difficult for individuals to face directly, and yet can be seen by others.

3. Hidden Area (Quadrant 3)

This quadrant represents things that you know about yourself, but that others don't know.

4. Unknown Area (Quadrant 4)

This last quadrant represents things that are unknown by you, and are unknown by others.

The End Goal

The ultimate goal of the Johari Window is to enlarge the Open Area, without disclosing information that is too personal. The Open Area is the most important quadrant, as, generally, the more people know about each other, the more productive, cooperative, and effective they are when working together. The process of enlarging the Open Area quadrant is called "self-disclosure," and it is a give-and-take process

that takes place between an individual and the colleagues that they are interacting with.

As you share information, your Open Area expands vertically and your Hidden Area gets smaller. As colleagues provide feedback about what they know or see about you, your Open Area expands horizontally, and your Blind Area gets smaller. Done well, the process of give and take, sharing, and open communication builds trust within a group of practitioners.

The Johari Window provides a visual reference that the Reflective Practitioner can use to look at their own character, and it illustrates the importance of sharing, being open, and accepting feedback from others.

People who have a large Open Area are usually very easy to talk to, they communicate honestly and openly with others, and they get along well with a group.

People who have a very small Open Area are difficult to talk to, they seem closed off and uncommunicative, and they often don't work well with others, because they're not trusted.

Other people might have a large Blind Area, with many issues that they have not identified or dealt with yet. However, others can see these issues clearly. These people might have low self-esteem, or they may even have anger issues when working with others.

Using the Tool

The process of enlarging your Open Area involves self-disclosure. Put simply, the more you (sensibly) open up and disclose your thoughts, feelings, dreams, and goals, the more you're going to build trust with your colleagues.

Lecture 24

Understanding Self and Others

Understanding Self and Others

A Definition of Intelligence

Intelligence is a complex topic. Howard Gardner, David Perkins, and Robert Sternberg have all been quite successful in helping spread knowledge about the meaning of "intelligence" and applications of this knowledge to education. The study and measurement of intelligence has been an important research topic for nearly 100 years. IQ is a complex concept, and researchers in this field argue with each other about the various theories that have been developed. There is no clear agreement as to what constitutes IQ or how to measure it. There is an extensive and continually growing collection of research papers on the topic. Howard Gardner (1983, 1993), Robert Sternberg (1988, 1997), and David Perkins (1995) have written widely sold books that summarise the literature and present their own specific points of view. The following definition is a composite from various authors. Intelligence is a combination of the ability to:

1. Learn. This includes all kinds of informal and formal learning via any combination of experience, education, and training.
2. Pose problems. This includes recognizing problem situations and transforming them into more clearly defined problems.
3. Solve problems. This includes solving problems, accomplishing tasks, fashioning products, and doing complex projects.

This definition of intelligence is a very optimistic one. It says that each of us can become more intelligent. We can become more intelligent through study and practice,

through access to appropriate tools, and through learning to make effective use of these tools (Perkins, 1995).

Howard Gardner

Some researchers in the field of intelligence have long argued that people have a variety of different intelligences. A person may be good at learning languages and terrible at learning music - or vice versa. A single number (a score on an IQ test) cannot adequately represent the complex and diverse capabilities of a human being. Howard Gardner has proposed a theory of multiple intelligences. He originally identified seven components of intelligence (Gardner, 1983). He argues that these intelligences are relatively distinct from each other and that each person has some level of each of these seven intelligences. More recently, he has added an eighth intelligence to his list (Educational Leadership, 1997).

Many teachers have studied the work of Howard Gardner and use some of his ideas in their teaching. For example, in creating a team of students to do a particular project, a teacher may select a team whose collective "highest" talents encompass most of the eight areas of intelligence identified by Gardner. The teacher may encourage a team to divide up specific tasks in line with specific high levels of talents found on a team. Alternatively, a teacher may encourage or require that team members not be allowed to work in their areas of highest ability in order to encourage their development of knowledge and skills in other areas.

The following table lists the eight intelligences identified by Howard Gardner. It provides some examples of the types of professionals who exhibit a high level of a particular ‘intelligence’. The eight intelligences are listed in alphabetical order.

Intelligence	Examples	Discussion
Bodily-kinesthetic	Dancers, athletes, surgeons, crafts people	The ability to use one's physical body well.
Interpersonal	Sales people, teachers, clinicians, politicians, religious leaders	The ability to sense other's feelings and be in tune with others.
Intrapersonal	People who have good insight into themselves and make effective use of their other intelligences	Self-awareness. The ability to know your own body and mind.
Linguistic	Poets, writers, orators, communicators	The ability to communicate well, perhaps both orally and in writing, perhaps in several languages.
Logical-mathematical	Mathematicians, logicians	The ability to learn higher mathematics. The ability to handle complex logical arguments.
Musical	Musicians, composers	The ability to learn, performs, and compose music.
Naturalistic	Biologists, naturalists	The ability to understand different species, recognize patterns in nature, classify natural objects.
Spatial	Sailors navigating without modern navigational aids,	The ability to know where you are relative to fixed locations. The ability to

	surgeons, sculptors, painters	accomplish tasks requiring three-dimensional visualization and placement of your hands or other parts of your body.

As a Reflective Practitioner you might want to do some introspection around these different types of intelligence. For each of the eight intelligences in the Howard Gardner list, as a teacher you might think about your own level of talents and performance. For each intelligence, you would need to decide if you have an area of expertise that makes substantial use of the intelligence. Therefore, a Reflective Practitioner can come to understand that they are more naturally gifted in some areas than in others, but that they have some talent in all of the eight areas identified by Howard Gardner. Reflective Practice, and professional development, can be developed around these ‘intelligences’ to make progress in enhancing the talents an individual practitioner has.

Lecture 25

Reflecting and connecting with lifelong learning

Reflecting and Connecting with Lifelong Learning

The Teacher as Lifelong Learner: Domains and Proficiencies for the Reflective Practitioner

1. Knowledge

Includes general education courses that cultivate intellectual and practical skills in written and oral communication, quantitative literacy, critical thinking and ‘wellness’. In addition to his or her general knowledge, Reflective Practitioners must be thoroughly versed in their subject matter and have sufficient preparation in a major academic area related to the field of specialisation. Further, teachers must be able to demonstrate the ability to apply content, pedagogical competencies and critical thinking in educational settings. Teachers additionally must possess knowledge about the materials available for the teaching of their subject matter.

1.1. Communication

Knowledge and use of effective communication skills are at the heart of effective teaching. An educator must be able to demonstrate appropriate written and verbal communication skills including articulation, expressive language, voice quality, usage, and grammar. A teacher must also be aware of the messages relayed via nonverbal communication. Additionally, an educator must be able to select and utilize appropriate communication media. Clarity in presentations, feedback, direction of learning and goal setting contribute to the educator's ability to structure and reinforce learning. Communication skills allow the educator to accomplish these goals and communicate enthusiasm to learners, both about the subject and about learning. The teacher as a lifelong learner is continually refining communication skills with

students, parents, and colleagues.

1.2. Critical Thinking

Teachers must practice critical thinking in all content areas; they must be able to ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions. Additionally, the teacher is able to model and teach the process of critical thinking and inspire students to be responsible citizens who contribute to society.

2. Skills

Professional knowledge is vast in scope, begins with the pre-service aspect of a teacher preparation program, and expands commensurately with experience. Examples of practical/experiential knowledge include an awareness of the climate, issues and politics that affect the role of teaching, a passion for teaching, an ongoing curiosity about the world, the confidence to become a risk-taker and change agent, and a belief that all students can learn. The teacher as a lifelong learner is always extending practical/experiential knowledge.

2.1. Interpersonal Skills

Effective interpersonal skills are also essential in the act of teaching. The capacity for empathy, a belief that every child can learn, attention to individual needs, sensitivity to home and community issues, ability to be at ease in the presence of children or young adults, and the ability to provide a positive, caring atmosphere for learning are examples of these skills (Gideonse, 1989). The teacher also must possess interpersonal skills that foster peer collaboration. In the continual process of learning, the teacher must be willing to seek help, advice, or solace from peers. The teacher

revises and expands interpersonal skills on a continual basis.

2.2. Integration of Discipline

Knowing content is important for a teacher; however, broadening the context and applicability of content through integration of disciplines provides students with a richer academic experience. Integration fosters ongoing reinforcement of skills learned in one area of study and utilized in other areas. This integration of discipline allows teachers and students to view their content discipline with perspective and understanding of how it all relates together.

2.3. Technology Integration

Integrating technology into classroom instruction means more than teaching basic computer skills and software programs in a separate computer class. Rather, technology should be used to engage students and facilitate their thinking and construction of knowledge. Students learn to access, evaluate, and use information.

2.4. Organization and Classroom Management

Organizing and managing instructional settings are complex activities, requiring effective skills and supportive affective relationships. The teacher adopts a proactive organizational and managerial style that involves interventions and strategies designed to include positive expectations, self-evaluation, and growth.

3. Dispositions

These are internal values, beliefs, and attitudes that are manifested in patterns of professional behaviour. Reflective Practitioners demonstrate classroom behaviour that are consistent with the ideal of fairness and the belief that all students can learn.

3.1. Scholarly Inquiry

Reflective Practitioners must be well versed in their content and be aware of current trends and issues. Toward that end, teachers must have the ability to be collaborative and conduct and use action research within his or her own academic disciplines.

3.2. Reflective Wisdom

Through reflection, Reflective Practitioners gain a deeper understanding of their own teaching style and ultimately, greater effectiveness as a teacher (Schon, 1983). It is essential that teachers reflect in action - while doing something - and on action - after they have done it. Thus, teachers are engaged in the process of continuous learning.

3.3. Cultural Awareness and Acceptance

The teacher must be able to work with an ever-changing diverse student population and have the perception to see diversity in people as a strength rather than a deficit. Cultural awareness and acceptance includes those similarities and commonalities found across cultural lines as well and is not merely a study of contrasts. The teacher must provide for educational opportunities that will strengthen students' appreciation of their diversity.

Work-based (Practice-based) Learning

Practice based learning and improvement requires the Reflective Practitioner to investigate and evaluate their work with students, appraise and assimilate empirical evidence and theory, and to continuously improve teaching based on constant self-evaluation and life-long learning.

A Reflective Practitioner is working in areas to develop skills and habits to be able to:

1. Identify strengths, deficiencies, and limits in one's knowledge and expertise;
2. Set learning and improvement goals;
3. Identify and perform appropriate learning activities;

4. Systematically analyse practice, using quality improvement methods, and implement changes with the goal of practice improvement;
5. Incorporate formative evaluation feedback into daily practice;
6. Locate, appraise, and assimilate evidence from studies/theory related to their students' learning needs;
7. Use information technology to optimise learning; and
8. Participate in the education of colleagues and other professionals.

Lecture 26

The Socratic method for reflective practice

The Socratic Method for Reflective Practice

What is the Socratic Method?

Developed by the Greek philosopher, Socrates, the Socratic Method is a dialogue usually between teacher and students, or for the Reflective Practitioner, between colleagues, instigated by continual probing questions, in a concerted effort to explore the underlying beliefs that shape views and opinions.

For Reflective Practice, the Socratic Method involves a shared dialogue between professionals. One individual leads by posing thought-provoking questions. Colleagues actively engage by asking questions of their own. The discussion goes back and forth.

1. The Socratic Method surfaces complexity, difficulty, and uncertainty rather than to elicit facts about our experience. The aim of the questioning is to probe the underlying beliefs upon which each teacher's statements, arguments and assumptions are built.
2. The reflective practice environment is characterised by "productive discomfort," not intimidation. The Socratic Method does not have all the answers and is not merely "testing" values and opinions. The questioning proceeds open-ended with no pre-determined goal.
3. The focus is not on an individual practitioner's statements but on the value system that underpins their beliefs, actions, and decisions. For this reason, any successful challenge to this system comes with high stakes—one might have to examine and change one's life, but, Socrates is famous for saying, "the unexamined life is not worth living."

Six Steps to Applying Socratic Questions to Reflective Practice

	Types of Questions for Reflective Practitioners	Sample Questions
1	**Clarification**	What do you mean by ____? Could you put that another way? Can you give me an example?
2	**Probing Assumptions**	What are you assuming? How did you choose those assumptions? What could we assume instead?
3	**Probing Reasons and Evidence**	How do you know? Why do you think that is true? What would change your mind?
4	**Viewpoint and Perspectives**	What are you implying by that? What effect would that have? What is an alternative?
5	**Probing Implications and Consequences**	How can we find out? Why is this issue important? What generalizations can you make?
6	**Questions about Questions**	What does that mean? What was the point of this question? Why do you think I asked this question?

Lecture 27

Reflecting on professional roles

Reflecting on Professional Roles

The professional role: its nature and purposes

Around the world, great importance is placed upon teachers meeting a wide set of professional commitments and obligations. In terms of the teacher's professional role, the focus is upon those values and practices which comprise 'professionalism' and 'being professional'. At the core of these terms is the belief that by putting into action what they imply, teachers can 'make a difference' – to pupils, their learning and their sense of self and the world.

For teachers there are always the references to 'beliefs, values and attitudes' that are said to underlie teacher professionalism, 'the strong sense of vocation' many teachers have in their capacity to change their pupils' life chances, and the responsibility they have to challenge stereotypical views and to strive for equality of opportunity. This is about professionalism-in-action, and in relation to many others: to pupils, colleagues, other professionals and interested parties, parents and so forth; to the school itself in a particular context; and to the teachers themselves and their own capacity for learning and development.

The use of language to describe such professionalism for teachers is telling: the words 'aspire', 'enhance', 'assist', 'endeavour', 'respect' and 'sharing' say a great deal here about expectations and about the complexity and challenge of the teacher's wider professional role.

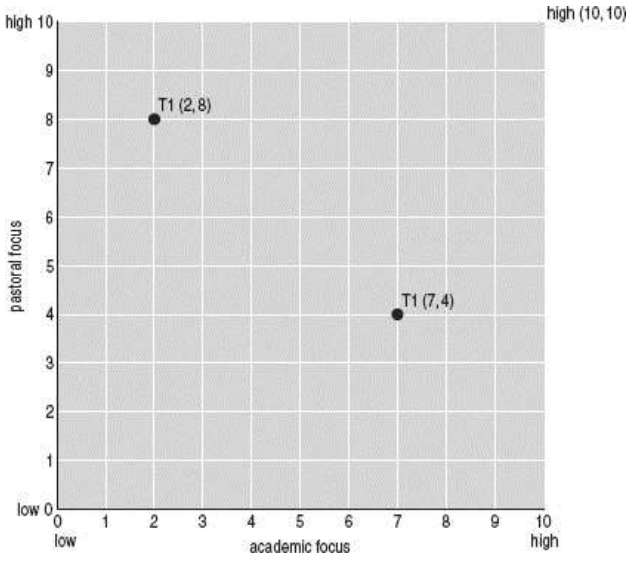
This professional role of the teacher is, then, multifaceted. It incorporates professionalism-in-action. It also includes acting in a pastoral way towards pupils. It

is important to stress the presence and interplay of the pastoral and academic dimensions of the teacher's role.

The professional role: its nature and purposes 2

A Reflective Practitioner, teaching in a particular subject area, will be expected to exercise a pastoral dimension in his/her work. This may show itself in seeking out the reasons behind the poor performance of a class or of an individual, planning to integrate isolated or shy pupils into group activities or seeking advice or information from a line-manager.

In addition to these allocated roles, different teachers may also have an underlying tendency towards a preferred mode of response. This point is illustrated in the diagram below, which shows the locations of two teachers (T1 and T2) on a matrix, where the horizontal axis measures degrees of academic focus and the vertical axis shows degrees of pastoral focus.



Teacher 1 (T1) tends to emphasise the pastoral aspects of the teaching role, whereas Teacher 2 (T2), while mindful of the pastoral dimensions of teaching, tends to stress rather more its academic focus.

Of course, what may be an appropriate response in a particular context will depend on the activity involved. The ability to be flexible and to adjust your own preferences to circumstances and requirements is an important skill to develop as a teaching

professional. It is a complex and subtle skill, however, and one which will continue to be developed over years, and throughout your professional career.

Finally, your professional role as a teacher will also encompass your contributions to extra-curricular activities, to whole-school initiatives and to the corporate life of a school The idea of living out the ethos of a particular school, and helping to shape it, is at the heart of the rather special role of being a teacher.

Professional Relations

1 Professional Relations with Pupils

What is regarded as 'professional' must be linked with the in-action responsibilities of the teacher. So, for example, it is clear that the teacher must plan ahead and actually protect pupils from physical harm in school and outside it when accompanying them on any school activities to the degree that it would be reasonable to expect a parent or carer to do. The same teacher must teach and assess appropriately, report to parents and engage with the detail of this set of professional duties

Teachers must be seen to treat pupils with respect, fairness and consistency, that is, from an unconditional positive stance. This requires you to operate with a working knowledge of pupils' cultural and social backgrounds, their experience and their interests. This is no simple matter, of course, since the knowledge we possess of any pupil is inevitably partial and it may well be the next piece of information we receive about them that makes a difference to our interpretation of a situation – and how to tackle it. For example, there are perceived different preferences of boys and girls in relation to teachers - Boys likedto chat with teachers about shared interests, enjoy an informal atmosphere and welcome personal encouragement; girls like being able to talk about work with fellow pupils and want effective class management. In relation to this there are the actions and attitudes of teachers most preferred and disliked by

both boys and girls alike. (for example, both like to be treated with respect and dislike unpredictable mood changes in their teachers.)

What emerges clearly, here and elsewhere, is that subject expertise is never sufficient by itself. Such expertise is essential, since its absence will undercut teaching and learning at every turn. But other things are also vital: the imaginative mediation of content, varied activities, personable responses that indicate concern for all pupils, and fairness. All of these are ranked universally high by students. What is not wanted by pupils is a teacher who attempts to be 'one of them'. Indeed, such attributes as displayed by male teachers was particularly disliked by girls, for example.

Exploring the notion of professionalism

The concept of 'appropriate' professional relations is certainly defined by all the things – actions and attitudes – it is not. In terms of what it is, for a teacher, a commitment to respect, to listen and respond honestly and tactfully to pupils is at the heart of the role. The phrase in loco parentis here indicates the critical friend who is also an adult with a wider view of an issue, someone who is willing to explain, patiently listen and respond constructively to familiar arguments and faults of logic. There is also an enduring view that the best teachers, the ones who impact positively upon pupils' lives and values, are those who have a passion for learning and for what individuals can achieve, an openness of spirit and a resistance to pre-judgement, and those who inspire others to be the same.

Professional Relations with Colleagues

The same issues and responses outlined above apply to all colleagues in your school experience. As a teacher you may find that pupils may criticise named colleagues and it is wise to be alert to pupils' need to get you to agree with their point of view. It is

not appropriate, however, for you to reveal personal information about colleagues, nor to encourage classroom conversations about them.

In this instance a discussion with the colleague concerned would identify possible ways forward, not least a discussion with the pupils themselves about appropriate ways to tackle an ailing relationship with any member of staff who teaches them, and particularly about how to deal with the one to whom they have referred. Consider, too, how you yourself have felt when you have heard opinions about yourself based on an incomplete set of facts. Above all, the Reflective Practitioner is a member of a number of different teams within the school, and you will need to be regarded as a team player in all of them, whatever your assigned or self-designed role within them. This is not to suggest that unfailing agreement is required of you. There will certainly be overlaps and conflicts of interest and intention because of these different groups and your membership of them. It does mean, though, that you should give a fair hearing to colleagues, present counter-views pleasantly and humanely and be willing to do your share of any work-tasks generated by your group, conscientiously and on time. This is professionalism-in-action.

Lecture 28

The impact of organizational dynamics

The Impact of Organizational Dynamics

Much of the work that has been written about teams and teamwork focus on the assumption that some teams are more effective than others.

1. Historical Look at Team Effectiveness.

In the 1930's Kurt Lewin focused on work groups and what forces made them effective. His research produced force field analysis, in which the forces that help and impair groups are studied. There have been many articles about effective teamwork. McGregor (1960, 232) created a list of eleven important elements of effective groups. These are presented in such a way that a teacher could identify each aspect from observations of the groups/ teams they work with:

1) informal, relaxed atmosphere

2) a lot of discussion

3) task or objective is well understood

4) members will listen to each other

5) there is disagreement

6) decision making by consensus

7) criticism is frequent, frank, and relatively comfortable

8) people are free to express their feelings and ideas

9) clear assignments are made and accepted (roles)

10) little evidence of a struggle for power. Leadership shifts from time to time

11) self-conscious and self-examining

Likert gives 24 Characteristics of an Effective Team:

1. Skilled Members and Leaders

2. Group has been in existence sufficiently long to have developed a well-established, relaxed working relationship among all its members.

3. Members are attracted and loyal to the team, its members, and the leader.

4. A high degree of confidence and trust

5. Values and goals reflect needs of members

6. Harmony

7. Values are seen as important

8. Values and goals motivate members

9. Supportive atmosphere.

10. Leadership adheres to principles that support members, create cooperation

11. Helps members develop

12. Members accept willingly and without resentment the goals and expectations.

13. Leader and members believe that each member can accomplish the "impossible."

14. Mutual help

15. Supportive atmosphere stimulates creativity.

16. "Constructive conformity" to mechanical and administrative matters

18. Motivation to communicate

19. Motivation to receive communications

20. Motivation to influence other members and to be influenced

21. Communications with the leader

22. Flexibility and adaptability

23. Goals and philosophy of operation are clearly understood, and provide a solid base for making decisions.

24. Careful selection of leader.

Lencioni (2002) presents a pyramid model with the five dysfunctions of a team (from the bottom, up):

1. Absence of trust: stemming from unwillingness in the team members to be vulnerable and genuinely open up with one another about their mistakes and weaknesses.
2. Fear of conflict: inability to engage in unfiltered, passionate (yet constructive, though it may strike you as odd) debate.
3. Lack of commitment: no buy in and commitment can be expected when ideas and opinions have not been aired and genuinely taken into consideration prior to a decision.
4. Avoidance of accountability: without commitment to a clearly defined set of goals, team members will hesitate to call their colleagues on their actions and behaviors that are counterproductive for the team.
5. Inattention to results: Avoidance of accountability leads to a state where team members tend to put their individual needs above the team's collective goals.

In 1972, Beckman wrote of four "Important Areas for Team Effectiveness:" 1) goals, 2) Roles, 3) Processes, and 4) Relationships). These broad areas are similar to many of the characteristics of effective teams today.

Gladstein created a model to confirm that group structures affect process relationships and group effectiveness (1984). The Gladstein Model of Task Group Effectiveness has been formally tested using a sample of one hundred groups:

1. Inputs - Group Level

1A. Group Composition

a) adequate skills

b) Heterogeneity

c) Organisational tenure

d) Job tenure

1B. Group Structure

a) Role and goal clarity

b) Specific work norms

c) Task control

d) Size

e) Formal Leadership

2. Inputs - Organisational Level

2A. Resources Available

a) Training and technical consultation

b) Communities served

2B. Organisational Structure

a) Rewards for group performance

b) Supervisory control

3. Group Process

a) Open Communication

b) Supportiveness

c) Conflict

d) Discussion of strategy

e) Weighting individual inputs

f) Boundary management

4. Group Task

a) task complexity

b) environmental uncertainty

c) interdependence

Parker's twelve "Characteristics of a Good Team" include both task and behaviour characteristics:

1. Clearly defined goal accepted by all members and a plan for reaching it
2. Informal climate - not tense or boring
3. Encourages participation of all members
4. Good listeners
5. Members disagree in civilised manner
6. Open communication
7. Roles - distributed, defined, well executed
8. Leadership shifts depending on the needs of the team.
9. Decisions are reached by consensus
10. Team takes time to build relationships and trust
11. All four team member styles on the team
12. Team periodically examines itself.

Hackman writes that effective teams meet three criteria: 1) the productive output meets standards; 2) the team helps people to work together on future projects, and 3) the team contributes to growth and personal well-being of team members.

Motivating teachers to improve instruction

In the last two decades, teachers have been viewed as central to both the problems of education and their solutions. Education researchers and school leaders have faced the challenge of motivating teachers to high levels of performance. According to sociologists, current school environments are a reward-scarce setting for professional work and often seem to work against teachers' best efforts to grow professionally and

improve student learning (Peterson 1995). Much of teachers' work is carried out in self-contained classrooms that isolate them from the support of their colleagues. Because of this organisational structure, teachers are difficult to supervise, do not receive regular feedback from others, and often find it hard to collaborate. Perhaps as a result of these circumstances, the research also shows that many good teachers leave teaching in the first three years (Frase 1992). Clearly, education leaders need to find ways to keep teachers in the profession and keep them motivated. A motivated teacher is one who not only feels satisfied with his or her job, but also is empowered to strive for excellence and growth in instructional practice.

History of Teacher Motivation Measures

Since the 1980s many governments have initiated incentive plans designed to recruit, reward, and retain the best teachers. Merit pay and career ladders were intended to provide financial incentives, varied work, and advancement opportunities for seasoned teachers. These, along with across-the-board pay raises, work environment premiums for difficult assignments, and grants or sabbaticals for research and study, were expected to improve teacher performance and motivation.

According to Johnson (1986), measures developed to boost teacher motivation are based on three theories of motivation and productivity:

1. Expectancy theory. Individuals are more likely to strive in their work if there is an anticipated reward that they value, such as a bonus or a promotion, than if there is none.
2. Equity theory. Individuals are dissatisfied if they are not justly compensated for their efforts and accomplishments.
3. Job enrichment theory. Workers are more productive when their work is varied and challenging.

The first two theories are justification for merit pay and career ladders, and the third suggests differentiated staffing, use of organizational incentives, and reform-oriented staff development.

Merit Pay

The idea of merit pay has a straightforward appeal: it provides financial rewards for meeting established goals and standards. Some researchers have warned, however, that merit pay may change the relationships between teachers and students: poor students may pose threats to the teacher's rating and rewards (Johnson 1986). Another concern is that merit pay plans may encourage teachers to adjust their teaching down to the curriculum goals, setting their sights no higher than the standards set. Odden and Kelley reviewed recent research and experience and concluded that individual merit and incentive pay schemes do not work and, in fact, are often detrimental (1997). A number of studies have suggested that merit pay plans often divide faculties, set teachers against their administrators, are plagued by inadequate evaluation methods, and may be inappropriate for organizations such as schools that require cooperative, collaborative work (Lawler 1983).

Differentiated Staffing and Career Ladders

While merit pay plans attempt to reward excellent teacher performance with increased financial compensation, career ladders such as mentor teacher and master teacher courses are designed to enrich work and enlarge teachers' responsibilities. However, many of these programs have faltered for largely the same reasons that merit pay plans have failed - unanticipated costs, teacher opposition, inadequate evaluation methods, and dissension (Freiberg 1984).

New Theories of Teacher Motivation

Merit pay and other incentive policies gained popularity largely because of their seeming simplicity. They were meant to provide external incentives - financial rewards, advancement opportunities, workplace variety - but did not adequately resolve the problem of teacher satisfaction. Frase (1992) offers one reason why measures relying on external rewards have been insufficient. There is overwhelming research evidence, he says, that teachers enter teaching to help young people learn, that their most gratifying reward is accomplishing this goal, and that the work-related factors most important to teachers are those that allow them to practice their craft successfully (see also Frase 1989; Lortie 1976; Mitchell, Ortiz, and Mitchell 1987). Frase identified two sets of factors that affect teachers' ability to perform effectively: work context factors (the teaching environment, and work content factors (teaching).

Work Context Factors

Work context factors are those that meet baseline needs. They include working conditions such as class size, discipline conditions, and availability of teaching materials; the quality of the principal's supervision; and basic psychological needs such as money, status, and security.

In general, context factors clear the road of the debris that block effective teaching. In adequate supply, these factors prevent dissatisfaction. Even the most intrinsically motivated teacher will become discouraged if the salary doesn't pay the mortgage. But these factors may not have an extended motivational effect or lead to improved teaching. For example, a survey conducted by the National Center for Education Statistics (UK) found that teacher compensation, including salary, benefits, and supplemental income, showed little relation to long-term satisfaction with teaching as a career (NCES 1997). According to Frase (1992), content variables are the crucial factor in motivating teachers to high levels of performance.

Work Content Factors

Work content factors are intrinsic to the work itself. They include opportunities for professional development, recognition, challenging and varied work, increased responsibility, achievement, empowerment, and authority. Some researchers argue that teachers who do not feel supported in these states are less motivated to do their best work in the classroom (NCES 1997). Data from the National Center for Education Statistics (UK) confirm that staff recognition, parental support, teacher participation in school decision making, influence over school policy, and control in the classroom are the factors most strongly associated with teacher satisfaction. Other research concurs that most teachers need to have a sense of accomplishment in these sectors if they are to persevere and excel in the difficult work of teaching. Frase and Sorenson (1992) identified three major areas that relate to teachers' job satisfaction.

1. Feedback is the factor most strongly related to job satisfaction, yet teachers typically receive very little accurate and helpful feedback regarding their teaching.
2. Autonomy is strongly related to job satisfaction for many, but not all, teachers. Autonomy is not necessarily defined as freedom from interference in the classroom; rather, the majority of teachers view autonomy as freedom to develop collegial relationships to accomplish tasks.
3. Collegiality is also important for teachers. Collegiality can be expressed through experiencing challenging and stimulating work, creating school improvement plans, and leading curriculum development groups. The literature suggests that collegiality is directly linked to effective schools (Johnson 1986; Glatthorn and Fox 1996), where "teachers valued and participated in norms of collegiality and continuous improvement (experimentation)" (Little 1982, 1).

New Directions Shaping Teacher Motivation

Zemmelman, Daniels, and Hyde (1993) write that teachers' attitudes are crucial to the success of in-depth curricular innovation. Moreover, the beneficial effort of teachers' attitudes on education reform is reciprocal. Some research shows that when principals effectively used shared governance strategies and participatory management, teachers feel energised and motivated, and their sense of ownership and empowerment increases (Blase and Blase 1994).

Well-implemented school improvement plans can increase collegiality and give teachers the satisfaction to committing themselves to school improvement goals. Some practitioners believe that such rewards may be more effective in motivating teachers and improving teaching practices than individual, extrinsic rewards (Johnson 1986). However, Frase and Sorenson (1992) caution that not every teacher will respond positively to such approaches. Autonomy for one may be isolation for another; one teacher may welcome feedback, another may see it as infringement on his or her professionalism; and while one may welcome collaboration, another may see it as stressful imposition. Opportunities for participatory management must be differentiated for each teacher.

Professional Development

The interrelation of teacher motivation and school development/ change efforts has also been addressed through the issue of staff development. Traditionally, staff development has meant encouraging teachers to enhance pedagogical skills and knowledge of subject matter through advanced academic study; providing funding for conferences and workshops; and developing other training opportunities, including in-service programmes/ in-house training. However, many leading school reformers

have called for new forms of professional development. Lieberman (1995) argues for a "radical rethinking" of professional development that encourages teachers' growth. She believes that teachers must have opportunities to try out new practices by taking new roles and creating a culture of inquiry. Darling-Hammond and McLaughlin (1995) suggest that staff development also means "providing occasions for teachers to reflect critically on their practice and to fashion new knowledge and beliefs about content, pedagogy, and learners" (p. 597). Monahan (1996) describes a new concept, Comprehensive Professional Development (CPD), that focuses on strategies for facilitating teacher growth through professional dialogue with colleagues, collaborative curriculum development, peer supervision, peer coaching, and action research leading to school-wide change. Unfortunately, he reports, principals and teachers still regard CPD like activities for continuing professional development to be less important than traditional methods. Monahan suggests embedding strategies like collaborative curriculum design, peer supervision/review, and portfolio analysis within the tenure review process, and providing incentives such as increased preparation time for peer collaboration and resources for action research.

Even traditional staff development models such as workshops can be motivational if they give teachers control by asking them to set their own agenda at the beginning of a meeting or in-service training, asking for their analysis of problems in the school or in children's learning, and respecting their answers (Zemmelman, Daniels, and Hyde 1993). Many teachers respond with great energy when they are immersed in new perspectives on their own teaching and learning abilities and provided with opportunities to express themselves honestly.

The National Foundation for the Improvement of Education (UK) offers several recommendations for establishing professional development programmes that result in teacher growth and motivation.

1. Find the time to build professional development into the life of schools. Re-organise the school day to enable teachers to work together as well as individually, both daily and weekly, and throughout the year. Redefine the teaching job to include blocks of extended time for teachers' professional development.
2. Help teachers to assume responsibility for their own professional development, based on an analysis of the needs of students in their own schools. Professional development goals, standards for student learning, and standards for professional practice should be decided locally by the school community of teachers, administrators, and parents. In addition, teachers and administrators should collaborate in each district to create peer assistance and review to nurture the practice of all teachers.
3. Work with the community to provide high-quality professional development. At the local level, parents, business, and the community should continue to help schools set the vision for students' success and support teachers' learning. Teachers' organizations should collaborate with districts to invite local leaders to join in conducting an inventory of available local resources and institutions for teachers' professional growth, including higher education, business, cultural groups, and other relevant agencies.

Induction and Support of New Teachers

New teachers enter the profession for intrinsic rewards, but the negative effect of extrinsic conditions may overwhelm them. They face new and difficult challenges:

classroom management and discipline, adjustment to the physical demands of teaching, managing instructional tasks, and sacrificing leisure time. Without proper support and aid, a new teacher's problems can grow worse.

Key ideas for supporting new teachers include:

1. Relocation and acclimation assistance can help the new teacher with locating housing, can share information about the community, and can introduce the recruit to other new teachers.
2. Mentor/buddy teachers break the isolation, show the new teacher the ropes and help them reflect on a day's experience and redirect efforts for next day. In addition, these experienced teachers can transmit instructional, planning, and/or management skills the novices lack skills that can help new teachers grow professionally as they adjust to the realities of teaching. (Frase 1992). In addition, the mentor teachers themselves gain the satisfaction of sharing their knowledge and experience and helping their new colleagues grow professionally.

Teacher Evaluation

Recognition and feedback have been cited as important motivators for teachers, so it would seem that evaluation is an obvious vehicle for using these incentives to direct the teachers on the path towards professional growth and improvement (Frase 1992). However, the most common practices in evaluation are limited in their capacity to improve teaching, and chiefly serve as monitors of minimal competency for retention (Loup et al. 1996). Peterson (1995) calls for a new direction in teacher evaluation that will bring better results more allied to the goals of comprehensive professional development and the goals of education reform:

1. Emphasise the function of teacher evaluation to seek out, document, and acknowledge the good teaching that already exists.

2. Place the teacher at the center of the evaluation activity. Ask the teacher to consider his or her duties, responsibilities, contributions and outcomes, and direct the evaluation.
3. Use multiple and variable sources, such as student and parent surveys, peer review of materials, logs of professional activity, and pupil test-score data.
4. Use the results of a teacher evaluation to encourage personal professional dossiers, publicize aggregated results, and support teacher promotion systems.

Lecture 29

Models and Mentors

Models and Mentors

Effective mentoring has been found to have a range of benefits for teachers' professional learning and can help teachers take control of their own professional development.

For best results, mentoring should tie colleagues teaching the same subject or age group and be removed from all formal performance management systems in a school.

For an effective mentor a Reflective Practitioner should focus on two key concepts:

1. "Legitimate peripheral participation": mentors help mentees move from the periphery to full participation in the school community.
2. "Scaffolding": mentors provide pedagogical assistance so that mentees begin to make their own conclusions and decisions.
3. Hobson and Malderez suggest that good mentors also:
4. Act as a good professional model.
5. Broker professional opportunities and relationships on mentees' behalf.
6. Offer emotional support as mentees adjust to their new role.

When these roles are meaningfully filled, the use of a mentor becomes a powerful tool for the Reflective Practitioner, enhancing skills in classroom management, self-reflection and also improving job satisfaction. When practiced ineffectively and without consideration of relevant research evidence, mentoring can severely limit mentees' professional development.

The most damaging failing is what Hobson and Malderez term "judge-mentoring". This occurs when mentors are predominantly concerned with evaluating and passing judgment on mentees, and fail to create a "safe and trusting relationship". Mentees

then feel reluctant to acknowledge difficulties or seek help, for fear of appearing weak or incompetent.

Situated Learning for Reflective Practitioners

According to the situated learning model, context can be: (1) the actual work setting; (2) a highly realistic or 'virtual' surrogate of the actual work environment; or (3) an anchoring context such as a video or multimedia programme.

The challenge put to researchers was to identify the critical aspects of situated learning to enable it to translate into teaching methods which could be applied in the classroom. Although McLellan (1994) summarises the key components of the situated learning model as: 'apprenticeship, collaboration, reflection, coaching, multiple practice, and articulation of learning skills'(p. 7), the contributions of various theorists and researchers, including the original authors of the model, have expanded and refined the notion to a much more comprehensive and far-reaching framework for the design of learning environments.

What are the critical characteristics of situated learning for reflective practice?

A critical reading of the principal theorists (and critics) of situated learning reveals a number of important characteristics which have added to the evolving theory of situated learning, and an attempt has been made here to distinguish those features. Many of these authors believe that useable knowledge is best gained in learning environments which feature the following characteristics.

The learning environments will:

1. Provide authentic context that reflect the way the knowledge will be used in real-life;
2. Provide authentic activities;
3. Provide access to expert performances and the modeling of processes;

4. Provide multiple roles and perspectives;
5. Support collaborative construction of knowledge;
6. Provide coaching and scaffolding at critical times;
7. Promote reflection to enable abstractions to be formed;
8. Promote articulation to enable tacit knowledge to be made explicit;
9. Provide for integrated assessment of learning within the tasks.

Lecture 30

The Dialogic Process in Reflective Practice and Community Building

The Dialogic Process in Reflective Practice and Community-Building

Reflection is widely accepted as being at the core of teacher education and development. However, teachers often struggle to engage in reflective practice, citing that it takes time to write journal entries and, in an already busy schedule, it is one of those tasks that goes to the bottom of the list.

However, research in teacher education is attempting to change these views. It is promoting the importance of teachers as active practitioners, and encouraging us to see reflection in new ways. One example highlights the role of dialogue, encouraging teachers to talk with each other about their own practices. Researchers, including Professor Steve Walsh, Newcastle University, and Dr Steve Mann, Warwick University, emphasise reflection as a collaborative process that involves the co-construction of meaning and produces insights through teachers' discussions. Research suggests the use of checklists, video recordings and peer review, among other tools, to facilitate reflective dialogue are invaluable tools for reflective practice. Researchers at the University of Limerick, Dr Fiona Farr and Dr Elaine Riordan, say that dialogue can also include the use of interactive online tools such as blogs, chat, and discussion forums.

This dialogic process can help develop understanding, allow for flexibility in reflective practices, facilitate the co-construction of meaning around practice, and allow for the emergence of different 'dialogues'. To begin with, there may be scope to incorporate a more dialogic approach into writing, which would help share practice and aid further enquiry for the Reflective Practitioner.

How dialogue encourages reflection

The discussion in the table below represents an example of dialogic reflection. At this point, Teacher 2 has recently taught an English language lesson on vocabulary and is discussing how it went:

Teacher 1	Yeah, anything else you'd like to highlight?	1
Teacher 2	Umm… I don't think so. I… I don't know	2
Teacher 1	How did you feel at the end of the lesson?	3
Teacher 2	I wasn't quite sure how to end it. Like they finished the radio commercials task and I was like 'Well thanks', like I wasn't I didn't really have an end to it. I mean I just… that was my last task and I didn't close it and I think I should probably have closed it off.	4 5 6 7 8
Teacher 1	Yeah.	9
Teacher 2	Because there was no closing.	10
Teacher 1	Yeah. How might you have closed it, thinking back about it?	11 12
Teacher 2	Eh, maybe just to review some of the words we went over.	13 14
Teacher 1	Mmh... mmh… or you could have said… ok, you could have shown some pictures or something and done a recap like, you know, 'These are vegetables. They grow in my garden, anybody know how we might refer to them from the words we covered	15 16 17 18 19 20

	today?' Like a fun quiz, maybe?	21
Teacher 2	Oh, yeah, that might have helped.	22
Teacher 1	Mmh.	23

This illustrates several points, including the impact of dialogue, and the importance of interaction and collaboration in the reflective process. In lines 1-3, Teacher 2 is struggling for points to discuss and is supported by Teacher 1, who focuses on her colleague's attention on a particular point and opens up the debate.

This supportive work by Teacher 1 is one strength of the process and clearly shapes the kind of reflection that takes place. In lines 7-11, where Teacher 2 ponders on alternative ways to end her lesson, Teacher 1 encourages further critical engagement and processing by asking what Teacher 2 might have done. This provides evidence on how the teachers co-construct insights and meaning. The dialogic process allows different roles to emerge - Teacher 1 becomes a type of facilitator who supports, helps, directs and encourages her colleague through questioning and debate.

Lecture 31 (Part 1)

Collaborative observation and feedback 1

Collaborative Observation and Feedback 1

The purpose of peer observation is for teachers to receive formative feedback from a peer to help improve their practice. The peer observation is only shared between the teacher and the peer and is an opportunity for teachers to engage in collegial conversations concerning pedagogical practice. It is teacher driven - Teachers guide the observation process. This empowers teachers to share with peers their expectations from this partnership which allows peers to more effectively tailor their feedback.

Peer Observation Guidelines and Recommendations

Definitions

Formative peer observation assists in the improvement of teaching. Summative peer observation involves the evaluation of teaching effectiveness used for merit, promotion, and/or tenure decisions. Both formative and summative observations can be based on the same observation instruments.

Rationale/Purpose Statement

1. Observations offer insight regarding the improvement of teaching.
2. Many education settings are currently moving toward multiple observation formats.
3. **Strengths/ Advantages of Peer Observation**
4. Gaining new ideas and perspectives about teaching from colleague(s);
5. Both observer and observe may improve teaching ability;
6. **Weaknesses/ Disadvantages of Peer Observation**
7. Possible bias relating to the observer's own beliefs about teaching;

8. Without a systematic approach—including observer training, multiple visits, and use of reliable observation instruments—peer observation is not a valid method for summative evaluation.
9. For more on the problems inherent in peer observation and questions to ask when contemplating peer observation

Peer Observation Training

If peer observation is to be used for summative purposes, training peer observers is necessary. It helps them focus on specific criteria essential to completing a reliable and valid observation.

Conducting a Pre-Observation Conference - Guidelines

The purpose of the pre-observation conference is to review the teacher's teaching plan, including the lesson goal, objective, strategies/methodology, and assessment. The following is a list of questions that the observer might ask the teacher:

1. What is the main goal of your course?
2. What is the main goal of the course session to be observed?
3. What is your specific objective for the course session to be observed? In other words, what do you expect the learners to be able to know and do by the end of your session?
4. What strategies/ methods will you use to help the learners to reach this objective?
5. How will you assess whether the learners reached this objective? In other words, how will they show that they know and can do what you expected of them?
6. Do you have any concerns that you would like the observer to address?

Peer Observation Guidelines

1. The observer should arrive at least 10 minutes before class. "Walking into class late is poor practice and inconsiderate" (Seldin, 1999, p. 81).

2. The observer can be briefly introduced to the students, with an equally brief explanation of why the observer is present.
3. Observers are not to ask questions or participate in activities during class; such behaviour can detract from and invalidate the observations.
4. An effective observation requires an observation instrument designed to accurately and reliably portray the teacher's behavior.

Observation Instruments

Planning and implementing a systematic approach to observation reduces bias and unreliability. The three most common instruments are checklists, rating scales, and open-ended narratives (written analysis). Seldin recommends a combination of two instruments. When choosing observation instruments, keep in mind that:

1. forms and checklists help standardise observations, making the observation more reliable;
2. viewing a videotape of one's teaching and then completing an observation instrument is a feasible option;
3. the blank sheet observation is not reliable and therefore is not recommended for summative purposes. However, for formative purposes, copious notes about what is taking place during the class can be the most useful prompt for discussion.

Post-Observation Conference Guidelines

1. Schedule this conference within a week of the observation.
2. Review results from the completed Classroom Observation Instrument(s).
3. Begin the conference with a positive comment (i.e., "I really enjoyed your class...").
4. Provide honest, constructive feedback.

Observable Characteristics of Effective Teachers

1. Begins class promptly and in a well-organised way.
2. Treats students with respect and caring.
3. Provides the significance/importance of information to be learned.
4. Provides clear explanations.
5. Holds attention and respect of students, practices effective classroom management.
6. Uses active, hands-on student learning.
7. Varies his/her instructional techniques.
8. Provides clear, specific expectations for assignments.
9. Provides frequent and immediate feedback to students on their performance. Praises student answers and uses probing questions to clarify/elaborate answers.
10. Provides many concrete, real life, practical examples.
11. Draws inferences from examples/models and uses analogies.
12. Creates a class environment which is comfortable for student...allows students to speak freely.
13. Teaches at an appropriately fast pace, stopping to check student understanding and engagement.
14. Communicates at the level of all students in class.
15. Has a sense of humour!
16. Uses nonverbal behavior, such as gestures, walking around, and eye contact to reinforce his/her comments.
17. Presents him/herself in class as "real people."
18. Focuses on the class objective and does not let class get sidetracked.
19. Uses feedback from students (and others) to assess and improve teaching.
20. Reflects on own teaching to improve it

Lecture 31 (Part 2)

Collaborative observation and feedback 2

Collaborative Observation and Feedback 2

What is Peer Supervision?

Peer supervision offers a structure that supports teaching improvement by interaction among peers. A peer supervision group will often be composed of three persons who - whenever they meet - will take on one of three roles: focus person, mediator, and observer.

Peer supervision is not intended to fix, advise or tell anyone what to do. The focus person determines the challenge s/he would like to get feedback on from the observer. S/he receives appreciative and constructive feedback that allows him/her to elaborate ideas to improve the way in which s/he lectures. These ideas are recorded by the mediator in a document at the end of each meeting.

Peer Supervision and Reflecting Teams

Sometimes peer supervision groups can benefit from adding another element to the session: The reflecting team, which will consist of two or more people who listen to the dialogue without interrupting, take notes and have the opportunity to make proposals for questions that can be posed, directions that can be followed etc.

Models of Supervision and Evaluation

There are several models of supervision from which Reflective Practitioners can draw on.

Differentiated Supervision

Glatthorn’s (1990) model of "Differentiated Supervision" responds to the different needs and preferences of classroom teachers. It assumes that if teaching is a profession, and teachers are to be empowered, then teachers need to have control over

their professional development within certain standards. All teachers need support and feedback, but that feedback need not come from only supervisors or administrators. The support can come from fellow teachers and even students. This approach helps the supervisor find time to focus his or her efforts where they are most needed.

The Differentiated approach offers four supervisory choices for teachers:

1. Intensive development (clinical)
2. Cooperative development (small teams)
3. Self-directed development (own progress)
4. Administrative monitoring

Intensive development. Intensive development, or clinical supervision, is a systematic, sequential, and cyclic supervisory process that involves the interaction between supervisors and teachers. Traditionally this has been an intensive skill-focused process that incorporates a "conference/observation/conference" cycle. Clinical supervision can be used with inexperienced teachers, experienced teachers who are experiencing difficulty, and experienced teachers looking to improve their teaching.

The focus of clinical supervision should be on formative evaluation that increases the effectiveness of on-going educational activity, rather than summative evaluation, which is concerned with judging and rating the teacher, and not helping improve teacher performance. This is not to say that teachers should not be accountable for their actions, but rather they should be professionally accountable, so that the accountability is growth-orientated.

Cooperative development. Cooperative development is a process of fostering teacher growth through systematic collaboration with peers. As teachers often naturally turn to each other for support and advice, the process is natural. Costa and Kallick (1993)

believe that a "critical friend" enhances the cooperative supervisory process. A critical friend provides feedback to the individual teacher or group. A critical friend is a trusted person who asks provocative questions, provides data to be examined from another perspective, and offers a critique of a person's work as a friend. The friend takes the time to fully understand the context of the work being presented and the outcomes that the person or group is working toward. The friend becomes an advocate for the success of that work. Once trust has been established, the participants meet in conference style where they plan, discuss, and reflect on the work (pp. 49-50).

Several advantages can be cited as reasons for incorporating the cooperative process. Clearly principals cannot meet all support and assistance needs, and cooperative development provides a means of empowering teachers. Teachers become more committed to the concept of supervision if they are involved in the planning process. An increase in development of self-esteem of staff members is evidenced, and teachers' feelings of isolation are reduced as they can interact on an ongoing basis (Glatthorn, 1990, p.189). Emphasis is placed on reflection about teaching in a collaborative atmosphere where there is sharing of experience and insights.

Self-directed development. In self-directed development the individual teacher works independently on a program of professional growth. Special emphasis is placed on teacher autonomy. A trained specialist is not required as teachers set out their own professional growth goals, find the resources needed to achieve those goals, and undertake the steps needed to accomplish outcomes. This process incorporates the principles of adult learning by responding to individual needs. Teachers as professionals are encouraged to make judgments about the teaching process and appraise their own performances. The success of this model necessitates that teachers

choose meaningful and challenging goals, make use of all feedback received, and make constructive assessments of what they have accomplished.

Administrative monitoring. Administrative monitoring is a process by which the supervisor monitors the staff through brief, unannounced visits, simply to ensure that the teachers are carrying out their responsibilities. The process may include an evaluative element, however, it is not a substitute for systematic evaluative visits. The principal should be explicit with teachers about the relationship between administrative monitoring and evaluation. Administrative monitoring gives the principal information about what is happening in the school, and enables him/her to be aware of any problems. Teachers see the principal as actively involved and concerned. This method is only successful when performed by a sensitive and trusted leader.

Developmental supervision

Glickman (1981) views educational supervision as a process for improving classroom and school practices by working directly with teachers. His model of developmental supervision allows supervisors to identify their own beliefs about the supervisory process, and to determine the appropriate amount and sequence of direction needed to improve teaching and learning. He is clearly an advocate of the belief that "no one approach works for all". When considering individual teacher development, including level of commitment and level of abstract thinking, the supervisor and/or teacher can choose an approach that will be most effective.

Glickman defines three orientations to supervision: directive, collaborative, and non-directive (p. 17).

Directive. In directive orientation, the supervisor emphasises the behaviours of presenting, directing, demonstrating, standardizing, and reinforcing, in developing an

assignment for teachers. The directive supervisor judges the most effective way to improve instruction by making standards clear, and by tangibly showing teachers how to attain such standards. It is a thoughtful, systematic-like approach, based on a careful collection of data. This approach implies that the supervisor is more knowledgeable about teaching, and that his or her decisions are more effective than the teachers are when seeking to improve instruction.

Collaborative. In the collaborative orientation, the behaviours of presenting, clarifying, listening, problem-solving, and negotiating are used to develop a contract between the teacher and the supervisor. With this approach the supervisor and teacher actively negotiate the plan of action. Neither the supervisor nor the teacher has a final plan that excludes the other's view. The final product of the supervisory process is a contract, agreed to by both and carried out as a joint responsibility.

Non-directive. In the non-directive orientation, the behaviours of listening, encouraging, clarifying, presenting, and problem solving, are used to create a teacher self-plan. This plan rests on the premise that the teacher is capable of analyzing and solving his/her own instructional problems. When the teacher sees the need for change, s/he is more ready to implement such change. Throughout this process a clinical approach to supervision might not be incorporated. Instead, the supervisor might observe without interpreting or analyzing, and give the teacher the opportunity for self-analysis. If the teacher chooses the clinical route, s/he determines the direction of the supervisory process.

Lecture 31 (Part 3)

The challenges of inter professional work

Challenges of Inter-Professional Education (IPE)

Research suggests that IPE is beneficial to enhance interprofessional collaboration and develop positive changes in attitudes, knowledge and skills (Cooper et al, 2001; Salmon and Jones, 2001; Freeth et al, 2002; Cullen et al, 2003). Research literature also supports the implementation of IPE in undergraduate as well as postgraduate programmes (Salmon and Jones, 2001; Cooper et al, 2001; Freeth et al, 2002; Barr, 2002), suggesting that early interprofessional learning experiences benefited later participation by teachers in interprofessional activities. Similarly, Hind et al (2003) found in their evaluation of inexperienced first year undergraduate students, from various disciplines, that there was a strong willingness to engage in interprofessional learning, suggesting that teachers should capitalise on this potential.

When considering strategies to support IPE to a diverse range of learners from different disciplines, it is important to plan appropriate learning and teaching approaches that will be most effective in achieving meaningful and sustainable IPE. Some research suggests that models of education that incorporate significant didactic, lecture-based elements may be less effective in promoting change, with attitudes towards interprofessional working remaining the same (Cooper et al, 2001; Tunstall - Pedoe et al, 2003). Nevertheless, didactic teaching methods remain a popular choice for IPE initiatives (Cooper et al, 2001; Freeth et al, 2002). Learning and teaching approaches and styles incorporated in IPE initiatives are predominantly influenced by the individual IPE facilitator. However, Freeth et al (2001) warn that the differing styles of facilitation can affect the team functioning and teacher satisfaction with the IPE experience. Similarly, Salmon and Jones (2001) and Camasooksai (2002) argue

that IPE facilitators require appropriate IPE facilitation training and development, as poor IPE facilitation could further reinforce any prior hostilities.

An IPE Model

In an attempt to encourage meaningful learning, a variety of learning and teaching approaches in the classroom and practice settings need to be incorporated into the Reflective Practice process. These approaches consisted of: a) facilitated learning experiences where teachers are paired together; b) taught classroom sessions by specialist practitioners; c) self-directed study and d) facilitated guided reflective sessions both as individuals and as a group.

IPE and Professional identity

Reflective Practitioners engaged in IPE report how they develop a greater insight, and understanding, into their own professional identity, as a result of their participation in IPE. They report being encouraged and how IPE provided them with an opportunity to consider and reflect upon their role and responsibilities, within the context of interprofessional working.

What teachers say:

"I think by being aware of other people, it makes you aware of yourself and what your remit is and what you need to be doing when you go and see a patient…."

"I now have a greater appreciation of each other's common humanity."

The experience of IPE prompts the Reflective Practitioner to challenge the stereotypical ideas and beliefs they hold in respect to individual professions, activities in school, and patterns of interactions between professionals from different disciplines.

Interprofessional working improves communication between professionals and improves a team approach to complex problems.

Lecture 32

Grounded Theory

Goals and Perspective

The phrase "grounded theory" refers to theory that is developed inductively from a body of data. If done well, this means that the resulting theory at least fits one dataset perfectly. This contrasts with theory derived deductively from grand theory, without the help of data, and which could therefore turn out to fit no data at all.

Grounded theory takes a case rather than variable perspective, although the distinction is nearly impossible to draw. This means in part that the Reflective Practitioner takes different cases to be wholes, in which the variables interact as a unit to produce certain outcomes. A case-oriented perspective tends to assume that variables interact in complex ways. Part and parcel of the case-orientation is a comparative orientation. Similarly, cases that have the same outcome are examined to see which conditions they all have in common, thereby revealing necessary causes.

The grounded theory approach consists of a set of steps whose careful execution is thought to "guarantee" a good theory as the outcome. The quality of a theory can be evaluated by the process by which a theory is constructed.

Overview of the Approach for Reflective Practice

Grounded theory begins with a research situation. Within that situation, your task as Reflective Practitioner is to understand what is happening there, and how those involved manage their roles. You will mostly do this through observation, conversation and interview. After each set of data collection you note down the key issues - "note-taking".

Constant comparison is the heart of the process. At first you compare interview (or other data) to interview (or other data). Theory emerges quickly. When it has begun to emerge you compare data to theory.

The results of this comparison are written in the margin of the note-taking as coding. Your task is to identify categories (roughly equivalent to themes or variables) and their properties (in effect their sub-categories). As you code, certain theoretical propositions will occur to you. These may be about links between categories, or about a core category: a category which appears central to your reflection. As the categories and properties emerge, they and their links to the core category provide the theory. You write yourself notes about it – "memoing".

As the data collection and coding proceeds the codes and the memos accumulate.

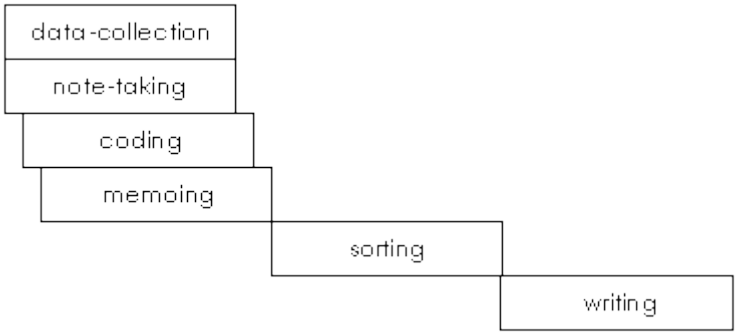
If your core category and its linked categories saturate, you no longer add to them or their properties. This is a sign that it is time to move to sorting. You group your memos, like with like, and sequence them in whatever order will make your theory clearest.

The literature is accessed as it becomes relevant. It is not given special treatment. Glaser makes the point that most research including qualitative research is hypothesis-testing.

The order of your sorted memos provides you with the skeleton, and many of the words, of your thesis. You begin writing.

Over time, a grounded theory study works through the following mostly-overlapping phases.

To summarize this graphically:



In short, data collection, note-taking, coding and memoing occur simultaneously from the beginning. Sorting occurs when all categories are saturated. Writing occurs after sorting.

Lecture 33

Building Theory From and For Practice

Using Tacit Knowledge

Tacit (silent) knowledge and implicit learning have in common the idea of not knowing what you do know or have learned. "Tacit knowledge" refers to the stock of expertise a teacher acquires which is not written down or even formally expressed, but may nevertheless be essential to its effective operation. It refers to the kind of knowledge which we routinely use and take for granted, such as the ability to recognise the face of a friend. We cannot reduce this to explicit propositional knowledge and it cannot be articulated. It cannot therefore be taught, although of course there is obvious evidence that it can be learned or acquired. It may therefore be associated with understanding, and procedurally - in the form of "know-how" - with a "knack" for doing something. How does this relate to ‘Implicit Learning’? If tacit knowledge is about the content of what is learned, implicit learning is about the process.

The Learning Organisation and the Reflective Practitioner

According to Senge, the learning organisation depends upon the mastery of five dimensions:

Systems thinking: The notion of treating the organisation as a complex system composed of smaller (often complex) systems. This requires an understanding of the whole, as well as the components, not unlike the way a doctor should understand the human body. Some of the key elements here for the Reflective Practitioner are recognising the complexity of the organisation and having a long-term focus.

Personal mastery: Senge describes this as a process where an individual strives to enhance his/her vision and focus energy, and to be in a constant state of learning.

Mental models: "Deeply ingrained assumptions, generalisations, or even pictures and images that influence how we understand the world and how we take action" These must be recognised and challenged so as to allow for new ideas and changes.

Building shared vision: Shared vision is a powerful motivator. A teacher's vision does not necessarily become shared by those around. The key here is to pass on a picture of the future. To influence using dialogue, commitment, and enthusiasm, rather than to try to dictate. Storytelling is one possible tool that can be used here.

Team learning: The state where team members think together to achieve common goals. It builds on shared vision, adding the element of collaboration.

There are seven dimensions that characterise schools as learning organisations:

1. Environmental scanning refers to the activities of the school that contribute to broadening the scope of the information, policy, theory and practice that is brought to bear on the school's development and decision making processes.
2. Vision and goals refer to the recognition of and commitment to a coherent and an agreed upon sense of direction that is forged and re-forged to guide a school's everyday actions and decisions as well as shape long term planning.
3. Collaboration refers to the extent that there is a climate of openness and trust which promotes collaboration, cooperation, support and involvement in the functioning of the school.
4. Taking initiatives and risks refer to the extent that school staff are open to change and feel free to experiment and take professional risks toward personal and whole school improvement.
5. Review refers to the extent that programs and practices are reviewed, evaluated and actioned.

6. Recognition and reinforcement refer to the extent that there is sincere recognition and valuing of effort, initiative and achievement.
7. Continuing professional development refers to the extent that encouragement, opportunity and resources are provided to enable all school staff to learn, develop and implement the knowledge, skills and attitudes needed to contribute to improving the school's performance as a whole.

Lecture 34

Action research

Action Research

What Is Action Research?

A succinct definition of action research is: “A disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the “actor” in improving and/or refining his or her actions”. Reflective Practitioners who engage in action research inevitably find it to be an empowering experience. Action research has this positive effect for many reasons. Obviously, the most important is that action research is always relevant to the practitioner. Relevance is guaranteed because the focus of investigation and reflection is determined by the practitioner, who are also the primary consumers of the findings. Perhaps even more important is the fact that action research helps teachers be more effective at what they care most about—their teaching and the development of their students. Seeing students grow is probably the greatest joy teachers can experience. When teachers have convincing evidence that their work has made a real difference in their students' lives, the countless hours and endless efforts of teaching seem worthwhile.

The Action Research Process

Action research can be engaged in by a single teacher, by a group of colleagues who share an interest in a common problem, or by the entire faculty of a school. Whatever the scenario, action research always involves the same seven-step process. These seven steps, which become an endless cycle for the inquiring practitioner, are the following:

1. Selecting a focus

2. Clarifying theories
3. Identifying research questions
4. Collecting data
5. Analyzing data
6. Reporting results
7. Taking informed action

Step 1—Selecting a Focus

The action research process begins with serious reflection directed toward identifying a topic or topics worthy of a busy teacher's time. Considering the incredible demands on today's classroom teachers, no activity is worth doing unless it promises to make the central part of a teacher's work more successful and satisfying. Thus, selecting a focus, the first step in the process, is vitally important. Selecting a focus begins with the teacher asking:

What element(s) of my practice or what aspect of student learning do I wish to investigate?

Step 2—Clarifying Theories

The second step involves identifying the values, beliefs, and theoretical perspectives the practitioner holds relating to this focus. For example, if teachers are concerned about increasing responsible classroom behaviour, it will be helpful for them to begin by clarifying which approach—using punishments and rewards, allowing students to experience the natural consequences of their behaviours, or some other strategy—they feel will work best in helping students acquire responsible classroom behaviour habits.

Step 3—Identifying Research Questions

Once a focus area has been selected and the practitioner's perspectives and beliefs about that focus have been clarified, the next step is to generate a set of personally meaningful research questions to guide the inquiry.

Step 4—Collecting Data

Teachers always want their instructional decisions to be based on the best possible data. Action research enables practitioners to accomplish this by making sure that the data used to justify their actions are valid (meaning the information represents what the teachers say it does) and reliable (meaning the teachers are confident about the accuracy of their data). Lastly, before data are used to make teaching decisions, teachers must be confident that the lessons drawn from the data align with any unique characteristics of their classroom or school.

To ensure reasonable validity and reliability, practitioners should avoid relying on any single source of data. Most teacher researchers use a process called triangulation to enhance the validity and reliability of their findings. Basically, triangulation means using multiple independent sources of data to answer one's questions. Triangulation is like studying an object located inside a box by viewing it through various windows cut into the sides of the box. Observing a phenomenon through multiple “windows” can help a single researcher compare and contrast what is being seen through a variety of lenses.

When planning instruction, teachers want the techniques they choose to be appropriate for the unique qualities of their students. All teachers have had the experience of implementing a “research-proven” strategy only to have it fail with their students. The desire of teachers to use approaches that “fit” their particular students is not dissimilar to a doctor's concern that the specific medicine being prescribed be the correct one for the individual patient. The ability of the action research process to

satisfy an teacher's need for “fit” may be its most powerful attribute. Because the data being collected come from the very students and teachers who are engaged with the treatment, the relevance of the findings is assured.

For the overworked teacher, “data collection” can appear to be the most intimidating aspect of the entire seven-step action research process. Fortunately, classrooms and schools are, by their nature, data-rich environments. Each day a child is in class, he or she is producing or not producing work, is interacting productively with classmates or experiencing difficulties in social situations, and is completing assignments proficiently or poorly. Teachers not only see these events transpiring before their eyes, they generally record these events in their grade books. The key to managing triangulated data collection is, first, to be effective and efficient in collecting the material that is already swirling around the classroom, and, second, to identify other sources of data that might be effectively surfaced with tests, classroom discussions, or questionnaires.

Step 5—Analysing Data

Although data analysis often brings to mind the use of complex statistical calculations, this is rarely the case for the practitioner. A number of relatively user-friendly procedures can help a practitioner identify the trends and patterns in action research data. During this portion of the seven-step process, teachers will methodically sort, sift, rank, and examine their data to answer two generic questions:

1. What is the story told by these data?
2. Why did the story play itself out this way?

By answering these two questions, the teacher can acquire a better understanding of the phenomenon under investigation and as a result can end up producing grounded theory regarding what might be done to improve the situation.

Step 6—Reporting Results

It is often said that teaching is a lonely endeavour. It is doubly sad that so many teachers are left alone in their classrooms to reinvent the wheel on a daily basis. The loneliness of teaching is unfortunate not only because of its inefficiency, but also because when dealing with complex problems the wisdom of several minds is inevitably better than one.

The sad history of teacher isolation may explain why the very act of reporting on their action research has proven so powerful for both the teachers and their colleagues. The reporting of action research most often occurs in informal settings that are far less intimidating than the venues where scholarly research has traditionally been shared. Faculty meetings, brown bag lunch seminars, and teacher conferences are among the most common venues for sharing action research with peers. However, each year more and more teachers are writing up their work for publication or to help fulfill requirements in graduate programmes. Regardless of which venue or technique educators select for reporting on research, the simple knowledge that they are making a contribution to a collective knowledge base regarding teaching and learning frequently proves to be among the most rewarding aspects of this work.

Step 7—Taking Informed Action

Taking informed action, or "action planning," the last step in the action research process, is very familiar to most teachers. When teachers write lesson plans or develop academic programmes, they are engaged in the action planning process. What makes action planning particularly satisfying for the teacher is that with each piece of data uncovered (about teaching or student learning) the educator will feel greater confidence in the wisdom of the next steps. Although all teaching can be classified as trial and error, action researchers find that the research process liberates them from

continuously repeating their past mistakes. More important, with each refinement of practice, action researchers gain valid and reliable data on their developing virtuosity.

Three Purposes for Action Research

As stated earlier, action research can be engaged in by an individual teacher, a collaborative group of colleagues sharing a common concern, or an entire school faculty. These three different approaches to organizing for research serve three compatible, yet distinct, purposes:

1. Building the reflective practitioner
2. Making progress on schoolwide priorities
3. Building professional cultures

Building the Reflective Practitioner

When individual teachers make a personal commitment to systematically collect data on their work, they are embarking on a process that will foster continuous growth and development. When each lesson is looked on as an empirical investigation into factors affecting teaching and learning and when reflections on the findings from each day's work inform the next day's instruction, teachers can't help but develop greater mastery of the art and science of teaching. In this way, the individual teachers conducting action research are making continuous progress in developing their strengths as reflective practitioners.

Making Progress on School wide Priorities

Increasingly, schools are focusing on strengthening themselves and their programs through the development of common focuses and a strong sense of esprit de corps. When a faculty shares a commitment to achieving excellence with a specific focus—for example, the development of higher-order thinking, positive social behaviour, or higher standardized test scores—then collaboratively studying their practice will not

only contribute to the achievement of the shared goal but would have a powerful impact on team building and program development. Focusing the combined time, energy, and creativity of a group of committed professionals on a single pedagogical issue will inevitably lead to program improvements, as well as to the school becoming a “center of excellence.” As a result, when a faculty chooses to focus on one issue and all the teachers elect to enthusiastically participate in action research on that issue, significant progress on the school wide priorities cannot help but occur.

Building Professional Cultures

Often an entire faculty will share a commitment to student development, yet the group finds itself unable to adopt a single common focus for action research. This should not be viewed as indicative of a problem. Just as the medical practitioners working at a “quality” medical center will hold a shared vision of a healthy adult, it is common for all the faculty members at a school to share a similar perspective on what constitutes a well-educated student. However, like the doctors at the medical center, the teachers in a “quality” school may well differ on which specific aspects of the shared vision they are most motivated to pursue at any point in time.

Schools whose faculties cannot agree on a single research focus can still use action research as a tool to help transform themselves into a learning organization. They accomplish this in the same manner as do the physicians at the medical center. It is common practice in a quality medical center for physicians to engage in independent, even idiosyncratic, research agendas. However, it is also common for medical researchers to share the findings obtained from their research with colleagues (even those engaged in other specialties).

School faculties who wish to transform themselves into “communities of learners” often empower teams of colleagues who share a passion about one aspect of teaching

and learning to conduct investigations into that area of interest and then share what they've learned with the rest of the school community. This strategy allows an entire faculty to develop and practice the discipline that Peter Senge (1990) labeled “team learning.” In these schools, multiple action research inquiries occur simultaneously, and no one is held captive to another's priority, yet everyone knows that all the work ultimately will be shared and will consequently contribute to organisational learning.

Why Action Research?

For the Reflective Practitioner it is important to accomplish the following:

1. Professionalise teaching.
2. Enhance the motivation and efficacy of a weary faculty.
3. Meet the needs of an increasingly diverse student body.
4. Achieve success with “standards-based” reforms.

Professionalizing Teaching

Teaching in the forty years has evolved in a manner that makes it more like blue-collar work than a professional undertaking. Although blue-collar workers are expected to do their jobs with vigilance and vigour, it is also assumed that their tasks will be routine, straightforward, and, therefore, easily handled by an isolated worker with only the occasional support of a supervisor. Professional work, on the other hand, is expected to be complex and non-routine, and will generally require collaboration among practitioners to produce satisfactory results. With the exploding knowledge base on teaching and learning and the heightened demands on teachers to help all children achieve mastery of meaningful objectives, the inadequacy of the blue-collar model for teaching is becoming much clearer. When the teachers in a school begin conducting action research, their workplace begins to take on more of the flavor of the workplaces of other professionals. The wisdom that informs practice

starts coming from those doing the work, not from supervisors who oftentimes are less in touch with and less sensitive to the issues of teaching and learning than the teachers doing the work. Furthermore, when teachers begin engaging their colleagues in discussions of classroom issues, the multiple perspectives that emerge and thus frame the dialogue tend to produce wiser professional decisions.

Enhancing Teacher Motivation and Efficacy

The work of teaching has always been difficult. But now it isn't just the demands of the classroom that are wearing teachers down. Students increasingly bring more problems into the classroom; parental and societal expectations keep increasing; and financial cutbacks make it clear that today's teachers are being asked to do more with less. Worse still, the respect that society had traditionally placed upon public school teachers is eroding, as teacher bashing and attacks on the very value of a public education are becoming a regular part of the political landscape. Consequently, teacher burnout has become the plague of the modern schoolhouse.

Many teachers now ask, “Am I making any difference?” Regardless of all the negative pressures on teachers, the sheer nobility of the work keeps many dedicated educators on the job, but only so long as they can get credible answers to the “efficacy” question. However, without credible evidence that the work of teaching is making a difference, it is hard to imagine the best and brightest sticking with such a difficult and poorly compensated line of work. Fortunately, evidence has shown that teachers who elect to integrate the use of data into their work start exhibiting the compulsive behaviour of fitness enthusiasts who regularly weigh themselves, check their heart rate, and graph data on their improving physical development. For both teachers and athletes, the continuous presence of compelling data that their hard work is paying off becomes, in itself, a vitally energising force.

Meeting the Needs of a Diverse Student Body

In a homogeneous society in which all students come to school looking alike, it might be wise to seek the one right answer to questions of pedagogy. But, as anyone who has recently visited a classroom can attest, it is rare to find any two children for whom the same intervention could ever be "right on target." The days are gone when it was possible to believe that all a teacher had to do was master and deliver the grade-level curriculum. It is now imperative that classroom teachers have strong content background in each of the subjects they teach, be familiar with the range of student differences in their classrooms, and be capable of diagnosing and prescribing appropriate instructional modifications based upon a knowledge of each child's uniqueness. Crafting solutions to these dynamic and ever changing classroom issues can be an exciting undertaking, especially when one acknowledges that newer and better answers are evolving all the time. Nevertheless, great personal satisfaction comes from playing a role in creating successful solutions to continually changing puzzles. Conversely, if teachers are expected to robotically implement outdated approaches, especially when countless new challenges are arriving at their door, the frustration can become unbearable.

Achieving Success in a Standards-Based System

Standards-driven accountability systems have become the norm. Specifically, most education departments and ministries have declared that they expect the standards to be rigorous and meaningful, and that they expect all students to meet the standards at the mastery level.

The stakes in the standards movement are high. Students face consequences regarding promotion and graduation. Teachers and schools face ridicule and loss of funding if they fail to meet community expectations. Of course, none of that would be

problematic if we as a society knew with certainty how to achieve universal student success. However, the reality is that no large system anywhere in the world has ever been successful in getting every student to master a set of meaningful objectives. If we accept the truth of that statement, then we need to acknowledge the fact that achieving the goal of universal student mastery will not be easy. The reality is that schools will not prevail with the challenges inherent in the standards movement unless they encourage experimentation, inquiry, and dialogue by those teachers who are working toward meeting those challenges. For this reason, it is imperative that teachers conduct the research on "standards attainment" themselves.

Lecture 35

Appreciative Inquiry

Solving Problems by Looking at What's Going Right

Imagine that your school is full, and you are desperate to expand – but you just can't find the staff you need. What's worse, you strongly suspect that some of the approaches you're using just aren't working. One approach here is to focus on the things that aren't working, and think about how you can fix them. This is the conventional approach to problem-solving. In many cases it is the right one to use. However in others, all it does is bring you up to the same bland level as everyone else. Another approach is to shift to a positive perspective, look at the things that are working, and build on them. In some situations this can be very powerful because, by focusing on positives, you can build the unique strengths which bring real success. This is the premise behind "Appreciative Inquiry", a method of problem solving that was pioneered by David Cooperrider of Case Western Reserve University in the mid 1980s.

To understand the basis of Appreciative Inquiry it is useful to look at the meaning of the two words in context.

1. Appreciation means to recognise and value the contributions or attributes of things and people around us.
2. Inquiry means to explore and discover, in the spirit of seeking to better understand, and being open to new possibilities.

When combined, this means that by appreciating what is good and valuable in the present situation, we can discover and learn about ways to effect positive change for the future.

Using Appreciative Inquiry: The 5D Approach

To apply Appreciative Inquiry to a problem solving situation, it is important to focus on positives. A positive energy approach helps you build on your strengths, just as conventional problem-solving can help you manage or eliminate your weaknesses. The first step of the process is to identify and describe the problem you are trying to solve. From there you go on to look at the issue in four phases: Discovery, Dream, Design and Deliver. This approach is described in the 5 steps below.

[NOTE: Appreciative Inquiry is often explained using four Ds: "Discovery", "Dream", "Design" and "Deliver"/"Destiny". The Reflective Practitioner can add a fifth D ("Define") as the first step.

Step 1. "Define" the Problem

Before you can analyse a situation, you need to define what it is you are looking at, and just as your decision to look at the positives will move you in a positive direction, defining your topic positively will help you look at its positive aspects. So, rather than seeking "Ways to fix recruitment problems", for example, you will choose "Ways to accelerate recruitment." This subtle change in wording can have huge implications for what you focus on. Also, make sure that your topic does not unduly constrain you: You want to explore many possibilities and avenues for change so keep your topic broad.

Step 2. "Discovery" Phase

Here you need to look for the best of what has happened in the past, and what is currently working well. Involve as many people as sensibly possible, and design your questions to get people talking and telling stories about what they find is most valuable (or appreciated), and what works particularly well. Using the example from the first stage, a good way to do this would be to get new recruits to interview one

another, focusing on getting to the core of what they liked about the job before they joined, and what they've enjoyed about the organisation since joining. In this situation, the following might be good discovery questions:

1. When you think back to when you decided to join the school, what was the thing that most attracted you?
2. Tell me a story about a time when you were very enthusiastic about your work.
3. What do you think is most important for success at the school?
4. Tell me about the time you felt proudest about the school.

Another approach to solving this problem could be to look at the different approaches you use to recruit people, and identify the ones that bring the greatest volume of good recruits.

When you have gathered enough raw information, you need to analyse the data and identify the factors that most contributed to the team or organisation's past successes. What is most valued? What did people find most motivating or fun? What instills the greatest pride? And so on.

Step 3. "Dream" Phase

In this phase, you dream of "what might be". Think about how you can take the positives you identified in the Discovery phase, and reinforce them to build real strengths. The way forward may be obvious from the results of the Discovery Phase. If it's not, a useful approach is to bring a diverse group of stakeholders together and brainstorm creative and innovative ideas of what the organisation and team could accomplish. In our example here, you might choose to enhance and build the good points that everyone likes about the organisation, and use this as a strong message to attract potential candidates during the recruitment process. You may also stop doing the things that aren't working, and use the money saved to reinforce the things that

are. Once you have agreed upon your dream or vision, you can take it to the Design phase.

Step 4. "Design" Phase

Building on the Dream, this phase looks at the practicalities needed to support the vision. Here you start to drill down the types of systems, processes, and strategies that will enable the dream to be realised.

Step 5. "Deliver" Phase

Sometimes called the Destiny phase, the last of the Ds is the implementation phase and it requires a great deal of planning and preparation. The key to successful delivery is ensuring that the Dream (vision) is the focal point. While the various parts of the team will typically have their own processes to complete, the overall result is a raft of changes that occur simultaneously throughout the organisation, that all serve to support and sustain the dream.

Lecture 36

Extensions to Dewey's work

Extension to Dewey's Work

John Dewey (1859-1952): Experience, Reflection and Learning

As the father of the 20th Century progressive movement in education and an eminent philosopher, John Dewey's work is particularly helpful in defining and describing the relationships among experience, reflection, and learning, because faculty expect students to learn, especially the knowledge within their respective disciplines, reflection on course readings and field experiences is essential. Across a variety of disciplines, journals are a well-established way to record, reflect, and continue to learn from experience. John Dewey has defined what experiences are educative, how learning proceeds, and what role reflection plays in learning.

Dewey (1933) states that an experience is an interaction between the individual and the environment. An experience first includes more than participation in activities; experience could be reading a book, taking lecture notes, or talking with others. Secondly, an experience contains what Dewey referred to as continuity, a continuous flow of knowledge from previous experiences. Learning, therefore, is a continuous and cumulative process. Prior learning becomes the fodder for further understanding and insight. In his 1933 work, How We Think, Dewey distinguishes between four different modes of thinking: imagination, belief, stream of consciousness, and reflection. Dewey acknowledges that imagination, belief, and stream of consciousness are certainly part of our thinking activities, yet they do not necessarily contribute to learning and even less to lifelong learning. Reflection, however plays a different role. Dewey defines reflection as the "…active, persistent, and careful consideration of any

belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends". (1933, p. 9)

Reflection is active. When we reflect we examine prior beliefs and assumptions and their implications. Reflection is an intentional action, a "demand for a solution of a perplexity is the steadying, guiding factor in the entire process of reflection" (Dewey, 1933, p. 14). Dewey adds, "The function of reflective thought is, therefore, to transform a situation in which there is experienced obscurity, doubt, conflict, disturbance of some sort into a situation that is clear, coherent, settled, harmonious". (1933, p. 100). Reflection starts with discomfort during an experience and leads a person to a balanced state. It takes time and focus to reach clarity of thought. Dewey writes that reflection "gives an individual an increased power of control" (Dewey, 1933, p. 21). It "emancipates us from merely impulsive and merely routine activity…It converts action that is merely appetitive, blind and impulsive into intelligent action" (1933, p. 17). It is not enough just to have an experience. Reflection directs that experience to learning and deeper insights. Reflective thinking takes time and requires one to engage in several different "phases" or "aspects" of reflective thought:

1. Perplexity: responding to suggestions and ideas that appear when confronted with a problem.
2. Elaboration: referring to past experiences that are similar.
3. Hypotheses: developing several potential hypotheses.
4. Comparing hypotheses: finding some coherence within these hypotheses
5. Taking action: experiencing "mastery satisfaction, enjoyment" when selecting and then acting on these hypotheses (Dewey, 1933, pp. 106-115). Dewey asserts that these

are not steps but aspects of reflective activity. An individual may stop at some point and find it necessary to go back and, for example, collect more experiences.

A key point is that informed action follows this reflective thinking process and leads to more ideas and therefore generates more experience on which to reflect.

"Reflective thinking impels to inquiry" (Dewey, 1933, p. 7). In fact, to Dewey, reflective thinking fosters the development of three attitudes that further the "habit of thinking in a reflective way." These three attitudes are:

1. Open-mindedness (freedom from prejudice)
2. Wholeheartedness or absorbed interest
3. Responsibility in facing consequences (Dewey, 1933, p. 33)

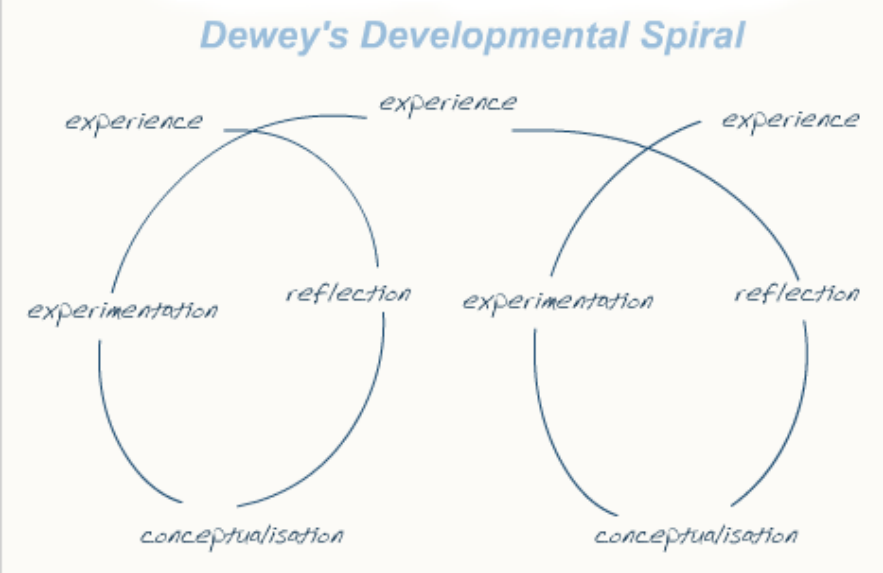
These dispositions are the foundation for education that gives people "a personal interest in social relationships and control and the habits of mind that secures social changes without introducing disorder." (Dewey, 1944, p. 99).

We have seen that John Dewey (1933) placed great emphasis on reflective thought and saw it as an important part of a cycle that enabled us to learn from experience. He believed that reflective thought began when we found ourselves having an experience that raised some difficulties or dilemmas, which he referred to as a "felt difficulty". From this experience, Dewey argued, we then set about reflecting on the problem – asking ourselves the question what's going on? Then we conceptualise the problem: considering and analysing potential solutions – asking what might I do? We experiment, or act by trying out a possible solution.

Finally, we consider whether that solution was effective and how it might be further adapted in the future.

Within Reflective Practice our interest is not so much in learning from a single experience, or learning in the short term; but more in a long term, developmental

process that enables learners to develop well-grounded professional knowledge and skills.



Dewey suggests we consider professional development as a developmental spiral where the learning from one cycle stimulates the beginning of another and so on thereby providing us with a process that allows us to reconstruct our knowledge and skills in light of new experiences.

Lecture 37

Extensions to Boud's Representation

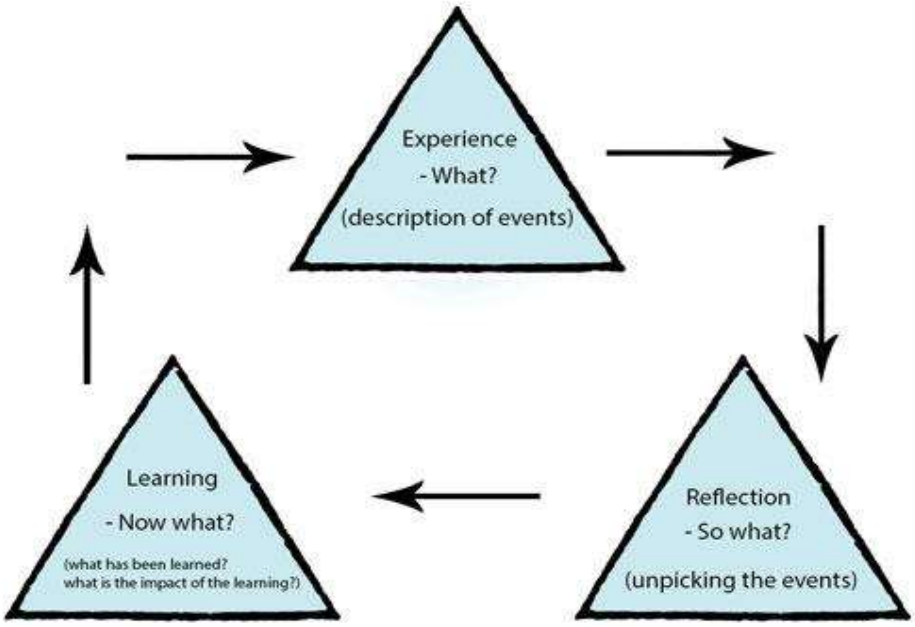
Extensions to Boud's Representation

One of the most frequently cited models used in this context comes from the early work of Boud, Keogh and Walker (1985). In their three-stage model, they recommend that learners first reflect on an experience by mentally replaying the experience and describing it in a descriptive, non-judgemental way. The second stage involves attending to feelings – both positive and negative – triggered by the experience, 'discharging' any negative feelings which may obstruct the reflection. The learner is then ready to re-evaluate the experience by progressing through four sub stages: association (relating new data to what is already known); integration (seeking new relationships between the data); validation (determining the authenticity of the new ideas and looking for inconsistencies or contradictions); appropriation (making the new knowledge/attitudes one's own).

David Boud's Ideas about Reflective Practice

David Boud and his colleagues, Rosemary Keogh and David Walker (1985) have described reflection as a process of turning experience into learning—a way of re-examining the messy and sometimes confusing nature of experience in order to learn new things from it. This definition of reflection implies that the raw, unprocessed material of our experiences in the world can lead to sense-making when the Reflective Practitioner focuses on the thoughts and emotions that accompany their experiences (Boud, 2001). Journal writing, Boud asserts, is ideally suited to such personal exploration, whether it is undertaken as an informal personal activity for its own sake or as part of a structured learning experience.

Many others who write about reflective practice would agree. Reflective journals have also been employed by educators to deepen the quality of students' learning by (a) promoting critical thinking; (b) encouraging a questioning attitude, enabling students to understand their own learning processes (meta-cognition); and (c) strengthening active involvement in learning through personal ownership of the learning experience (Boud, 2001; Moon, 1999). Reflective journaling has been shown to contribute to the exercise of voice (Peterson & Jones, 2001), and the narrative nature of journaling has been shown to contribute to development of a professional identity (Blevins, 2007; Redman, 2005).



If the Reflective Practitioner is going to use this model then it is possible to align key reflective questions to this model (see opposite).

Problems with the Model

One problem with this model is that it tends to confine reflection to a retrospective role: reflection-on-action rather reflection–in-action. Also, the focus stays on individuals' mental activity; practitioners are not encouraged to engage in reflective dialogue in a wider social arena. Boud et al have countered such criticism by highlighting the complexity of the reflective process given the way emotions and

cognition interact, for example in the way that learners who feel more positive about themselves are more likely to persist with reflective activities. Ideas like these have since been applied in professional education with the use of mentors and supervisors who are understand the importance of giving students external validation and positive feedback about their reflections.

This model, although capturing the essentials (that experience and reflection lead to learning), has limitations. It does not guide the Reflective Practitioner as to what reflection might consist of, or how the learning might translate back into experience.

Lecture 38

Extension to Gibb's model

Extension to Gibb's Model

Gibb's reflective cycle is a popular model for reflection. The model includes six stages of reflection:

Description

In this section, you need to explain what you are reflecting on to your reader. Perhaps include background information, such as what it is you're reflecting on and tell the reader who was involved. It's important to remember to keep the information provided relevant and to-the-point. Don't waffle on about details that aren't required – if you do this, you're just using up valuable words that you'll get minimal marks for.

Feelings

Discuss your feelings and thoughts about the experience. Consider questions such as: How did you feel at the time? What did you think at the time? What did you think about the incident afterwards? You can discuss your emotions honestly, but make sure to remember at all times that this is an academic piece of writing, so avoid 'chatty' text.

Evaluation

For your evaluation, discuss how well you think things went. Perhaps think about: How did you react to the situation, and how did other people react? What was good and what was bad about the experience? If you are writing about a difficult incident, did you feel that the situation was resolved afterwards? Why/why not? This section is a good place to include the theory and the work of other authors – remember it is important to include references in reflective writing.

Analysis

In your analysis, consider what might have helped or hindered the event. You also have the opportunity here to compare your experience with the literature you have read. This section is very important, particularly for higher level writing. Many students receive poor marks for reflective assignments for not bringing the theory and experience together.

Conclusion

In your conclusion, it is important to acknowledge: whether you could have done anything else; what you have learned from the experience; consider whether you could you have responded in a different way. If you are talking about a positive experience…discuss whether you would do the same again to ensure a positive outcome. Also consider if there is anything you could change to improve things even further. If the incident was negative…tell your reader how you could have avoided it happening and also how you could make sure it doesn't happen again.

Action plan

Action plans sum up anything you need to know and do to improve for next time. Perhaps you feel that you need to learn about something or attend some training. Could you ask your tutor or placement supervisor for some advice? What can you do which means you will be better equipped to cope with a similar event?

Using Gibbs' (1988) reflective model in reflective writing

The following text is an example of a piece of reflective writing, following Gibbs' (1988) model. The task was to write a reflection about an incident which occurred during the first few weeks of a teaching placement (1000 words):

Description

I am currently on a teaching practice placement in an adult education college in the south-west of England, learning how to teach GCSE maths to various groups of

adults. As my placement is in the early stages, I am mainly assisting the class tutors and have just started planning and delivering a small part of each lesson. The incident occurred in an evening class during which I was due to deliver my very first session. The class tutor had been teaching the learners about fractions, and my task was to continue with this instruction, looking specifically at how to multiply two fractions. However, when I was due to teach the session, I got to the whiteboard and became so nervous that I struggled to speak to the group. I felt myself visibly shaking and was unable to articulate my first sentence coherently. The students were quite understanding, as they are all mature students who are aware that I am new to teaching and am nervous, but the class teacher was unsympathetic and responded by taking over the lesson whilst I sat at the back of the room trying not to cry. I left the session as soon as the class was over, and did not speak to anyone.

Feelings

I felt extremely miserable at the time and even considered leaving my teacher training course. I was also embarrassed and upset by my own inability to speak in front of the group, but I was also extremely angry with the class teacher for her response in the presence of the learners. I felt afterwards that she had not given me sufficient time to compose myself, and that she should have allowed me to address my nerves. The situation left me very distressed and I rang in sick the following week; it was only when I reflected on the experience that I decided I needed to speak to the placement supervisor. I also realised later that feeling nervous is a natural reaction to speaking in public (Jones, 2000) which made me feel less embarrassed.

Evaluation

At the time, I did not feel that the situation had been resolved at all. I very deliberately left at the end of the class without speaking to the class teacher or the learners.

However, after speaking to a fellow trainee about his own experience, I felt much more positive. I realised that everyone feels nervous before their first few classes. This is clear in the relevant literature, as Greene (2006, p. 43) points out, saying that nine out of ten new trainee teachers found their first session "incredibly daunting". It appears that most trainee teachers have moments of being "tongue-tied" and "losing their way with the lesson" (Parbold, 1998, p. 223).

Analysis

The situation was made worse by both my own actions and those of the class teacher. I feel that I should have stood up to her, rather than letting her take control of the lesson, and that I should have spoken to her immediately after the lesson about how I was feeling. Dealing with situations like this immediately is preferable, as Cooper (2001) points out.

Instead, I spoke to my placement supervisor several days later, and did not see the class teacher again until a formal meeting consisting of myself, the teacher and the supervisor. Daynes and Farris (2003) say that, by not dealing with situations immediately and personally, and instead taking it to an authority figure, the situation can be made worse. The class teacher could have felt that she was being "ganged up on" (Thomas, 2003, p. 22), which could lead to future problems. The teacher's actions also made the situation worse, because she did not give me time to overcome my fears and she deliberately embarrassed me in front of the class. She claimed that she had thought she was helping me to overcome my anxieties, but I do not believe that to be the case. However, as we only spoke about the incident over a week later in the meeting with the supervisor, she rightly argued that I should have said something to her at the time.

Conclusion

In retrospect, I would do several things differently. I should have spoken to the class teacher immediately after the session and voiced my opinions. I should also have been more assertive by advising the tutor that I could continue with the lesson. However, the incident made me realise the importance of building up a relationship with the teacher, a skills that Jackson (1999) stresses as fundamental to a successful placement. I feel that, had I developed a professional relationship with the teacher in the preceding weeks, I would have been able to explain how nervous I was beforehand. This would have provided the opportunity to discuss strategies for dealing with nerves and perhaps the incident could have been avoided entirely.

Action Plan

In future, I will ensure that I build up a relationship with colleagues. I am working alongside several different teachers during my placement, and I intend to speak to each of them about my nerves. I have already had a beneficial conversation with one teacher and together we have developed a programme of team-teaching for the next few weeks so that I do not feel so pressurised. I plan to do this with the other class teachers, as it will help them to understand how I feel. I also need to speak to my fellow trainees more often about how they feel, as I think I will be able to learn from them. In terms of training, I have booked onto a presentation skills workshop at University, and intend to follow it up by attending the practise sessions afterwards. This experience has made me realise that I need to gain more confidence with presenting and I feel addressing my presentation skills will help me to do this.

Lecture 39

Extensions to John's Model

Extensions to Johns' Model

Johns' model for structured reflection can be used as a guide for analysis of a critical incident or general reflection on experience. This would be useful for more complex decision making and analysis. Johns supports the need for the learner to work with a supervisor throughout their learning experience.

Johns' model focuses on uncovering and making explicit the knowledge that is used in our teaching practice. It can be used as a guide for analysis of a critical incident or general reflection on experience or more complex decision making. He suggests that in addition to guided reflection students should use a reflective diary since noting, reflecting on, and sharing such experiences can lead to greater understanding than by reflection as a lone exercise.

The model requires 'looking in on the situation', which includes focusing on yourself and paying attention to your thoughts and emotions. It then advises 'looking out of the situation' and writing a description of the situation based on five sources of knowledge, each of which has a number of cues.

He refers to this as guided reflection, and recommends that students use a structured diary. Johns considered that through sharing reflections on learning experiences greater understanding of those experiences could be achieved than by reflection as a lone exercise. Johns also uses Carper's (1978) four patterns of knowing, aesthetics, personal, ethics and empirics adding a fifth pattern 'reflexivity'. Platzer et al (1997) identify this as a strength of the model as it is one of the few models of reflection that refers to the development of an epistemological base to reflections. Rolfe et al (2001) criticise the reflexive pattern of knowing, though, as it only responds to a situation,

which has been resolved. The question, then, of ‘How would I do it next time?’ is appropriate for that instance. If the situation remained on-going, though, the practitioner would want to know ‘How can I take this forward?’ Rolfe et al (2001) do not consider that Johns has made provision for this question. If you use this model for a situation that is on-going you could adapt the reflexive section using cues from another model or develop your own set of cues.

Stage 1: Describe the event/experience

What happened?

Who was involved?

What part did you/others play?

What was the result?

Stage 2: Thinking and feeling

What was significant about this experience to me?

What was I thinking and feeling during the experience?

What was I trying to achieve?

How do I feel about the outcome of the event?

Stage 3: Evaluation

What was good and bad about the experience?

What were the consequences of my action/actions of others?

Stage 4: Analysis

What sense can I make of the situation?

What factors (e.g., values, assumptions, meaning perspective, experiences) influenced my feelings, thoughts, and actions?

What sources of knowledge influenced or should have influenced my actions?

How did others feel and how do I know?

What could I have done differently?

What would be the consequences of those other actions?

Stage 5: Conclusion and action plan

How do I now feel about the experience?

What have I learned about my practice/myself/my organizations?

What would I do now in a similar situation?

What factors might get in the way of me applying my learning from the experience?

Johns' 10 C's of Reflection

Johns also defines a set of attitudes that the Reflective Practitioner needs in order for the framework to do justice as a schema for accurate reflection:

1. **Commitment** Accept responsibility & be open to change
2. **Contradiction** Note tension between actual & desired practice
3. **Conflict** Harness this energy to take appropriate action
4. **Challenge** Confront your own typical actions, beliefs & attitudes in a non-threatening way
5. **Catharsis** Work through negative feelings
6. **Creation** Move beyond old self to novel alternatives
7. **Connection** Connect new insights in the world of practice
8. **Caring** Realise desirable practice
9. **Congruence** Reflection as a mirror for caring
10. **Constructing** Building personal knowledge in practice

Lecture 40

Taking Reflective Practice Forward

Taking Reflective Practice Forward

In education, reflective practice refers to the process of the educator studying his or her own teaching methods and determining what works best for the students. It involves the consideration of the ethical consequences of classroom procedures on students.

The appeal of the use of reflective practice for teachers is that as teaching and learning are complex, and there is not one right approach, reflecting on different versions of teaching, and reshaping past and current experiences will lead to improvement in teaching practices. Schon's reflection-in-action assists teachers in making the professional knowledge that they will gain from their experience in the classroom an explicit part of their decision-making.

According to Paterson and Chapman (2013), reflection and learning from experience is key to staying accountable, and maintaining and developing aptitude throughout your practice. Without reflection you as a practitioner are not able to look objectively at your actions or take into account the emotions, experience, or responses from your actions to improve your practice. Through the process of reflection teachers are then held accountable to their teaching practice to students, parents, administration, and all interested stakeholders; to the standards of practice for teaching, commitment to students and student learning, professional knowledge, professional practice, leadership in learning communities, and ongoing professional learning. Reflection is a vital process of learning from experience that allow you to evolve as a practitioner; through learning from past experiences, it allows you to develop a more thorough schema for practice. Through reflective practice, you as a teacher are committing

yourself to students and student learning; you are looking back on your practice and reflecting on how you have supported students through treating them equitably and with respect and are sensitive to factors that influence individual student learning. By this, you are asking yourself, have I supported student learning, and provided all of my students with an entry point into learning. Through reflective practice you are reflecting on your professional knowledge and professional practice; you are looking at how you teach and the information and forms of learning you bring to your students, and taking a critical look at whether or not you are current and if your ways of teaching are having an impact on student learning that they will be able to translate into future endeavours. If this is not the case you are then addressing the standard of on-going professional learning. Here you are looking at and trying to recognise where you need to enhance your own learning so that it has a bigger benefit to student learning. In addition, teachers are the leaders in their learning communities; it is from their cues and attitudes that their learners develop. Through reflection, and sharing this with your learners, you are showing strong leadership because it shows that you are willing to learn from your mistakes and improve your practice for all of those affected by it.

Reflective Practice moves teachers from their knowledge base of distinct skills to a stage in their careers where they are able to modify their skills to suit specific contexts and situations, and eventually to invent new strategies. In implementing a process of Reflective Practice teachers will be able to move themselves, and their schools, beyond existing theories in practice. Teachers should resist establishing a classroom culture of control and become a reflective practitioner, continuously engaging in a critical reflection, and consequently remaining fluid in the dynamic environment of the classroom.

The act of reflection is seen as a way of promoting the development of autonomous, qualified and self-directed professionals. Engaging in Reflective Practice is associated with the improvement of the quality of care, stimulating personal and professional growth and closing the gap between theory and practice. Activities to promote reflection are now being incorporated into undergraduate, postgraduate and continuing education across education. Mann (2009) found through her research that in practising professionals the process of reflection appears to be multi-factorial and to include different aspects. In addition to reflection both on and during experiences, that the anticipation of a challenging situation also stimulated reflection. Practicing professionals vary in their tendency and ability to reflect. Davies (2012) identifies that there are both benefits as well as limitations to reflective practice:

Benefits to Reflective Practice

1. Increased learning from an experience or situation
2. Promotion of deep learning
3. Identification of personal and professional strengths and areas for improvement
4. Identification of educational needs
5. Acquisition of new knowledge and skills
6. Further understanding of own beliefs, attitudes and values
7. Encouragement of self-motivation and self-directed learning
8. Could act as a source of feedback
9. Possible improvements of personal and clinical confidence
10. Limitations of Reflective Practice
11. Not all practitioners may understand the reflective process
12. May feel uncomfortable challenging and evaluating own practice

13. Could be time consuming
14. May have confusion as to which situations/experiences to reflect upon
15. May not be adequate to resolve clinical problems.

Stephen D. Brookfield Ideas about Critically Reflective Practice

In explaining what it means to be a critically reflective teacher, Brookfield (1995, p. 1) reminds us that teaching is far from being an innocent activity since "the cultural, psychological, and political complexities of learning and the ways in which power complicates all human relationships (including those between students and teachers) confound our best intentions". Not only is it challenging to be fully aware of our actions and their effects in the classroom, we cannot assume that the meaning and significance we place on our actions as teachers are understood in the same way by our learners. Therefore, teachers must have a critically reflective stance towards their practice as educators.

Reflection becomes critical when educators consider (a) how power undergirds and distorts the educational process, and (b) how to challenge our own untested hegemonic assumptions to uncover practices that appear to make teaching easier but actually work against our own long-term interests (Brookfield, 1995, p. 8). Hegemonic assumptions are those that we think are in our own best interests, but have been designed by others who are more powerful to work against us; they have, however, become so embedded in our practices that we can no longer identify the oppression or disenfranchisement contained within them. It is therefore necessary that a teacher have a well-grounded philosophy of practice about what he or she does and why.

Examples of hegemonic assumptions include beliefs about teaching as a vocation or calling that justify an overwhelming workload to our own physical and mental

detriment; being overly invested in student evaluations to the point that we berate ourselves for anything less than perfect ratings; attempting to meet everyone's needs (an unattainable standard); and assuming that the answers to our teaching dilemmas can always be found if we locate just the right resource. Examples of mistaken assumptions about power in the classroom include use of the circular seating as a democratic form of participation, not accepting that shy or timid students can be terrified of such an "exposed" classroom stance; failure to intervene in discussions by viewing our sole role as facilitators of learning without offering the benefit of our experiences to learners, in essence withholding our own points of view from students or assuming that we are equals with students. As much as we might like to consider ourselves equal in many dimensions of practice, the classroom is always infused with the power position of the teacher.

Reflection as a learning tool

1. Reflection is the process that we consciously undertake to gain further understanding and add meaning to our daily lives.
2. Reflection is associated with learning that has occurred through experience and is an activity that helps you make sense of and learn from situations.
3. Reflection therefore is a means of assisting us to think, to explore our thoughts and feelings and to work through an experience, in an attempt to gain new understandings, fresh insights and self-awareness.
4. 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.

5. The most important aspect of engaging in reflection for your ongoing personal and professional learning is that you are able to demonstrate your progression towards achievement of professional learning outcomes and standards of proficiency.
6. The process of reflective writing leads to more than just a gain in your 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.

Lecture 41

Higher Order Thinking that Unifies Curriculum, Instruction and Learning

Higher Order Thinking that Unifies Curriculum, Instruction and Learning

On Becoming the Critically Reflective Teacher

Developing as a critically reflective teacher encompasses both the capacity for critical inquiry and self-reflection. Critical inquiry involves the conscious consideration of the moral and ethical implications and consequences of classroom practices on students. Few teachers get through a day without facing ethical dilemmas. Even routine evaluative judgments of students' work is partly an ethical decision, in that lack of opportunity to learn as well as impact on self-concept are ever-present considerations. Self-reflection goes beyond critical inquiry by adding to conscious consideration the dimension of deep examination of personal values and beliefs, embodied in the assumptions teachers make and the expectations they have for students. Critical reflection involves examination of personal and professional belief systems, as well as the deliberate consideration of the ethical implications and impact of practices. Engaging in critical reflection brings commonly-held beliefs into question. Beliefs are convictions we hold dearly, having confidence in their truth, while acknowledging they are not susceptible to proof. Our beliefs shape our identity; hence shedding a dearly-held belief shakes our very existence. If a teacher tries to shed the belief that the teacher must be in control to be effective, it means revealing uncertainty and vulnerability.

As with all mental models, there is a clear distinction between what we profess to believe in and our values in action, those that actually guide our behaviour (Senge et al., 1994). Our operating values steer how we behave on a daily basis to pursue educational goals and student outcomes. They also define the lines we will and will not cross. Values are our ideals; hence, they are subjective and arouse an emotional response. In teaching, often sets of values are in conflict, challenging the teacher to weigh competing values against one another and play them off against the facts available. For example, a teacher may value being consistent while simultaneously valuing treating students justly, and there are times when to be fair is to be inconsistent. To be critically reflective is to act with integrity, openness, and commitment rather than compromise, defensiveness, or fear.

Bloom's Taxonomy and Critical Thinking Instruction

Teachers are now not only familiar with and accepting of the general categories of Bloom's Taxonomy, but also are persuaded that the Taxonomy's identified higher-order skills of analysis, synthesis and evaluation are essentials because higher-order skills are essential. To learn how to think critically is to learn how to ask and answer questions of analysis, synthesis and evaluation. To help teachers incorporate critical thinking in the classroom is to help them ask questions that call for analysis, synthesis and evaluation. The teacher's thinking does not need to be significantly altered, and no fundamental shifts in educational philosophy are required. The Taxonomy and the ability to generate a full variety of question types are all that a teacher needs.

The 40 Critically Reflective Questions that Link Teaching/Subject/Student

Backward-Looking:

1. How much did you know about the subject before we started?
2. What process did you go through to produce this piece?

3. Have you done a similar kind of work in the past (earlier in the year or in a previous grade; in school or out of school)?

4. In what ways have you gotten better at this kind of work?

5. In what ways do you think you need to improve?

6. What problems did you encounter while you were working on this piece? How did you solve them?

7. What resources did you use while working on this piece? Which ones were especially helpful? Which ones would you use again?

8. Does this work tell a story?

Inward-Looking

9. How do you feel about this piece of work? What parts of it do you particularly like? Dislike? Why? What did/do you enjoy about this piece or work?

10. What was especially satisfying to you about either the process or the finished product?

11. What did/do you find frustrating about it?

12. What were your standards for this piece of work?

13. Did you meet your standards?

14. What were your goals for meeting this piece of work? Did your goals change as you worked on it? Did you meet your goals?

15. What does this piece reveal about you as a learner?

16. What did you learn about yourself as you worked on this piece?

17. Have you changed any ideas you used to have on this subject?

18. Find another piece of work that you did at the beginning of the year to compare and contrast with this what changes can you see?

19. How did those changes come about?

20. What does that tell you about yourself and how you learn?

Outward-Looking:

21. Did you do your work the way other people did theirs?

22. In what ways did you do it differently?

23. In what ways was your work or process similar?

24. If you were the teacher, what comments would you make about this piece?

25. What grade would you give it? Why?

26. What the one thing you particularly want people to notice when they look at your work?

27. What do your classmates particularly notice about your piece when they look at it?

28. In what ways did your work meet the standards for this assignment?

29. In what ways did it not meet those standards?

30. If someone else were looking at the piece, what might they learn about who you are?

Forward-Looking:

31. One thing I would like to improve upon is ...

32. What would you change if you had a chance to do this piece over again?

33. What will you change in the next revision of this piece?

34. What's the one thing that you have seen in your classmates' work or process that you would like to try in your next piece?

35. As you look at this piece, what's one thing that you would like to try to improve upon?

36. What's one goal you would like to set for yourself for next time?

37. What would you like to spend more time on in school?

38. What might you want next year's teacher to know about you (what things you're good at)?

39. What things you might want more help with?

40. What work would you show her to help her understand those things?

Lecture 42

The Future of Reflective Practice

The Future of Reflective Practice

Essential Practices for Becoming a Reflective Practitioner

The process of becoming a reflective practitioner cannot be prescribed. It is a personal awareness discovery process. While it is not possible to prescribe a linear process or define a step-by-step procedure, there are actions and practices that are fundamental to developing as a reflective practitioner. The following three practices are essential: making time for solitary reflection, becoming a perpetual problem-solver and questioning the status quo (Larrivee, 1999). The first creates an opening for the possibility of reflection while the others allow for a way of developing teaching practice that accepts uncertainty, recognises contextual bounds and considers multiple plausible causal explanations for events and circumstances.

Making Time for Solitary Reflection

Engaging in systematic reflective means making it an integral part of daily practice. Making time for thoughtful consideration of their actions and critical inquiry into the impact of their own behaviour keeps teachers alert to the consequences of their actions on students. Teachers also need reflective time to consider the inevitable uncertainties, dilemmas, and tradeoffs involved in everyday decisions that affect the lives of students. Any effort to become a critically reflective teacher involves negotiating feelings of frustration, insecurity, and rejection. Taking solitary time helps teachers come to accept that such feelings are a natural part of the change process. Keeping a reflective journal is one vehicle for ensuring time is set aside for daily reflection. Journal writing is a reflective process that allows teachers to chart their development and become more aware of their contribution to the experiences they

encounter. This process of systematic self-reflection can provide the clarification necessary for teachers to gain, or regain, a sense of meaning and purpose in their teaching. Finding personal meaning is a key element in preventing teacher burnout.

Journals can serve several important purposes for teachers. They can provide a safe haven for dumping daily frustrations, working through internal conflicts, recording critical incidents, posing questions, naming issues, solving problems, identifying relationships, seeing patterns over time, and tracing life patterns and themes.

Beliefs about teaching and interacting with students are the result of attitudes and experiences gained over time. By making journal entries, teachers can look more objectively at their behaviours in the classroom. Journal writing is also a helpful tool for examining personal biases and prejudices that may unwittingly play out in interactions with students. Teachers are not always conscious of inappropriate responses to students on the basis of culture, race, gender or social class. Making journal entries could allow teachers to look more objectively at their behaviour toward students from diverse cultural and social settings.

Becoming a Perpetual Problem-solver.

A teacher's approach should be solving problems not enforcing preset standards of operation. Problems surface as natural resistance to taking action toward a new possibility. The classroom should be a laboratory for purposeful experimentation. A practice or procedure is never permanent.

New insights, understandings, and perspectives bring previous decisions up for re-evaluation and consideration.

When all aspects of practice become the object of systematic inquiry, teachers must confront issues of power and control in the classroom. As teachers think more deliberately, articulating the rationale that underlies their teaching decisions, they

begin to name and confront the dilemmas and contradictions they face on a daily basis. Becoming a perpetual problem-solver involves synthesising experiences, integrating information and feedback, uncovering underlying reasons, and discovering new meaning.

Teachers who engage in critical reflection infuse their practice with a sense of vision and purpose as they continually forge new ground. While they learn from the past, they thrive in the present. They know that much of what occurs cannot be predicted but they also know that they are not victims of fate. Not to be critically reflective puts teachers in danger of what Freire (1993) calls `magical consciousness', viewing life in the classroom as beyond their control subject to whimsical blessings and curses.

Questioning the Status Quo

When teachers make a practice of questioning the status quo and conventional wisdom, they seek their own truth and remain open to examining the assumptions that underlie classroom practices. Because school policies and teaching practices are both culturally and politically imbedded, changing aspects of individual practice often requires a collective effort. Challenging currently-held beliefs, assumptions, and expectations that translate into school policies and classroom procedures often brings a teacher into direct conflict with school priorities and hierarchies of power. By questioning institutionalised definitions of acceptable teacher and student roles, a teacher challenges familiar routines and a way of thinking that is comfortable for colleagues. Hence, those questioning the status quo will need to learn ways of prompting colleagues to question their commonly-accepted assumptions and practices that are as non-threatening as possible so they do not become the enemy, shaking up established practices. Although questioning the status quo is always risky business, the risk can be minimised if the reflective teacher can engage others in ways that are

invitational rather than confrontational. Critically reflective teachers also need to develop measures of tactical astuteness that will enable them to take a contrary stand and not have their voices dismissed.

One way to keep from committing cultural suicide is to build prior alliances both within and outside the institution by taking on tasks that demonstrate school loyalty and build a reputation of commitment. Against a history of organizational contributions, a teacher is better positioned to challenge current practices and is less readily discounted. As Shor & Freire (1987) note, the most effective change agents are able to secure social and organizational changes while simultaneously doing personal damage control.

By making time for solitary reflection, becoming a perpetual problem-solver, and questioning the status quo, teachers come to recognise their repetitive cycles and reflexive loops which limit their potential for tolerance and acceptance as the vital elements for effectively managing classrooms composed of students from different cultural and social backgrounds with diverse beliefs and values. Reflective practitioners find a means to catch themselves when they try to unjustly impose their values or dismiss students' perspectives without due consideration.

Developing the Practice of Self-reflection

The challenge of effectively managing today's diverse classroom involves self-reflection as well as critical inquiry. By developing self-reflection, teachers become more cognisant of the interdependence between teacher responses to students and student responses to teachers. Through self-reflection, teachers become increasingly aware of how they are interactive participants in classroom encounters rather than innocent bystanders, or victims.

Self-reflection involves developing the ability to look at what is happening, withholding judgment, while simultaneously recognising that the meaning we attribute to it is no more than our interpretation filtered through our cumulative experience. When teachers develop the practice of self-reflection, they learn to: (1) slow down their thinking and reasoning process to become more aware of how they perceive and react to students, and (2) bring to the surface some of their unconscious ways of responding to students. Self-reflection encompasses reflection, deliberation, awareness, and insight turned inward so we continually discover new dimensions of ourselves. This complex process is not prescriptive in nature, rather it is a process that allows insights to surface which serve to challenge our familiar behaviour patterns. It is more a way of knowing than a knowing how.

Developing the practice of self-reflection allows teachers to recognise that what they see goes through a series of internal, interpretive filters reflecting personal belief systems. Perception is subjective; it is not pure, and it can be distorted. When a student misbehaves, one teacher sees a cry for help, another a personal attack. It is the teacher's interpretation of the student's behaviour, or the meaning the teacher attaches to the behaviour, that determines how the teacher will respond. Through self-reflection, teachers can learn to see beyond the filters of their past and the blinders of their expectations. Teachers can learn to reframe or `reposition' classroom situations and school circumstances. The term reposition connotes the notion of changing our perception by `moving out of' our old position and creating a new position from which to view a situation (Larrivee, 1996). It is our personal framing that shapes how we attribute meaning to our experiences. Seeing new ways of interpreting a situation enables teachers to move beyond a limited perspective. By challenging themselves to create a new vantage point, teachers can assign new meaning to the classroom

situations they confront. By repositioning a seemingly negative event, the teacher seizes the opportunity to discover the positive potential in a situation. In repositioning, the teacher looks for openings to extend and learn in any situation. Some productive ways of repositioning for the classroom setting include: repositioning conflict as opportunity to be uncovered; repositioning confrontation as energy to be rechanneled; repositioning aggression as a cry for help; repositioning defiance as a request for communication; and repositioning attention-seeking as a plea for recognition.