
Title	Empowering trainee teachers with metacognitive knowledge and skills for proficient teaching practice
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Source	<i>3rd Redesigning Pedagogy International Conference, Singapore, 1 - 3 June 2009</i>

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ABSTRACT FOR CRPP PAPER (1--3 June 2009)

Empowering Trainee Teachers with Metacognitive Knowledge and Skills for Proficient Teaching Practice

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Trainee teachers have to undergo both theoretical and practical training in all teacher education programmes. But it is the teaching practicum which is the acid test for differentiating the making of proficient teachers and those who are less effective in the classroom.

Some of the missing or weak " knowledge and skills" commonly observed in trainee teachers are: the inability to multi-task, conditional knowledge(the whys and whens in strategy choice), students' diversity in ability and behaviour, group motivation, time-management, self-awareness of affective resources, management and organizational skills.

A combined lack of the above mentioned knowledge and skills can lead to a lesson plan heavy in subject content, with little consideration for students' needs, diversity and reactions to lesson. Few trainees realize the importance of metacognitive knowledge and regulation BEFORE, DURING and AFTER a lesson

Scaffolding of trainee teachers with metacognitive knowledge and skills should take place BEFORE the Practicum, DURING and AFTER each lesson observation through group focus discussion and coaching.

Trainee teachers need to be empowered with metacognitive knowledge and skills in order to prepare, execute, monitor and evaluate a good lesson.

Empowering Trainee Teachers with Metacognitive Knowledge and Skills for Proficient Teaching Practice

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Practicum is the most important phase of any teacher education programmes, as it provides many opportunities for a prospective teacher to practise theory, experience the thrill of working with students, the satisfaction of assuming professional responsibilities, and the joy of successes or the discouragement of failure in teaching activities. It is greatly helpful in preparing teachers as it is the most critical component and backbone of any educational system.

How well teachers teach depends on their motivation, experience, training, and aptitude which is better developed during teaching practice (Akbar, 2002; SAHE Education Watch Report 2002 & Akhtar, 1995, 1992).

Reviewing the research on teacher preparation, Wilson, Floden and Mundy (2001) reported that teachers see field experiences as the most powerful component of pre-service programmes. Therefore, there is a continued push for including more practice and increasing the number of field experience hours in teacher education programs.

Teachers construct professional knowledge through their practice work during training and use practice-based knowledge for effective/learning teaching (Sztajn & Abney 2003).

Pre-service teachers at the National Institute of Education have also consistently rated Teaching Practicum as the most useful component of their Teacher Education Programme.

The successful experience of a trainee teacher during practicum depends on the trainee's commitment to the teaching profession, his interest in his students and his teaching subjects, and his attitude towards teaching and learning. Being a novice, he also needs the guidance and nurturing by his university supervisor and school collaborating teachers.

Trainee teachers are being assessed on **THREE KEY AREAS** of teaching during practicum:

1. Planning and Preparation.
2. Teacher – Pupil Interaction.
3. Professional Autonomy.

1. Planning and Preparation

- Clarity of purpose (goals, aims, objectives)
- Appropriate resources and learning experiences
- Documentation of curriculum plans
- Accurate and up-to-date content

2. Teacher-Pupil Interaction

- Initiation and presentation skills
- Management of individuals and groups
- Use of teaching materials and media
- Responding to pupils and their needs
- Pupil participation and initiative

3. Professional Autonomy

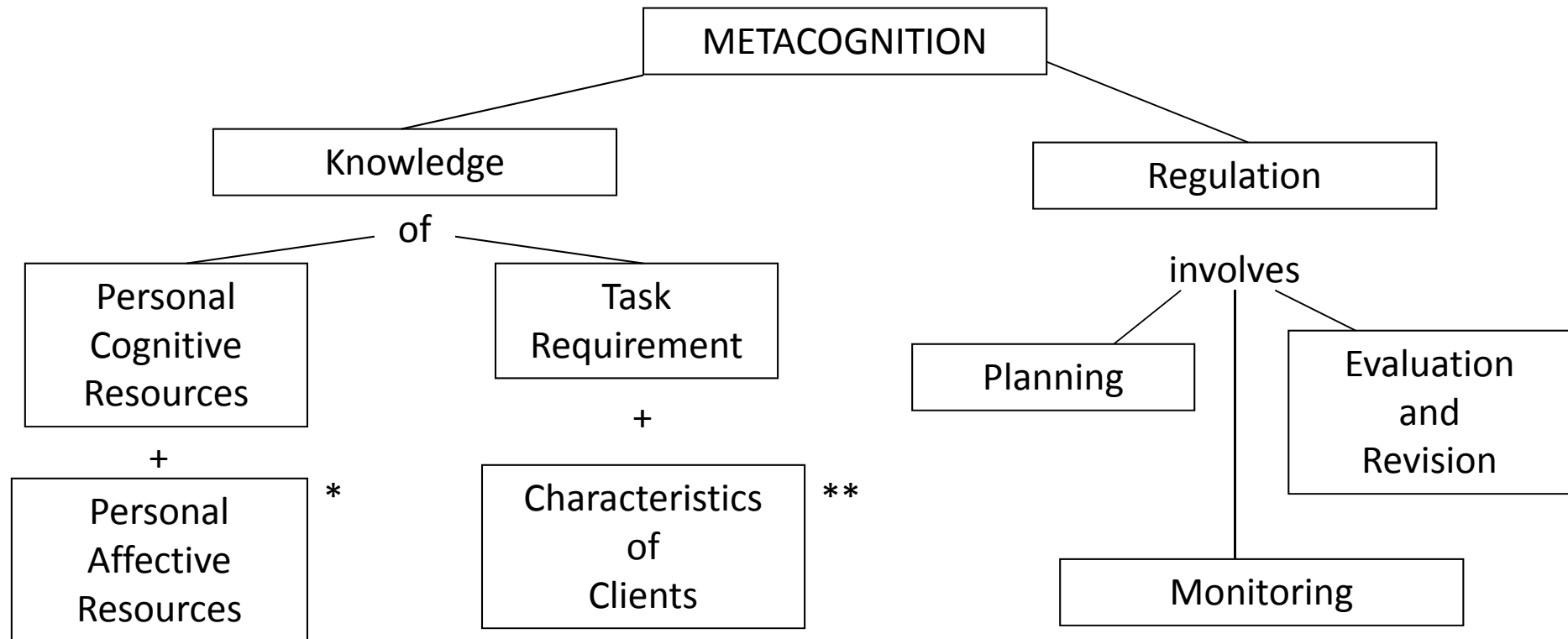
- Reflection and self-evaluation
- Developing a coherent approach to teaching
- Contributions to the school as a whole
- Independence in thought and action

Some experienced supervisors provide detailed step-by-step instructions to their supervisees before their first classroom encounter. While trainees tend to focus on the content of the lesson they are going to teach, experienced supervisors will wisely advise the trainees to spend time to think through, then plan and organize the lesson.

In short, the trainees should go through the metacognitive process in preparing their lesson.

Metacognition is controlled; it is purposeful thoughtfulness. The awareness, reflection, control and intellectual action that participate in metacognition enable us to think more effectively (Sternberg, 1998; Byrnes, 1996; Hyde and Bizar, 1988).

The Components of Metacognition



Schmitt and Newby, 1986

Chang and Ang, 2002 *

Chang, 2006 **

From the diagram on the Components of Metacognition, we can see that the metacognitive process of planning and organizing a plan consists of two parts:

1. Awareness of one's knowledge of the subject to be taught.
2. Awareness of one's own motivation, confidence, efficacy in subject, likes and dislikes for subject, students.
3. The cognitive demands and strategies required for the particular lesson.
4. Knowledge of the abilities, learning disabilities and learning behaviours of the students.&
5. THEN, plan, organize, monitor and evaluate lesson.

With the necessary knowledge of his own cognitive and affective resources, the demands of the lesson and the characteristics of the students, the trainee teacher can begin to design his lesson with some confidence of success.

Supervisors should have a pre-observation conference to check on possible oversight on the part of the trainee.

E.g.: A trainee planning to teach a first lesson on volume at Primary Four, using a two dimensional transparency is heading for disaster. He does not even understand the concept of volume.

- Cognitive coaching will guide the trainee into self checking, self-analysis and self-correction.
- It is appropriate to remind trainee during the pre-conference to monitor students' reactions to the lesson in order to make the necessary adjustments.
- At the post-observation conference, trainee should be prepared to do an evaluation of his lesson:
 1. The highlights of lesson
 2. The sections which require adjustment and revision
 3. Ways on how the lesson can be improved

- Supervisor may wish to alert trainee on oversights involving students' behaviours unnoticed by trainee.
- It is appropriate for supervisor to coach trainee on motivational strategies or pedagogical skills not in the repertoire of trainee.
- Trainee is encouraged to enter his reflection on the lesson in a journal.

If there are two or more trainee supervisees, it is often helpful to organize a group focus discussion to share problems and strategies. Self- assessment, self-analysis, self- correction and self proposed solutions to problems are often better remembered and provide a better sense of achievement and satisfaction.

Planning a lesson by going through the metacognitive process by both supervisors and supervisees together will be more meaningful and beneficial than allowing the trainees to experiment by trial and error without guidance. It is daunting and stressful if one is not confident of the results of one's efforts.