

LEARNING TO BE A TEACHER

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1

YOUR PROFESSIONAL LEARNING CONSCIOUSNESS

Having read this chapter, you will have an understanding of how:

- differing contexts you encounter can provide for your knowledge and learning about teaching
- your talk about teaching tells a story – developing a theoretical and practical language of enquiry and interpretation
- you can generate change in yourself through enquiry and self-observation
- to use scaffolding to manage your own tailored learning
- this lift in your cognitive and affective functioning supports you to generate your own responses to teaching and learning challenges
- you can transform your learning through a pattern of awareness, theorizing and interpretation.

The most important feature of this chapter is the individual focus on *your* learning to teach and why and how you can become a self-observing, self-regulating, enquiring, outstanding professional. Let us first consider the particular contexts in which you can develop your teacher self-awareness.

The contexts of your knowledge and learning about teaching

The education system, university and school context

The widest context of professional learning is provided in the teacher education curriculum that is the outcome of both society's and the education system's requirements for the preparation and on-going support and guidance of teacher-learners. The defined curriculum of teacher education is dependent on subject input, both theoretical and research, regarding knowledge acquisition and pedagogical awareness. It is generally provided in partnerships between university and school personnel.

Over recent years in England, the balance between the academic, university-led contribution and time in school settings has changed. According to their particular philosophy, government agencies endeavour to respond to the perceived value of education generally, through university teacher education and the training of individuals who will provide teaching for the children and youth of society.

An emphasis on teaching as learning *what* and *how* to teach, as a practical apprentice-type activity, primarily values time in classrooms. This results in proportionally less time in university settings to explore the pedagogical and research components of any curriculum subject. This constrains teacher education to accessing specific knowledge and understanding of the subject from academics who have made that knowledge discipline the focus of their intellectual lives. You also need to learn the psychology of how knowledge accessed this way can be used to plan learning for students. Knowledge cannot be transferred by osmosis from a subject expert, leaving you, as teacher-learner, to transform it into classroom teaching. Developing as a teacher requires expertise in both content conceptualization and organization; and responsive and relevant pedagogy for your students.

The personal professional learning strategies identified in Section 2 are not particularly concerned with what might be provided by academic subject specialists in the traditional content areas, such as mathematics, science, history, geography, language and literacy, or with the theoretical and research-oriented subjects of educational psychology, philosophy and sociology. Examples are ‘how the reading skills of specific learners are to be introduced, maintained and enhanced’ or ‘how the reading skills of reluctant learners are to be encouraged and reinforced so that they can access other curriculum subjects’. These: (i) would be a component of the pedagogy offered in an English language course in the university, (ii) could prompt an individually focused critical review by you as *teacher-learner*, and (iii) would be further clarified by you in a focus on effective implementation in your classrooms.

School-based requirements may be localized responses to national policy and curriculum statements. You can interrogate and interpret these with a view to integrating them into your range of teaching skills. You can use the professional learning agenda (PLA), set out in Chapter 4, to manage this process. Most primary and secondary schools will have a range of policies and programmes implemented across all classrooms and subject areas, such as the expected requirements of students’ behaviour. You will have these strategies available to you to respond directly to off-task incidents with learners and to social behaviour that does not conform to normal expectations.

There will also be classroom curriculum and management patterns, adapted by mentors and teaching colleagues, to which you will initially

need to adhere – for example, the development of teaching responses to learners who are exhibiting either significant success in a specific subject area or learners who have demonstrated that they require additional help and support. It is your responsibility not only to know about and to respond to such school initiatives, but also to develop a range of intervention strategies and approaches for use in specific instances with *your* learners that are congruent with stated school policies. An *enquiring, theorizing, interpreting and generating* strategy is useful in developing and extending your approaches. This will become more relevant as you learn to take increasing control of classroom management and teaching. You can ready yourself for these growing responsibilities by observing, interrogating and interpreting individual teacher responses. You can do this through informed listening to colleagues and children, and by generating potential initiatives that you have identified using your enquiry strategy (see Chapter 3, REACT).

The context of the classroom

The classroom environment is a very relevant and potentially productive context for your professional development. It holds the opportunity for you to personalize your knowledge and understanding of teaching and learning. You will want to go beyond being a copier to becoming an implementer who develops ways of responding to teaching and learning episodes; and to move deliberately towards having executive control of your professional development. You will want to investigate and theorize about potential approaches, strategies and skills that best fit your current levels of understanding and individual expertise in working effectively with learners.

What you interpret and understand from the observation of and discussions with informed others, such as colleagues and mentors, can provide a basic framework to which your evolving ideas and responses can be added. Eventually, your deliberations and elaborations will make this conceptual framework into a meaning-making tool or habit for you. An on-going personal agenda for learning how to learn and the associated concepts of what and how to teach, will provide you with a growing intellectual capacity and associated skills to make relevant decisions for yourself and the learners you teach.

The context of *self*

Questions you may ask yourself as you learn to teach include:

- How do I make sense of the order of the classroom?
- What is really happening here?
- Where do I fit comfortably?

- What strategies can support identifying and processing my current professional learning?
- What form of a professional learning agenda could provide a pedagogical resource for supporting my meaning making and my expertise in how to respond?

Some potential answers follow. Though you have spent a considerable proportion of your life in various classrooms, the immediate challenge on a school experience placement or first job appointment is to recognize the duality of your continuing roles in education. The first challenge is accepting the role of teacher, that is, someone who is responsible for creating, organizing and managing the continuing education of a group of learners. We refer to this throughout the book as learning the *what* and the *how* to teach. Your second challenge is to focus on *learning how to learn*, with the varied support of colleagues and course experiences. The enormity and immediacy of taking on these dual roles can seem overwhelming. How will you survive and grow? What content and skills, in planning, resourcing, teaching and behaviour management, will you need to acquire immediately? Once a professional learning approach has been identified and implemented, how might you continue to enhance it? What is there to observe and understand in this classroom? What are other teachers doing? How are the children responding? What makes or encourages the students to act in a certain way?

Observing in a classroom, your first impressions might be students seeming to work quietly and productively with only limited input and interactions by the teacher. Based on the *surface* interactions and engagements, everything seems to be running smoothly. Let us assume that the teacher presents a prepared introduction to the lesson, identifies or reminds students of some rules of how the learning activity is to be conducted, and then the teacher *wanders* around the room to check on individuals and small groups of learners. You see the teacher support learners who need additional help or guide those learners who need to extend the nature and complexity of the learning task. Is this what teaching is really about?

This may look like an easy process to follow, but ask yourself: what did the teacher prepare beforehand to make this classroom run with seeming clockwork precision? Had the management and monitoring of the learners required significant prior training time to achieve? How can you know when to intervene with a learner's task completion, or offer guidance or further support, as the teacher being observed seems to manage so easily? How is this seamless interaction between the teacher's work and the students' learning, and the associated task, arrived at in this classroom? How was trust in engagement in the activity built and maintained between teacher and learner?

At first, the many questions that classroom observation generates, may be confusing. You will become increasingly aware that to understand productive learning in the classroom it is necessary to consider principles and actions that have gone into creating this classroom environment. Your aim as a new teacher is to focus on developing insights, analyses and interpretations through paying direct attention to classroom learning processes. By critically analysing and interpreting these observations, you can to begin to identify some of these *beneath-the-surface* understandings. Learning, through observing and analysing the teaching of more experienced colleagues, can therefore become meaningful. In the analogy of a swan moving apparently effortlessly across a still pond, the water surface is calm with no visible disruption from the effort of energetic propulsion occurring below the surface.

In order to gather relevant information and make sense of complex classroom situations, you will need to develop a range of interpersonal psychological functions. These include listening and attending, discriminating, observing, recording, collating and acquiring describing skills to articulate what you observe. These are an *investigative set* of research skills which underpin *learning how to learn* in the social domain. As well as information gathering and organizational cognitive skills, you will want to apply higher-level intellectual processes of critical analysis in order to interpret, interrogate, restructure, critique, predict and synthesize your findings. In this book, the term *critical analysis set* is used to describe these enquiry and interpretive skills operating in the intra-psychological domain (see Vygotsky, 1978). Both of these sets of exploratory skills apply within the *syntactic* orientation of the professional learning curriculum, further explored in Chapter 2. These terms are used to represent each of these sets of professional learning skills. In this book, you will learn how to use these social and cognitive skills to create your evolving understanding of your teaching role.

To formulate relevant responses to teaching and learning episodes, you need to employ systematic, enquiry-focused and self-generating learning frameworks. By using these frameworks, you can create potential initiatives to be trialled, evaluated for possible modification, and tentatively included in your repertoire of teaching strategies. Such strategies for observing, analysing, enquiring, theorizing, interpreting, and the creation of the associated professional learning agenda, are covered in the chapters in Section 2 of this book.

Developing theoretical and practical language for professional learning

There is a perception in education that teachers, and by implication, *teacher-learners* and their mentors and colleagues, feel uneasy using

theoretical language for describing the practical functioning of classrooms (Campbell & Neill, 1994; Hancock, 1997; Marchel & Green, 2014). As professionals, we need to feel comfortable in describing and justifying, in theoretical terms, the practices and conventions of the educative process. To do this we use the language of enquiry and interpretation, and the application of scientific concepts that allow us to define, describe and theorize about the teaching and learning process, and the ways that our students learn. The terms we use must be precise enough for significant understanding to be interpreted, developed and communicated – for example, the range of skills in the investigative set of interpersonal, psychological functions that you will need for information gathering and meaning making in the classroom. These cognitive functions are an interrelated cluster of social, inter-psychological skills, and a number of these include observation and discrimination. They become the organizing foci for exploration in the following chapters. As a brief introduction to what is intended, let's consider *observing* as a task you undertake as a teacher and learner. Aids to observation and the associated processes will be found more fully in Chapters 3 and 4.

Observing in schools and classrooms is seen as a legitimate activity for *teacher-learners* to engage in. You want to feel prepared to make insightful and meaningful observations within the very busy classroom environment. You need to develop observation techniques so that you can accurately identify, describe and interpret the significant characteristics and connections. This observation process is not a skill that everyone possesses. You need to employ a level of analytical enquiry and interpretation that allows you to develop appropriate understandings about what you are actually seeing.

Recent constructivist approaches to teacher education emphasize observing and reflecting (after Schön, 1987; Crichton & Valdera, 2015). How can you listen attentively and discriminate between and among the characteristics and conditions that exist in the classroom? Skills of listening, discriminating, recording and describing form a cluster of pre-requisite skills for enhancing your higher intellectual processes.

Skills in critical analysis and interpretation are referred to here as the critical analysis set. They are also fundamental to developing effective understanding of the complex teaching and learning process. Your critique underpins discrimination between characteristics that, on the surface, may seem very similar. This critical analysis allows you to thoughtfully review your own involvement.

We need to be alert to the adequacy, for our professional purposes, of some concepts in everyday usage. One example is over-use of the labels *reflecting* and *reflection* for defining complex theoretical ideas and investigation of teachers' work. The concept of critical awareness we talk about

here is a more inclusive and detailed representation of the term *reflection* used by Dewey (1933). Later, Schön's (1991) description of the *reflective* practitioner entailed analysis, discrimination, interrogation, interpretation and evaluation. To better understand reflection, we want to be able to articulate and explore the constituent parts of the critical awareness needed. In this case, we want, and need, to know more about what our observed *teacher swans* do, to propel the learning of their students.

Generating cognitive change through enquiry

Higher-order intellectual processes within the individual domain include critiquing, re-framing, critical review and evaluation. These four processes are specifically described by their sub-set of intellectual processes. Critiquing, for example, involves the associated intellectual skills of analysing, interrogating, interpreting, synthesizing, inferring and generalizing. You learn to use these processes as you articulate, understand, interpret and theorize about your own involvement in professional learning activities in classroom and study contexts. Engaging with these cognitive functions provides you with complex and supportive enquiry schema. The concept of schemata is taken from Piaget (1952) who defined schema as cognitive or knowledge structures or mental maps. Later research by McVee and colleagues (2005) focused on Piaget's schema as a pattern of repeatable behaviour where experiences are assimilated. The resultant structure and connections lead to higher-order cognitive levels and more influential and authoritative states. The schema can be characterized as a basic building block of intelligent behaviour, a way of organizing knowledge that increases in number and complexity as an individual learns in a particular content domain.

You can maintain, extend and contextualize your professional learning as schemata as you seek underlying reasons and meanings from observed incidents in the learning environment. To find personal relevance in professional learning situations, you need to be directly involved in both the generation and control of your learning contexts, and the intellectual skills that you bring to this process. This is a personal recognition of the intellectual worth that you bring to teaching, and growing confidence in your ability to respond creatively to the education of your students.

In proposing a shift of control in learning from the provision of structured learning tasks to a strategy of conscious understanding and control by the learner, Bruner (1983) considers the concept of *scaffolding*, a concept which you can readily apply to your own professional learning. The metaphor of a scaffold is used to describe both the structure of the social interaction of the professional learning process, and the content and

process of the professional learning experience (Wood et al., 1976). Here the scaffold is in the form of the sequencing of the strategic processes that you learn to use. If a mentor or colleague is involved in a supporting role, then the strategic enquiry may be carried out in collaboration. Use of the professional learning agenda pro-forma (PLA in Chapter 4) provides the scaffold for considering your role in self-directing learning and understanding (much more on this practical tool later). When another teacher is available and involved, these concepts exist in the social and content interactions of the zone of proximal development (ZPD) (Vygotsky, 1978). An emphasis on involvement in, and management of, your own professional learning requires a change in the traditional way of working with an *informed other* (a mentor or colleague). Together these play a more supportive role in a collegial approach to interaction and communication in considering the scaffolding process. You should aim to establish a scaffolding framework of self-initiating and self-regulating learning strategies so that you are becoming the initiator and controller of a significant proportion of your own learning.

CONTRIBUTING IDEAS 1.1

Establishing a framework for self-initiating and self-regulating strategies enables you, the teacher-learner, to initiate, collaborate and control your professional learning.

Learning to become a critical inquirer and a self-regulating practitioner requires you to clinically and comprehensively review the conditions and characteristics that influence your engagement in both simple and complex learning situations. Your aim is to store knowledge in *propositional* form, rather than rely on experiential memory of encounters and strategic responses stored in the form of a case repertoire. As you progress, useful and applicable propositional knowledge derived from many situations can be analysed, interpreted and then synthesized into a description that defines a relevant teaching response to a situation. This current understanding will also represent your progress in applying the specific characteristics of critical review, and the perceived validity of your responses to the situation.

You are learning from studying real and relevant practical situations that are problematic, complex and open to a variety of interpretations from different perspectives. A pedagogy of learning and enquiry to enhance your

professional learning is focused on experiences where you can develop the attributes of critical analysis and interpretation, self-monitoring of your personal judgements and responses, and the ability to consider a situation from a variety of theoretical and practical perspectives. You are required to translate ways of thinking that are usually characteristic of one location of professional learning into another setting, and to ‘particularize abstract theories and to abstract principles from particulars’ (Leinhardt et al., 1995: 403).

Implications for understanding professional learning

The integration and transformation of the various types and aspects of professional knowledge require you to engage in systematic and focused observation, including self-observation. Thus, you come to perceive, articulate and theorize about the connections between these theoretical and practical perspectives of professional understanding. This awareness lifts your perception of both practical and theoretical relevance for your on-going learning and expertise.

For systematic self-observation together with critical analyses, you need to identify and develop enquiry strategies and associated intellectual skills. These *investigative* and *critical analysis* skill-sets qualify your evolving understanding of teaching and learning. You are driven to perceive the effect of theory on practice, and practice on theory. Using the framework of interpretative and theorizing learning processes facilitates your construction of responsive, integrated and generative professional knowledge.

CONTRIBUTING IDEAS 1.2

Using interpretative and theorizing frameworks brings structure to your responsive, integrated and generative professional knowledge.

You are refining the analytical and generative strategies that you can employ to develop responses to classroom encounters (Biggs, 1996; Vermunt & Vermetten, 2004). Your confidence as a teacher will build as you strive for a secure awareness of the contribution that you can make to your own knowledge and understanding of the teaching and learning environment. This awareness is founded on recognition of personal, self-generated successes in planning and teaching, rather than a less effective imitation of others’ programme and teaching responses.

CONTRIBUTING IDEAS 1.3

Teaching confidence is more likely to be built on personal, self-generated successes rather than from copying another's teaching.

The nature of teacher learning explored in later chapters parallels the features of learning development that were first theorized by Vygotsky (1978) in his socio-historical theory of intellectual development. The features of neophyte teacher learning are similar to the characteristics, conditions and processes that Vygotsky described as mediated activities of a zone of proximal development (ZPD). Most (but not all) of Vygotsky's ideas and theoretical perspectives are helpful in understanding and investigating the similar connections of the concepts and processes inherent in the teacher learning model in this book. These activities for your professional learning are found in later chapters that refer to the self-monitoring (REACT) process, the professional learning agenda (PLA) and critical review strategies (see Section 2).

Generative responses in professional learning

Over time, there has been a movement away from the idea of 'one grand theory of teaching and learning' that could be generalized across a variety of contexts and associated conditions (Biggs, 1996). The shift has been towards the articulation of a set of generalizations based on bottom to top, theorizing from research carried out within the context of teacher education. A conceptual framework is proposed for interpreting and extending understanding of the nature of the teaching and learning process. This framework endeavours to describe, order and characterize interpretative understandings of how *you* might learn to become an effective, responsible and responsive professional. Your professional learning programme needs to start with you, the teacher-learner, rather than from a set curriculum. Once you have been led into identifying and evaluating your individual, antecedent, current and potential professional learning, then a responsive agenda can begin to take account of each individual's needs and abilities (Darling-Hammond et al., 1995). Hence, self-regulation is a most desirable characteristic to develop and engage in as you gain executive control of your current and future professional learning (Manning & Payne, 1993). It is the application of a higher-order psychological process that will enable you to go beyond a superficial awareness of the contextual characteristics of your

teaching. You will see how cognitive and affective self-regulation also includes self-questioning, self-coping and self-reinforcing strategies. In self-regulating your learning, you will explore how new cognitive and affective behaviours can enhance a particular learning situation. You come to perceive the application of your newly-learned behaviours to anticipated future contexts. Your analysis of these learning episodes, contexts and outcomes feeds into subsequent action and responses, and in this way you can continually use your enquiry processes to focus on professional learning and improvement.

So, how might you use these enquiry, interpretative and generative processes? Consider 'learning through play' as an example? From your, possibly confusing, observations of learners engaged in open-ended play activities, you realize your assumptions about any learning directions for responding to learner behaviour should draw on a theoretical understanding of *how* students learn through play. Let's assume that your research and interpretation incline you to recognize the value of different play activities. So your subsequent planning needs to be enriched by juxtaposing theoretical and practical understandings in creating your lesson plans. You introduce a sequence of pedagogical responses to this professional learning initiative, over time. You develop critical review and interpretations to ascertain the relative effectiveness in matching play activities with students' involvement in learning. Your introduction of a changed learning environment is proving sensitive to both sequence and learner ability. You could substitute role play, scientific investigation, problem solving, and so on, for 'play'.

In a cyclical process, you identify – from differing teaching situations, professional learning initiatives, contexts and outcomes – and go on to develop behavioural responses (O'Brien & Hart, 1999). In doing so, you feel a positive motivational awareness through recognizing your need to know about, understand and apply processes of effective learning.

In summary, such cognitive and affective functioning can be identified in the inter- and intra-psychological phases (Vygotsky, 1978, 1986, 1987) of your development of a professional learning consciousness. In this way, your social (inter-psychological) and individual (intra-psychological) learning is interactional. It is within these interactions that you can seek and establish a scaffold of the teaching and learning schema and relationships for initiating your professional learning. As the professional development process moves forward, scaffolding support is not provided directly by an external source, such as a mentor or colleague, but rather by the conceptual frameworks that you are tentatively evolving and trialling. To acquire these interactive frameworks, the content, knowledge and skills patterns of these mediated strategic activities must be well structured.

Your critical enquiry skills are continually being honed through focusing on real classroom incidents. However, you should not expect to transfer responses directly from one classroom teaching event to the next. These insights are the tenets inherent in the enquiry strategy of the professional learning agenda (PLA, Section 2). This analytical process should convince you that teacher learning is multi-faceted; that you will need to build complex conceptualizations for your on-going professional development; and that you make connections between the activities and processes, theoretical and practical, of your teaching.

Learner-focused teacher development

Darling-Hammond (2000, 2006) writes of a need to respond to the call for reform in the education of all learners (children and teachers) to achieve higher levels of intellectual functioning and committed performance. Effective student learning requires skilled teachers who understand and apply the processes of learning to the strategies and skills of effective teaching.

To achieve these intellectual gains, teacher-learners need to:

- develop the learning and enquiry strategies to appraise and modify their own actions
- evaluate, anticipate and control the behaviours of learners
- differentiate the learning responses required to meet the learning abilities and needs of their learners. (Darling-Hammond, 1994)

Though the second and third points are significant foci for teacher learning, it is the initial proposition that has guided the development of the practical and researched strategies underpinning this book. Teachers need to know about and to incorporate new credible theories and research findings into their practice, and be aware that underlying theoretical support exists for their planning and preparation. You aim to possess, or acquire, the intellectual skills and understandings needed to enable you to articulate your planned teaching and to communicate your actions to others, including fellow professionals. In becoming an *inquisitive teacher*, you will be increasingly aware of new and theoretically grounded conceptual frameworks (or schemata) for thinking about and implementing these teaching and learning processes. These forms of knowledge and enquiry systems are developed through individual critical enquiry and in collaborative professional relationships for collegial problem solving.

To self-regulate your professional learning, you will need to learn how to evaluate, and be supported in evaluating, both your intellectual and

practical involvement with learners and the learning process, including understanding and extending what you are finding out from both theoretical and practical perspectives.

The key issue in engaging in your learning experiences involves more than the transformation of learning. Your learning experiences should involve collaborative interactions and empowerment of your actions and responses to the complexities of the teaching and learning processes that reinforce the concept of the professional as a learner. This is a concept of *learning how to learn* that can support teachers from the start of their teacher education and throughout their careers.

For example, purposeful observations can help to clarify the reasoning underlying any classroom activity. It is relevant to your critical review process for you to offer tentative suggestions about how you might have responded to observed incidents and to test your initial understandings in a follow-up discussion with the colleague you have observed (Wood et al., 1976).

Consider the following questions to support an observation process:

- How will the observation be recorded?
- What should you be attending to as the scope and sequence of the learning activity unfolds?
- How could you add interpretative comments during the recording? (This is an example of probing for clarification that goes beyond description, in considering the intensity and timing of an observed lesson.)
- In identifying the time frame of each section of the lesson, ask: is the timing or the pace of the lesson's sequencing particular to this group of learners and individuals at this specific phase of their learning?
- Is a concept of pace or keeping to an exact time sequence transferable to another learning context or is it directly dependent on the learning abilities and needs of the given group?
- Is it necessary to observe and record the lesson in its entirety or is it more appropriate to concentrate on specific sections of the lesson for closer focused attention?
- How should your observations be detailed for later interrogation and interpretation to enable your on-going adaptation and application?
- How could observations be modified and reframed to benefit *your* future teaching experiences?
- What or whose purposes were being served?
- Would the observation of specific, identified and relevant segments of the lesson focus, help in later discussions between you and a colleague, for example your mentor?

- What does it mean to critically review?
- How is it possible to understand, interpret and evaluate your review outcomes?
- What is the purpose of discussions of school organization and procedures with school administrative and teaching personnel?

Addressing the list of questions above may challenge you in identifying the significant learning that you encounter in an observed practical situation. This list focuses primarily on being able to *see* how colleagues operate with their learners, whereas in Chapter 3 (REACT) the emphasis is on self-observation. It may be interesting for you to juxtapose these different types of observation to develop more insightful information-gathering processes.

You need to be able to relate these observation skills to the academic component of your teacher education. Your experiences on university-based courses and in schools can support the careful scaffolding and articulation of relevant, interconnected knowledge and understanding through critical enquiry. There have been increasing initiatives during the last two decades to help you make connections to alternative models of teacher education that have an enquiry focus or are research based (see, for example, Goodlad, 1990; Holmes Group, 1990; Reid & O'Donoghue, 2004; Williamson & Morgan, 2009). The value for you in understanding your teaching and learning comes from this occurring as enquiry-focused experiences in both school and university contexts.

It is only after you are proficient and committed to your application of such cognitive processing that you will feel free to seek more involvement in the decision making associated with professional learning. You will still appreciate and be mindful of the support and guidance offered by informed others, but importantly you will also recognize your evolving expertise in self-managing and self-regulating your professional learning, which can subsequently support your early teaching years.

So, what do you need to succeed in becoming a self-regulating and self-coping teacher during your initial teacher education programme and thereafter? The traditional focus of beginning teacher learning has been on the acquisition of subject-specific knowledge and skills. You are required to plan, initiate, teach, manage and assess learning programmes that are responsive to learners' abilities and needs within your planned classroom placements. However, knowledge and understanding of the complexities that exist in the teaching and learning process still need to be acquired. What has not been regularly featured, or is perceived as being incidental to those teaching and learning activities, is the enquiry-focused learning necessary to function as a self-initiating learner.

However, if new teachers are to carry increasing responsibility for their own professional education, then it will be necessary to acquire the knowledge and skills to do so effectively and relevantly early on in their professional development. So, during your teacher education programme you should aim to develop the intellectual tools that you need to identify, plan, interpret, monitor and reframe your own personal educational learning needs and potentials (McKay & Kember, 1997). The subsequent executive control that develops as you are involved in such processes enhances the possibility of this level of self-directedness being transformed or re-created in future learning opportunities.

When practical and theoretical experiences are associated with significant learning, these need to be mindfully managed in provocative, though supportive ways. It is not sufficient to simply equate experience with learning or that learning or development can be expected to derive readily from it without focused instruction and guidance. You need to characterize your professional development process as one of on-going and expanding empowerment. Your professional learning, when perceived in this way, is a self-monitored enhancement, rather than continually dependent on the role of a facilitator, be that person a mentor teacher, a member of university faculty or, ultimately, your school management team.

CONTRIBUTING IDEAS 1.4

Acquiring intellectual tools to interpret, monitor and reframe your personal educational potential will empower you now and throughout your career.

Your accumulated teacher-learner consciousness and your continuing confidence to be able to identify, articulate and respond appropriately to the specific teaching and learning issues, powers your evolving understanding, expertise and application.

It is difficult for informed others (teacher educators, mentors or peers) to understand all the relevant antecedent experiences and knowledge you have and are acquiring as a teacher-learner. Therefore, it is important that you undertake a comprehensive inventory of these pre-requisites of your professional knowledge and current expertise. Doing so will focus your expanding awareness of what you know and can apply in the classroom. Effective professional learning can take place when you are developing an attitude towards openness, and a cluster of interrelated cognitive processing skills that will enable authoritative analysis, interpretation, self-evaluation and self-generation of teaching and learning responses.

The five-phase self-monitoring process (REACT, Chapter 3) and the professional learning agenda (PLA, Chapters 4–6) with its associated enquiry-focusing and response-generating questions, have been created and researched to support these processes. Be aware though that what you already know, or believe, can have a biasing effect on your acceptance of *new* information or learning experiences. Try to see the existing conceptual framework where your knowledge and skills are considered as being a tentative representation at that developmental point in your professional learning journey. This pre-existing knowledge and understanding can be interrogated so that the ways in which they may influence future learning responses can be recognized, reframed and utilized. This applies to your awareness of curriculum and pedagogy that made sense earlier but now provides useful foundational bases for deriving alternative pathways of individual enquiry and interpretation.

Transforming learning: the social and intellectual planes of your teacher-learner consciousness

Though the primary objective of this book is to provide you with personal strategies for engaging your professional learning, you may be collaborating with a university or school mentor or colleague. This may create situations of critical learning dissonance or incongruity between what you have learnt previously and what is currently the focus of the learning environment or situation. Initially, this may seem confusing, but this dissonance may be an appropriate context for creating analytical processes for interrogating and interpreting your individual perspectives and pedagogical practices (Lange & Burroughs-Lange, 1994). Transformation of your learning occurs as your knowledge and understanding move from the social, inter-psychological phase of consciousness, to the individual, intra-psychological plane. Initially, you use these learning skills to identify, collect, organize, categorize, critically review and interpret. Subsequently, you come to use the acquired theoretical and practical knowledge and understanding within an expanding realm of *teaching consciousness*. You are moving through enquiry processes from the social to the interpretative, intellectual domain of your teacher learning.

If the fundamental objective of the school experience placements, within the teacher education curriculum, is to support the transformation of teacher-learners' learning, then enquiry activities that will guide the neophyte teacher to develop theoretical understandings about the associated practice of teaching need to be developed. Such activities will demonstrate and clarify the theoretical or conceptual frameworks that teacher-learners use to understand and extend their own knowledge and

related practice. They may also be closely associated with the educative dialogical interactions that may be engaged between the teacher-learner and an informed other. So, let us continue with a discussion of the transformation of such learning if, on some occasions, other professionals are available to this educative process. It is important that you are aware of the tentative and evolving nature of these conceptual, interpretative and generative frameworks so that you continue to have an open mind to encourage further interrogation and enhancement. Your professional learning depends on detailing a personal agenda that identifies initiatives around individual strengths and weaknesses in knowledge and skill development. You need to be precise regarding the terms that you use to describe and theorize about the interpretations of your and others' practice and the related explanations. The preciseness of your articulation, using a shared *language of enquiry and interpretation*, is a significant factor in expressing this professional learning agenda.

The characteristics, patterns and actions of the ZPD-like interactions within your teacher learning will provide both the content and processes by which you will transform your understanding and internalize from the inter-psychological to the intra-psychological planes of learning consciousness. Getting to recognize your stage of development, *knowing where you're at*, will mean, at some times, together with your tutors and colleagues, that you will want to try and determine whether you are using syncretic, complexive or conceptual descriptions to illustrate your knowledge and understanding. Higher-order psychological functions that you are coming to know and able to use to, for example, enumerate, interrogate, interpret, create and respond, conceptually support the enhancement of your understanding. These functions operate within the internalization and integrating processes of the intra-psychological, the intellectual phase of consciousness. The patterns of awareness and theorizing that exist between these two levels of social and intellectual functioning support your development and articulation of professional learning and understanding.

You want to be able to verbalize your thoughts and feelings about your involvement in the teaching and learning process and present these openly for scrutiny by fellow professionals. It is thought-provoking activities of this nature that will heighten your awareness of the meta-cognitive processes that you use to initiate, guide and verbalize personal enquiry. Both the five-phase self-monitoring process with its focused questioning at each of the phases, and the individual critical analyses, re-construction and focused responses of the professional learning agenda, are intended to provide the learning framework for the critical awareness processes articulated above. They each provide the intellectual structure and scaffolding for your teacher learning within a meta-cognitive orientation (see Chapters 3–6).

You can develop such meta-cognitive learning skills while engaged in individually focused, enquiry and response, generating strategies, but also in dialogical interactions with a colleague or mentor as learning ideas and situations are analysed, interpreted and theorized about. Then you can use conceptual and experiential frameworks for interrogating, interpreting and applying concepts and processes in the future review of your own teaching and learning behaviours and interactions in the classroom.

Your unifying experiences that are based on theorizing, generative and self-regulated principles, are not seen as only occurring at the time of a school experience placement, nor focused only on learning activities that might take place in this context. You should seek opportunities for the application of associated enquiry strategies when accessing and developing knowledge and skills within your university-based courses. The notion that teaching and learning responses are multi-faceted and not knowledge-domain-specific should be reinforced as a condition of learning at all stages of *your* professional development and within all your learning contexts. Therefore, you should continue to search for ways of linking elements in these processes of your teacher learning more widely.

This exploration of a teaching consciousness has endeavoured to provide insights into how knowledge might be acquired, with understanding of your own cognitive processes and the variety of ways that learning can be enhanced. You must respond to your own meaning making from within your own teaching behaviour through the framing of problems and the identification, integration and synthesis of information and active enquiry. This requires a professional learning agenda in which activities are engaged in challenging ZPD-like processes that enable you to be increasingly involved in the structuring and development of your personal professional learning process.

The teaching and learning process can be conceived as being reciprocal, complex and contingent (Darling-Hammond et al., 1995). Teacher learning is reciprocal in that it is intimately linked to being responsive to your current abilities and professional needs, as well as to being appreciative of potential areas for development. Professional learning is complex in its content and processes as it is dependent on many knowledge bases, such as subject content, subject pedagogy and general pedagogy (Shulman, 1986). Professional outcomes can be accomplished by seizing 'opportunities for directing one's own learning, being receptive to inquiry, and challenging one's own ideas to construct new knowledge' (Darling-Hammond et al., 1995: 220). This research literature reflects the components and interrelatedness of the learning framework, proposed by Darling-Hammond et al. (1995) and extended by Biggs (1996). These researchers prompted the authors' development of and research into the use of the tools in this book.

The tools have their foundation in self-regulation, multi-dimensional enquiry and the potential for dialoguing with like-minded colleagues. They encompass a learning process that must be multi-dimensional, not linear. The emphasis here is on the teacher-learner's self-regulation of their professional learning. The role of colleagues, school or university-based, is also valued to support and guide the teacher-learner in constructing understanding that makes it transformative, rather than just transferring what might be perceived as *correct* understanding and techniques. You will be in control of a learning approach that is both responsible to the needs of society and the profession, and responsive to your individual learning agenda now and in the future (Edwards, 1995).

The above discussion has identified learning perspectives divergent from an approach that insists on the tabula rasa nature of the teacher-learner's experience that may be based in behavioural theory and the notion of transfer of knowledge. This book acknowledges that the social context contributes to learning (Hansman, 2001). Situated learning – in this case, the classroom and school environment – emphasizes the specific setting and the mediated activity as dialectically integrating you, the techniques and strategies of enquiring and interpreting, and the context within a professional learning episode. Proponents of situated cognition (Lave & Wenger, 1991; Rogoff, 1995; Lave, 1996; Korthagen, 2010) suggest that learning does not happen in independent isolation or just inside the mind, but instead is shaped by the context, culture and strategies in the learning situation. Brandt et al. (1993) gave us the concept of a *cognitive apprenticeship* in professional learning. This accords with the focus of this book, where the emphasis on your teacher learning, in both university and school settings, will have equipped you to continue to transform the content and processes of your teaching and learning through observation, interrogation, interpretation, critical analysis and generative response. We believe that you will be better prepared to theorize about and regenerate your practice rather than merely hoping to survive when you first enter the classroom. The generation of critical knowledge bases that are robust and symbiotic will promote you as a prospective teacher through all the professional learning experiences. This belief is in accord with Doll (1989) who suggested that a postmodern *teacher as learner* is one who considers the complex, chaotic and finite world of contemporary teaching and learning ideas and practices. Doll (1989: 250) conceptualized this as a process of development, in which the principles of enquiry, interpretation and creativity take over the direction and scope of the programme design process.

Earlier in this chapter, we explored the professional language of interpreting, interrogating and investigating teaching and learning, and the 'scientific' concepts that are used in academic learning environments to

provide the content and meaning pathways that can be internalized by the teacher-learner (Vygotsky, 1978, 1986, 1987). The learning activities that engage the phases of consciousness included models, collaborations, observations (including self-observations), dialogues, challenges and self-questioning. A number of these activities benefit from the application of a language of enquiry and interpretation, that is, with pedagogy. The preciseness of an acceptable language of learning will provide professional legitimacy to your educational endeavour, for your self-managed coping in the theoretical and practical complexities of classrooms, and in effectively communicating these understandings with authority to other professionals and policy makers.

So, there is a constant need to focus your professional learning through conceptualizing learning strategies and challenging questioning to create situations of professional uncertainty that will require you to seek thoughtful resolution (Lange & Burroughs-Lange, 1994). The levels of your teacher-learner understanding and development are dependent on your control and on the complexity and intensity of the challenging teaching and learning initiatives to which you respond (Feiman-Nemser, 2012).

The literature associated with the concepts of dissonance and psychological distancing may also be explored in identifying and explaining the conditions and the characteristics of challenging learning episodes and the initiatives that can be derived from them (Festinger, 1957; Cooper, 2007). Understanding the sequencing of challenging learning experiences is an essential professional pre-requisite for teacher-learners who are attempting to move their understanding and expertise from a comfort zone of operating with limited thought, towards challenge and application at an individual's level of potential development and relevance. A number of questions to help us think about the extent of this personal enriching process include:

- How can you develop the knowledge and understanding for selecting and sequencing procedures as you engage in school, classroom and university experiences?
- Should you, as one who is assuming increasing control of your professional learning, also develop selecting and sequencing skills for identifying and engaging with developmental strategies?
- Is it important for you to comprehend the description of the optimal behaviour to be achieved by you?
- What role does learning dissonance play in achieving your cognitive change?
- How does the structure of the learning experience increase the potential for your success in meaning making? (On these last two questions, see the *what* and the *why* of the PLA process, in Section 2.)

- If the complexity of the learning sequence is targeted beyond your potential developmental level, can any worthwhile learning be achieved? This is relevant if the teacher-learner overreaches their ability to comprehend.

The answers to these questions might only provide a limited understanding of the role that challenging learning situations and activities might play in the enhancement of your meaningful learning. But they might provide you with further opportunities to delineate the selecting and sequencing processes for developing well-structured and challenging professional learning strategies. The engagement of the ZPD-like process for focusing on a particular initiative of professional learning establishes an investigative orientation that accepts rather than rejects difficult learning experiences and situations, and so values the construction of a set of idiosyncratic responses to a perceived professional learning issue. The descriptions above regarding pedagogical conversations, self-dialogue and critical dialogues with colleagues, including mentors, have been further enhanced by linking the discussion to the conceptions of *critical dissonance* and *collaborative resonance* offered by Cochran-Smith (1991).

Through the discussions in this chapter, it would seem that in learning to teach, practice may *not* make perfect, if it merely reproduces a set of teaching practices that are founded on somewhat limited conceptions of learning and cognition. Learning to teach needs you to discard concerns about fitting in, or copying existing practices unchallenged. More importantly, the emphasis turns to the *transformative* rather than a *reproductive* nature of practice. As the quality and expertise of your teacher-learning change, so too does the context because you have changed. The converse would also be true, but much less profitably for that professional.

Professional learning characterizes knowledge as an interactional phenomenon between the individual and the situation, and as enquiry strategies through which this interaction contributes to the reorganization and reinterpretation of both. In this way, the notions of learner and learning that are situated within a particular context can also be recognized as part of that context. As you learn, so the context of learning changes and so do your learner identity and social and intellectual characteristics. In this interactive relationship, learning may be considered as being intricately and completely dependent on the context rather than as the outcome of direct causal and linear conditions and directions. Davis and Sumara (1997), in drawing ideas from Bateson (1987) and Varela et al. (1991: 105), have called such a relationship of learner, context and learning, an 'enactivist theory of cognition' (see also Davis & Sumara, 2002). There are clear implications for neophyte learning:

this notion helps us to rethink what it means to teach and to interpret the difficulties of enacting alternative conceptions of teaching. The oft-noted problems of taking on teaching actions that are known to be inappropriate and, of coping with tacit pressures to behave in particular ways can, for us, be better understood through ecological rather than a monological basis of action. (Davis & Sumara, 1997: 112)

Davis and Sumara's enactivist theory of cognition tends towards a hermeneutic perspective (Habermas, 1987) that favours a more holistic, all-at-once, co-emergent programme of learning that may be defined by the circumstances of multiple realities and serendipity, rather than being responsive to pre-determined learning objectives.

From this perspective, cognition is thus understood as a process of organizing and re-organizing one's own subjective world of experience, involving the simultaneous revision, re-organization and re-interpretation of past, present and anticipated actions and perceptions (Davis & Sumara, 1997: 109).

Cognitive change is engaged in this manner because 'teaching, like any other collectively situated experience, occurs in wholly embodied contexts that in some way must cohere' (Davis & Sumara, 1997: 113). Relationships existing among the supporting functions of cognitive change, the process of teaching in the creation and maintenance of cultural perspectives, and learning were identified earlier by Bruner (1986). Bruner suggested that in order to understand the relationships between concepts and processes of teaching and learning as pervasive, co-emergent and evolving practices within a culture's self-renewal and self-organizing procedures, it might be necessary to blur the defined boundaries between schools and universities. Therefore, he believes in a collaborative, educative, cultural environment where the teacher-learner uses self-enquiry strategies to understand the social milieu of the teaching and learning process. Within this book, the focus is on the processes of self-observation, analysis, interpretation and generation of responses, and we endeavour to provide enquiry skills for these purposes.

If you are empowered in the ways presented in this book, you will be protected from what Richardson (1990: 16) has fears of becoming: 'victims of their personal biographies, systematic political demands, and ecological conditions, rather than making use of them in developing and sustaining worthwhile and significant change'. You have an opportunity not only to begin your own teaching career, but also to be part of significant change in the education of young people in your charge and the school institutions in

which you work and lead. Look to the long term as well as to the immediate challenge of learning to teach.

FURTHER READING

Korthagen, F. (2010) Situated learning theory and the pedagogy of teacher education: towards an integration view of teacher behavior and teacher learning. *Teaching and Teacher Education*, 26(1): 98–106.

Korthagen provides a three-level model of learning that can be used to analyse the friction between teacher behaviour in practice and the intention to ground teachers' practice in theory (Lave & Wenger, 1991). It reconciles the situated learning perspective with traditional cognitive theory and leads to concrete implications for the pedagogy of teacher education.

McKay, J. and Kember, D. (1997) Spoon feeding leads to regurgitation: a better diet can result in more digestible learning outcomes. *Higher Education Research and Development*, 16(1): 55–67.

A case study of a course which originally relied on memorization but was altered in order to incorporate more clinical reasoning, problem solving and analytical judgement, through the use of case studies, role play and student-led seminars.

Williamson, D. and Morgan, J. (2009) Educational reform, enquiry-based learning and the re-professionalisation of teachers. *The Curriculum Journal*, 20(3): 287–304.

The implications for teacher education and continuous professional development of enquiry-based learning are explored. It is suggested that adopting enquiry-based practices is partly influenced by teachers' own narrative pathways, and by professional biographies. The focus is on teacher re-professionalization in the context of enquiry learning.