

Lesson planning and the student teacher: re-thinking the dominant model

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Rationalistic, technical curriculum planning has been the dominant model underpinning student teachers' lesson-planning for a generation or more in England and Wales. In recent years, this process has become embedded in documents that direct initial training. The paper argues that this model leads to a limited view of teaching and learning as well as a restricted approach to learning to teach. Building on recent developments in socio-cultural theory, an alternative, dialogical model of lesson planning is offered which not only emphasizes context-dependency but also sees planning itself as a practice. This process is the key to developing reflective engagement across the different phases of the professional learning cycle

Introduction

In virtually every teacher-preparation programme considerable time is spent teaching novices how to write detailed lesson plans; however, when they begin this process for themselves, their responses are quite diverse. For some, the encounter holds creative possibilities; for others, it is a brick wall of bewilderment and anxiety. Why is developing and constructing lesson plans so difficult to learn as well as teach? Perhaps the answer lies in the fact that the predominant model demands a linearity of thinking that does not necessarily exist. Furthermore, although a variety of lesson-planning formats and approaches are recommended for use, few of the formats are derived empirically. The purpose of this paper is three-fold: first, to stimulate critical thinking about the dominant approach used in teacher preparation in England and Wales; secondly, to compare the dominant model with research into the lesson planning of both novice and experienced teachers; and, thirdly, to suggest an alternative dialogical model of lesson planning where constructing a product (the plan) is seen as secondary to the representation of the planning problem (the process).

The dominant model

The use of the linear model, which begins with the specification of objectives and ends with a lesson evaluation, pre-dates the current emphasis in the UK

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on external accountability in teaching and teacher education by more than four decades. The approach has in fact been a pervasive feature of curriculum and lesson planning since the early 1950s, although it gained greater prominence during the curriculum and pedagogical reforms of the 1960s and 1970s. This rational approach to planning owes a great debt to instrumental interpretations of Tyler's (1949) *Basic Principles of Curriculum and Instruction* written in 1949—amazingly now in its 41st edition—and to other theorists who constructed variants using both extended taxonomies of learning outcomes (Bloom 1956) and more sophisticated constructs around instruction (Gagné 1970, Popham and Baker 1970).

In recent years, the attempts to reform the teaching profession and to restructure formal teacher education in the UK and across the world has meant an increasing emphasis on the importance of competence on the part of student teachers in the skills of curriculum design and lesson planning. In England and Wales, for instance, various official documents from the Department for Education and Employment (DfEE), the new Department for Education and Skills (DfES), and the Teacher Training Agency (TTA) stress the importance of being competent in skills before 'qualified' teacher status can be awarded. The *Professional Standards for Qualified Teacher Status* published by the Teacher Training Agency (DfES 2001: 9) require student teachers to demonstrate that they can 'set challenging teaching and learning objectives' and use these 'to plan lessons and sequences of lessons, showing how they will assess pupils' learning'. Additionally, they must show the ability to 'select and prepare resources, and plan for their safe and effective organization, taking account of pupils' interests and their language and cultural backgrounds'. These demands have been embedded in numerous documents issued by the DfES. The Key Stage 3 National Strategy for science, for instance, suggests the following format:

- Objective;
- Vocabulary;
- Resources;
- Starter;
- Main activity; and
- Plenary.

Institutional templates vary; however, there are common threads and figure 1 presents a typical, if truncated, example.

It is also worth noting that these admonitions are part of a broader emphasis on Outcomes-based Education (OBE),¹ and this nexus is part of a thread of ideas stretching back over a century or more. The terminology may change, but the essences remain the same, hence the National Curriculum framework with its programmes of study, its standards, targets, and levels of attainment. Embedded within the TTA and DfES requirements are a series of injunctions that insist that learning outcomes should be the same for all students—operationally defined as exit behaviours and measured against a system of national bench-marking (Elliot 2001).

The emphasis on OBE has also led to teaching based on a restricted set of aims, which can in turn misrepresent the richer expectations that might emerge from a constructive and creative use of curriculum documents. This,

Name: Placement:		Lesson evaluation: Date:	
Objectives			
Timing			
Grouping			
Differentiation			
Whole class			
Assessment of outcomes			
Successes		Action plan	
Difficulties			

Figure 1. A typical lesson-planning template.

it appears, is more prevalent when assessment is externally-mediated. As a result, OBE can de-emphasize the elements of teaching and learning that are not endorsed by the assessment structure. In this sense, OBE runs counter to the rational planning model, which is predicated on the idea of getting greater alignment between objectives, classroom practice, and evaluation (Barnes *et al.* 2000).¹

However, the endurance of Tyler's (1949) model, and its popularity among teacher educators, curriculum consultants, inspectors, and classroom teachers, suggests a deeper affinity that goes beyond the prevailing political climate. Much of the attraction of this approach to planning lies in its elegant simplicity. Supporters ask questions similar to the ones posed by

Tyler (1949): How can we know if we have achieved our aims if we have not specified them clearly in first place? How is it possible to analyse the process of teaching and learning unless we break it down into all its component parts? How can we design, plan, or implement anything if we do not go through the rational cycle of formulating objectives, deciding on strategies, selecting resources, organizing activities, implementing delivery, and evaluating the results? At root then, Tyler's (1949: 25) framework and numerous copies of it are structuralist in conception—Cherryholmes (1988) contends that they are 'based on a systematic way of thinking about whole processes and institutions whereby each part of a system defines and is defined by the other parts'.

Essential to such a systems approach is the distinction between ends and means, often expressed in planning in the language of aims, objectives, and goals on the one hand, and strategies, methods, and tactics on the other. Of central importance is the notion that any system is part of a hierarchy of supra-systems and sub-systems, and that such systems can be regulated through constant and meaningful feedback. 'Softened' systems theory, which emerged in the teaching profession in the 1980s (Squires 1999), introduced new concepts into the then-prevailing educational discourse, terms such as synergy, interaction, equilibrium, and 'equi-finality'. The idea of 'feedback', for instance, was seen as more meaningful than the harsher more behaviourist 'knowledge of results', but they are synonymous. In teaching, the concept of 'system' has found its clearest representation in the emphasis on precise, observable, objectives and outcomes in the curriculum, linked by step-by-step approaches to planning and teaching. These sequential steps are outlined below.

Step one involves the selection of the topic or component of the subject to be taught. This subject-matter source, along with the age and ability-range of the pupils, are the major factors in the early consideration of appropriate aims and objectives. These early considerations are also linked to broader social or educational goals, usually in the guise of a National Curriculum (as in England and Wales). *Step two* focuses on the exemplification of aims and objectives, both of which should be linked to wider curriculum considerations. During this step, more precise learning objectives or goals are specified as pupil learning is operationalized into these objectives, which are often drawn from a combination of cognitive, affective, and psychomotor domains and taxonomies. *Step three* involves the preparation of the content to be covered and a consideration of the teaching methods and learning experiences that will best bring about the accomplishment of the set aims and objectives. These usually coalesce into activities or tasks based on the types of methods adopted. Here the lesson plan is broken down into chunks or segments defined by time and activity, with the necessary materials and resources usually prepared together. In *step four*, an assessment process is planned (as is an evaluation sequence) so that the efficacy of the teaching methods and activities can be gauged against the set objectives. Thus, all the steps in the model lead to or emerge from the aims and objectives in a linear, rational ends-means sequence.

Despite the attraction of such a process, much depends on its *use* by student teachers at the various points in their professional learning. Thus,

the model does not take into account the contingencies of teaching. Plans constructed according to the rational model may look fine on paper, but classrooms tend to be more uncertain places: time-pressures, organizational issues, attitudes, moods, emotions, and serendipity all impinge on the closed structures implied in the model. In fact, the negotiated nature of learning needs to be added to the planning equation if spontaneity and improvisation are to be allowed. Furthermore, means and ends are isolated as successive steps rather than being seen as part of the same situation. This can result in ends being seen as unchanging once their definition is complete, and only open to minor revisions once the teaching and learning process begins.

Finally, while accepting that the systems approach to planning and teaching is a powerful generic idea, it tells us very little about the substance of the particular activity we apply it to. In sum, it does not say enough about the uniqueness of teaching and learning. Used badly, such planning patterns can lead to a progressive disaggregation: teaching and learning are broken down into segments or key elements, which are then sub-divided into tasks, which are further broken down into behaviours and assessed by performance criteria. As a result, opportunities for self-conscious reflectiveness (Bruner 1996) are in danger of being lost as items of knowledge are parcelled together by well-written objectives.

So, why has the dominant model maintained its popularity? First, it is claimed that student teachers need to know how to plan in a rational way before they can develop more complex lesson structures and become adept at juggling curricular elements. However, it should be remembered that gaining experience and expertise is complex, and interactive teaching requires planning that is flexible and practical from the outset (Kagan and Tippins 1992, Calderhead and Shorrock 1997, John 2000); experienced teachers learn to juggle the classroom variables almost separately from the planning process (Peterson 1978). Secondly, it is believed that students *need* to follow the model because the National Curriculum and various standards documents require them to do so (DfES/TTA 2001). This suggests that students are being prepared for teaching *as it appears to policy-makers*; experience tells us that classroom teaching is far more complex and differentiated than policy-makers would have us believe.

Thirdly, it is often pointed out that the model and its associated formats can help to overcome the 'loose-coupling' (Weick 1976) that often exists between schools and higher education institutions. A unified agreed-upon model creates congruence between sites and the personnel involved in delivery of courses, while simultaneously creating greater equity in terms of student teachers' experiences.

Fourthly, and most controversially, it can be argued that the use of the rational planning model reinforces a sense of control. It is easier to manage, assess, and direct the process of teaching if all student teachers are required to plan according to the same procedure and format. It, therefore, follows that lesson planning is based on prediction, and to some extent prescription. However, even those with a minimal knowledge of classroom life realize that pupils' responses create an ever-changing dynamic for teaching—one that is in no sense predictable or 'prescribe-able' (Ben-Peretz 2001).

Research on teachers' planning

Despite the apparent ubiquity of the dominant model, there are alternatives. One of the most prominent has been the 'naturalistic' or 'organic' model based on the work of Stenhouse (1975) and Egan (1992, 1997). They claim that the mismatch between specific objectives and the complexity of classrooms means that teachers need to consider more naturally-emerging planning structures. The endemic uncertainty of classrooms (Lortie 1975) mean that statements of objectives can only explain and connect with a small number of the variables that are typical of classroom interaction. Naturalistic planning, therefore, involves starting with activities and the ideas that flow from them *before* assigning objectives. In this way, lesson plans are perceived to be responsive to children's needs and the teacher can pursue goals that are emergent rather than pre-determined. These organic models see objectives as flowing from a cyclical process and are viewed more as symbols—advertisements even—for lessons.

Another approach to planning is the 'interactional method'. This stresses the interactive rather than the discrete character of objectives. Here, learning embedded in the processes of interaction is preferred to the more tightly focused structural approach inherent in the rational model. The emphasis on form is central, which is based less on the outward shape of a lesson and more on a set of graded principles which change during interactive teaching. (This emphasis on form is in contrast to the stress on the mechanics of planning implied in the rational model.) Alexander (2000) likens interactional planning to the structure of a musical performance where the composition or score is analogous to the lesson plan, and the performance itself shifts according to interpretation and improvisation.

These alternative models apart, a number of syntheses of the research literature on the processes of teachers' planning are also available (Clark and Lampert 1986, Clark and Peterson 1986, John 1991). A notable finding relates to teachers' perceptions of the key elements in the curriculum—teacher, learner, context, resources, and methodology—and the powerful impact these have on their approaches to planning. Characteristics such as the length and type of experience, the levels of subject and pedagogical knowledge, teaching style, repertoire, and perceptions and knowledge of pupils all influence the planning style adopted (Zahorik 1970). Most teachers, it appears, also consider the nature of the content and activities before they consider other curricular elements, even though pupils might seem to be their central concern (Peterson 1978, Clark and Lampert 1986). Experienced teachers' planning can be best described as a simultaneous consideration of the above elements, rather than a step-by-step or linear progression of decision-making. And planning also occurs during the interactive phases of teaching as the teacher reflects on situations as they arise and plans ahead accordingly. Some research on student teachers' thinking during their extended practicum shows the emergence of analogous characteristics (John 2000).

Furthermore, many teachers are guided in their planning and teaching by broad intentions, intuition, tacit knowledge, and lesson images (Calderhead 1989, Doyle 1990, Eraut 1994, John 2000). While these

processes are rarely articulated in detail, either verbally or in writing, they nevertheless are geared towards the activity flow of lessons. They elaborate on the material presented in textbooks or other curriculum materials (Shulman 1987, Feiman-Nemser and Featherstone 1992) and re-structure knowledge for and with pupils during the process of planning and teaching. Time on task and perceived pupil abilities and differentiation often figure prominently in such planning decisions.

Expert-novice studies have also suggested that, whereas experienced teachers engage in long-range planning, the thinking of novices is more short-term. Novices describe their planning as time-consuming as they struggle to make sense out of the cornucopia of decisions they have to make regarding content, management, time, pacing, and resources. Experts, on the other hand, seem to have a very general plan for lessons, leaving detailed decision-making to the period prior to starting the lesson or to various points in the lesson itself. Novices, particularly early on in their training, have difficulty making predictions about student responses and have problems adjusting their practice according to the exigencies they encounter.

A number of other studies (Kennedy 1987) have indicated that experienced teachers have a more comprehensive range of teaching skills and are more expert in developing representations of their subject matter than novices, who tend to define learning and teaching more literally. Jones and Vesilind (1996) found that as student teachers became more experienced, their planning moved from being tightly associated with scripting and the preparation of materials to a larger cluster of concerns that included classroom management, the organization of learning, and the need for greater flexibility. It seems that greater exposure to teaching challenged the novices to see planning and preparation less as an unalterable event and more as a concept associated with unpredictability, flexibility, and creativity. It was as if the student teachers were seeing planning as the glue that held the various pieces of learning and teaching together and the linear format, despite being a course requirement, was largely superfluous to their needs as teachers.

Research also indicates that novice teachers have difficulty constructing objectives (both intellectually and semantically), more so if they have to be delineated *before* they have even considered the methods, activities, resources, or central idea of the lesson (John 1992, Kagan and Tippins 1992). Some studies have shown that many student teachers, particularly early in their training, have difficulty matching goals, objectives, and forms of evaluation; many also fail to understand the conceptual (and sometimes semantic) distinctions between aims, objectives, and goals (Joyce and Harootunian 1964, John 1991). According to Calderhead and Shorrock (1997), Kagan and Tippins (1992), and Lampert (1985), many neophyte teachers have difficulty integrating subject topics, understanding the concepts or tasks embedded in curriculum materials, and juggling conflicting goals when there is uncertainty about how to achieve multiple, desired outcomes. As a result, there is often an elision between aims, goals, and objectives on the one hand, and teaching and learning process on the other.

Personality factors and preferences related to teaching style likewise appear to lead teachers to approach their planning differently, and in many

cases this has little to do with the amount of experience the teacher has. A number of these pre-dispositions are linked to particular and personal cognitive styles. Research indicates that student teachers enter their programmes with a variety of experiences, pre-conceptions, and models about what constitutes teaching, learning, and learning to teach (Feiman-Nemser and Buchmann 1985, John 1996, Calderhead and Shorrock 1997). The literature also points to the diversity of learning styles exhibited by student teachers when planning lessons. Some may be stimulated by creative thinking based around loosely-conceived ideas; others may find the seed of a lesson within the content or a particular resource. Whatever approach is taken, the research evidence points to the fact that the end-product—the lesson plan—is often arrived at through a variety of processes, many of which are highly personal, idiosyncratic, and embedded in the subject and classroom context of the topic being planned.

Considering the alternatives

Many of the processes recommended by various authors, agencies, and policy-makers are mostly derived from information-processing models of learning. As a result, the social processes that influence planning abilities in practical teaching contexts have not gained prominence. Wertsch (1991), for instance, focuses attention on the univocality found in the pervasive conduit metaphor for communication and planning; this, he claims, underpins the transmission model for learning, where the receiver is seen as passive. The model of planning and teaching represented in this minimalist conception develops as follows: aim > input > task > feedback > evaluation. It reflects an approach to teaching and learning wherein reflection and exploration are at worst luxuries, not to be afforded, and at best minor spin-offs, to be accommodated. The emphasis in the system is always on the functions: explaining, questioning, guidance, practice, task-completion, reinforcement, and evaluation. All bypass what Eisner (1985) calls the 'educational imagination'. Referring to Bakhtin, Wertsch (1991) goes on to critique the monological assumptions embedded in such communicative acts, preferring instead the concept of dialogality. Lave and Wenger (1991: 76) likewise indicate that any tool or technology must 'always exist with respect to some purpose and is intricately tied to the cultural practice and social organization within which the technology is meant to function'. Viewed from this standpoint, the linear template model lacks the contextual fabric needed to make it a useful cultural tool.

The functionalism embedded in the various schemata or scripts that underpin the dominant model is committed to the creation of de-contextualized modes of action. It is, according to Lave and Wenger (1991), made out of different kinds of 'stuff' from the physical world to which it is to be applied. This static picture of abstract and de-contextualized thinking—where cognitive tools can be pulled out and applied in any context and then returned to the tool kit unchanged—is, in part, a critique of the emerging phenomena of planning templates in initial teacher education. Thus, Linné (2001) argues that a prevailing official lesson-discourse is in fact reflected in the lesson plan.

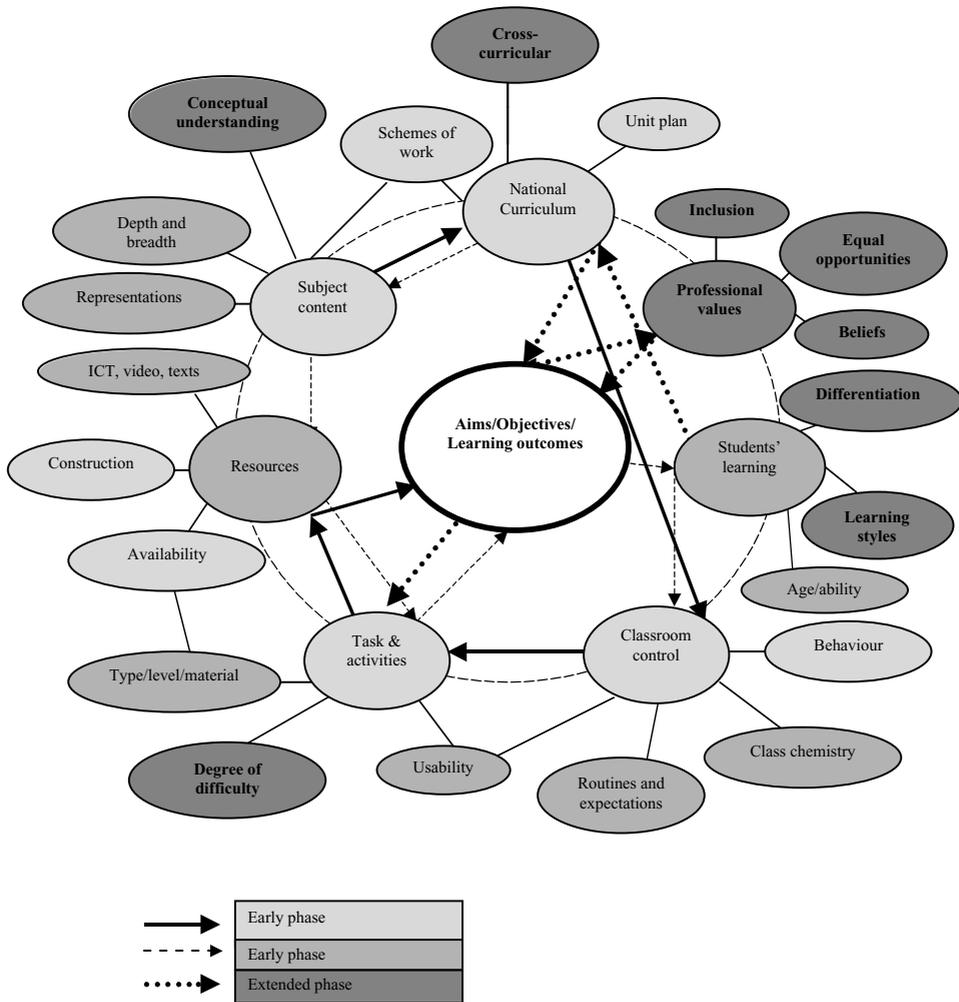


Figure 2. The planning process.

It may be that a dialogical model of lesson planning where problem-level processes are emphasized may prove to be a better way forward. Figure 2 offers a more balanced approach in that it stresses the importance of representing the planning problem (the process) as a vital pre-cursor to the construction of the product (the plan).

Although the model presented in figure 2 attempts to mimic the natural decision-making of the experienced practitioner, it also recognizes that not all naturalistic decision-making is of the same kind. Lipshitz (1993), after reviewing nine models of decision-making, concluded that real-world decisions are made in a variety of ways, and no single unitary process can fit all situations. The model in figure 2 does not privilege a fixed order, and the process of planning it engenders would automatically involve a number of sub-processes. The main core is fixed by the aims, objectives, and goals of the plan. However, a number of satellite components rotate around this central element; these represent the foundational aspects of planning, and

attached to each are a series of nodes that further sub-divide the key aspects. These nodes and satellites are illustrative and can be changed or developed according to context. For instance, the 'scheme-of-work' satellite is specific to the UK, as is the National Curriculum node, while 'students' learning' would be more generic, as would 'classroom management'.

In terms of use, the model may change as a student teacher moves through the various stages of a programme of initial training. The lightly-shaded balloons represent some of the core concerns that a novice teacher in the early stages of their training might see as significant. Whatever the starting point, there is a constant iterative pattern of shuttling back and forth between each component as the student teacher explores, frames, checks, and re-frames where appropriate. Gradually, as more and more information becomes available—the size of the class, the ability-range, the time of the day, the availability of resources, etc.—a more concrete plan emerges. This usually occurs only after a creative, yet careful path has been trodden, where each element is visited and re-visited in a cyclical fashion, and where to follow Emerson's dictum 'the ends pre-exist in the means'. Its advantages are that it encourages a constant interaction with the context and its entities, and underlines the point that teaching, learning, resources, tasks, tools, context, and objectives are inter-connected rather than separated.

The model can also be applied at different levels of complexity across the various phases associated with student teachers' learning. As Furlong (2000: 13) points out, if novices are to 'deal effectively with complex and changing situations, they need to develop progressively more sophisticated practical theories about how children learn and the knowledge they are trying to teach'. During the *early phase* of their professional learning, student teachers need to know what a lesson plan actually is, as well as understanding the crucial nexus that exists between planning and teaching. Here, the dialogical model can serve as a powerful descriptive tool to acculturate student teachers into the complexities of the planning process. To illustrate this: it is well recognized that in the early part of their training student teachers need concrete, even prosaic models of planning to guide their thinking. Here, the model can help them understand the crucial connection between classroom management, subject content, and the curriculum (see the lightly shaded balloons in figure 2). It is, therefore, likely that during this early stage in their learning student teachers will move between these components in a narrowly-drawn fashion. Presenting student teachers with model lesson plans or series of exemplars that exemplify the process could augment this.

As soon as student teachers begin the *practical phase* of their courses, the school-based mentor becomes more prominent as the novices move through a form of 'legitimate peripheral participation' (Lave and Wenger 1991). In this sense, they should be scaffolded through a dialogue with real teaching situations. This process is partly mimetic in that various routines and representations are internalized and layered onto their evolving practical theories. However, it is precisely at this point that joint planning can help the novice gain access to the expert knowledge of the experienced teacher. Again, scaffolding should be evident as the novice and the expert move through the process of planning together, jointly informing one another of the process as it evolves. At this point, the model might not only help clarify

many of the choices and decisions made by the experienced mentors but could also lead to a deeper understanding of the craft-knowledge that has been developed through familiarity with the circumstances of their teaching. Such guided reflection may challenge the assumption that framing and designing a lesson simply means creating concrete recipes or routines interspersed with subject knowledge. This is supported by Bage *et al.* (1999), who discovered that efforts to impose a uniform system of lesson planning on teachers meant that often they did not draw on the full range of their expertise when planning lessons in diverse contexts. They concluded that the uniform system-approach was in fact less sophisticated than what teachers actually did in their classrooms. The model, by challenging this uniformity, could then act as a heuristic, guiding the student teacher to follow the thinking of the experienced teacher as the lesson structure emerges.

This possibility might be further enhanced during structured observation periods where the model could serve as a tool that might frame an agenda for a post-lesson discussion regarding the 'in-flight' thinking of the teacher. The resulting conversations might reveal the complexity behind the apparent simplicity of experienced teachers' planning. Behind the façade of ease lies a rich and sophisticated appreciation of how children learn, a flexible understanding of the structure and deployment of subject-matter knowledge, and a repertoire of pedagogical skills and strategies (Furlong 2000). At this point, the novice teachers are likely to want to broaden their repertoire, and further components of the model will be incorporated into their planning practices. They should now have a deeper understanding of classroom management, and will begin to see the importance of differentiation, the significance of learning styles, as well as the need to refine their aims, objectives, and learning outcomes (see darker shaded balloons in figure 2). It is at this point that they are more likely to return to the central core of the model as they shift their thinking back and forth among a wider range of variables.

As the student teacher becomes more experienced and is 'flying solo' (John and Gilchrist 1999) the model likewise changes its salience. Rather than guiding, it might now become a creative tool helping novices clarify and structure their thinking as they engage in the process of preparation. The core of the model should then take on greater significance as the novice begins to ask more complex questions: What do I want the children to learn? What teaching and learning styles might best bring this about? What knowledge and skills are worthwhile and how might they be best learned? How might curricular objectives and learning outcomes best inform my planning? What resources and tools might help me to engage my pupils so that learning might take place? And what are the classroom management implications of my chosen strategy? Such questions require planning and teaching to be more provisional, and open to a debate in which issues of value and belief come to the fore. It is during this *extended phase* that the dialogical model can help student teachers develop what Elliott (1998: 51) has called 'that courteous translation of knowledge', by encouraging them to shuttle freely back and forth between the components, examining each according to their emergent professional knowledge, values, and expertise.

Table 1. The planning products.

Products
Introduction
Conclusion
Plenary
Timings
Tasks and activities
Classroom layout
Subject topic
Presentation
Evaluation
Homework
Administration
Reminders
Booking
Equipment
Resources
Teaching and learning style
Aims and objectives
Key questions

The model does not, however, neglect product-level planning (see table 1. In fact, it emphasizes the all-important link between the problem-solving processes and the format used to structure the components of the plan. Here, important house-keeping issues need to be noted, such as the booking of equipment, the collecting of assignments, the distribution of texts, the setting of homework, etc. The product also stresses the core elements that have to be followed if a lesson is to be successful, and, thus, pulls together the thinking into a clear, definable classroom guide. Introductions and conclusions, the timing of segments, the setting of activities, seating arrangements, the delineation of objectives and learning outcomes, the classroom management implications, and the teaching and learning styles adopted, all need to be considered and noted within a chronological framework.

Seeing planning in this way helps to establish the understanding that the process of planning is dialogical—a thought-experiment tied to the specifics of the discourse-community in which it is embedded. Hence, the need for adaptation when different subjects and types of teaching are involved. The model also provides more explicit guidance on how to process planning problems by heightening awareness about the crucial interplay of the variety of factors that inform planning—both in terms of individual lessons and in the construction of curricular units. It should also develop a greater meta-cognitive awareness, whereby the student teacher evaluates and controls their own thinking as choices are made. Drawing student teachers' attention to the delineation and choice of objectives by tying them into a range of decisions might also make teaching more responsive to the dynamic and fluid events that can occur during interactive teaching.

The model also allows student teachers to emphasize and de-emphasize certain aspects of planning according to their particular circumstances and needs. Given this, perhaps teacher educators and school-based mentors should encourage student teachers to pay more attention to the integration of knowledge about pupil characteristics, teaching materials, and environmental constraints. Student teachers need to know what materials are available and appropriate for particular groups of pupils, be it, for instance, age or ability. Such understandings demand contextual knowledge combined with experience of working with such children. Finally, the model might help students to understand and deal with what Leinhardt (1989) has termed the 'double agenda' of teaching: the tension between an anticipated sequence embedded in the diachronic aspects of lesson planning and the immediacy of the synchronic 'here-and-now' of teaching.

Conclusions

Enacting the dialogic model outlined in this paper challenges the idea—often embedded in student teachers' implicit theories—that planning is a concrete process involving the enactment of particular routines or recipes (Furlong 2000). The model also supports an articulation with the emerging concept of 'professional learning teams', where teachers come together to examine specific lessons in order to deepen their understanding of pupils' learning. Such use of 'lesson study' should be encouraged in initial teacher education, thereby challenging the impression, implicit in the *Professional Standards for Qualified Teacher Status* (DfES/TTA 2001), that teaching is a scripted performance as opposed to a complex engagement with children. Planning, and the teaching of planning models, might then be viewed less as a preparation for practice and more as a practice itself. As Carlgren (1999: 54) points out, the practice of planning is as important as the practice of teaching; the process needs to be treated as 'a simulated practice with reflective backtalk as part of the planning, so that students have experience of naming and framing as well as re-framing'. In this way, language, and in particular the discourse of planning, becomes a reflective tool rather than a pointer to activities in which meanings are hidden.

The ideas presented in this paper remain speculative. They represent a critical commentary on an exceedingly complex area of novice and experienced teachers' professional work. How to plan well remains a knotty but crucial topic for teacher education research and practice. It is a concern too, that the creative, problem-solving, 'intelligent' aspects of planning and teaching become lost as students are encouraged to conform to rigid templates. Wrestling with the technical aspects of lesson-planning will not, in the long-term, encourage pedagogical intelligence. The lesson plan should not be viewed as a blueprint for action, but should also be a record of interaction. Such a definition would help novices view deviation from the lesson plan as a positive act rather than evidence of failure (Kagan and Tippens 1992, John 2000). Finally, the so-called Tylerian model, so long in the ascendancy, should be seen as a point of departure rather than a

Procrustean bed (Kagan and Tippens 1992), and student teachers should be encouraged to personalize their plans—as they do to so many other aspects of their classroom practice.

Note

1. It has been argued OBE has in fact led to a derogation of many of the fundamentals of rational planning. In particular, it has diminished the central concern for learning as well as limiting the principles and procedures that teachers might adopt to implement the aims of *their* teaching (Peters 1964). As Elliot (2001) has contended, the emphasis on goals and targets for learning has led to a reverse linearity, where the curriculum tail wags the teaching dog.

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