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A Vygotskian perspective on teacher education

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Contemporary teacher education demonstrates the continued use of competency-based, personality-based and inquiry-based approaches. These approaches are commonly regarded as representing alternative paradigms for designing curriculum and pedagogy. From a Vygotskian perspective, characterized by the use of bridging concepts relating individual functioning and personal development to sociocultural process and setting, these approaches may serve to provide elements for a more comprehensive paradigm of professional development. Drawing on Vygotskian theory, a teacher-education environment offers support to trainee teachers for developing a professional identity. A central element is that trainees explore the practice of teaching for its underlying public meanings and as these meaning relate to their own structures of personal meanings. Such an exploration involves the shaping and testing of personally-meaningful action in professional practice. Commitment to meanings found to be valid and practicable constitutes the core of professional identity. The task students face in developing professional identity on the basis of an assignment of meaning to teaching needs an appropriate teacher-education environment. These conditions are worked out from a Vygotskian perspective on professional development.

Paradigms in teacher education

The role of the teacher has gained significantly more prominence in the curriculum literature over the past decades in both the contexts of curriculum construction (the teacher as 'co-researcher;' see e.g. Stenhouse (1975), Ponte (1999)) and in curriculum implementation (see, e.g. Schön 1983, Westbury 2000). However, because the teacher plays a key role in the school curriculum, a critical reflection on the professionalism of teachers is needed. In this paper, we will focus on the way teacher education—through its own curriculum—can contribute to fostering those teacher qualities required by today's schools.

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During the past half-century, several efforts have been made to reform or re-orient teacher education on the basis of an explicit theoretical paradigm. These efforts were made on the assumption that they could improve the effectiveness of teacher education by a more careful definition of ends and means, open up this practice to discussion and inquiry for the purpose of planning and evaluation, and promote synergy among teacher educators. Among these efforts, the paradigm of competency-based teacher education of the late-1960s and 1970s, with the personal orientation to teaching and teacher education as its counterpart, and the paradigm based on reflection and inquiry of the late-1980s and 1990s, achieved the clearest recognition and the strongest influence on teacher-education practice (Zeichner 1983; Feiman-Nemser 1990: 212).

However, commentators agree that the impact of these paradigms has remained limited, and that, rather than being reformed by them, teacher education has absorbed elements of these paradigms, even from those that from a theoretical perspective would be regarded as incompatible (Joyce *et al.* 1977, Clark and McNergney 1990: 109). In this connection, concerns have been expressed about the anti-theoretical bias of teacher education and its lack of an explicit epistemology (Ginsburg and Clift 1990: 454). Each of the three paradigms may be regarded as holding valuable points that, taken in isolation or over-emphasized, involve a risk of one-sidedness and exaggeration.

Competency-based teacher education

A strong point of competency-based teacher education, here taken to include performance-based teacher education (Elam 1971, Houston 1974, McKenzie *et al.* 1996, Valli and Rennert-Ariev 2002) is that it defines a public (supra-personal) standard for teaching as a framework for teacher education, that it is explicit about objectives and assessment criteria, and that it emphasizes the need for teacher education to bear fruit in effective performance in the daily practice of teaching. Privileged attention to the instrumental aspect of teaching, however, tends to detach this aspect from the aims and values underlying teaching, and limits the space for practitioners to participate in choosing and designing their own performance. As a result, this paradigm leaves little room for a personal interpretation of the teacher's role in the light of either personal preferences or specific demands and conditions of the situation in which the teacher is engaged. Hence, this paradigm has been criticized for reducing the teacher's role to that of a 'technician' or 'executive' (Borman 1990: 395, Valli and Rennert-Ariev 2002: 203).

The concept of competency-based teacher education has been re-actualized by changes in schools and school systems that have led to a re-definition of the teacher's functions and tasks (e.g. Organization for Economic Co-operation and Development 1990). This has produced designs for professional profiles describing the essential qualities required by teachers' renewed and extended roles. These professional profiles serve teacher education as broad frames for designing and revising teacher education

curricula. This use of professional profiles is a recent manifestation of a competency-based approach to teacher education in that it hinges on trainable qualities for specifying attainments and curriculum, even if these competencies are now more broadly conceived, as well as more explicitly defined and justified in the light of teachers' present-day roles and responsibilities in the school.

The personal orientation to teaching

The personal orientation to teaching (Combs 1965, 1978, 1982, Fuller 1970, Fuller and Bown 1975) is, in some respects, the reverse of the competency-based paradigm. The personal orientation justly emphasizes that one of the chief instruments a teacher uses is his or her own person, and that teaching requires a fit between the teacher as a functionary and the person of the teacher. This orientation has been criticized because a one-sided attention to the personal side of teaching tends to overlook the public, institutional, and corporate aspects of teaching. Also, an accent on the unique personality of the teacher, and on personal meanings and values, may neglect the extent to which these factors are shaped by interaction with other people and by the socio-cultural environment. Hence, an appeal to personal creativity, self-development, and self-fulfilment (Combs 1965) may be self-defeating if it is not accompanied by a recognition of the stimulus and support these qualities require from outside the lone individual (Buchmann 1990).

The continuing appeal of personality-oriented teacher education shows up in various forms. One of these refers to the preconceptions trainees bring to the teacher-education programme from their earlier experiences as learners, pre-conceptions which may operate more powerfully to the degree that their presence is not consciously realized (e.g. Wubbels 1992). A related view, in the spirit of constructivism, suggests that any theory a teacher-education programme presents to trainees will only be used by them as far as it becomes part of a personal working conception guiding their practice as teachers (Elbaz 1983, Woods 1987, Vereniging van Samenwerkende Nederlandse Universiteiten 1996). This recognition of the interconnections of teachers' professional and personal lives has led to an interest in teacher biographies (Goodson 1992, Knowles 1992, Huberman *et al.* 1993, Kelchtermans and Ballet 2002). And the related concept of the teacher's identity or 'self'—although recognized as an as yet poorly defined category—has been examined from many perspectives, some of which focus on the professional, others on the personal identity of the teacher (Nias 1989, Cooper and Olson 1996, Tickle 1999, Beijaard *et al.* 2000, Korthagen 2001b).

Reflection and inquiry

The paradigm advocating reflection and inquiry (Stenhouse 1975, Schön 1983, Posner 1985, Tom 1985, Cruikshank 1987, Valli and Taylor 1987, Zeichner and Liston 1987, Richardson 1989, Calderhead and Gates 1993)

is noteworthy in its emphasis that professional repertoires are not established once and for all and are not given from outside a practice, but have to be continually reappraised, reaffirmed, or modified by questioning experiences in the light of standards of evaluation. A frequently signalled problem with this paradigm is that it refers to a formal procedure that may be applied to many different aspects of teaching but does not itself refer to any substantive image of teaching to which reflection and inquiry are to be addressed (e.g. van Manen 1977, Hursh 1987). Also, an overemphasis on reflection and inquiry may deny the extent to which teaching depends on—and may profit from—accepted definitions and standards and established knowledge and repertoire, even if their limitations are recognized (e.g. Bennett and Carré 1993, McIntyre *et al.* 1996).

Nevertheless, the paradigm advocating a combination of the teacher as researcher (Stenhouse 1975) and the reflective practitioner (Schön 1983) has attracted attention because the qualities it singles out are regarded as core qualities of the professional teacher. In action-research projects (Elliott 1991, Ponte 1999, 2002), this approach has been used for improving the professional functioning of teachers and for developing the curriculum. However, the theoretical frames that have informed such research and provided areas and criteria for reflection (e.g. instrumental, pedagogical, or emancipatory) have demonstrated very different emphases.

Although teacher-education practices reveal points of contact between the different paradigms (for example, in the notion of teachers' professionalism involving self-regulation in relation to a public standard and an attitude of inquiry towards their own functioning in professional roles), there does not seem to be an active interest in harmonizing the paradigms themselves. From a theoretical perspective, we may question if the three paradigms can be reconciled, founded as they are in different anthropologies, epistemologies, and theories of learning and development. Whereas a competency-based approach follows an 'equipment model' of development, trusting that individuals can be invested with abilities and repertoire, a personality-based approach aims at the support of a process of self-development. And the paradigm of reflective inquiry undercuts both the use of a transferable repertoire and the notion of a stable personal identity on which professional development may be based.

Starting from the above analysis, in this paper we ask whether a more comprehensive paradigm for teacher education can be devised and we offer a Vygotskian perspective as a promising theoretical basis for the elaboration of such a paradigm. Recently, Edwards *et al.* (2002) developed a similar argument on the basis of a critical analysis of mainstream teacher-education paradigms. In their view, teaching is essentially an activity characterized by uncertainty, and teacher education should assist novice teachers to deal with uncertainties in their practice. On the basis of mainly sociological arguments, Edwards *et al.* (2002) outline collaborative strategies as a major way of assisting (new) teachers in their attempts to improve their teaching. We argue from a psychological point of view and outline a Vygotskian paradigm that focuses on the contextualized support provided to trainee teachers for developing a professional identity. In this connection, we propose

several specific conditions that must be taken into account in teacher education.

Another challenge to the status quo of teacher education was outlined by Wood (2000). His choice of an experiential rather than a cognitive perspective on teacher education, as well as his focus on meaningful learning both by trainee teachers and their pupils, are akin to ours. We think that his phenomenographic approach may benefit from contact with a compatible body of established theory that has proved relevant and productive in many developmental settings.

Hudson (2002) has drawn attention to the differences between the Anglo-American and continental European traditions of teaching and teacher education. One key feature he notes in the continental tradition—to which Vygotsky belonged—is a search for meaning and intentionality as a central characteristic of teaching as a reflective practice. In the next section, we present a brief outline of the relevant points of the Vygotskian perspective.

Distinguishing characteristics of the Vygotskian perspective on learning and development

Vygotsky (1896–1934) gave his name to a tradition in social science currently termed cultural-historical psychology or cultural-historical activity theory.[1] Chaiklin (2001a: 21) defines cultural-historical psychology as 'the study of the development of psychological functions through social participation in societally-organized practices'. Thus, a neo-Vygotskian perspective foreshadows a way of integrating the valuable elements of the teacher education paradigms we outlined above because it concentrates on the connections between individual functioning and development *and* the sociocultural practices in which individuals take part. The chief distinguishing mark of this perspective is that it does not set out from opposition between organism and environment (or individual and society), but from the idea of a unified system in which these two elements are joined together in a dialectical relationship. Individual and society mutually require each other in order to constitute themselves (Minick 1987: 32, Vygotsky 1997a, Prawat 2002: 19). Leont'ev (1978: 97) speaks of a 'middle link' mediating connections of the subject with the world, and Serpell (1993: 357–358) notes the interface between sociocultural and psychological aspects of an object of study and the need of 'a repertoire of two-sided constructs to bridge the two domains of analysis'.

The anthropology of the Vygotskian tradition considers humans as both shaped by and shaping their living conditions. Hence, in neo-Vygotskian theory 'activity' is the most fundamental and comprehensive concept, suggesting that the functioning and development of human individuals are to be studied in the context of their participation in sociocultural practice and, more concretely, in a variety of activity systems, of which the field of teacher education is but one example (e.g. Wertsch 1985, Van Oers 1987, Tharp and Gallimore 1988, Chaiklin and Lave 1993, Cole 1996, Wenger 1998). The historical aspect of the theory suggests that both an activity

system as a whole, and its individual participants, are involved in a process of development.

At this point, other important concepts in the theory should be considered. The development of participants towards a fuller (more extended, more responsible, and more autonomous) participation pre-supposes the 'moving inward' (Vygotsky 1997b: 106) of social functions, to be internalized or appropriated as psychological functions. Throughout this process, the individual needs an environment presenting and modelling an ideal standard of achievement and providing supporting conditions for a successful approximation of this standard—the zone of proximal development (e.g. Van Oers 1995). On the other hand, the concerted actions of participating individuals not only serve the maintenance of the activity system, but also its further development. The combination of personal and institutional development is characteristic of many projects in the sphere of the 'learning school', of which an early example is Kamehameha Elementary Education Program (KEEP) (Tharp and Gallimore 1988: 113).[2]

Participation in an activity system involves both the performance of action and the assignment of meaning. 'Action and meaning (sense) are two sides of a single coin' (Zinchenko and Davydov 1985: x). As formulated by Vygotsky's co-worker, Leont'ev (1978), activity is fundamentally defined by the meanings it seeks to realize: the needs and motives it seeks to satisfy, and the goals it seeks to achieve. An activity system survives and develops on the strength of the meanings invested in it, and participation of individuals in an activity system is powered by a commitment based on the personal meanings participants attach to the activity in which they take part. Hence, learning to be a participant in an activity system involves learning an action-repertoire in relation to the meanings 'behind' this repertoire: public meanings invested in the activity that need to be explored by participants in relation to what makes participation personally meaningful to themselves.

The interplay between the exploration and development of public and personal meanings is another example of the two-sided character of the neo-Vygotskian perspective. In a teacher-education programme based on an explicit professional image of teaching, this image (for example, the teacher as coach, as team-worker, as co-innovator) may be presented in such a way that it serves trainees as a starting-point for clarifying their personal motives for entering teaching.

One important further step in this approach concerns the conceptualization of personality and identity. In the Vygotskian tradition, these two concepts tend to come very closely together. This is due partly to the Russian language using the term '*licnost*' in both meanings, and partly to the fact that personality and identity are conceived in this tradition as qualities developed during a person's life. Taking up Vygotsky's distinction between meaning and sense, Leont'ev (1978) proposed that the formation of the personality is based on a process of involvement with public cultural meanings that individuals, in the process of their participation, transform into personal sense. In this process, the specifics of the individual play an important part, causing the personality to be a uniquely individual psychological structure. Through being invested with personal sense, human needs achieve the character of

sense-providing motives, which are the chief determinants of a person's action choices and make up the core of the personality. Thus, the development of individuals as participants in an activity system is not limited to their appropriation of cultural tools and repertoires, but—more fundamentally—extends to the formation of a personality enabling them to make committed action choices. As a stable profile of action-choices makes a person identifiable to others and to himself or herself, the development of personality runs parallel to the creation of a personal identity. Owing to its recognition of the sociocultural background of personality—the idea that personality is always founded in a person's participation in cultural practices (González Rey 1999: 256, Chaiklin 2001b: 252)—the Vygotskian perspective suggests a continuity rather than an opposition between the development of a personal and a professional identity.

Attention also needs to be paid to the role of the emotions. In his own work, Vygotsky emphasized the motivational basis of thought, the role of emotional experiences in personality development, and the unity of intellectual and affective processes in consciousness as a dynamic system for assigning meaning (Yaroshevsky 1990: 395). In their further development, cultural-historical psychology and pedagogy have continued to acknowledge the importance of the emotions in developing the personality (e.g. Van der Veer 2001). Emotional experiences register the quality of a person's participation in activity in relation to that person's needs and motives; for that reason, emotions are 'a cornerstone in the constitution of personality' (González Rey 1999: 260–262). Hence, the personality is viewed as an integrative system, in which rational, volitional, and emotional aspects are welded together (Bozhovitch 1979, Chaiklin 2001b: 241). This integrated view of personality development creates a clear distinction between the Vygotskian perspective as the basis for a paradigm of teacher education and the recent elaboration of a 'situational perspective' which is primarily based on the cognitive tradition (Putnam and Borko 2000).

In the next section, we will provide the Vygotskian framework for a paradigm for teacher education.

Basic principles of a Vygotskian paradigm for teacher education

Vygotsky was also a pedagogue and pedagogical psychologist and his ideas have been, and are, influential among educationists in both Russia and elsewhere (e.g. Davydov 1988, Moll 1990b, Forman *et al.* 1993, Bruner 1996, John-Steiner and Mahn 1996, Wenger 1998). His views have been acknowledged, and used fruitfully, in studies of teacher learning and professional development, e.g. Tharp and Gallimore's (1988) *Rousing Minds to Life* and Lave and Wenger's (1991) *Situated Learning*. However, the Vygotskian tradition has not been examined explicitly and consistently in order to devise a paradigm of teacher education. In this section, some basic principles of a Vygotskian paradigm for teacher education will be distilled from the theoretical overview presented above; we will be comparing the resulting outline with the earlier paradigms.

Learning through participation

A first principle to be derived from the Vygotskian theoretical framework is that professional learning and development are best conceived and conditioned as an aspect of evolving participation in a social practice. Participation involves being drawn into a setting that includes a programme directed to the realization of values and goals, forms of social interaction and co-operation in an institutional context, and the use of cultural resources. In such a setting, productive action and understanding are dialectically related (Lave and Wenger 1991: 102), and interpersonal transactions create patterns of meanings, values, and cognitive structures (Gallimore and Tharp 1990: 187). For all participants in such a setting, learning and development may be regarded as continuing and integrating aspects of their participation, which can be fruitfully related to the continuing development and renewal of the practice itself (Tharp and Gallimore 1988). Newcomers in a social practice, such as trainee teachers, may be accepted and treated as one particular category of these learning practitioners. The reception of newcomers in an activity system and the conditions to be provided for their apprenticeship have been examined in a general way by Lave and Wenger (1991) in their concept of legitimate peripheral participation. Like Tharp and Gallimore (1988), Lave and Wenger emphasize the need for an activity system to be oriented deliberately towards learning and development—rather than an exclusive orientation towards production—in order to function as a context for apprenticeship and continuing professional development.

The principle of learning through participation offers an important message for teacher education, which has been traditionally shaped and organized along a dichotomy between a pre-service, chiefly theoretical professional preparation outside the target practice, and an in-service professional life firmly directed to productivity, with only rare and incidental moments of further schooling. The practice-shock experienced by beginning teachers may be partly attributed to the way teacher education has been institutionalized.

Orientation toward ideal forms

Vygotsky's concept of a zone of proximal development pre-supposes the presence of 'ideal forms' (Froumin 1995) towards which professional development may be oriented and directed. From the Vygotskian perspective, ideal forms are based on the central cultural meanings (values, goals) attached to the core activities in an activity system, for example schooling. Ideal forms may be available in documentary form such as educational paradigms, and/or may be exemplified and modelled to newcomers in the practice of an educational community and its members. Ideal forms have to be of such a nature that they may serve apprentices (and other participants) as not only criteria of competence, but also as objects of commitment. In teacher education, ideal forms may clarify the relationship between values and aims of school education, the professional image of the teachers serving

these values and aims, their functions and tasks, and the competences that have to be learned to be effective in the professional role.

Attuning a public standard to personal motives

In teacher education, the presentation of ideal forms, inviting commitment, should be combined with an explicit attention to the need for apprentices to explore their personal ideas and motives for being a teacher. The aim of this combination is, ideally, to shape a process of professional development in which publicly valid ideal forms of teaching are critically evaluated, appropriated, and personalized, or—the other way around—in which personal ideas and motives can find a valid public expression. Elaborating this principle requires the provision of an exploratory space for apprentices to make and followup personal choices in the teacher-education environment—within the available space for making professional choices in the activity system of the school as a whole.

Interaction between performance and assignment of meaning

The interplay between action and meaning, a key element in Vygotskian theory, may serve teacher education as a principle that can be developed in many ways. A general characteristic of these elaborations would be that the observation, the design and planning, as well as the evaluation of practical action and performance, are guided by a reflection on ideal forms representing values and goals. Formulated in other terms, this principle holds that the instrumental aspect of teaching is accompanied by a consideration of the educational meanings to be realized in practical action. From the Vygotskian perspective, this would be the essential relationship for the reflective practitioner to reflect upon.

Development of a professional identity

From the Vygotskian perspective, the overall aim of a teacher-education programme is best conceived as the development of a professional identity. The teacher's professional identity to be developed through guided participation (Rogoff 1990) consists in commitment to an image of teaching that is both publicly and personally meaningful and underlies and directs the acquisition and further development of professional knowledge and skills.

Learning from emotional experiences

The view that personality and identity development involves an integration of intellectual, emotional, and volitional elements leads to the principle that teacher education should acknowledge and use the emotional experiences of apprentices. As stated above, these experiences are an important source of

information about the current relationship between the aspirations and commitments of apprentices and their perception of their own functioning as participants in their activity setting.

If we briefly compare the above principles with the earlier paradigms, these principles may be regarded as preserving the major strength of those paradigms, but with the added value of integration into a more comprehensive and theoretically more satisfying ensemble. Competence is no longer the primary target of a teacher-education programme, but is defined and developed in relation to an image of 'good' teaching that invites commitment. Personal motivation and development are related to a position in an activity context, to a commitment to the ideal forms inspiring this activity, and to the identity of the actor as a participant in this activity (Wenger 1998). Reflection and inquiry are focused on the continuing harmonization of action and meaning.

In the following two sections, we will present an elaboration of two characteristic elements of a Vygotskian paradigm for teacher education in relation to the principles we have outlined: the assignment of meaning to teaching, and the development of a professional identity. In these elaborations, we will sometimes refer for concrete examples to the context of university-based teacher education in the Netherlands, hoping that these will be sufficiently representative to be recognized in other settings.

Assigning meaning to teaching

As we have argued, the close association of action and meaning in Vygotskian theory suggests that apprentices will have to orient themselves towards the meanings of teaching informing the practice in which they become participants. In particular, they will have to orient themselves towards a public standard of teaching that reflects the values and goals in the cultural and political setting of the schooling in which they are engaging. This orientation should not lead them to be recruited into any existing ideology, but clarify and define their own allegiance and commitment to teaching as the core of their professional identity. How can such an orientation be conceived so that it could take place in a teacher-education environment?

To start from the negative side: the more firmly an emphasis is placed in teacher education by the instrumental aspect, the more the aspect of meaning is left implicit or dogmatically imposed and, consequently, is inaccessible to exploration, reflection, and discussion. In addition, such a situation obscures an understanding of the fact that the meanings of education and teaching are not self-evident, but subject to contrasting and changing views. Hence, the primary condition to be provided for apprentices to explore actively the meanings of their profession is that these meanings are explicitly presented, clarified, and deliberately modelled in practice.

For this purpose, the activity system of teaching may be conceived as a nested structure (Tharp 1993) made up of different levels, each of which represents a locus of action and of the production of meaning. These levels run from a macro-level, in which societal functions are allocated to education and broad policy frames for teaching are developed; through a meso-level,

in which individual schools and other educational establishments define their own identity within the boundaries of the given macro-frames; to a micro-level, where meanings of teaching are transacted in interactive situations as encountered in classrooms, conference rooms, counselling, or collegial consultations. Individuals participate in the production of meaningful action on all of these levels. The quality of their participation as agents depends to a considerable extent on informed choices and commitments based on an understanding of the meanings assigned to teaching in the whole of the system. The following sketch is intended to illustrate this process.

Macro-level: societal interests into broad policy frames

The societal forces that have shaped the school as an institution continue to exert their influence on the education system: the state watches over its concerns about fostering citizenship and patriotism; economic interests are directed to forming a properly-schooled labour force; various social groups seek either the conservation or the improvement of their position; parents project their aspirations for their children on the school; organized educational sectors and professional groups defend their vested interests; and many special interest groups compete for an entry into the school curriculum for such 'educations' as emancipation, conservation, public health, and human rights. It is the responsibility of government to channel this diversity of interests and claims into broad, uniform policy frames. On their part, schools and teachers are entrusted with—as well as held accountable for—the successful realization of the resulting ensemble of expectations.

Against this background, the frames directly affecting teacher-education establishments deserve some special attention. Wherever teacher education serves a publicly financed education system, and is itself an element of this system, some fundamental meanings affecting teacher education are laid down by national governments in legislation or binding rules. Governmental policy is apt to perceive teacher education as instrumental to introducing changes in the content and organization of education. These changes may be furthered by defining and developing a 'new' teacher, able, for example, to support independent and co-operative learning, to work together with colleagues in teams, to fulfil a varied and extended package of tasks in the school, and to supervize and direct his or her own process of professional development. In the context of university-based teacher education in the Netherlands, the professional image of such a 'new' teacher, elaborated into a professional profile specifying functions and competences, represents a public standard underlying teacher-education programmes. Trainee teachers need to understand the background and logic of an accepted standard in order to define their own relation to it as an 'ideal form' guiding the development of their own professional identity. To foster such an understanding, the teacher-education environment may present an accepted standard in the context of a broader diversity of images of teaching, such as Fenstermacher and Soltis's (1992) tripartite distinction between an 'executive', a 'therapist', and a 'liberationist' approach to teaching.

Meso-level: individual schools and educational establishments

Individual schools and other educational establishments may be viewed as corporate agents assigning meaning to teaching within the macro-frames on the basis of their educational identity, their position within the education system, and their demographic and market position. However, these corporate agents may also be viewed as aggregates of groups and individuals with different interests and perspectives, having to harmonize these differences into a viable and marketable unity. Assigning meaning may take an explicit documentary, as well as an implicit enacted or embodied, character (Van Huizen 2000: 34). Thus, the meanings assigned to education are formulated explicitly in mission and identity statements as well as in study guides and curriculum materials. These documented meanings are parallelled by the meanings embodied in the culture of the establishment—in an 'organizational climate' (Sparks and Loucks-Horsley 1990) expressing values and standards informing all working relations, and in its 'school ethos' (Rutter *et al.* 1979: 55–56), expressing more deliberately the values and standards it wishes to communicate through its practice as a model.

Each teacher-education institution uses the macro-meanings communicated to it in various forms as a context for defining its own views about teaching. In this process, the institution may be said to develop its identity as an agent. A teacher-education institution needs an identity to present itself consistently to the outside world, to develop and realize a consistent programme, and to create conditions for co-operation among its faculty, as well as between teacher educators and trainees. In this connection it is important to note that teacher-education institutions tend to have a composite structure, made up of a university or higher education institute working together with practice schools. In such a structure, conceptualizations of teaching may differ between the college and its faculty and schools, as well as among participating schools themselves. Feiman-Nemser (1983)[3] has pointed out the importance of a distinction between campus-based and field-based elements in pre-service programmes as representing different and often competing notions of the process of learning to teach.

In a teacher-education environment, the distinction between explicit and implicit meaning has a special significance in that the teacher-education institution partakes of the nature of a school in which the position of trainees is akin to the position of pupils. At the same time as explicit meanings about teaching are presented and communicated to trainees, they experience meanings that are enacted and embodied in the teaching practice of the institution. In professional education, this parallelism is specific to *teacher* education and holds consequences as its practice becomes a model. Thus, Ginsburg and Clift (1990) emphasize the impact of a hidden curriculum in professional education courses, to the point of considering this hidden curriculum the core of teacher socialization. From a descriptive point of view, it may be asked how the relation between presented and practiced meaning is perceived by trainees. From a normative, pedagogical point of view, it may be asked how this relation has to be shaped in such a way that the practice of a teacher-education institution functions as a model for the teaching practice it seeks to promote.

Micro-level: interactive situations in a teacher-education environment

Older readings of Vygotskian theory have focused on the micro-level as providing the model and basis for the personal assignment of meaning. More extended readings, as recommended, for example, by Minick *et al.* (1993: 3), pay attention to the embeddedness of micro-situations in broader institutional contexts. From this perspective, micro-situations in specific activity-settings, such as in teacher education, with the repertoire of situations, interactions, and roles they provide for interacting participants, are considered to be partly predetermined on the macro- and meso-levels. At the same time, this wider context also partly pre-establishes the frames of meaning available for interpreting situations, interactions, and roles on the micro-level. Thus, the teacher-education environment holds a variety of interactive situations that are representative of an activity-setting geared to teaching and learning. In these educational situations, trainees take part in different roles. By the way the teacher-education environment selects and structures its repertoire of interactions and roles, it creates conditions for its trainees to explore and appropriate the meanings of these interactions and roles.

With respect to assigning meaning to teaching, the interactive situations in a teacher-education environment may be ordered on a dimension: from situations in which meanings remain largely implicit to situations that involve an explicit way of dealing with meanings. At one end of this dimension there are situations with the general character of 'work situations', as exemplified by class teaching, in which action dominates over meaning. In these situations tasks are to be undertaken, plans to be carried out, and expectations to be met. In such situations meanings have to be realized in action. While they are in progress, these situations leave little room for inspection, interpretation, or deliberation. They require 'a grasp of the moment and lightning decisions' (Caselmann 1964: 81) and have been characterized as 'immediate educational situations' (Dolk 1997: 5), that is, situations leaving little time for reflection. In Luria's (1982) terms, the meanings of such situations are 'sympractical': meanings are enacted by individual participants or rather 'transacted' between participants without—mostly—being explicitly expressed or negotiated. Such enacting of meaning in an 'immediate' situation has been conceived as taking the character of a gestalt, a pattern in which cognition, emotion, volition, and action-tendencies are fused (Korthagen 2001a: 42). As long as meanings in such 'immediate' situations remain unquestioned and unchallenged, they may become fossilized, and action patterns may become consolidated into a routine.

At the other end of this dimension, the teacher-education environment may provide situations, for example, through the method of clinical supervision, which are at a remove from the workplace and relieved of pressures of performance, designed to inquire into practical situations as they are experienced by participants. Such inquiry is intended to analyse and consider what practical situations mean to participants: how they may be interpreted in the light of goals and values, to what motives they appeal, and what action possibilities they afford. In such contemplative situations, meanings are made explicit in order to be consciously appreciated. Here, meaning may be said

to dominate over action. Explicit attention to educational meanings is also offered, at some distance from practical performance, as 'theory' forming part of the teacher-education curriculum. This theory may provide participants with publicly available and valid frames for their inquiry into the meaning of educational situations and of their own role.

Between these two extremes, the teacher-education environment holds a variety of interactive situations involving communicating, discussing, and negotiating the meanings of education and teaching in connection with practical tasks: the design and planning of instruction, guidance, or educational materials, the assessment of results, and the evaluation of instruction in so far as these situations involve an exchange of views and opinions; interviews, consultations, discussions, and conferences on the collegial level or in settings of coaching and guidance. And, as well as the formal situations that the teacher-education environment provides for such exchanges, participants may seek, and use, opportunities for informal exchanges, both to test and develop personal meanings through comparison with peers and to develop shared meanings as a mark of in-group membership and solidarity. Depending on its organizational culture, a teacher-education institution may provide openness and safety for exchanges within and across sub-groups in order to support informal contacts. Lave and Wenger (1991: 93) underscore the importance of such forms of 'benign community neglect' to promote the learning of apprentices among themselves.

Teacher-education trainees also take part in interactive situations in different roles. On the one hand, they participate in the role of learners vis-à-vis their teachers and coaches: as the addressees of instruction, the executors of study assignments, the clients of tutoring, coaching, and supervision, and the objects of assessment. They may also be engaged as partners in co-operative activities with the faculty and staff. As adult learners, trainees are—within limits—the planners and organizers of their own learning routes through their programme. As members of the student population, they are also the peers and co-learners of other trainees. On the other hand, trainees participate in interactions in the role of teachers vis-à-vis their pupils in the practice situation and in collegial contacts with teaching staff of practice schools. The performance of these two basic roles, their partial overlapping, and the frequent transitions from the one to the other, are all characteristic of initial teacher education and provide trainees a two-sided perspective on the teaching-learning transaction.

Personal level

From the perspective of Vygotskian theory, individuals develop personal meanings through being engaged in social practices. Vygotsky's principle of internalization suggests that personal meanings about teaching cannot be developed independently of the inter- and supra-personal levels of assignment of meaning. However, the meanings established on the personal level are also influential on the inter- or supra-personal levels in which people participate in assigning meaning to teaching: communicating meaning within the overall practice is a two-sided process.

In Vygotskian educational theory there is no place for direct or mechanical transmission of meaning from the inter- or supra-personal levels to the personal level. Transacting meaning between these levels involves an active role for the participant as a person. Thus, the appropriation of the meanings communicated by the teacher-education environment depends on the way these meanings are perceived by participants. How meanings are perceived by individual participants depends first of all on the structure of meanings that participants, as persons with already-formed personalities, bring to the situation. Personalities, as relatively stable structures of personally valid meanings, develop over time and on the basis of experiences both within and outside the province of education. An especially strong influence has been attributed to the many hours of anticipatory socialization spent by trainee teachers as pupils, forming an 'apprenticeship of observation' (Lortie 1975: 66)[4] 'The mind of the education student is not a blank awaiting inscription'. New meanings can only be appropriated through a confrontation with existing understandings, and by way of a transformation of the existing structure of personal meanings.

How meanings regarding teaching are perceived by participants also depends on conditions in the teacher-education environment. Meanings can be clearly perceived when they are clearly and consistently presented. Meanings can be perceived as relevant and valid if their relevance and validity have been shown in the context of teaching practices. In so far as developing a professional identity is the result of an identification with meaningful models, such models must be provided by the teacher-education environment. As a person, the individual confronts the meanings presented to him or her with the freedom either to appropriate or to reject these meanings. However, whatever the choice may be, actual behaviour is always a response in part to institutionalized structures on the macro- to micro-levels.

Appropriation implies that meanings are integrated into the personality through a process involving valuation and choice. Thus, Lortie (1975: 55–56) makes a distinction between 'strong' and 'weak' socialization experiences in professional education: as an effect of strong experiences, 'the selves of participants tend to merge with the values and norms built into the occupation', whereas weak experiences leave existing attitudes, values, and orientations intact. However, as Lacey (1977: 72) has argued under the heading of 'strategic compliance', socialization under pressure may enforce outward behaviour, but will not be able to touch the existing personal structure of meaning. Hence, 'strong' experiences require the complement of unconstrained inspection for a personal appropriation of the meanings they carry.

Guided development of a professional identity

To complement these conceptions of assigning meaning to teaching as it takes place in the activity system of education, we will now explore the development of a professional identity as a process requiring structured support and guidance.

The Vygotskian framework sees the development of a professional identity by trainee teachers as embedded in the sociocultural practice in which

they are participants. The practice of teaching includes a mission and programme, guided by values and goals, forms of social interaction, and communication in an institutional setting. Participation involves being drawn into a setting where productive activity and understanding are dialectically related (Lave and Wenger 1991: 102), and where interpersonal transactions create patterns of meanings, values, and cognitive structures (Gallimore and Tharp 1990: 187). For trainee teachers, developing a professional identity requires that they explore the practice of teaching for meanings to which they are willing to commit themselves, and for the realization of which they are willing to develop competence.

Conditions supporting the guided appropriation of meanings and means for fuller participation are not 'naturally' present in a social environment, whether educational or in work settings. Formal schooling has been criticized from a Vygotskian point of view as a 'recitation script' (Tharp and Gallimore 1988: 14) and as 'rote practices' (Moll 1990a: 11). The idea of learning as apprenticeship has also led to reservations about the educational quality of work environments. Lave and Wenger (1991: 96) emphasize that apprenticeship learning should not be 'work-driven' because 'the ordering of learning and of everyday practice do not coincide'. They also warn that a trade-off between offering labour and gaining access to a work environment does not by itself hold a guarantee for the learning of the apprentice (p. 76). The implication is that the teacher-education environment must give careful attention to the conditions that can ensure a fruitful interaction of practice and theory, action and reflection, all geared to developing a professional identity. Some important conditions are outlined below.

Presenting an orientation basis

From a Vygotskian perspective, and taking a liberal view of the teaching model of Vygotsky's pupil Gal'perin (Haenen 2001), the teacher-education environment could appropriately begin by providing an orientation basis to its trainees. Such an orientation serves as an advance organizer by presenting the content of the teacher-education programme as a meaningful whole (Haenen 2001: 161). According to Gal'perin's model, a full orientation includes all the information essential for the mastery of an action. Flexibly applied to teacher education, an orientation contains a reasoned account of the teacher's professional practice in the context of education as a societal function, and presents ideal forms for both the trainees' personal involvement in this practice and for the roles and competences to be learned in the course of the programme. Once established, this orientation continues to function—and to be regularly revisited—as a frame for evaluating trainees' progress in the programme.

Creating awareness of pre-conceptions

To serve as a source for a personally meaningful conception of teaching, the public rationale presented in the orientation has to be confronted with the

personal perceptions and attitudes about teaching that trainees bring to their programmes. Precisely because of its external, verbal, and explicit nature, the documentary orientation can be used as a starting-point for developing awareness of existing personal perceptions and attitudes, and for making them explicit. This confrontation between a public and a personal assignment of meaning to teaching leads to a personalized orientation for participation in the programme: an initial commitment to a conception of teaching that is both publicly and personally meaningful, and constitutes the underlying rationale of learning in the teacher-education environment.

Providing for learning in cycles

Learning to work in a close interaction between assigning meaning and realizing meaning in action is served by structuring learning activities in cycles. In the prospective and retrospective phases of such a cycle, attention to a meaningful rationale for practical action can be ensured. This kind of attention can help to counterbalance the emphasis on the instrumental aspect of teaching that easily comes to dominate in practice. By virtue of its embeddedness in a cyclical pattern, the practical activity of trainees acquires the character of an exploration of the available means—including their personal functioning and repertoire—to achieve personally meaningful goals. The retrospective phase may include a return to the orientation. Successive cycles subject the basis of the initially personalized orientation to reality testing, both in terms of the practical relevance of initial ideas and ideals and to trainees' ability to contribute successfully to their realization in practice.

Providing for learning through exchange and co-operation

The professional identity of teachers includes their identity as members of a professional community, e.g. the teaching staff of a school, working as interdependent practitioners. Developing a professional identity requires the ongoing exchange of experiences and views with fellow-trainees, teachers, and teacher educators. Possibilities for such exchange may be provided both in formal settings, such as collegial consultation and intervisitation, and through conditions promoting informal contacts. These exchanges serve the double purpose of further defining the individual professional profile of each trainee, and of exploring ways to work together meaningfully with colleagues. The latter aspect becomes more prominent in co-operative activities in which trainees work together among themselves, or with other teachers or teacher educators. These situations are by themselves of a nature to encourage a negotiation of meaning between participants as a prerequisite for co-operation.

Encouraging trainees to make choices

The concept of a professional identity includes the notion that there are different ways to be a good teacher and that professional practice allows and

welcomes practitioners with different commitments and competences. Hence, development of a professional identity may be regarded as the development of a personal professional profile under a common standard. The teacher-education environment should support trainees in exploring their practice by allowing them room for choice and initiative, and by providing guidance in the making, implementing, and evaluation of these choices—with a view to clarifying and defining their personal profiles. In this way, the teacher-education environment may provide a basis for the successful handling of the choices and decisions that trainees will be facing in the course of their teaching careers.

Providing for participation in developmental activities

In the practice of teaching, the relation between action and meaning becomes especially prominent and visible in development and innovation. These require an ideal standard underlying both the diagnosis of an existing practice for needs and wants that are as yet insufficiently met, and the definition of targets toward which innovative activities are directed. These activities also contribute to an awareness of the on-going process of attuning instrumental solutions to changing demands and conditions. Hence, with a view to developing their professional identity, trainee teachers profit from being involved, even peripherally, in such activities: they represent explicitly, and clarify the relation between ends and means with which trainees will be expected to deal throughout their practice as teachers.

Supporting trainees in recognizing and overcoming resistances

Litowitz (1993: 184–190) has pointed out that the development of motivation contains the conflicting elements of identification and resistance. Developing a new (professional) identity may incur resistance through the confrontation with existing (personal and social) identities. In the socialization of trainee teachers, recognizing and overcoming resistances to teaching as a profession may count as an important element in developing a professional identity and a feeling of membership (Lave and Wenger 1991: 52–54, Serpell 1993: 361).

Using clinical supervision

One final important element of a teacher-education environment supporting the development of a professional identity in trainees is clinical supervision (e.g. Acheson and Gall 2003). Rather than being an additional form of guidance, clinical supervision is directed towards the three-way harmonization of the trainee as a functionary, as a person, and as the participant in a specific concrete working environment. By being focused on the interface between these three elements in the make-up of the teacher, clinical supervision involves an on-going negotiation between the public and private meanings

assigned to teaching in a concrete professional setting as well as drawing conclusions and making decisions about the further participation and commitments of the trainee. By paying systematic attention to the emotional aspect of trainees' experiences in the practice situation, clinical supervision enables them to examine these experiences as signals of the (more or less successful) agreement of their professional functioning with their ideals and commitments.

Conclusion

In this paper, we have contended that the Vygotskian perspective on learning and development in a sociocultural context holds promise for teacher education by offering the possibility for integrating approaches that emphasize development towards a standard of competence, development of a personal orientation towards teaching, and reflective inquiry.

Elaboration of this perspective will have to do justice to its central bridging concepts. This means that teacher-education programmes will have to work out the connection between orienting trainees in publicly-accepted conceptions of teaching and supporting trainees' development of a personally-meaningful professional identity. It also means that teacher-education programmes will have to shape the interaction between the reflective inquiry involved in assigning meaning to teaching and the practical activity in which these meanings have to be realized.

Implementing a Vygotskian perspective in teacher education will put demands on the environment in which trainees will be training and teaching. Attention and commitment to meaningful teaching for prospective teachers become more relevant and important to the extent that schools are dedicated to meaningful learning for their pupils. The teacher-education environment will have to be structured and organized in such a way that trainee teachers are encouraged and supported to be participants in learning and to develop a professional identity in the course of their participation. And, with a view to implementation, the theoretical approach in this paper will need elaboration into a research programme centred on the relation between the pedagogy supporting the professional development of trainee teachers and the institutional conditions that have to be fulfilled for realizing such a pedagogy.

Notes

1. See Vygotsky (1962, 1971, 1978, 1988–1999), Wertsch (1985, 1991, 1998), Ratner (1991), Van der Veer and Valsiner (1991), Asmolov (1998), and Chaiklin (2001c).
2. Tharp and Gallimore (1988: 113) reported that '[a]t the time of this writing, KEEP consisted of a laboratory-and-demonstration school in Honolulu enrolling about 500 Hawaiian and part-Hawaiian children in kindergarten through the sixth grade, an organization for exporting and supporting the program into the public schools of Hawaii, some 60 classrooms serving about 2000 public school students of many ethnicities in five public elementary schools on three of Hawaii's islands'.
3. Cited by Zeichner and Gore (1990: 336).
4. Cited by Zeichner and Gore (1990: 333).

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