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Implications of studies on expertise in pedagogy of teacher education

Since the publication of the third edition of the American Educational Research Association's seminal *Handbook of Research on Teaching* in 1986 and the ensuing explosion of teacher knowledge research, understanding of the specialised professional knowledge and thinking of able teachers is still a central issue in teacher education – also in the field of Second Language Teacher Education (see: Shulman, 1986; Berliner, 1986; Sternberg and Horvath, 1995 Richards and Nunan, 1990; Williams and Burden, 1997; Richards, 1998, Tripp, 1993).

More and more teacher educators and researchers come to understand that efforts towards establishing this model should focus more on studying the practice of teachers, their „clinical" experience, and less on a priori academic considerations of how teaching practice ought to look like (Pearson, 1994; Kumaravadivelu, 1999; Richards and Nunan, 1990). Teachers' everyday reality should be the starting point of theorising about teaching; to improve teaching, we need to understand the knowledge and processes mediating teachers' performance. Consequently, there has been a shift in research paradigm in teaching from quantitative, process – product studies concerned with „What is effective and important in teaching" to

qualitative approach focusing on „What teachers should know, consider and act upon."

Yet still the pedagogy of teacher education is in need of an adequate model of teaching and learning to teach. Such a model would contribute to discovering, articulating and codifying a shared body of professional knowledge and thus informing pre – and in – service teacher education practices and teacher assessment criteria. In consequence, this ight lead to improving teaching both as an activity and as a profession (see: Shulman, 1986; Berliner, 1986; Richards, 1998).

A number of researchers have noted that psychological research on human expertise offers a number of highly relevant and well grounded insights into the understanding of successful teaching (Berliner, 1986; Leinhardt, 1993; Sternberg and Horvath, 1995). A substantial number of studies comparing novice and expert teachers was carried out. Unfortunately, to date, such studies concern mostly teachers from domains other than foreign languages (Leinhardt and Greeno, 1986; Shulman, 1986; Clark and Peterson (for a review), 1986; Borko and Livingston, 1989; Leinhardt, 1993; Sternberg and Horvath, 1995; Feldman, 1997; McAlpine, 2000). The findings mesh well with those in other domains, especially in such complex domains as medical diagnosis and nursing.

A formidable body of psychological research on expertise accumulated over the last two decades guides us to some salient aspects of expertise: knowledge extent and organisation (its content, character and sources) and expert information processing. There is convincing evidence that the organisation, quality and quantity of knowledge of experts is a critical factor in their performance. Expertise depends on acquiring large stores of relevant knowledge which are accessible for use within a given domain (see: Ericsson et al.,1996). What is more, task analyses of many domains show that the amount and quality of knowledge assessed is one of the best predictors of expert performance.

Thus, what is the nature of expert knowledge and its relation to the superior performance of experts as compared to novices? In

comparison to novices, experts have larger knowledge base from which to draw and they organise their knowledge more efficiently in complex, interconnected patterns and access them more rapidly and effectively. Experts simply know more, better and in a more usable way. A fundamental mechanism of expert performance – pattern based retrieval – reflects the acquisition of well organised and integrated knowledge which provides a schema for thinking (Glaser, 1997). Experts' schema (structures that represent an organising unit of the effective memory organisation) are built up as a function of experience within a particular domain (Patel et al., 1996; Patel and Ramoni, 1997). Outside their domains experts do not outperform novices or non-experts. Therefore, it emerges that experts' knowledge is grounded in experience and is contingent upon specific memory for previously experienced examples and episodes from their practice. Research from nursing reveals that expert nurses rely in their decision making on past experiences not abstract rules (Daley, 1999).

Experts acquire and preserve highly adapted, refined, as if finely – tuned representations of situations form their domain (Ericsson, 1996: 28). Their representations though context specific and in the form of exemplars, analogies, prototypes, cases, episodes go beyond surface features and reflect experts' encoding at a deeper as opposed to surface level. Expert encoding is found to subsume surface features of raw information. This capability might be explained in terms of different memory skills exercised by experts, that is conceptual memory vs. surface memory and a moderately abstract nature of experts' representations of information or MACRs (Zeitz, 1997). MACRs are hybrid representations that are neither so general as to lose contact with the material, nor so concrete and detailed as to be strongly influenced by the original formatting of the information (Zeitz, 1997: 48; see also: Ericsson and Charness, 1994: 736). To conclude, we can hypothesise that the construction blocks or chunks of experts' knowledge representations seem to be clusters, constellations, patterns of meaningful cues and categories of rather situated, not universal, abstract and theory-driven nature (Glaser, 1996:305). It seems that expert knowledge representations are

practice-driven, created and made meaningful by the context and activity through which they are acquired.

Research on human expertise has bolstered new understanding in the field of teacher education that to understand teaching it is necessary to „unlock" what is learned and known in the practice of teaching, where decisions are made on – line and relevant knowledge must be rapidly accessible in a usable form (Leinhardt, 1993). Researchers turned towards discovering the principles embedded in real – life performance of teachers as a means to construct adequate theory of professional knowledge. Elbaz, who carried out the first research on teacher practical knowledge as early as in 1981, suggested that teacher's professional knowledge might be represented in the form of rules of practice, practical principles and images. Later research yielded similar results which described expert performance of teachers as mediated by practical, procedural, specific and pragmatic form of knowledge, to use Leinhardt's categorisation (1995):

location	*academy*	*practice*
type	declarative	procedural
generality	abstract	specific
nature of principles	conceptual	pragmatic

The work of a number of researchers confirms that the knowledge unique to expert teachers is accrued in real – life „clinical" situations of practice, that it is highly domain – specific, episodic, situated, intuitive, tacit, image -based, subjective, strategic (Shulman, 1986), personal (Connely et al., 1997), experiential (McAlpine and Weston, 2000).

It has been also hypothesised (Shulman, 1987) that at the heart of expert teachers' professional knowledge lies „pedagogical content knowledge – a special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding" (p.8) In other words, this kind of

knowledge, featured uniquely by expert teachers, represents the blending of content and pedagogy into and understanding of how particular topics, problems, or issues are organised, represented and adapted to the diverse interests and abilities of learners, and presented for instruction (p.8). It seems, thus, that expert knowledge structures include stores of powerful explanations, demonstrations and examples for presenting subject matter to students (Livingston and Borko, 1989: 39). As to the generic pedagogical knowledge expert teachers also differ from novices. They tend to know more form the backgrounds of students and they accurately anticipate what skills and expectations students might possess, what types of misbehaviour could be displayed (Berliner, 1986,; see: Clark and Paterson , 1986, for a review of research). It is believed that expert teachers know their students before they get to know them.

The unique knowledge that differentiates experts from novices mediates experts' superior information processing and reasoning skills which can be characterised as combining the abilities to recognise key features of situations and link them to relevant information in memory and the abilities to solve problems by heuristic. Put another way, experts exceed novices both in relatively resource – independent, automatic, as well as in resource consuming, controlled cognitive processing.

Thanks to large stores of relevant patterned knowledge, experts have unusual perceptual abilities. They make greater use of recognition and instantaneous retrieval techniques in interpreting ongoing stream of information while engaged in activities in their domain. Their schemata act as a set of pointers from a problem / situation encoding in STM to relevant knowledge categories in LTM (Patel and Ramoni,1997). Experts accurately identify what cues in the new information are similar to previously stored categories; they quickly distil the essence of the situation and discard the inconsequential bits (Zeitz, 1997: 59). They establish analogies to previously situations attending to deep level features. This ability might explain why novices attend to different cues than experts, and are generally less selective getting bogged down by irrelevant data

(Patel at al., 1996: 134). These findings fit well with what has been found about expert teachers. Livingston and Borko (1989) report that in post lesson sessions novice and expert teachers differed significantly in this respect.

Stores of expert knowledge underlie increased familiarity with domain situations. Gaining expertise might be even conceptualised as bringing more and more of information into the realm of the familiar. This results in emergence of routines. Across domains novices are consistently reported as lacking in routine behaviour, whereas experts rely heavily on routines. This holds true for expert teachers in a number of studies referred to above. Expert teachers are found to display 4 types of routines: activity, instructional, management and executive planning routines (Yinger, quoted in Clark and Paterson, 1986: 15).

With regards to the second mode of experts' superior cognitive processing, i.e., problem solving, experts differ from novices in attending to unique and anomalous data. They spend greater proportion of time to understand the problem and build adequate problem representation. So in the first phase of problem solving experts tend to be slower that novices who instantly try out different solutions. Experts, instead, use the so called „strong" problem solving strategy, i.e., forward reasoning (Patel et al., 1996: 132) they first report the „givens" of the problem until a solution appears. They are also eager to change hypothesis instead of fitting data into a hypothesis. But the range of experts' hypotheses is rather limited because they usually zero in on the accurate region of the problem without wasteful consideration of a large range of unfruitful possible alternatives (Daley, 1999). Thanks to this ability experts' construction of adequate problem representations is much less prone to errors.

The relevant research on expert teacher concerns teacher decision making which can be conceived as a form of problem solving (Copeland et al., 1993; Artzt and Armour – Thomas, 1998). It has been noted that both the because both pre – and inter – active decision making of teachers bear close affinity to human problem solving and decision making in naturalistic settings (see: Clark and

Paterson, 1986: 272). Research on expert teacher decision making distinguishes the double agenda of teachers (Leinhardt, 1993): didactics – planning decisions, diachronic anticipation of teaching activities and goals – and pedagogy – synchronic actualisation of teaching (Tochon and Munby, 1993).

Expert teachers avoid rigid plans, their plans seem to be in closer contextual relation to pedagogy. Expert anticipation of time is more synchronic and involves fusion of didactics and pedagogy , whereas didactic organisation of content seems to be an obsessional thought among novices (Tochon and Munby, 1993). Livingston and Borko (1989) noted that expert plans were in the form of specified contingencies that are dependent upon specific behaviour of the students. Leinhardt and Greeno (1986) describe the planning process of expert teachers as an interaction between an action schema (what teachers planned to do and how to do it) and an information schema (the knowledge of content and students). Expert teachers are also more planful than novices in their approach to classroom discipline problems. They focus on defining the problem, establishing their goal structure and not being „solution oriented" as novices (Swanson et al., as quoted in Sternberg and Horvath, 1995: 13).

Expert teachers' interactive decision making is characterised by rapid and accurate interpretations of what is going on in the classroom (Berliner, 1986). Expert teachers engage in ongoing monitoring of classroom events, paying special attention to student cues (Tachon and Munby, 1993) An interesting finding has been reported by McAlpine and Weston (2000) who found that expert teachers employ „interpretative filters" that are sensitive to not only negative student cues but also to cues that promise the optimising of student learning. Expert teachers are also found to be more at ease when the pedagogic context of teaching influences didactic time and requires some deviation from the anticipated sequence of events, which might be explained by expert teachers' confidence in their managerial skills (Berliner, 1986) and relying on stores of powerful explanations, demonstrations and examples for representing subject matter (Livingston and Borko, 1989).

It appears from the findings discussed so far that that the critical feature of expertise is related to the quantity and quality of experts' knowledge and their extraordinary pattern recognition capabilities. Expertise develops with time, practice and experience and results in increasing familiarity with circumstances of a domain and relying on effective routines. Expert routines are perceived to be significant „energy savers" and facilitate effortless „reinvestment" of cognitive resource to high – level reasoning and problem solving if needed. However, there are some inherent risks in expert information processing. Cognitive changes resulting from extended practice are known to have rigidifying effects, which can only be exacerbated in a world of complexity and rapid change. It is quite probable, then, that experts might fall into the traps of schematisation, routinisation, functional fixedness, automaticity and the reductive bias (Feltovich et al., 1997). In the case of schematisation, experts' mental structures like schemata, frames, scripts can cause them to see the world as too repeatable and can make their cognitive processes more automatic and less amenable to regulation or change. Over time, experts might also become reductively biased and thus treat and interpret complex circumstances and topics as simpler that they really are. Instead of seeing them as dynamic, simultaneous, organic, interactive, irregular they might tend to view them as static, sequential, mechanic, separate and regular. In the field of education the reductive bias is sometimes bolstered by authorities and school cultures.

Research in medical expertise shows that experts overcome rigidity when their expectations for a particular patient are violated or they notice something anomalous about the case (Feltovich, 1997: 131). Experts' sensitivity to cues of unusualness and difference might be attributed to the quality of their schema i.e., their high differentiation resulting probably from their extended practice with a wide variety of cases. Having confronted anomalous data medical experts are reported to engage in „unpacking their knowledge" employing more basic kind of reasoning – from first principles (Zeitz, 1997: 58). A question arises: „How to remain flexible after a years of practice?" Or rather: „How to remain a true expert ?" because expertise can be

characterised by the ability to adopt quickly and accurately to changes in circumstances. It is believed that experts must engage in a life – long process of learning from their experience adopting a personal epistemology or worldview about knowledge. Moreover, Feltovich et al. (1997) argue that to avoid rigidity it helps to have and nurture a large „tool box" of cognitive and interpretative processes which involves multiple perspectives and frames of reference and the ability to reason from multiple past cases, precedents and collaborating with other people.

Experts also need to adopt effective learning strategies. One of them would be exploring any practice – driven concept or principle across many diverse cases from their own and their colleagues' experience (see also Daley, 1999).

Expert flexibility is highly reminiscent of the concept of reflection in education. Although everyone seems to have their own personal understanding of what reflection is (Wallace, 1999; Ixer, 1999), it seems that reflection is triggered by the feeling of „felt difficulty," to use Dewey's words, or uncertainty and mediates the processes of learning from experience contributing to building expert teachers' own epistemology of practice.

With regards to time necessary to attain expertise research findings are consistent that 10 years' experience is required. Berliner (1988) suggested that expertise in teaching begins to emerge after 5 years of practice. But this hypothesis needs to be validated.

Conclusion

Cognitive psychology provides a powerful array of theoretical and methodological tools for examining the components of teaching as a cognitive skill and teacher as a learner and thinker. Research in expertise clearly shows that expertise must not be confounded neither with experience nor the accumulation of formal knowledge. It has been also found experience without deliberative practice and informative feedback may actually impair rather than improve performance (Ericsson and Charness, 1994; Ericsson, 1996: 18).

These findings bring to our attention the field of in – service training for teachers, its goals and techniques.

However, certain difficulties arise when we want to adopt the psychological framework for researching teaching. First of all, finding criteria for defining expertise in pedagogy is quite problematic. As Leinhardt (1993) notes, one reason can be attributed to the nature of teaching as a very complex cognitive activity. In teaching there are inherent tensions between simultaneous goals which can frequently be resolved in a particular temporal arrangement. What is more, the environment produces huge information processing demands where strategic knowledge must be co-ordinated with semantic knowledge of the content (p. 5). Additionally, teaching is an ill – structured activity with classes of problems whose optimal answer is not known nor obviously deductible (p. 7/8). Finally, teaching performance cannot be deemed successful or effective because they refer to future events or hidden conditions and some teachers' actions can be evaluated after years.

Another source of difficulty springs from the social nature of teaching . It is suspected that in such domains as teaching, nursing or medicine experts are not usually the most knowledgeable among their peers. They might have earned their status by sheer capacity to construct and maintain confidence. This would suggest that the minimum criterion of expertise would be having a constituency that perceives them to be experts (Agnew et al., 1996). In this light, expertise viewed as personally constructed, socially selected and historically situated might be in fact a highly fallible construct.

Final difficulty in studying effective teaching within the framework of expertise is still the inadequacy of the methods in exploring cognition in the workplace, in real – world settings where such modulating variables as stress, time pressure, fatigue, communication patterns in a team performance significantly influence cognitive processing (Patel et al., 1996: 135). Last but not least, teaching is a value – laden activity, a moral enterprise where teachers' beliefs, values and attitudes are brought to bear in their actions. There is a

risk that studying teaching within the framework of expertise can foster a simplistic view of teaching.

Even if studying teaching as expert performance may not prove fruitful in the long run, it still cannot be denied that the studies in expertise have changed the way the process of becoming a successful teacher is conceptualised. The tacit assumption that if student teachers learn theoretical, generative principles and concepts, they can later adapt, apply and instantiate them in practice has been seriously challenged (Leinhardt et al., 1995: 402). There is growing understanding among researchers and teacher educators that the professional knowledge of teaching is not identical with the declarative knowledge base offered by the academia. Rather the concept of the uncodified knowledge of practice as a critical component in teacher professional knowledge is starting to receive serious scholarly attention.

References

Agnew N.M., K. M. Ford, P. J. Hayes (1997). Expertise in Context: Personally Constructed, Socially Selected and Reality-Relevant. In Feltovich, P. J. et al.

Artzt. A. F. and E. Armour-Thomas (1998). Mathematics Teaching and Problem-Solving: A Framework for Studying Teaching Metacognition Underlying Instructional Practice in Mathematics. Instructional Science, 26, 5-25.

Berliner, D.C. (1986). In Pursuit of the Expert Pedagogue. Educational Researcher, Aug / Sept, 5 - 13.

Berliner, D.C. (1988) The Development of Expertise in Pedagogy. American Association of Colleges for Teacher Education, Washington, D.C. (ED 298 122)

Clark, C. M., P.L. Paterson (1986). Teachers' Thought Processes. In Wittrock, M. (ed.).

Connely, F.M., D. J. Clandinin, M. F. He (1997) Teacher's Personal Practical Knowledge on the Professional Landscape. Teaching and Teacher Education, 13, 665-674.

Copeland, W. D., G. Birmingham, E. de la Cruz (1993) The Reflective Practitioner in Teaching: Toward a Research Agenda. Teaching and Teacher Education, 9, 347-359.

Covino, E. A., E.F. Iwanicki. (1986). Experienced Teachers: Their Constructs of Effective Teaching. Journal of Personnel Evaluation in Education, 10, 325 - 363.

Daley, B. J. (1999). Novice to Expert: An Exploration of How Professionals Learn. Adult Education Quarterly, 49, 133 - 147.

Elbaz, F. (1981). The Teacher's 'practical knowledge': Report of a Case Study. Curriculum Inquiry, 11, 43 - 71.

Elliot, J. 1989. Educational Theory and the Professional Learning of Teachers: an overview. Cambridge Journal of Education, 19, 81-101.

Ericsson, K.A. and N. Charness. 1994. Expert Performance. Its Atructure and Acquisition. American Psychologist, 49, 8:725-747.

Ericsson, K.A. et al. (1996). The Road to Excellence: The Acquisition of Expert Performance in the Arts and Sciences, Sports and Games. Lawrence Erlbaum Association.

Feltovich, P.J. et al. (Ed.) (1997). Expertise in Context: Human and Machine. Cmbridge, MA: The Mit Press.

Glaser, R. (1996). Changing the Agency for Learning: Acquiring Expert performance. In Ericsson, K.A. et al.

Ixer, G. (1999) There's No Such Thing as Reflection. British Journal of social Work, 29, 513-527.

Kumaravadivelu, B. 1999. Theorising Prctice, Practising Theory: the Role of Critical Classroom Observation. In H. Trappes-Lomax and McGrath (1999).

Livingston, C. and H. Borko. 1989. Expert-Novice Differences in Teaching: A Cognitive Analysis and Implications for Teacher Education. Journal of Teacher Education, 40,4: 36-42.

Leinhardt, G., J.G. Greeno. (1986). The Cognitive Skill of Teaching. Journal of Educational Psychology, 78, 75 - 95.

Leinhardt, G. (1993). On Teaching. Advances in Instructional Psychoiogy, vol. 4.

Leinhardt, G., K. McCarthy Young, J. Merriman. (1995). Integrating Professional Knowledge: The Theory of Practice and the Practice of Theory.Learning and Instruction, 5, 401 - 408.

McAlpine, L. and C. Weston. 2000. Reflection: Issues Related to Improving Professors' Teaching of Students. Instructional Science, 28, 5-6: 363- 385.

Patel, V. L., D.R. Kaufman, S. A. Magder (1996). The Acquisition of Medical Expertise in Complex and Dynamic Environments. In Ericsson, K.A. et al. (1996).

Patel, V.L. M.F. Ramoni (1997). Cognitive Models of Directional Interference in Expert Medical Reasoning. In Feltovich, P.J. et al.

Pearson, A.T. 1994. Nauczyciel. Teoria i Praktyka w Kształceniu Nauczycieli. Warszawa: WSiP.

Richards, J.C. (1998). Beyond Training: Perspectives on Language Teacher Education. Cambridge: Cambridge University Press.

Richards, K. (1999). Theory in Practice: Design and Argument in Day- to- Day Teaching. In H. Trappes- Lomax and McGrath.

Richards, J. and D. Nunan (1990). SLTE. Cambridge: Cambridge University Press.

Shulman, L.S. (1987). Knowledge and Teaching: Foundations of the New Reform. Harvard Educational Review, 57, 1: 1-23.

Sternberg, R.J. and J. Hotvath. (1995). A Prototype View of Expert Teaching. Educational Researcher, 24, 6: 9-17.

Trappes-Lomax,H. and I. McGrath (eds.) (1999). Theory in Language Teacher Education. Essex: Longman.

Trappes-Lomax,H. and I. McGrath. (1999). Introduction. In H. Trappes- Lomax and McGrath (1999).

Tripp, D. (1993). Critical Incidents in Teaching. Developing Professional Judgement. London and New York: Routledge.

Tochon, F., H. Munby. (1993). Novice and Expert Teachers' Time Epistemology: A Wave Function from Didactics to Pedagogy. Teacher and Teacher Education, 9, 205 - 218.
Tomlinson, P. (1999). Conscious Reflection and Implicit Learning in Teacher Prepartion. Part I: Recent Light on an Old Issue. Oxford Review of Education, 25, 3, 405-424.
Wallace, M.J. (1991). Training Foreign Language Teachers. A Reflective Approach. Cambridge: Cambridge University Press.
Williams, M. (1999). Learning Teaching: a Social Constru ctivist Approach – Theory nd Practice or Theory with Practice. In H. Trappes-Lomax and McGrath (1999).
Wallace, M. (1999). The Reflective Model Revisited. In H. Trappes-Lomax and McGrath.
Williams, M. and R.L. Burden. (1997). Psychology for Language Teachers. A Social Constructivist Approach. Cambridge: Cambridge University Press.
Wittrock, M.C. (ed.) (1986). Handbook of Research on Teaching (3rd.ed.). New York: Macmillan.
Zeitz, C. M. (1997). Some Concrete Advantages of Abstraction: How Experts' Representations Facilitate Reasoning. In In Feltovich, P.J. et al.

Erika Diehl / Helen Christen / Sandra Leuenberger / Isabelle Pelvat / Thérèse Studer: *Grammatikunterricht: Alles für der Katz? Untersuchungen zum Zweitsprachenerwerb Deutsch.* Max Niemeyer Verlag, Tübingen 2000

Erika Diehls et al. *Grammatikunterricht: Alles für der Katz?* ist eine Position, die über Ergebnisse des Forschungsprojektes *Grammatikerwerb im Fremdsprachenunterricht untersucht am Beispiel Deutsch als Fremdsprache* (DiGS) berichtet und diese zur Diskussion stellt.

Dem eigentlichen DiGD-Projekt geht eine Pilotstudie voran, die unter Leitung von E. Diehl entworfen und in Genfer Schulen durchgeführt wird. Die Datenerhebung dauert von September 1995 bis Juni 1997. In 30 Schulklassen (4. –12. Klasse) werden je 10 Schüler ausgewählt, die im Verlauf von 2 Schuljahren 8 Aufsätze schreiben; hinzu kommen die Abiturarbeiten. Die Zahl der Probanden erfasst 300 und im zweiten Jahr der Untersuchung 220 Schüler. Zur Auswertung werden rund 1800 Schüleraufsätze bereitgestellt.

Ziel des DiGS-Projektes ist es, die Hypothese der kognitiv ausgerichteten L2-Erwerbsforschung zu überprüfen, nach der der Erwerb einer Fremdsprache auch im unterrichtlichen Kontext einer inneren Gesetzmäßigkeit unterliegt und in einer bestimmten Reihenfolge einzelner Erwerbsphasen abläuft. Im Zentrum des Interesses stehen die Relationen zwischen Grammatikinstruktion und Grammatikerwerb, insbesondere die Frage, inwieweit sich überindividuelle Erwerbsreihenfolgen für Teilbereiche der Grammatik ermitteln lassen, die signifikant von der schulischen Grammatik-progression abweichen. Dabei werden sowohl die bereits vorliegenden Forschungsergebnisse zum Spracherwerb als auch eigene DiGS-Daten in die Datenanalyse mit einbezogen. Die drei grammatischen Hauptbereiche: der Satzbau, der Verbalkomplex und die Deklination werden im DiGS-Projekt parallel bearbeitet.

Die Beiträge des I. Teils stellen die gängigen Theorien zum Zweitsprachenerwerb dar und bilden die theoretische Basis der Arbeit. Es