INTERACTION OF IMPLICIT THEORIES AND ORIENTATION STYLE IN THE TEACHER PRACTICUM

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1. The practicum-necessary or negligible in teacher education?

Practica in classrooms are regular component of teacher's pre-service education in Germany. Generally, student teachers spend one morning each week during several semesters in classrooms observing lessons, taking over teaching assignments now and then, and discussing their experiences afterwards with the classroom teachers as well as later with docents in university seminars. Although supposed to complement theoretical studies, theare are also doubts of the practicum's effectivity; even the student teachers on the one hand value practicum very much, on the other hand they criticize insufficient supervision (Klinzing, 1990). Roth (1981) found puzzling results after six months of practicum: Student teachers became more liberal, student-oriented, and non-directive, and at the same time they agreed more with statements favouring teacher dominance, but less with teachers's diagnostic and individualizing tasks. Considering these contradictions, we should not jump to conclusions neither about the functionality of teacher practica in general nor about additional factors outside the praxis experience that may have caused these findings.Instead we should at last take Lewin's (1936) classic formula more serious/y according to which behavior results from both person and environment.

The findings from research on teacher practica appear to be inconsistent, but a closer look reveals that gains in the arithmetic mean

of scores on opposing scales must not exclude each other. If we take interpersonal differences into account, we could suppose that one subsample of participants in school practica concentrated above all on cases of student-centered teaching, while another subsample's attention was drawn to teacher-centered classroom activities. Both subsamples gained from their praxis experiences, i.e. there post-practicum scores were higher on the relevant test scales than their pre-practicum scores. The important question, then, is why we should expect interpersonally differing results of practica. Our preliminary answer is that practicum effects will depend on student teachers' implicit about learning and instruction. However, there is immediately an additional question: Why should their implicit differ? Do not all student teachers come to teacher education with years of experience as learners in the same educational system? We suggest that implict theories develop in interaction with fundamental personal orientations (towards the world and oneself) and will contribute to produce differential experiences of student teachers exposed to the same classroom events. These events seem not to be negligible for teacher education, but we have to find out which of them are necessary for whom.

In the following, we will outline the construct of implicit theories, elaborate on the notion of student teachers uncertainty vs. certainty orientation, and report results from an empirical study on the interaction of student teachers' orientation style and their implicit theories about practical teaching.

2. Implicit theories and practicum experiences

We suggested to take student teachers' implicit theories into account, if explanations for differing experiences in the practicum are needed. Buchmann (1989) has pointed out that student teachers enter teacher education with a great number of well established ideas about learning after twelve or more years of watching teachers and experiencing their activities as students. More than often these ideas from the basis beginning teachers' classroom activities. Many of Marcelo's subjects in a study on the socialization of beginning teachers expressed this quite clearly; here is an example (cf. Huber and Marcelo, 1991): «What I really do in the classroom is to follow what my teachers did with me, I treat my students the same way, maybe somewhat milder.» This strategy surely is not the sort that teacher education tried to establish. We have to find out and modify how student teachers' ambiguous subjective

experiences with teaching and learning are transformed into their implicit theories of instruction.

Above all, the necessity to act immediately in front of a classroom seems to play a most important role for the development of implicit theories of teachers (and students, of course): Their actions take under permanent constraint to get quickly orientated. The fast flow of necessary decisions does not allow teachers to be highly attentive to the exact results of their actions. Therefore they are always endangered to learn nothing from their «experiences», simply because analysis and interpretation are insufficient. But with defective analytical procedures they succeed in maintaining the impression of controlling the events rationally, thus stabilizing their implicit theories of instruction. For this special advantage of implicit theories, however, teachers pay high costs: Although implicit theories allow to structure classroom situations in a way that bears little danger of paralizing them because of too much and too differentiated thinking, these cognitive systems contain many hardly tested assumptions. So teachers mostly remain convinced of their «hold on the situation», and of their subjective categories.

These categories, i.e., the contents of implicit theories, include entities referring to a person's thinking, feeling, and acting as well as to the situation. Regarding our interest in elucidating the role of implicit theories in practicum situations, we should try to find out about student teachers' (1) situational appraisals, i.e., their expectations based on experiences with similar situations; (2) behavioral appraisals, i.e., their expectations what can be done and what follows this action in a specific situation; (3) functional appraisals, i.e., their expectations of further consequences regarding the situation and themselves; and (4) evaluative appraisals, i.e., their idiosyncratic affective reactions to these expected consequences.

During a case study comparing three practicum teachers and the student teachers observing their classrooms (Huber & Roth, 1990), we were confronte with widely differing reactionos of students to the same classroom events, and they gave us some hints about their implicit theories. One of these teachers employed very systematic and formal teaching procedures, i.e., her teaching seemed to follow a predictable series of steps. Towards the end of each lesson she made sure that the pupils had written down all the necessary information. She seemed to know what was appropriate and important for her pupils. Another teacher, on the contrary, tried to integrate the central components of the Freinet approach into her teaching style by allowing independent study in specified learning situations, discussion circles, etc. The fact

that every one of her pupils was unafraid discuss anything with her that came to mind was principly noticed by the observing student teachers. In conflicting or critical situations this teacher always tried to find out how much she contributed to the situation. However, on occasions when she felt that the Freinet method was too daring she would use «real lessons». This teacher seemed to be convinced thad new possible modes of teaching can open up a reservoir of yet untouched teaching potential.

Following classroom observations, the student teachers, the teachers, and the second author always met for a seminar at the university. Two very different reactions regularily characterized the beginning of the seminar sessions.There were student teachers who expressed their overall impressions with remarks like «I would like to be able to teach in the same way!», or «If I get enough out of these lessons, then l'Il be a good teacher, too!». They wanted now to reflect on their classroom experiences, and to receive additional theoretical information. On the other hand there were students who expressed there uneasiness about totally structured lessons, during which they had experienced an artificial pedagogical climate of certainty, with smoothly flowing argumentations and mildly dosed, «didactized» controversies. Again other students came with strong emotions, even aggressiveness into the seminar, due to the uncertainties and contradictions they had to overcome during the morning hours spent in the classroom. Many of the student teachers observing lessons tailored to the pupils' subjective experiences and conceptions began to feel intimidated; they could not just consume the «goods» of teaching, but were forced to make up their own minds. Sometimes they not only expressed their doubts of this way of teaching, but also their anger: «How shall I ever learn teaching!», «We don't have equal chances - nobody shows us how to teach!» or «There is no order at all!». Finally, there were student teachers who felt just challenged by this adaptive approach to learning and instruction. Altogether, this seminar provided us with more variety of implicit situational, behavioral, functional, and emotional appraisals than would have been sufficient for vivid seminars.

3.   The construct orientation style

The occurence of intrapersonal cognitive conflicts, which many of our student teachers clearly had experienced during the practicum, should evoke the motivation to establish a new cognitive balance, at least following for instance Festinger's (1957) theory of cognitive

dissonance or Heider's (1958) assumptions about the resolution of cognitive discrepancies.But, as we have seen, many student teachers' reactions to practicum experiences, which did apparently, not match their implict theories of teaching, oppose these assumptions. We suppose, there is an individual orientation towards the world and oneself that supports stabilizing tendencies, while another type of orientation makes people ready for cognitive re-organization. This notion is taken from Sorrentino and Short (1986), who raised the question, whether reactions to controversies are mediated by what they called «uncertainty» vs. «certainty» orientation (u-o *vs.* c-o). These orientations describe modes or styles of coping cognitively with situatios or actions that imply uncertainty of consequences or results as one of their basic aspects. As Sorrentino and Short (1986) stated, so-called «uncertainty-oriented» persons can be characterized by a tendency to actively expose themselves to situations that are open, unclear or «uncertain» in their consequences. In contrast, persons characterized by a so-called «certainty-orientation» try to actively avoid or circumvent situations for which uncertainty of consequences constitutes an important aspect. They are first of all motivated to keep constant their actual views about themselves and their environment, and they do not want these views to be submitted to constant discussion or revision. In other words: C-O persons try to maintain the ideas and views about themselves and their environment, while U-O persons try to attain new forms of clarity.

The construct of uncertainty-/certainty-orientation resembles and, as a matter of fact, builds upon the theoretical work Rokeach (1960), who introduced the personality concept of «dogmatism» with its opposing poles of «open-minded» and «closed-minded» personalities. For the operational definition of uncertainty-/certainty-orientation Sorrentino, Short and Raynor (1984) also referred to Byrne and Lamberth's (1971; cf. Cherry and Byrne, 1977) construct of authoritarianism, which like the construct of dogmatism was based on the early work of Adorno et al. (1950) on the so-called authoritarian personality.

Supposing that many student teachers constructed teacher-centered implicit theories of learning and instruction during their time as pupils, these student teachers' expectations should be fulfilled if they observe formally structured lessons. If they happen to come to a student-centered classroom like the one described above, they will experience major discrepancies between expected and real conditions of learning and instruction. Under these circunstances, uncertainty oriented student teachers should be motivated to modify their implicit model of instruction, whereas certainty oriented students should not be interested in finding out anything new about learning environments, but resist

against being exposed to this puzzling situation. Student teachers with implicit theories of open, student-centered teaching on the other hand should feel reinforced in´the latter classroom, while formal lessons should be controversial for them. Again, uncertainty orientated student teachers should try to resolve this controversy by learning to balance advantages and disadvantages of open vs. formal teaching. We do not predict reactions of certainty oriented student teachers holding implicit theories in favour of open learning, because this combination seems to be rather unlikely.

As a first to test these considerations we tried to find out whether there are matching interactions of orientation style and implicit theories. We doubt that all student teachers cope wich cognitive conflicts in the same manner, alghough this does not exclude principally the possibility that controversial experiences, i.e. discrepancies between implicit theories and observations in the classroom will cause positive effects for student teachers. The important question is: for wich student teachers' and by means of which processes?

4. *Empirical study*

In an investigation on relations of uncertainty/certainty orientation and problem solving behavior in small groups (Huber and Rollinger-Doyen, 1989) at the University of Munich we had identified 17 student teachers as uncertainty oriented and 15 as certainty oriented. All of these students had already participated in a teacher practicum for at least one year, and they were all in one of the second author's seminars. He asked them to talk with him about their reactions to teaching assignments and teaching probations during their classroom practicum. By means of these interviews we wanted to gest access to their implicit teaching theories, expecting to find systematic interactions between these subjective notions and their orientation style.

As a surprising side-effect we noticed that only three of the certainty-oriented (C-O) subjects were willing to participate voluntary in such an interview, while thirteen of the uncertainty-oriented (U-O) student teachers volunteered for this talk with their docent. Additionally, there were two student among the interviewees who could not be appointed to the C-O or the U-O category. The inconsistency of this distribution (3:12 for C-O students, 13:4 for U-O students) is highly significant (Chi square = 10.7; $p < .01$). This unintended finding confirms the funda-mental difference between C-O and U-O persons: while the first try to

avoid situations that contain uncertainty about the self (or the environment), the latter are very much motivated to profit from «diagnostic» situations. This result also confirms the findings of Sorrentino, Shor and Raynor (1984): In their experiment the subjects took a test of a new and important ability (as they were told), then they received «uncertain» feedback about their results, i.e. they were told that it was not clear whether they were good or average in that ability in condition 1, and bad or average in condition 2. All subjects were then given a chance to take a second test, for which they could choose their items from three subtests. One subtest would resolve uncertainty for high vs. average ability, the second subtest for low vs. average ability, and the third subtest provided now additional information about the ability level. The U-O subjects in this experiment preferred diagnostic subtest items over non-diagnostic items regardless of ability level: «Hence, regardless of whether the information was likely to be good news or bad news, they still wanted to know about the ability», whereas for C-O subjects «it did not matter wheher the information was likely to be good news or bad news, they still did not want to find out anything new» (Sorrentino et. al., 1989). Although we were somewhat disappointed with the small number of remaining subjects, we felt very much reinforced by the effects of the critical variable «orientation style», and we decided to continue with this sample.

Measurement of orientation style

As conceived of by Sorrentino & Short (1986), the measure of uncertainty orientation is designed to assess the relevance of two components, uncertainty and certainty. The uncertainty component was measured by means of a four point rating-scale consisting of 22 items, all constructed to assess coping with ambivalence. Most of these items were taken from the chapter on controversies in a publication by Johnson and Johnson (1987). Examples are: «If someone disagrees with my ideas, I feel rejected.» «When others disagree with me, I view it as a good opportunity to call my ideas in question and to modify them.» The remaining items were developed from students' answers during previous interviews on their experiences while learning in groups, for instance: «If controversies arise in a group, I try my best not to become involved.» The certainy component was inferred from the Byrne & Lamberth (1971) acquiescence-free measure of authoritarianism. In order to identify U-O and C-O subjects we z-transformed both scores, i.e., ambivalence and authoritarianism scores for all subjects. We then defined those subjects as U-O, whose score on the ambivalence scale

was z > 0 and whose score on the authoritarianism scale was z < 0; for C-O subjects the criteria were z(ambivalence) < 0 and z(authoritarianism) > 0.

Assessment of implicit theories

Verbalization in various modes is the central component of approaches to implicit theories. If subjects are allowed to verbalize their expectations, explanations, evaluations, etc., we avoid to narrow their expressions by pre-formulated answering patterns which do not reflect a subject's cognitive structure but reflect the researchers' or their favorite theories' structures. On the other hand, we have to be aware of the fact that verbalization methods do not provide direct access to our subjects' cognitions. When we ask subjects to tell us what went trough their mind in a particular situation, neither our subjects nor we get access to these cognitions per se, because what the subjects do is talking about cognitions. From this talk we have to draw our conclusions later (cf., Huber and Mandl, 1982).

In this study we approached student teachers' implicit theories of teaching by means of interviews structured by three descriptive questions. The first question was: «Imagine the following situation: When you come to your practicum school in the morning you are told you have to give a lesson in a classroom, where you not have been yet. Nobody expects that you realize a particular goal with the students, but a teacher or a student teacher has to be in the classroom. Thus you have an opportunity to organize teaching and learning just the way you would like it. What is going through your mind in this situation?» After the subjects elaborated on that they were asked the second question, which differed from the first in two important details. The subjects had to imagine that they were informed about their teaching assignment one day ahead and that the practicum teacher and the other student teachers of the practicum group would be present and observing during the lesson. The third question, finally, described the formal situation of a teaching probation, during which a mentor would be present, evaluate their performance, and decide about a mark. The whole interview was audio-taped and transcribed afterwards.

Securing objectivity

The computations for the identification of individual U/C-orientation were done by the first author. In order to ask students to participate in an interview on their practicum experiences (see above) the second

author had to know whom to accost. Therefore he received a list of code numbers of subjects choosen for further activities, but he received no information about these students' orientation style. From another list, which was not available for the first author, the second author them could identify the names of potential subjects. The first author got back the interview tapes with new code numbers; thus he was unable to identify in advance the interviewees' orientation style. Only after interpretation of the interviews, which was done by the third author, the first author got a list of old and new subject codes.

Analysis of interview data

Interpreting and analyzing qualitative data starts with the codification of texts. Whe coding, we attach abbreviations symbolizing our interpretation of particular text segments to the text. In this study, we realized a two-step process of codification. The third author started the process of data reduction by descriptive-comparative coding, then we tried to integrate these codes into a more limited number of broader categorial codes. Both steps together should contribute to reconstruct at least relevant parts of our subjects' implicit theories of teaching. Thus we tried to follow the guidelines of Glaser & Strauss (1979) for a grounded theory approach, which is ment to build theories from the data given, not just use data as specimen for the test of a hypothesis.

We analyzed the interview data wich computer support, using the software-package AQUAD 3.0 (Huber, 1991), after all interviews had been transcribed with a common text processor and stored in ASCII-format (American Standard Code for Information Interchange). The coder used a line-numbered print-out of all 18 interviews, produced with AQUAD 3.0. First he read all interviews in order to get an impression of the student teachers reactions to three standard situations they were confronted with (see above). Comparing the answers, the coder interpreted them as containing the following topics: general modes of teaching, teaching methods, social organization of classrooms, emotional reactions, self disclousure. In a second run through the materials these broad categories more differentiated. Altogether, the coder defined 33 interpretative codes. In addition, formal codes were introduced for the three situations and for the varying amount of data, i.e., the lenght of text produced by the subjects.

In the following we will give some examples. If a subject said, he or she would teach, the code *un9* [1] was noted, whereas remarks about not giving a lesson were coded as un*0*. The code *zs9* was used for statements about new classroom organizations or arrangements for

open learning, *zs0* was used for just following the classroom routines. If the subject planned to suggest a topic and to structure the situation, the text segment was marked by *th9*. If a subject expressed the impossibility to imagine concrete activities, because she or he would adapt own actions to the particular situation, we noted *sit*. Tuning to the students' interests was marked by *zk9*, questions for further information about the situation were coded by *is9*. Other codes were used for planning and preparation of teaching *(vo9)*, for talking with the students and openness for situational demands *(ia9)*, dependency on the students' openness *(os9)* or closed-mindedness *(os0)*. If a subject expressed, he or she felt able (unable) to cope with the situation, we marked *sd9 (sd0)* on the transcript, sd0 for the contrary. Reflections on the own situation as teacher received the code *pl9*, descriptions of teacher-student interactions as characterized by dominance were coded *re9*, as characterized by relations of partners were coded *re0*. Unspecific descriptions of expected student behavior were marked with *re5:* «...they would gaze at me, whisper, but I think, when they notice...». The code *ord* was used if subjects referred to order and classroom management, for instance: «Well, if they are fresh, then, well, then I would care for order, well, more in the background, but anyway...» Remarks which expressed a subject's assurance to experience fun in this situation were marked *em9*, expectations of blocks or intimidation were coded *em0*.

The next step was to summarize these codes systematically, i.e., to develop a system of interpretative categories reflecting the subjects' implicit theories of teaching. For this purpose, we tried to stay as close as possible to the units of meaning in our subjects' texts, on the other hand we tried to reconstruct their cognitions according to the hypothetical contents of implicit theories outlined in chapter 2. In order to get an overview we computed the frequencies of codes used for interpreting each interview, and we tested a number of interrelations, which we expected from a theoretical point of view. For instance, we expected that the codes *un0* and *zs9* (no lesson; open learning) should be closely interrelated. The same should be true for *th9* and *vo9* (suggesting a topic; preparing a lesson) or for self-related statements like *pl9, ein,* and *fr9* (situation as a teacher; self-evaluation; evaluation by others). Thus, assisted by analysis functions of AQUAD 3.0, we constructed six hypothetical categories.

However, there were many empirical units of meaning not yet included. Therefore we used the code frequencies as data for a dimensional analysis, looking for six factors. 29 of our 33 initial codes could be grouped on six dimensions, which we labelled as *teaching* (unspecific descriptions of the classroom situation: «Well, l'ld try

somehow, if there are no particular goals, to get acquainted with the students...»; int. 10), *personal aspects* («...it is fine, if I don't know that he —the mentor— comes, I cannot prepare anything...»; int. 4), *adaptativeness* («...it depends on the topic l'll have to teach»; int. 7), *emotions* («When I'm told this, l'Id feel taken by surprise ... well, nervous, on the other hand I'ld feel challenged»; int. 13), *tuning to the situation* («I'ld arrange a circle that all can see each other»; int. 1), and *structuring* («l'ld prepare myself even more minutely, more exactly»; int. 8). Excluded were only four codes, which either were used only once or did not carry differentiating information: *un9* (teaching), *si9/si0* (feeling secure/insecure), and *be0* (feeling evaluated). By means of the «meta-code» functions of AQUAD 3.0 we then recoded all interviews according to these six categories.

Relating the new codes again to the frame of reference of implicit theories, further re-groupings appeared to be meaningful. We suggested to conceive of the rather general statements coded as *teaching* and the statements coded as *tuning* as situational appraisals. *Structuring* contains statements referring to concrete classroom activities, i.e., surely behavioral appraisals. Remarks about *personal* as well as *adaptiveness* and *emotions* could be classifieed as evaluative appraisals. Functional appraisals seem to be missing (or indirecty included in some statements) in our interviews. This would match the focus of the interview questions, which accentuated what went through the subjects' mind «here and now» in a given situation. Following cognitive theories of motivation and action (Heckhausen, 1980) we should find situation-outcome expectancies as specific relations between situational and evaluative appraisals in the interviews. We should also be able to identify action-outcome expectancies, i.e., relations between behavioral and evaluative appraisals. Because of a lack of functional appraisals we need not to look for outcome-consequence expectancies, i.e., relations between emotional and functional appraisals. With the help ot the component for hypothesis testing in AQUAD 3.0 we searched these particular code patterns in our code files. We found indeed instances of *structuring* and *personal aspects* (action-outcome expectancies) together in some of the interviews, in others we found closely related instances of *tuning* and *adaptativeness* (situation-outcome expectancies).

Comparing uncertainty-oriented and certainty oriented subjects

At this point we decided to combine qualitative and quantitative methods again (as we already had done when we analyzed the frequency distribution of initial codes). We had AQUAD 3.0 count the meta-codes

and write the results on a file for further statisfical analysis. We added the frequencies of *structuring/personal aspects* occurencies and of *tuning/adaptiveness* occurrences. Finally we computed relative code frequencies (relative to the sum of individual statements). To this file we added a variable representing the U-/C-orientation of our subjects. Thus we were able to compare both groups of subjects on four broad categories (see Table 1). The t-test of differences of arithmetic means showed that U-O and C-O student teachers differ significantly regarding their situation-outcome expectancies (tuning & adaptiveness; t = 4.14; p = .001) and their action-outcome expectancies (structuring & personal aspects; t = −3.22; p = .006), while there are no significant differences regarding unspecific statements about teaching (t = .89; p = .388) and regarding emotional statements (t = −.24; p = .811).

TABLE 1

COMPARISON OF U-/C-O SUBJECTS ON FOUR META-CODES

orientation style	N	statistic	teaching	tuning & adaptive- ness	structuring & personal aspects	emotions
uncertainty orientation	13	arith. mean st. deviation	35.3 11.3	23.1 6.5	24.6 10.8	16.9 8.8
certainty orientation	3	arith. mean st. deviation	28.7 13.6	7.1 1.8	45.9 7.2	18.3 10.8
		t	.89	4.14	-3.22	-.24
		p	.388	.001	.006	.811

The differences between U-O and C-O student teachers' implicit theories correspond with theoretical expectations: In U-O student teachers' interviews we find 23.1% statements expressing tuning to the situation and adaptativeness, compared to only 7.1% of corresponding statements in C-O student teachers' interviews. On the other hand, U-O student teachers dedicate about the same amount (24.6%) of their interviews to structuring and personal aspects, i.e., action-outcome formulations, while C-O students spend almost half of their interview statements (45.6%) with elaborating on this category. Clearly, their

implicit theories are dominated by action-outcome expectations, which may be helpful in maintaining their point of view regarding teaching and learning. U-O student teachers' implicit theories, on the other hand, show a balance of situation- and action-relevant aspects. The relatively high proportion of situative appraisals demonstrates the U-O subjects' tendency to learn about their environment and to attain clarity when deciding about actions.

5.   *Discussion*

First and above all, we have to remind ourselves that we sould be very cautions regarding generalizations. The number of subjects is too small for any far-reaching conclusions. However, within the frame of reference of this study we got convincing results. The contradictory reactions of student teachers to their practicum experiences in formal vs. more open classrooms can be explained by an interaction of implicit theory and orientation style. At least within this sample of 16 student teachers we notice a predominance of more formal, teacher-centered implicit notions of teaching and learning. Unfortunately, only three of 15 identified C-O student teachers were ready to participate in our interview! But this self-selection again demostrates the effectiveness of individual orientation styles. U-O students, on the other hand, readily volunteered for the interview. They showed a balance of student-centered and teacher-centered aspects of implicit theories of teaching. Both more open and more formal classrooms seem to provide good opportunities for them to learn how to teach.

Still within the framework of this study we face a problem, however. Which didactical conclusions should we drawn from these findings? Should we match our student teachers' orientation style and their practicum teachers' teaching style, i.e., should we assign C-O student teachers only to formal, traditional classrooms and U-O teachers to more open classrooms? Surely, we would avoid many troubles and complaints of disappointed or even confused student teachers. We would not have to cope with defensive reaction, but with nothing stirring up C-O students' cognitive structures, nothing new would be added to their pre-existing implicit theories of instruction. But do we really want them to change? Of course, from our point of view this is a rethorical question. But others may ask this question seriously. We are at a point now, where an empirical science needs exchange with normative sciences: what type of teachers is wanted for our schools? Since this

question has political dimensions, any efforts to adapt teacher education to individual prerequisites, especially aiming at opening «closed minds», will only have limited effects.

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NOTE

[1]   *un* in this code stands for the German word Unterricht, which means giving (or receiving) lessons. This code, like all the other ones, make sense as abbreviations of German words.

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SUMMARY: INTERACTION OF IMPLICIT THEORIES AND ORIENTATION STYLE IN TEACHER PRACTICUM.

The classroom practicum for student teachers is evaluated controversely both by educational researches and by student teachers. We suggested that student teachers' differing evaluations are due to interpersonal differences: according to their own experiences as pupils and to their uncertainty vs. certainty orientation student teachers developed implicit theories of teaching, which determine their actual practicum experiences. Interviews with 18 student teachers selected on the basis of their orientation style were analyzed using a combination of qualitative and quantitative methods. The results show a clear interaction of central components of their implicit theories of teaching and their orientation style. Consequences for the organization of teacher practica are outlined.

KEY WORDS: Implicit Theory. Uncertainty/Certainty Orientation. Qualitative Analysis. Teacher Practicum.

SUMARIO: INTERACCIÓN ENTRE TEORÍAS Y ESTILOS DE ORIENTACIÓN EN EL PRÁCTICO EN EL AULA.

La práctica en el aula es evaluada de un modo controvertido tanto por parte de los investigadores en educación como de los futuros profesores. Nuestra hipótesis es que las diferentes evaluaciones del profesor en formación son debidas a diferencias interpersonales: según sus propias experiencias como alumno y su orientación hacia la certidumbre o la incertidumbre, los futuros profesores desarrollan teorías implícitas de enseñanza que determinan el tipo de experiencia que sacarán de la propia práctica. Con

este fin se analizaron —usando una combinación de métodos cuantitativos y cualita-
tivos— 18 entrevistas con estudiantes de Pedagogía seleccionados sobre la base de su
estilo de orientación. Los resultados muestran una clara interacción entre los compo-
nentes centrales de sus teorías implícitas acerca de la enseñanza y sus estilos de
orientación. Se deducen, como conclusión, algunas consecuencias para la organización
de la práctica.