

Exploring teachers' will to learn

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Abstract

In this study, it is assumed that “a will to learn” must be present before teachers engage in actual learning activities. In order to explore teachers' will to learn in workplace situations, a small-scale qualitative study was conducted using a semi-structured interview, observation, a retrospective interview, and a phenomenographic approach to the analysis of the data. The results showed the following behaviors to be indicative of a will to learn among teachers: having the ambition to discover new practices, being open to experiences and other people, being pro-active, attribution of successes and mistakes to internal causes, question-asking after performance, undertaking action to learn, and recognition of learning processes and results. The results also showed three different manifestations of the will to learn to characterize the teachers studied here. The following groups of teachers could be distinguished: those who do not see the need to learn; those who wonder how to learn; and those who are eager to learn. The results of the present study contribute to fields concerned with teacher learning and the motivational aspects of learning.

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1. Introduction

Just as all individuals, teachers are expected to embrace life-long learning (Knight, 2002). And although continued professional development may be a necessity, it cannot be taken for granted. Within the field of professional learning at the workplace, for example, Kwakman (2003) recently took inventory of the degree of participation in several professional learning activities and found powerful opportunities for teachers to learn at their work to go unused. Recent studies concerned with educational innovation have similarly shown the majority of such innovations to fail because the

teachers—even after a considerable period of time and change—simply abandon the new behavior and return to comfortable old routines (Verloop, Van Driel, & Meyer, 2001). In other words, professional learning is not self-evident and there are clearly occasions on which teachers simply do not learn.

The phenomenon of “not learning” can possibly be explained by various personal and contextual factors. A significant personal factor has been revealed, for example, by the study of teacher cognitions and educational beliefs (Calderhead, 1996). The beliefs that teachers hold about what constitutes good student learning and good teaching have been found to strongly influence teacher's behavior. Such beliefs are formed, moreover, during the early stages of a teacher's career and therefore found to be self-perpetuating and even immune to

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contradictions caused by reason, time, schooling, or experience (Pajares, 1992). Several other personal factors have been found to influence teachers' workplace learning and development, including the following: the teacher's biography (Beijaard, 1995; Duffee & Aikenhead, 1992); perceived sense of self-efficacy (Bandura, 1997; Whitaker, 1993); such personality traits as openness to experiences, tolerance of uncertainty, conscientiousness (Button, Mathieu, & Zajac, 1996; Huber, 1995); manner of emotion regulation (Oosterheert & Vermunt, 2001); manner of knowledge growth regulation (Oosterheert & Vermunt, 2003); and reflection on experience (Korthagen & Kessels, 1999).

In addition to these personal factors, teacher learning and also 'not learning' are influenced by aspects of the work context. The professional development of teachers is obviously situated within the classroom and the school and partially within the professional learning environment outside the school. In other words, most teacher learning is situated in everyday activities or the so-called community of practice (Hargreaves, 1997; Lave & Wenger, 1991). And just as for other work contexts, it is difficult to separate teacher learning from teacher work (Eraut, 2000). Nevertheless, a large number of workplace conditions has been shown to be either conducive or obstructive to the professional learning of teachers and school improvement (Smylie, 1994). For instance, Hargreaves (1997) has shown professional learning to occur when: (a) teachers pursue it collaboratively and not individually; (b) the learning addresses issues of interest to teachers and not issues raised by others; (c) the learning is connected but not necessarily restricted to the ongoing priorities of the school; and, finally, (d) there is long-term and sustained commitment to learning as opposed to short-term, episodic commitment. In addition, Eraut, Alderton, Cole, and Senker (1998) has found the following workplace factors to affect learning: (a) how a person is managed (e.g., allocation of work, appraisal and feedback, manager as developer of staff, etc.); (b) the micro-culture within the workplace (e.g., collaboration, learning climate, focus on quality, etc.); and (c) the exact nature of the organization itself (e.g., appraisal systems, recruitment, etc.).

In sum, the results of previous studies show several personal and contextual factors to influence teachers' workplace learning and development. The focus of the present study, however, is on a personal factor that has received very little attention to date,

namely "teachers' will to learn." A will to learn is considered a necessary prerequisite for workplace learning and development to occur for, although the workplace may constitute a powerful learning environment in theory, it is not always in actual practice (Kwakman, 2003). Teachers must take an active role in order to learn, and a "will to learn" typically precedes such active involvement. In other words, several factors may influence teachers' professional development and in the present study a will to learn stands central among these.

In the present study, the question of which behaviors of experienced teachers within the workplace indicate the presence or absence of a will to learn will be explored. In addition, the possibility of different patterns in the various behaviors indicating a will to learn will be considered. The identification of a will to learn and greater understanding of such in the professional learning of teachers constitutes an important issue within the field of teaching and teacher education for a variety of reasons. First, the theme is clearly of current interest as reflected by the title of the 10th Biennial Conference of the European Association for Research on Learning and Instruction (Earli) in 2003: "Improving Learning, fostering the will to learn." Second, vast amounts of money are spent worldwide to stimulate the professional development of teachers, which means that explicit examination of any factors that foster or interfere with the workplace learning and development of teachers is merited. As many other studies within the field of teacher education, the present study is specifically concerned with how to foster or improve this professional learning. However, this study explicitly acknowledges that teachers do not always learn and explains this by their "will to learn". Third, thorough description of the phenomenon of teachers' will to learn may help school directors, adult educators, and change consultants identify the presence or absence of a will to learn and thereby approach teachers in a more personal and differentiated manner. Finally, it is not clear how the will to learn relates to such other areas as intentional learning, self-regulated learning, the ability to learn, and interest or motivation to learn. Given that a "body of knowledge" specifically concerned with the will to learn does not exist as yet, various domains will thus be called upon to provide a definition for the notion of a will to learn (see next section).

1.1. *The will to learn*

The term “will to learn” is taken to refer to a psychological state in which the learner has a desire to learn. Such a psychological state appears to be a prerequisite for actual workplace learning to occur (Bolhuis & Simons, 1999). In the words of Oosterheert and Vermunt (2001, p. 9): “Teaching experiences fail to be educative when existing knowledge is taken for granted and the desire to see something new is absent. Then the perception of classroom events tends towards self-confirmation.” Conversely, a clear will to learn may lead to what Dunn and Shriver (1999, p. 647) call deliberate practice, which is the approach of normal teaching activities in a deliberate manner: “It may be fully mindful during these activities, mindful of what was effective, what was not, of changes that may lead to improvement. It may be choosing to be effortful, making changes when teaching seems to be going well, trying to find an even better way, trying to reach a particular child, trying to solve a particular problem.” A clear will to learn may also lead to the process of teacher “tinkering” as described by Hargreaves (1999). Teacher tinkering represents the testing and modification of an initially good idea for more systematic validation. Schools that are involved in more or less systematic teacher tinkering may establish and disseminate professional knowledge more easily than other schools. And the “readiness of teachers to tinker” (Hargreaves, 1999, p.151) may be thus the equivalent of teachers’ will to learn. Finally, a will to learn may influence reflection-on-action, as described by Schön (1983, 198, p. 28) in the reflective practitioner: “We think up and try out new actions intended to explore the newly observed phenomena, test our tentative understandings of them, or affirm the moves we have invented to change things for the better.” However, teachers do not always meet the theoretical expectation of reflection. That is, the results of many previous studies show reflection, just as learning, to not be self-evident (Booth, Hargreaves, Bradley, & Southworth, 1995; Oosterheert & Vermunt, 2003; Van Eekelen, Boshuizen, & Vermunt, *in press*). And when such reflection does take place, it does not always lead to practical, how-to-do insights and not so much in a deeper understanding of teaching and learning.

A will to learn should not be confused with the intention to learn. Eraut (2000) has created a typology of informal learning processes based on

intention to learn. At one extreme is the now widely recognized phenomenon of implicit learning with no intention to learn and no awareness of the learning when it takes place. Next comes the category of reactive learning, which is almost spontaneous and largely unplanned; the learner is aware of the learning but the level of intentionality may vary and is often unclear. This type of learning occurs most often at the workplace in the form of spontaneous reflection, the incidental notation of facts, or the recognition of learning opportunities occurring within the workplace. Thirdly and finally, there is deliberative learning, which involves explicitly setting time aside. Examples of this intentional form of learning are systematic reflection, review of past actions, and engagement in planned (in)formal learning. In our view, however, there must be a basic underlying will to learn before a learner engages in any of the three aforementioned types of informal learning.

The same holds for self-regulated learning for which three types of learning activities have been discerned: cognitive, affective, and meta-cognitive or regulative (Vermunt, 1996; Zimmerman, 1986, 2000). A will to learn precedes each form of these activities. In addition affective learning activities relate closely to the will to learn as such activities involve the building of a will to learn (Vermunt & Verloop, 1999). However, in most descriptions of affective learning activities, the will to learn is almost exclusively considered in situations where obstacles to the ongoing learning process are encountered and the explicit exercise of a will to learn must exist to insure the implementation of the relevant learning activities. Once again, however, we assume a will to learn also to precede most any learning process.

The will to learn should also not be confused with the ability to learn. Important aspects of the ability to learn are: reflection upon a situation, making learning moments explicit, generalization, transfer, formulation of learning goals and learning routes, and the use of available learning resources (Onstenk, 1997). Ability to learn also involves goal directiveness and an intention to learn, which are different than the psychological state of openness associated with the concept of the will to learn.

Finally, both interest and motivation are important concepts but not synonymous with the will to learn. The energizing aspect of the two concepts refers to the fact that one tends to be more alert, more responsive, and exert greater effort when one

is interested and motivated. According to Hidi (2000), moreover, there is a psychological state involving focused attention, increased cognitive functioning, persistence, and affective involvement in cases of personal or situational interest. And when we think of a will to learn, we typically think of someone who is alert and fully mindful.

However, motivation and interest have a directional aspect that may interfere with the will to learn at times. The directional aspect refers to the fact that, when one is motivated or interested, a specific kind of motivation is usually involved or a specific object is of interest. This specificity can lead to selective action, striving, and attention such as being eager to learn about only a specific subject (Ferguson, 2000). We consider the person who is willing to learn as someone with “an open mind” and a desire to see something new. Interest and motivation appear to have a narrowing function, which is thus at variance with our perspective on the will to learn.

Most motivational theories are, in addition, goal directed. For example, in many motivational studies, the expectancy value model is used to characterize the motivation to learn (Garcia, McCann, Turner, & Roska, 1998). Theories along these lines include the notions of achievement motivation (Button et al., 1996; Dweck, 2000; Elliot & Chruch, 1997; Heckhausen, 1991), self-concept and self-efficacy (Bandura, 1997; Schunk 1991), and (perceived) locus of control (Skinner, Zimmerman-Gembeck, & Connell, 1998). However, teachers come to school first and foremost to teach. Their learning is therefore typically reactive, near-spontaneous, and unplanned (Kwakman, 1999; Lohman, 2000; Van Eekelen et al., *in press*). And given the unplanned character of such informal and unintentional learning, the expectancy value model cannot be used to explain the motivation of those involved. How can one “expect” or “value” something unplanned?

Given the specificity of motivation and interest and the goal-directed nature of motivation, we conclude that motivation and interest are not the same as the will to learn. We can certainly draw upon the theories concerned with these concepts but should avoid the complete equation of motivation or interest with a will to learn.

In sum, teachers’ willingness to learn does not involve intentional, goal-directed, or self-regulated learning but precedes such learning. The will to learn is thus, in our opinion, a psychological state

that involves a desire to learn, experiment, and see or do something that has not been seen or done before. Given that the meaning attributed to experiences is assumed to shape the learning of teachers, we adopted a constructivist perspective on the actual teacher learning itself. Learning is defined as a workplace experience that results in the “re-establishment” or “more or less change” of knowledge, skills, or attitudes with the teacher recognizing that the process constitutes a learning process. With “re-establishment,” we mean that teachers can relearn things that they once knew (e.g., “Today, I again realized that it is important to..”). With “changed,” we mean—in terms of Hashweh (2003)—transactional learning outcomes (e.g., live with unresolved cognitive conflict), conservative learning outcomes (e.g., alteration of some ideas and preservation of other ideas or practices), and progressive learning outcomes (e.g., accommodative change; a profound shift of paradigm, conceptions, beliefs, and/or practices).

The research questions guiding the present study were as follows.

1. What behaviors of experienced teachers in the workplace appear to indicate a will to learn?
2. Is it possible to discern different patterns of behavior (i.e., indicators of a will to learn) and thereby different manifestations of the will to learn?

2. Method

2.1. Research methodology

Given that the workplace learning and development of teachers has yet to be thoroughly explored, there is no shared tradition of inquiry. Nevertheless, in general five qualitative methods or traditions can be distinguished (Cresswell, 1997), namely: biography, phenomenology, grounded theory, ethnography, and case study. Given that the focus of the present research is on teachers’ experiences with respect to a particular phenomenon (see research question one), we opted for a phenomenological methodology. While phenomenology typically makes a distinction between immediate experience and the conceptualization of this experience, we do not make such a distinction. We are only interested in teachers’ perceptions or conceptualizations of their learning experiences and therefore did not even

try to distinguish “actual” learning from perceived learning. Furthermore, phenomenology often focuses on the “essence” of experience while phenomenography investigates the different ways in which people experience or think about phenomena (Marton, 1986, p. 31). A phenomenographic approach was therefore construed as particularly well suited to our second research purpose, namely to identify the variability in how people’s willingness to learn manifests itself (see research question two). Phenomenographic researchers categorize subjects’ descriptions of phenomena, and this is primarily what our study is about: The categorization of behaviors indicative of a will to learn and the development of categories of indicators to discern any qualitative variation in the will to learn.

2.2. Research context

The research was conducted within a single Dutch high school. The first school that we approached proved willing to participate in this small-scale study. The school had 1200 students and 100 teachers, and it was located in a middle-class neighborhood where most of the students also lived.

At the time of the study, the school was busy with the implementation of a new nationwide program aimed at fostering active and self-regulated learning among students in the latter phase of their pre-university education (i.e., students aged 15–17 years). This large-scale innovation project requires teachers to shift from a traditional teaching role to a more process-oriented coaching role.

2.3. Participants

A total of 28 potential participants were selected on the basis of the following three criteria:

- they were working in the innovation program;
- they had a minimum of 7 years of teaching experience (i.e., they were experienced teachers); and
- they had a contract for at least 20 h with the school in question.

Of the 28 potential participants, 15 were randomly selected for final inclusion in the study: 9 males and 6 females coming from different subject areas participated in the end. Their mean age was 47 years, and their teaching experience ranged from 10 to 31 years.

2.4. Data collection

A semi-structured interview, an observation study, and a retrospective interview based on the observations were used to collect the data.

The goals of the semi-structured interview were as follows:

1. to collect samples of situations in which teachers do and do not learn from the past, and the present;
2. to get acquainted with the teacher and establish sufficient rapport for classroom observation.

The interview protocol consisted of several open-ended core questions and a number of suggestions for possible follow-up questions, such as: “Can you give an example, in relation to the new program, of something that you have now mastered but could not do or did not know how to do before?” “Can you recall a situation that was important for mastery of that skill, for the creation of the necessary insight?” “What did you feel in that particular situation?”, “What did you think about the other, yourself, or the situation itself?”, and “What did you learn or do as a result of the situation?”.

The goal of the observation study was to collect examples of possible learning situations from an ordinary work day. For this purpose, any change in the activities of the teacher was noted by the observer in a logbook along with the time of the change. Examples of the activities noted are: walking through the classroom, listening to a student, encouraging a student to work, and explanation of something to a student. In such a manner, a chronological record of the day was created. Special attention was paid to so-called “incidents” or times when something unexpected happened (e.g., the teacher had to deal with an angry or overly enthusiastic student or group of students; a classroom disruption; brief meetings with colleagues, etc.).

The purpose of the second—retrospective—interview was to have the teacher reflect upon those incidents that occurred during the observation day and to determine whether the teacher learned something from the incidents or not. Both the teacher and researcher could mention incidents, and the following types of questions were posed to prompt further reflection or elaboration: “What happened at that particular moment?” What did

you feel in that particular moment?” “What did you think about the other, yourself, or the situation itself?” “Did you learn something from the situation? If so, what did you learn or what are you going to do as a result? If not, why was this situation not instructive for you?”

2.5. Procedure

Prior to the start of the study, all of the teachers were informed via a presentation about the object of the study (i.e., to learn about the learning processes of teachers) and the data collection procedures. This was done again at the beginning of the first interview. The participants were reassured that the study was unrelated to any form of evaluation and that their names would remain anonymous. The interview was then conducted, and a date was set upon completion of the interview for classroom observation.

On the observation day, the researcher briefly introduced herself to each of the teacher’s classes. According to a few of the teachers, some of the classes reacted to the appearance of the researcher. All of the actions of the teachers and, when necessary, those of the students were written down in chronological order. And after each class, the researcher marked the incidents to be reviewed during the retrospective interview.

The second interview took place at the end of the observation day. First, the teacher was asked to look back on the day and mention any unexpected incidents, which were then reviewed with the teacher using the interview protocol described above. Second, the researcher described any unexpected incidents and asked the teacher to review these using the interview protocol described above.

2.6. Data analysis

All of the interviews were audiotaped and then transcribed verbatim. Due to technical problems, the second interview for one teacher was not recorded. This teacher was therefore excluded from the data analyses, which left a total of 14 participants and 28 transcripts to be analyzed (14 initial and 14 retrospective interviews).

The data were analyzed in three main steps. First, all of the interviews were read, re-read, and broken down into separate fragments (i.e., sentences, statements, or paragraphs) that tell us something about the behavior of the teacher with regard to his or her

willingness to learn. Each fragment was given a temporary label such as “talks about experimenting,” “talks about own learning process,” or “talks about how to reach children.” With these temporary labels in mind, we found Calderhead’s (1996) overview of teachers’ beliefs (see Introduction) to be particularly helpful for the grouping of the fragments and construction of a preliminary categorization scheme. The categorization scheme was next tested on the interviews by coding some of the interviews and adjusted several times until a stable coding scheme with a discriminative combination of categories and subcategories was established. The categories were described as accurately as possible in order to represent the essence of each category and all were labeled with letters. The sub-categories were also described, and numbered. This way an overview with decision rules for assigning quotations to a (sub)-category of description was established. Later on this scheme would serve as a basis on which we could answer our first research questions.

In the second step of the analyses, all of the 28 interviews were coded using the categorization scheme. First, the topic of the interview fragment was identified (see Table 1). Next, the fragment was

Table 1

Six topics that teachers were most willing (or unwilling) to learn about

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1. *The organization of the classroom process*: The teacher is (not) willing to learn about the classroom process and the decisions that he or she makes about the lessons. Statements about how the teacher views the class as a whole or a cohort of students are placed in this category as well.
 2. *Individual or small group of individuals*: The teacher is (not) willing to learn about an individual and how to approach him or her. In most cases, a student is meant. In some cases, however, the teacher means a colleague, manager, or some other external person. Statements about how the teacher views these individuals are placed in this category as well.
 3. *The content of the teacher’s subject*: Statements about (not) being willing to learn more about the content of the subject being taught are placed in this category.
 4. *The teacher him/herself*: The teacher is (not) willing to learn about his or her personal characteristics, personality traits, performance while working, etc.
 5. *The school/educational system*: The teacher is (not) willing to learn about how to improve the school system, school management, or the educational system as a whole.
 6. *Other subjects*: In most of the fragments coded with this number, the teacher is (not) willing to learn about Information Communication Technology, but other subjects which do not fit the above categories are also placed here.
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assigned to one of the categories from the categorization scheme. And thereafter, which behavior (i.e., subcategory) from the categorization scheme best fit the fragment was determined (see Table 2). In such a manner, each fragment was coded using a topic number, a category letter, and a subcategory number. By adding all the subcategory numbers, it was possible to determine which behavior occurred most frequently within each category for each of the 14 teachers. When multiple fragments addressed the same event or incident, only the first fragment was considered; when the same fragment occurred on more than one occasion in the interview, only the first occurrence was considered. And in such a manner, a qualitative profile of each teacher's will to learn was established (see Appendix A).

In the final step of the analyses, the profiles of the 14 teachers were compared with each other. The teachers' profiles were rank ordered one to fourteen from "very willing" to "not willing" to learn. And on the basis of comparable types of content, three different patterns or clusters could be distinguished.

3. Results

The first research question was what workplace behaviors of experienced teachers appear to indicate a will to learn? However, the analyses of the teachers' behaviors showed their willingness to learn to clearly depend on the learning object. For example, some teachers were not eager to learn about the classroom use of computers but eager to learn more about the subject they teach. The six topics occurring most frequently in the interviews were therefore examined further and described in Table 1.

As can be seen from Table 2, six general categories of behavior that indicates a willingness to learn at the workplace could be distinguished on the basis of the present data. Each of these categories could be further divided into two to four subcategories of behavior, with a low number indicating a low will to learn and a high number indicating a high will to learn.

Three qualitatively different manners in which teachers exhibit a willingness to learn were next discerned. See the Appendix for explication of how the different patterns of behavior (i.e., manners of behaving) were identified. Suffice it to say that the three manifestations of the will to learn clearly differed with regard to the six general categories of behavior described in Table 2. The three manifesta-

tions of a will (or no will) to learn can be labeled as follows:

1. not seeing why there's a need to learn;
2. wondering how to learn; and
3. eager to learn.

Some teachers showed features from more than one manifestation, however they could all be placed in one of the three manifestations. In the following subsections, the different groups of teachers exhibiting the different manifestations of a will to learn will be considered; the boundaries on the different manifestations will be stipulated; and some characteristic statements (translated from Dutch) will be presented to illustrate each pattern of behavior (i.e., group of teachers). Note that each quotation is accompanied by the teacher identification number and the code assigned to the fragment: topic number from Table 1; general category letter from Table 2; and behavior number indicating relative willingness to learn from Table 2.

3.1. The "not seeing why there's a need to learn" group

Four features were found to be most characteristic of the "not seeing why there's a need to learn" group of teachers: (1) the teachers hold on to established habits of teaching; (2) they do not appear to have an open mind for others (category B); they often blame students or the educational system for things that go wrong and are seldom critical of their own performance or role (category C); and (3) they find it hard to describe any learning results (category F).

The teachers in this group hold on to old teaching habits and stick to established manners of working (A1).

That child (code 2B1) whom I sent away during class actually dared to ask if he could work on the computer. But I don't find working on the computer useful for this group. It only causes a lot of unrest because they don't know what to do with it... (3, code 1A1).

The teachers in this group are not open to others (B1-2).

Quote after lesson observation: "there are so many mentally retarded students in this class ..." (3, code 1B1).

Table 2

Main categories and subcategories of a teacher's behavior indicating the will to learn

- (A) The teacher is (not) alert while guiding the class learning process.
- (1) The teacher holds on to old teaching habits and the planned way of working. He or she barely takes the classroom situation into account; does his or her own thing; and relies on routine with little or no lesson preparation. He or she is not able or willing to change the classroom situation. The teacher avoids risky class situations. He or she does not agree with the view behind the educational innovation and barely puts this into practice. The teacher resigns him/herself to the situation in the classroom; he or she also feels, acts, and expresses him/herself as a victim of the classroom situation and/or the educational innovation.
 - (2) The teacher is alert to what is happening in the classroom; if necessary, he or she adapts the program. Earlier experiences with the group are taken into account, and the teacher adapts his or her manner of working to the group of students. The teacher tries to improve the classroom situation by making small adjustments. He or she (mostly) agrees with the view behind the educational innovation. The teacher is working on the educational innovation.
 - (3) Although the teacher has considerable experience, he or she devotes extra time and effort to the preparation of lessons and tries to improve on the textbook. Difficult or risky situations are not avoided. The teacher agrees with the vision behind the educational innovation. And he or she voluntarily tries to improve upon the classroom situation and educational innovation by experimenting with new methods or approaches.
- (B) The teacher is (not) open to others, (not) attentive to others (mostly an individual student, a small group of students, a colleague, or someone from outside the school).
- (1) The teacher does not pay attention to others or does not know the names of people. He or she resigns him/herself to not reaching or being able to help others and is not willing or able to put energy into helping others. The teacher feels, acts, and expresses him/herself as a victim of the situation in interaction with others. He or she does not keep an open mind when talking or thinking about others.
 - (2) The teacher does not keep an open mind when talking and thinking about others; he or she relates why he or she thinks that others do what they do.
 - (3) The teacher is alert, observant, listens well, and pays attention to others. He or she asks how others are doing. The teacher keeps an open mind when talking or thinking about others; he or she illustrates his or her views of others with facts. The teacher is aware of generalization.
 - (4) The teacher puts extra energy and effort into helping others. He or she is interested in how and what others are doing. The teacher tests his or her assumptions about others and adjusts his or her view of others, when necessary.

Table 2 (continued)

- (C) The teacher is (not) critical of his or her role/performance in the classroom, his or her role in interactions with others, his or her subject knowledge, him/herself as a person, his or her role in the organization, etc.
- (1) While talking about a critical incident, the teacher does not take his or her own role/performance into account. He or she attributes the cause of the problems to a source outside him/herself. The teacher feels, acts, and expresses him/herself as a victim of the educational system or school system.
 - (2) While talking about a critical incident, the teacher notes his or her own contribution and mentions what was effective and what was not. The teacher is able to state his or her qualities and learning opportunities. The teachers talks about his or her feelings, for example, of insecurity.
- (D) The teacher asks him/herself (no) questions with regard to how to deal with critical situations in the classroom, in interactions with others, with respect to his or her subject knowledge, him/herself as a person, his or her role in the organization, etc.
- (1) The teacher does not ask him/herself questions before, during, or after an incident. The teacher simply states that he or she does not need collegial visitation. The teacher also states that he or she does not need to learn any more about certain subjects. The teacher is unable to formulate either current learning goals or goals for the future.
 - (2) The teacher asks him/herself questions before, during, or after an incident. He or she reflects upon incidents. The teacher is able (when asked) to formulate a learning goal. He or she asks for feedback from others.
- (E) The teacher makes (no) resolutions and/or puts (no) such resolutions into action.
- (1) The teacher wants to improve his or her performance but does not know how to do this or how to take the first step. He or she formulates this as a rhetorical question (e.g., "I would like to improve, but how?"). The teacher does not create his or her own answer to a problem but searches for ready-to-implement solutions. The teacher does not make any resolutions or undertake any action to improve his or her performance, situation, knowledge, or skills.
 - (2) The teacher resolves to take action after his or her analysis of his or her performance (see category C), the receipt of feedback, or asking him/herself a question. The teacher states that he or she wants to learn and develop continuously and that he or she wants to face new challenges.
 - (3) The teacher undertakes action after his or her analysis of his or her performance (see category C), the receipt of feedback, asking him/herself a question (see category D), or after something in the school system does not work for him or her. The teacher keeps track of developments in his or her subject matter. The teacher has a network outside the school to keep him/herself up to date. The teacher undertake challenges in order to keep on

Table 2 (continued)

learning and developing; for example, by accepting a new function or task.
(F) The teacher learns (does not learn) how to deal with critical classroom situations, others, new knowledge of his or her subject, him/herself as a person, his or her role in the organization, etc.
(1) The teacher is barely able to describe learning experiences. The teacher states that he or she did not learn a thing from a critical situation in the past.
(2) The teacher is able to describe explicit learning experiences; the teacher clearly learns.

While talking about a critical incident, the teachers in this group do not take their own role/performance into account. They clearly attribute the cause of problems to a source outside themselves. They feel, act, and express themselves as if they are a victim of the educational system or the school (C1).

The gentlemen in The Hague [he means the Dutch government] decide which direction we must go, we—as foot soldiers—must follow that direction. But are we waiting for all that training? And will working in education be more attractive to us then? (1, code 5C1)

The problem is that I am constantly busy with students who are waiting at my desk. At that moment, there is a distance between me and the group. And although I hear the noise in the background, I am busy with a student and then the others are supposed to do what they should do, but they don't. That is a big problem (2, code 1C1).

These same teachers do not ask themselves about how to deal with difficult situations. They also simply state that they need not learn any more about certain subjects and that they need not be visited by colleagues (D1).

There is more to life than working in education. They ask a lot of my time, it is enough. When you are young, you can take on a lot. Now I know what I am capable of: My students have to graduate, and that's it (1, code 1D1).

The teachers in this group make no resolutions and therefore put no resolutions into action. They do not search for their own answers to problems but simply seek ready-made solutions instead (E1).

Interviewer: So, two different ways of instruction were used by the trainers during that professional development meeting. Why was it that the second one was not so useful?

Teacher: I really missed the ready-to-implement suggestions. Tell me what I should do in order to improve my relations with the students (12, code 1E1).

Finally, the teachers in this group barely describe a learning experience (F1).

What did I learn? ... (silence) somewhere, sometime, you can probably say: 'oh yes, I should think about that,' but for the rest... you just keep on moving... (1, code F1).

3.2. The "wondering how to learn" group

Unlike the first group of teachers, the teachers in this group are a bit more open to others (category B) and critical of their own performance and role (category C). The teachers in this group can also clearly state what they have learned at times (category F). The essence of this group is that the teachers want to improve their performance but do not always know how. As a result, these teachers do not make any learning resolutions, let alone implement them. They have less open relations with others than the following group (category B) and they are not alert to student concerns or very flexible with regard to the guidance of the learning process (category A).

Sometimes you lose. Last year, I had a class, the first lesson on Monday and the last hour on Thursday. On Mondays, they had to discuss the weekend with each other, and on Thursdays, they were too tired to concentrate. It was truly a disaster. At a certain point, I decided to let it go, and decided that they could worry about their results themselves. From that point on, I was just trying to keep it 'nice' for myself and for them (6, 1A1, 1B1).

The teachers in this group do not have an open mind when talking or thinking about others. They can, however, relate why they think others do what they do (B2).

It is rare that students give me the feeling that I should shut up. Very rare (...). Next time, I won't try to talk with her. Next time, I will ignore her, and she will just have to keep quiet or

leave. I don't have the feeling that being reasonable gets me any further (4, code 2B1).

While talking about a critical incident (C2), these teachers may note their own contribution to the situation and mention what was effective and what was not. In the following, a teacher describes the impact of the implementation of an educational innovation:

At that time, I seriously thought about quitting teaching. I told myself that if I performed this bad next year too, then I should stop (4, 1C2).

The teachers in this group do not ask themselves questions before, during, or after an incident (D1). In their opinion, they do not need collegial visitation and do not need to learn.

I have been teaching for many years now. When something does not go so well, I try this or that. I have several solutions, and there is not much to add to that (5, code 1D1).

One of my frustrations is the requirement that we have to get our ICT (Information Communication Technology) license. I'm absolutely not interested in ICT and I don't feel like studying for that (4, code 6D1).

Although they may clearly want to improve their performance at times, these teachers do not know how to do this or how to take the first step (E1). All of this may be conveyed in the form of a rhetorical question (e.g., "I would like to improve, but how?"). They do not create their own answers to problems but search for ready-to-implement solutions instead.

I would like to change a lot of things in my teaching, but that does not work. I still think that the students do not work hard enough (1B1). For example, in this morning's class, 12 out of the 27 had not done their homework. And they kept on talking during the lesson!! I didn't get that right. I kept on, very dull, checking their exercises and I asked 6 times if they wanted to listen (1A1), ... I am not satisfied at all. I really think I gave a bad lesson (1C2), but how do I improve that? I don't know how to improve that (5, 1E1).

Nevertheless, these same teachers can describe explicit learning experiences (F2).

I noticed that it is much more effective to approach students low-profile, carefully, especially the older students. When a student is not cooperative, this works much better (6, 1F2).

3.3. The "eager to learn" group

Unlike the first and second groups, this group undertakes action in order to learn (category E). The essence of this group is that these teachers want to improve their performances and undertake action in order to accomplish this. The teachers are critical of their own role/performances in every possible situation (category C). They have insight into their good and bad qualities, and they can mention explicit learning opportunities (Category D and F).

I know what my qualities are and also what I cannot do very well. For example, I am not so good in aerobics although I have tried it for years (11, code 3C2).

The teachers in this group ask themselves questions about how to deal with critical situations (D2).

There is a student who is really good. He constantly challenges me with difficult questions. And when I look over my own shoulder, I think, 'yes, he did ask me that question' and 'yes, I had to give that answer.' Did I do that to intimidate or just do explain some algebra? (12, code 2D2).

These same teachers resolve to undertake action in order to learn (E3).

I have a student who is visually handicapped, and I want to know how do deal with him in the classroom. I therefore went to a course that dealt with this specific subject (12, code 2E3).

These teachers learn (F2). They are able to describe specific learning experiences.

Interviewer: Can you explain what you have learned since the second phase program was introduced?

Teacher: I learned mainly about the new content of the program; there are different requirements now for the graduation (13, code 3F2).

Within the third group, we also see that the teachers are alert to what is happening in the classroom and that they adapt the program when necessary. They (mostly) agree with the view behind the educational innovation (A2).

The second phase program is implemented in a top-down manner. I wonder whether it is really that useful, especially for the less than average student. But I am coping with it. It is not possible to teach the way I used to in any case because we

have too much material to cover. Students therefore have to be more independent of me (8, 1A2).

The teachers in the third group are also open to others (B3). They are alert, observant, listen well, and pay attention to others. They also ask others how things are doing.

I am capable of doing more in my lessons now than just teaching. I listen to the students. I talk about the evening before. I ask them which concert they went to. That is something I learned during the past year (9, code 1B3, 1F2).

Our data (see teacher numbers 11 through 14 in the Appendix A) also show teachers within the “eager to learn” group itself, who slightly differ from the other teachers in this group with regard to the effort put into the guidance of the class learning process (category A) and the helping of individual students (category B). For example, some teachers put extra time and effort into the preparation of their lessons and try to improve on what the textbook contains (A3). These teachers connect even more with students and other people (B4). They are alert, observant, listen well, and clearly see others. They are truly interested in what the student is doing and how he or she is doing. They test their assumptions regarding the student and adjust their view of the student as necessary. All in all, these teachers exert more effort to create more learning opportunities than the other teachers within the third group. In other words, there are a few teachers with a real “yearning to learn” within the group of “eager to learn” teachers, and the following quotes illustrate this yearning.

Although I know my subject very well, I still prepare my lessons every day. I look at what we are supposed to do; what steps we must take; and where the students may run into trouble. I also do every exercise that they have to so I know exactly what they experience (7, 1A3).

Stefan is a student who did not work very hard during the last years. However, he is really working hard now to pass his exam and I think you have to change your view of such a kid then... (13, 2B4).

I find one student hard to reach. Every student has his own way of creating art, and hers... I don't know... I think I may have to call her parents... I have to find a way to get her going (14, 2B4).

4. Conclusions, discussion, and directions for future research

4.1. Conclusions

The aim of the present study was to explore teachers' will to learn. Greater insight was indeed gained into what behaviors indicate the presence of a will to learn. In addition, we were able to distinguish a number of different ways in which a will to learn is manifested within the teaching workplace. The combination of observations and a retrospective interview strongly contributed to our insights. Observation of the daily teaching process provided, for example, insight into the effort that the teacher puts into the process of managing the classroom and/or getting to know the individual student. The retrospective interview allowed us to question the teacher about a certain situation and our perspective on the situation as opposed to just his or her perspective. Given the limited scale of the study and the qualitative nature of the methodology, however, we do not intend to generalize to other teachers. It is also recommended that the lessons actually be videotaped in future research to provide the most objective view of the teaching situation possible.

With regard to the first research question, six categories of behaviors or statements that characterize teachers who are particularly willing or unwilling to learn were identified. As will be seen, each of the behaviors or statements within a category has the potential to provide a teacher with an opportunity to acquire new teaching knowledge.

The behaviors and statements constituting category A reflect a teacher who is “alert while guiding the learning process of a class.” The activities resemble the activities identified by [Dunn and Shriner \(1999\)](#) for those teachers who will not settle for less effective teaching. However, we also found the opposite to hold in a number of cases. That is, some of our teachers opted for a safe approach and thereby encountered relatively few potential learning situations as a result. These teachers resemble the teachers described in the following manner by [Desforges \(1995, p. 390\)](#): “they behave in such a way as to maximize predictability in the classroom and, when their routine operation does not appear to achieve the desired student behavior, they put in place actions that are intended to return classroom interaction to normal.” This type of non-risk-taking behavior can possibly be explained in terms of the

teachers' perceived self-efficacy, which was already mentioned as an influential factor in the Introduction to the present study. The greater the level of perceived self-efficacy, the higher the goals set by people, the risks that they are willing to take, and the commitment and perseverance shown in the pursuit of such (Bandura, 1997). The lower the level of self-efficacy, the greater the vulnerability to anxiety and the tendency to develop avoidance patterns designed to reduce fears. Huber (1995) similarly explains this difference between teachers in terms of tolerance of uncertainty.

The behaviors and statements constituting category B reflect an "openness to others" and reveal the importance of being open to other people, paying attention to them, and trying to connect with and understand them. In our view, this aspect of teacher learning has not been described very often. When a teacher truly tries to connect with students, the students may—in turn—constitute a potential source of teaching improvement. With increased information and familiarity, moreover, the teachers' images of others may become highly differentiated and situation specific. About half of the teachers in the present study did not appear to really get to know their students. They also, then, showed a tendency to overgeneralize and relate student behavior to deep-seated personality dispositions rather than specific stimuli within the classroom situation, for example. Once such attributions have been made, moreover, certain teachers have been shown to stubbornly stick to them even in the face of strong disconfirming evidence and to sometimes show a stronger belief in incorrect intuitions than objective data (Ross & Nisbett, 1991).

The behaviors and statements constituting category C refer to the teacher being "critical of his or her own role or performance" and thus the process of cognitive attribution (Weiner, 1990). People may readily attribute failure to chance occurrences (i.e., external causes) and success to their own ability (i.e., internal causes) or, vice versa, failure to personal inability and success to chance occurrence. A small group of our teachers indeed appeared to produce mostly external attributions with regard to failure and thereby reduce their possibilities for learning from a particular situation. Other teachers clearly view themselves as the victims of the educational system, the classroom situation (see category A as well), and/or unwilling behavior on the part of the students (see category B as well). As a result, they do not take any action to improve the

situation while others teachers do (see category E as well). This pattern of behavior appears to reflect the phenomenon of learned helplessness as described by Seligman (1991). That is, when people believe that there is nothing that they can do to control negative or painful outcomes, they also come to believe that they are helpless.

The behaviors and statements constituting category D pertain to reflection in order to learn from experience. Korthagen and Kessels (1999) have emphasized reflection as an important step in teacher learning. And the behaviors and statements in this category are part of this reflection process. Some of our teachers reflected via the posing of questions before, during, or after a particular experience. Some of our teachers sought feedback via the distribution of student questionnaires. And some of our teachers did nothing along these lines. In other words and in keeping with the earlier findings reported in the Introduction, not all teachers appear to behave as reflective practitioners (Schön, 1983, 1987).

The behaviors and statements constituting category E refer to the making of resolutions, on the one hand, and putting these into action, on the other hand. According to Kolb's (1984) theory of experiential learning, making resolutions and putting these into action are necessary steps for learning from experience. And according to the self-regulated perspective on learning (see Introduction), the planning and actual implementation of resolutions depend on the metacognitive and affective learning strategies of the learner. One-third of the teachers involved in the present study did not often, put their resolutions in action, and a similar phenomenon was detected in a previous study (Van Eekelen et al., *in press*). In other words, the will to learn appears to meet the ability to learn here. The relevant teachers said that they were willing to learn but did not know how, which could have arisen from their conceptions of learning. While the teachers are supposed to foster constructive student learning, their conceptions of learning still lean towards knowledge transmission. These teachers look to others to provide them with a solution or the "right" answer while others experiment, learn in a constructive manner, and create their own solutions for problems. Studies of the learning of student teachers, moreover, show those within the first group to also be more likely to maintain their misconceptions (Oosterheert & Vermunt, 2001; Pintrich, 1999).

Finally, the behaviors and statements constituting category F reflect the extent to which teachers can articulate their own learning experiences. (An overview of the specific topics that the teachers, in general, report learning about is presented in Table 1.) Nonaka and Takeuchi (1995) have described the process of professional knowledge creation as the interaction between explicit knowledge and tacit knowledge, a cyclic process involving four steps: socialization, internalization, externalization, and combination. During the retrospective interview, the dialogue and reflection may have triggered “externalization” and thereby the articulation of tacit knowledge. However, quantitative differences were still detected between the teachers with regard to the number of learning results reported. Some of the participating teachers reported many learning results while others had difficulties reporting any.

With regard to our second research question, it was possible to identify three different patterns of behavior and statements or manifestations of the will to learn. A group of teachers who do “not see the need to learn” was detected and found to barely question their existing knowledge and beliefs. They do not, thus, seem to have a will to learn. A group of teachers who “wonder how to learn” was also detected. These teachers want to improve their performance—and are therefore clearly willing to learn—but do not know how. Finally, a group of “eager to learn” teachers was found to be very willing and able to learn.

4.2. Discussion

Taken together, the behaviors in the categories A–F were found to be indicative of a teacher’s will to learn. In the Introduction, we mentioned that the notion of “a will to learn” is different than such notions as “ability to learn,” “self-regulated learning,” “intention to learn,” “motivation to learn,” and so forth. Nevertheless, numerous examples of behavior strongly related to the aforementioned notions were encountered in our analyses. For example, the close relation between a teacher’s will to learn and ability to learn was observed on a number of occasions. We also saw goal-directed behavior and self-regulated behavior to occur within categories D and E, respectively.

By observing the daily process of teaching and undertaking both an initial and retrospective interview, we discovered the importance of considering not only how teachers approach situations but also

how they actually handle them. Category A or “alert while guiding the learning process of a class” and category B or “openness to others” can be seen to reflect the manner in which teachers approach various situations. Just what they do in these situations, however, is reflected by categories C through F. In our view, teachers may encounter potential learning experiences, stemming from categories A and B but this does not mean that they necessarily learn from these. Prawatt (1992) has referred to this phenomenon as “naive constructivism” or the tendency to equate experience with learning. Learning cannot be simply equated with experience; nor can it be expected to readily flow from these (Desforges, 1995). A learner must approach and actively deal with an experience in order to learn from it, which is in keeping with our constructive perspective on learning. So, for a complete portrayal of a teacher’s will to learn, we now recognize that it is important to examine not only the starting point or basic will to learn but also the occurrence of such behaviors as those described in categories C through F.

4.3. Directions for future research

The results of the present study have provided insight into which behaviors can be taken as indicators of a will to learn. However, the behaviors and patterns of behavior discerned here must be verified in larger scale research. Longitudinal research may provide insight into any transitions between the different manifestations of a will to learn during the career of a teacher. And a critical hierarchy or possible developmental sequence may then be revealed. An “eager to learn” group of teachers is typically considered superior to a “not seeing why there is a need to learn” group of teachers; is one categorization more characteristic at a particular point in the careers of teachers than another categorization? Or do such categorizations simply reflect individual differences across teachers?

The specific characteristics of the three groups of teachers identified here should be examined in greater detail in future research. The present results revealed a subgroup of teachers with a “yearning to learn” within the “eager to learn” group, and the question is whether such a “yearning to learn” constitutes a separate manifestation of the will to learn? What drives this particular subgroup of teachers? For the “not seeing the need to learn” and “wondering how to learn” groups, examination

of their epistemological perspectives may be merited as these teachers may entertain an absolute or dualistic (Hofer & Burr, 2001) perspective and thus see knowledge as something that is absolute or unchanging and therefore be less likely to accept conflicting evidence than teachers who believe that knowledge is tentative and changing (Mason, 2000). According to Limón (2001), learners with less sophisticated epistemological beliefs (i.e., knowledge is simple and certain) have been found to perform relatively better in a directive learning environment than in a constructivist one, which may also hold for teachers as well. That is, the teachers in the “wondering how to learn” group tended to seek only ready-to-implement suggestions while the teachers in the “not seeing why there’s a need to learn” group were barely able to explicate any learning experiences at all.

One can argue that our description of the will to learn implies a construct that we have not as yet mentioned: namely, the readiness or willingness of the individual to change. Such behaviors as agreeing or not agreeing with an educational innovation (category A), acting in accordance with an educational innovation or not (category A), and feeling like a victim of the educational system or not (category C) point in this direction. And although

we see a clear link between a particular will to learn and the readiness of the individual to change, further research is needed to verify such a relation.

Finally, when presented with the behaviors described in Table 2, the teachers studied here suggested that such an overview may promote further discussion of the willingness of teachers to learn. It was suggested that asking teachers to position themselves with respect to each category of behavior might prove worthwhile. It was also suggested that teachers might ask colleagues, coaches, or managers to evaluate them on the basis of such a list. And in such a manner, our findings may provide the starting point for the construction of various instruments to measure and evaluate the will to learn.

Appendix A

In the Table 3 below, the percentage of the statements pertaining to each category of behavior for the 14 teachers interviewed in the present study are reported. The highlighted numbers indicate the subcategory of behavior with the highest percentage for a particular category of behavior. When there were two subcategories with the same percentage, the highest number of behaviors was highlighted.

Table 3
Number of statements in interviews (percentages) for each category of behavior per teacher

Teacher number <i>N</i> =	1	2	3	4	5	6	7	8	9	10	11	12	13	14
A A1. Holds on to old teaching habits	15	24	15	14	21	5	4	3	4	6	1	1	2	2
A2. Is alert to classroom processes	—	10	10	4	3	9	9	18	12	12	12	2	13	6
A3. Experiments with new approaches	—	6	2	1	3	1	4	11	4	4	8	1	5	9
B B1. Is not open to others	15	14	13	18	3	11	—	—	3	—	—	1	—	—
B2. Is more open to others	8	—	7	3	6	12	9	1	7	—	1	8	—	3
B3. Is open to, pays attention to others	3	—	—	3	4	2	11	12	8	5	15	—	7	8
B4. Connects with others	—	—	—	3	—	1	2	—	3	—	11	14	7	8
C C1. Is not critical of own role	21	20	15	2	7	11	2	1	1	6	1	5	2	3
C2. Is critical of own role	6	4	5	18	18	12	11	16	8	27	23	21	15	11
D D1. Asks him/herself no questions	16	4	2	3	8	7	4	—	1	—	3	—	—	—
D2. Reflects, asks him/herself questions	—	—	3	2	3	4	2	18	8	12	5	12	18	13
E E1. Does not know what to do to improve	2	4	3	4	5	11	2	1	—	2	—	1	—	3
E2. Resolves to take action	—	4	7	3	3	4	15	1	10	5	8	4	5	9
E3. Undertakes action in order to learn	—	—	7	1	—	2	4	5	11	10	8	7	7	10
F F1. Is barely able to describe learning	6	4	7	4	6	4	—	1	3	—	—	—	—	3
F2. Makes learning explicit, learns	5	8	5	8	13	6	24	11	17	12	8	15	15	10
	Pattern 1			Pattern 2			Pattern 3							
	Do not see need to learn			Wondering how to learn			Eager to learn							

There are two exceptions to this rule. Teacher 10 scored highest for the subcategory of A2 (“alert while guiding the learning process”) when the interview data was coded. When observed, however, this teacher was seen to take many risks and to clearly experiment with the principals of the new program. Unlike most of the other teachers, he also showed such behaviors as organizing group work for students, giving students a voice in what to do during the lessons, and using on-line ICT in his lessons. We therefore categorized this teacher as A3 (“experiments with new approaches”). Teacher 11 scored high for the subcategories of B3 and B4 (the teacher is “open to others, pays attention to others” and “connects with others,” respectively) when the interview data was coded. During the observation day, however, he was involved in the coaching of individual students more often than the other teachers and we therefore decided to categorize this teacher as B4 (Table 3).

In order to discern different manifestations of the will to learn, the results in Table 3 above were further analyzed. By counting the number of categories in which an individual scored more than the lowest subcategory (e.g., in category A teacher 1 received zero points, teacher 6 scored 1 point and teachers 10 and 14 scored 3 points, and so on for all 6 categories), an initial ordering of the teachers from “not really willing to learn” to “willing to learn” was established. However, the final order (as presented in Table 3) was reached by making the following qualitative decision. The initial positions of teachers 3 and 4 were switched because Teacher 4 scored quantitatively less than Teacher 3 but the profile of Teacher 4 for categories C, D, E, and F resembled the profiles of Teachers 5 and 6 more.

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