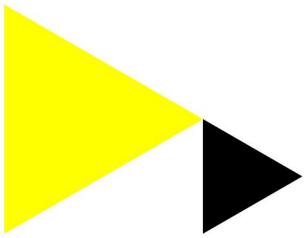
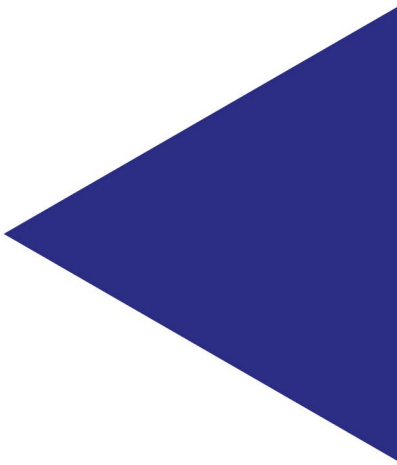
Identifying teacher quality: structuring elements of teacher quality





Identifying teacher quality: Structuring elements of teacher quality

Lies Timmering, Hogeschool van Amsterdam The Netherlands (E.C.Timmering@hva.nl)
Marco Snoek, Hogeschool van Amsterdam The Netherlands
Annette Dietze, Hogeschool van Amsterdam The Netherlands
ITQ Research and Evaluation Group

This paper presents the search for a categorizing framework that can be used to identify and discuss teacher quality. Both policy documents on national and European levels and academic literature show a remarkable variation in categories that are used to describe teacher education.
As part of a larger study where the voice of teachers is used en strengthened on the topic of teacher education, there was the need to find a categorizing framework that can be used to analyze responses from teachers on the most important qualities that teachers need.

The search for a categorizing framework combines a study of academic literature on categories for teacher quality and the use of international focus groups for the development of categories for teacher qualities. Both the outcomes from the literature survey and the results from the focus groups show the complexity of defining a coherent framework for teacher qualities. Two main approaches can be identified: one by using an analytical framework with mutual exclusive categories, based on Bloom's categories, and one based on a task analysis of the work of teachers, focusing on specific roles or identities. In both approaches, both the literature and the focus groups emphasize the importance of personal qualities of teachers.

Based on the outcomes a coherent framework for teacher qualities is presented, where both approaches are combined. This framework that might help in creating a shared language for discussing teacher quality among different stakeholders and different countries

1. Focus and content of this paper

The quality of teachers is considered as one of the most important factors influencing the learning of pupils and the quality of schools. Therefore, national governments put much effort in the development of policies to ensure and improve the quality of teachers. However, for policies and measures on the improvement of teacher quality, some definition of the concept of teacher quality is necessary.
Also teachers themselves need to be concerned with their professional quality. Reflective professionals reflect on the quality of their work and on the competences that they need for their work. As teaching is not an isolated individual activity, the reflection on the quality of teaching within a school and the competences that a team of teachers need should be a collective activity. There again, there is need for a shared frame of reference while discussing teacher quality, in order to avoid misunderstandings and to create shared meanings.

However, often discussions on teacher qualities are characterized by conceptual confusion. Snoek et al (2009) have shown that in formal national and European documents on teacher quality there is little convergence in the way that teacher qualities are identified. Categories differ considerable between countries and also European documents do not contribute to the creation of a shared language.
Not only between countries, but also between stakeholders differences exist. The perspectives of policy makers, school leaders, pupils, parents and teachers on teacher quality will not be the same.
As in most discussions on teacher quality, the floor is dominated by policy makers, teacher educators or researchers or, more generally, by non-teachers talking about teachers (Nóvoa, 2007). Therefore it is worthwhile to ask teachers about their conceptions on teacher quality.
However, also with teachers, their conceptions on teacher quality will differ. This creates a methodological problem for research on teachers' conceptions on their professional quality as the question arises what categories can be used for categorizing teachers' responses. This paper addresses this methodological problem.

The context of this paper is a Comenius funded project that started in 2006 and ended in 2009. The Identifying Teacher Quality project (ITQ) is a three year international project that involves 21 institutions from 12 European countries[1]. The aim of the project is to support teachers in Europe to

[1] See www.teacherqualitytoolbox.eu

strengthen their professional quality by developing a toolbox with tools that enables teachers (and other stakeholders) to recognize, to reflect upon and to evaluate teacher quality. The use of these reflection tools stimulates teachers to increase their ownership towards professional quality and standards. As quality is a personal and contextual construct, personal involvement in defining professional quality through active and collaborative reflection can stimulate ownership and therefore empower teachers to be involved in professional development and change.

The project outputs contain a number of products like a website, the toolbox in several languages and a number of research and evaluation reports. A specific part of the project involves research on what teachers in Europe identify as essential teacher qualities.

This paper describes the process of categorizing identified teacher qualities[2] according to teachers in Europe by first giving an overview of the way teacher quality is categorized in literature. In the third paragraph the methodology and use of focus groups is elaborated. After presenting the outcomes of the focus groups, the focus group results and the outcomes of the literature are combined in a final frame work that can be used to analyze teachers' perceptions of professional quality. In the final discussion, comments are made with respect to the methodology of focus groups with the context of this study and on the final categorization frame work.

Since terminology is an issue when working on an international level this study focuses on using the word 'qualities'. By using this generic term we avoid the use of terms like 'competence' or 'standard'. These words have many different translations and meanings in the different countries of Europe which would leave too much space for interpretation and misunderstanding. Both terms evoke quite strong emotional responses as 'competences' in some countries are sometimes seen as holistic qualities combining knowledge, skills and attitudes, while in other countries 'competences' are mainly interpreted as technical skills and are considered to lead to a reduction of the rich task of teachers. 'Standards' are in some countries connected with a technical process of standardization that does no justice to the ever changing context in which a teacher has to work

2. Teacher Quality in academic literature

Within the academic literature on teacher quality, teacher quality is described in various and very diverse ways. It can be described from the perspective of tasks or assignments (teacher creates a safe learning environment), roles or professional roles (teacher as educator/teacher as transmitter of knowledge), in terms of generic professional qualities (competences) or maybe in holistic terms (e.g. attitudes/personality) or in terms of metaphors. To give an example of this last type of descriptions, Palmer (as cited in Arnon & Reichel (2007) refers to philosophical metaphors:

> "The teacher as midwife (Socrates); as artist in the use of knowledge (Plato); as the conductor of dialogue (Bergman); as purveyor of culture (Cicero); as liberator (Freire); as one who focuses on teaching discipline (Breiter); as role model (Aristotle); as empiricist (Locke); as trainer (Watson); as educator in accordance with nature (Rousseau); as essentialist (Frankel); as mediator (Freuerstein); as child-centered (Neill); and as post-modernist (Foucault)."

The picture painted by Palmer does not provide an analytical list of teacher qualities, but it shows the complexity of describing the ideal teacher.
A closer study of academic literature on teacher quality shows that two different approaches can be distinguished in categorizing teacher quality: one using the traditional taxonomy of Bloom, separating knowledge, skills and attitudes and one using specific roles of teachers.

In the first approach, knowledge skills and attitudes are elaborated and specified with respect to the teaching profession. However in many descriptions of teacher quality, personality aspects are added.
Arnon and Reichel (2007, pg. 445) state that most of the research regarding the perception of the good teacher has pointed to two important components of the ideal teacher: 1) professional knowledge, both of the subject taught and of didactic knowledge and 2) an appropriate personality. They state that:

> "In other studies, especially those examining pupils' evaluation of their teachers, it has been concluded that personality is the most important quality of a good teacher. According to Blishen (1969), for example, the qualities of the desired teacher among pupils were

[2] Overview and comparison of the identified qualities: Timmering & Snoek, 2009

understanding and patience, the ability to pay attention to the pupil, modesty and politeness, informality and simplicity, participation in pupils' activities, the ability to develop good relations with the parents, getting to lessons on time, recognizing the importance and the value of the student, being warm and personal and understanding that students are not always ready to study."

The emphasis on personality has two aspects:

1. personality traits as personal qualities/character strengths - qualities that belong to a person (personalities/attitude/identity/beliefs) – qualities that cannot be taught;
2. personality as part of a professional role, qualities that can be taught.

In an extensive survey of academic literature on teacher quality, Van Gennip and Vrieze (2008) come to an overarching trinity of qualities:

a. (content) knowledge and matching didactics;
b. the pedagogical-didactical interventions that are needed;
c. the teachers' personality.

The first component (content) knowledge is a comprehensive concept that can be divided and specified. Jansma (2006) distinguishes three types of related knowledge: theoretical knowledge, methodological knowledge and practical, situated (context) knowledge. The (content) knowledge includes Shulman's concept of Pedagogical Content Knowledge (Shulman, 1986). Pedagogical Content Knowledge is different from scientific theoretical knowledge since it combines scientific theoretical knowledge with practical, situated (context) knowledge. The second component that Van Gennip and Vrieze identify is the pedagogical-didactical interventions (instruments and repertoire) that a teacher must be able to master. The third component is the teachers' personality (including aspects like motivation, attitudes, expectations, cognition).

In this same line of reasoning, the Association for Teacher Education in Europe (2006) pleads for a 'balanced view on the quality of teachers': "Teacher quality is an overall concept that comprises not only knowledge and skills, but also personal qualities (respect, care, courage, empathy, etc.) and personal values, attitudes, identity, beliefs, etc."

This first approach in categorizing teacher quality can be seen as an extension of Bloom's model, where personal qualities are added. This generic categorization uses mutual exclusive categories, although exact definitions of the concepts of attitude and personal qualities are lacking.

The second approach in categorizing teacher quality uses a distinction in professional roles. This approach is closely related to the concept of teacher identity (see e.g. Beijaard et al, 2004), the perceptions that teachers and the outside environment (parents, society, politicians) have about the roles of teachers, and about the qualities involved.

Arnon and Reichel (2007) describe two dominant images of the desired teacher since the 1970s:

1. Teachers as developers, shapers, tutors for each of their students;
2. Teachers as transmitters of knowledge in their fields.

Verloop and Lowyck (2003, pg. 194 and 232) elaborate these two categories in four professional roles or professional identities:

3. the teacher as someone that has a lot of knowledge
4. the teacher as an adult, balanced personality
5. the teacher as ruler of specific skills – based on evidence/empirical research –
6. the teacher as practician

Søreide (2006) continues on the idea of identities (as roles) as categorization and describes four identity constructions (the caring and kind teacher, the creative and innovative teacher, the professional teacher and the typical teacher). In these categories, Søreide combines professional roles with skills and personality. He argues that the negotiation between multiple identities is a necessary part of the construction of teacher identity.

So far we have identified two approaches in describing teacher quality, one analytical approach, identifying abstract and general categories of quality (knowledge, skills, attitudes, personality traits) and one approach focusing on specific roles of teachers, connecting them to identities. In both approaches to categorize essential qualities of teachers, there seems to be a general consensus that personality is an essential element of being a teacher. In both models the personality of the teacher is stressed, either explicitly as one of the qualities, or implicitly by using the term 'identity', which has a

much deeper personal impact than someone who has certain knowledge or masters specific skills. Blume (1971) writes how "teachers teach as they were taught, not as they were taught to teach." This indicates that teachers teach from their personality and personal experiences.

3. Methodology

The input for this study consisted of responses from participants that used one of the reflection tools developed within the ITQ project. The participants were asked one open question: "what do you identify as being essential teacher qualities?" With this survey teachers were invited to identify a maximum of 10 essential qualities, without ranking.

In this phase of the study, the preliminary results from a first group of 68 participants were used as input to define the categorizing framework, which could be used to categorize the full set of responses (from 343 participants).
The responses from the 68 participants provided us with approximately 680 teacher qualities that had been identified by educational professionals from nine European countries (Belgium/Flanders, Czech Republic, England, Greece, The Netherlands, Poland, Portugal, Slovenia and Sweden).

To come to categories for teacher quality, three steps were taken:

1. Reduction of qualities
   The full set of 680 qualities was reduced to 120 qualities. There were doubles in formulation and qualities that differed in formulation but that were semantically identical ('to care', 'to be caring' and 'to care for children'). Finally, qualities that were considered as doubles with respect to the content, but that differed in formulation ('be smiling' and 'humor') were taken out. During the data reduction process 3 steps were taken:
   1. validation formulation/semantically (reducing doubles done by researcher)
   2. content validation (reducing doubles done by researcher)
   3. validation check with independent expert in the work field
2. Categorization of the identified teacher qualities by focus groups, which led to the production of 10 categorization frameworks.
3. Development of a category framework based on the results of the focus groups and the findings from the literature.

<u>Using focus groups to design categorization</u>
Focus groups, as seen in Cohen, Manion and Morrison (2000, pg. 376) are useful for 'developing themes'. The use of focus groups can be of added value to the existing data. Morgan (1997) states that "the hallmark of focus groups is their explicit use of group interaction to produce data and insights that would be less accessible without the interaction found in a group." In combination with other methods, focus groups can provide preliminary research on specific issues in a larger project or follow up research to clarify findings from another method.

<u>Focus group composition</u>
Given the international source of data, the decision was made to work with international focus groups. Two sessions with focus groups were arranged and expert professionals were given the assignment to cluster the 120 different qualities and subsequently name these clusters.
The focus groups were composed by convenient sampling. The first focus group session took place in Sweden, Uppsala. The groups were formed by the ITQ project members, each group representing different European countries. The Uppsala focus groups were composed of teacher educators.
The second focus group session took place in Belgium, Brussels. It was carried out as an ITQ project contribution at the ATEE conference where conference members could participate in a workshop. The workshop gave them an overall idea of the ITQ project and the participants were used as international focus groups. The Brussels focus groups consisted of teacher educators.

4. Results of focus group work

Each focus group produced a different framework for categorizing the same 120 teacher qualities:

Focus Group 1 ▪ Knowledge ▪ General professional qualities ▪ Managing learning ▪ Interpersonal & social ▪ Personal values & attitudes	**Focus Group 2** ▪ Pedagogical & Didactics ▪ Reflection ▪ Knowledge & academic attitude ▪ Organizational ▪ Citizenship ▪ Values ▪ Personal attributes ▪ Originality
Focus Group 3 ▪ Professional knowledge ▪ Skills ▪ Abilities ▪ Traits (social skills) ▪ Personality ▪ Ethical behavior ▪ Attitudes & values	**Focus Group 4** ▪ Overarching qualities ▪ Social qualities ▪ Knowledge base ▪ Learning qualities ▪ Reflective qualities ▪ Personal qualities
Focus Group 5 ▪ Attitudes: • Personal • Interpersonal ▪ Skills: • Didactics & Pedagogical • Management ▪ Knowledge ▪ Professionalism	**Focus Group 6** ▪ Teaching strategies ▪ Social skills ▪ Teaching skills: • Formal • Personal ▪ Cognitive skills ▪ Creativity ▪ Personal attitudes
Focus Group 7 ▪ Knowledge ▪ Personal qualities ▪ Interpersonal qualities ▪ Meta cognitive ▪ Teaching qualities • promoting learning • classroom management ▪ Deontological	**Focus Group 8** ▪ Personal attributes ▪ Generic teaching skills ▪ Extended professional roles ▪ Professional knowledge
Focus Group 9 ▪ General professional expectations ▪ Role model ▪ Expertise / Knowledge ▪ Self development ▪ Active involvement in the wider educational community ▪ Effective educational strategies ▪ Ethics and beliefs ▪ Inclusion ▪ Personal traits ▪ Interpersonal traits	**Focus Group 10** ▪ Skills ▪ Stakeholder interaction ▪ Pupil interaction ▪ Personal qualities ▪ Didactics ▪ Professional knowledge ▪ Subject knowledge ▪ Inspire ▪ Awareness

Looking at the outcomes of the focus groups, it can be concluded that only focus group 5 uses one of the approaches more or less systematically, resulting in more or less mutual exclusive categories. Focus group 2 uses a wide variety of concepts that do not directly fit into one of the two approaches.
All other focus groups mix categories from Bloom (extended with personal qualities (in all focus groups), abilities (FG3), ethics & beliefs (FG3, FG9), deontological (FG7)) with specific teacher roles (managing learning (FG1), teacher as a social person (FG4), teacher as a reflective professional (FG4, extended professional role (FG8), active involvement in the wider society (FG9, FG10), role model (FG9)).
Focus group 6 limits the categories mostly to the level of skills.
In some focus groups content elements that are not directly related to one of the two approaches appear (inclusion (FG9), citizenship (FG2))
Also, specific personal qualities are mentioned separately (like awareness (FG10), inspire (FG10), originality (FG2)).

All focus groups (except focus group 5, which uses the term (personal and interpersonal) attitudes) include the concept of personal qualities (using different words: personality, values, attributes, traits. This can be understood as the 680 teacher qualities that were the input for the focus groups, contained many qualities that fitted in this category.

5. Conclusion: defining a category framework for teacher quality

The outcomes from the literature survey and the results from the focus groups show the complexity of defining a coherent framework for teacher qualities. Two main approaches can be identified: one by using an analytical framework with mutual exclusive categories, based on Bloom's categories, and one based on a task analysis of the work of teachers, focusing on specific roles or identities.
The literature shows examples of both approaches, based on inductive analyses of the profession. In deductive processes, where groups are asked to categorize a given set of qualities that teachers identify as essential for their work, categorizing frameworks are blurred and the two approaches are mixed, leading to categories that are overlapping and not mutual exclusive.

The use of a Bloom-type of category framework in analyzing and defining the teaching profession, is appealing, as it uses mutual exclusive categories. However, the use of generic categories like knowledge, skills, attitudes and personal qualities does not really specify the teaching profession, as these categories are very broad and vague.
One solution might be to combine the two approaches by maintaining the more or less mutual exclusive categories in a Bloom-type of category framework and at the same time introducing subcategories that are based on specific roles of teachers (e.g. the teacher as an academic, as a professional, as a manager of classroom activities, as a reflective professional, etc.).

In all categorizing frameworks, (both resulting from the deductive analyses in the literature and from the inductive work of the focus groups), personal qualities stand out as a major category for teacher quality. Defining subcategories for the category of personal qualities is complicated. The input of the 680 qualities that teachers mentioned shows that there is a wide variety of qualities that fit into this category. One solution is to use existing taxonomies with respect to personal qualities, like the Big Five Theory (John & Srivastava, 1999).

Given these considerations a possible category framework for defining the essential qualities of teachers is presented in the table below.

Main category	Subcategory	Sub-subcategory
Knowledge	1. Academic knowledge	
	2. Professional knowledge	2.1 Content knowledge
		2.2 Didactic knowledge
		2.3 Pedagogic knowledge
Skills	1. Teaching skills	
	2. Pedagogic skills	
	3. Management skills	

	4. Organizational skills 5. Reflective skills 6. Communicative skills 7. Social skills
Attitude	1. Beliefs 2. Motivation 3. Citizenship 4. Professionalism
Personality	1. Emotional stability 2. Extraversion 3. Openness 4. Agreeableness 5. Conscientiousness

Such a category frame work might help in creating a shared language for discussing teacher quality among different stakeholders and different countries.
This framework will be used in the next step of the study to analyze the full set of 343 teacher responses identifying the most important qualities of teachers.

6. Discussion

The category framework presented above will be used for a comparative study, analyzing the responses from a larger group of 343 teachers and student teachers that were invited to identify the 10 most important teacher qualities. The outcomes of this comparative study amongst these respondents from 9 different countries (Portugal, Czech Republic, Belgium, Poland, Slovenia, The Netherlands, Greece, Sweden and England) will be presented in another paper (Timmering, 2009).

6.1 Discussion on the methodology

A dilemma in the methodology that we used is the fact that the data that we used to define our category framework came from participants of the pilots within the framework of the ITQ project. These participants had just finished a tool testing session and the answers given were (probably) influenced by this session. This can create a bias in the qualities that were mentioned. It could be that participants would have identified different essential qualities the very next day. Also, the professional position could have been of influence on the answers given. It is likely that teachers in primary education identify different qualities than teachers in secondary education since the pupils/students need different qualities. However, as the results of the focus group had many similarities to the categories presented in the literature, we believe that the category framework that is presented in paragraph 5 covers the most important teacher qualities.

Several questions arise from the focus group work that could be interesting for further research;

1. Do professionals categorize in the same way as their national documents/standards are formulated? In other words, do the professionals answer and think in the way that they are used too because of the familiarity with their official documents?
2. To what extent does the focus group's interaction influence the way the focus groups categorize?
3. To what extent does the cultural-historical context of the participants influence the way the focus groups did their work with clustering and categorizing?
4. Would focus group members place the same qualities in the same category the next day? How consistent is the work that was done?
5. Would focus groups consisting of teachers categorize any different than the focus groups we used, which were consisted of teacher educators?

Another dilemma in the methodology used is the extent in which the methodology relies on language. Participants in the pilots have identified teacher qualities and translated them to English. As for most of the participants in the focus groups English is a foreign language, they had to translate the qualities to their own language and cultural frame of reference. There was not enough time to discuss the exact meaning of every single quality from each cultural-historical context nor was there always a shared

understanding. Since there was no moderator in the focus groups it could very well be that focus group members just decided to give in to the group instead of arguing their point. Time therefore seemed to be the second dilemma. It is advisable to have a moderator present not only to guard the process but also to observe and guard the interaction. As it turns out, one of the focus groups did not work as a group. This specific focus group worked in sub-groups and divided the work load. They therefore were not responsible for the categorization as a group.

6.2 Discussion on categorization

The focus groups and literature show similarities and differences in the categories that are used for identifying teacher quality. Although there is still not a uniform language in describing teacher qualities, the input we used for our final categorizing framework shows many common elements. At the same time, the fact that this study was needed shows that a common language is missing. This is also shown in a study of national formal documents on teacher quality in nine European countries and of 6 European policy documents on the quality of teachers and teacher education (Snoek et al, 2009): "*a shared frame of reference for teacher quality can create a common language that can facilitate effective exchange of policy practices between member states, mobility of teachers and cooperation between schools and teacher education institutes. However the study shows that Europe is still a long way from such a shared frame of reference and a common language*".

The framework we presented might contribute to creating a universal language on teacher quality.

7. References

Arnon, S. & Reichel, N. (2007). Who is the ideal teacher? Am I? *Teachers and teaching: Theory and practice*, *13*(5), 441 – 464.

ATEE, Association for Teacher Education in Europe (2006). *The quality of teachers: Recommendations on the development of indicators to identify teacher quality.* Policy paper.

Beijaard, D., Meijer, P.C. & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and teacher education*, *20*, 107–128.

Blume, R. (1971). Humanizing teacher education. *PHI Delta Kappan*, *53*, 411–415.

Cohen, L. , Manion, L., & Morrison, K. (2000). *Research methods in education* (6th ed.). Routledge, Taylor & Francis Group: London.

Gennip, H. van & Vrieze, G. (2008). *Wat is de ideale leraar? Studie naar vakkennis, interventie en persoon*. ITS: Radbout Universiteit Nijmegen.

Jansma, F. (2006). *Het kwalificatieniveau en de rol van kennis in de beroepskwaliteit van de leraar*. Retrieved January 12, 2009, http://www.bekwaamheidsdossier.nl/cms/bijlagen/kwalificatieniveauRol.pdf

John, O.P. & Srivastava, S. (1999). The big five trait taxonomy: History, measurement and theoretical perspectives. In: Pervin, L.A. & John, O.P. (red). *Handbook of Personality: Theory and Research*. The Guilford Press, New York.

Morgan, D.L. (1997). *Focus groups as qualitative research* (2nd ed.). Qualitative Research Methods Series 16. Sage Publications.

Nóvoa, António (2007). *The return of teachers*. Paper presented at the EU-conference 'Teacher Professional Development for the Quality and Equity of Lifelong Learning, Lisbon, September 2007.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.

Snoek, M et al. (2009). *Teacher quality in Europe; Comparing formal descriptions*. Paper presented at the ATEE Annual Conference, Mallorca, August 2009 .

Søreide, G. E. (2006). Narrative construction of teacher identity: positioning and negotiation. *Teachers and teaching: Theory and practice, 12*(5), 527-547. Routledge, Taylor & Francis Group: London.

Timmering Lies, (2009). *TEACHER QUALITY IS … Teacher qualities identified by teachers and student teachers in Europe*. Master's thesis, Hogeschool van Amsterdam.

Timmering, Lies & Snoek, Marco (2009). *How do teachers in Europe identify teacher quality?* Paper presented at the ATEE Annual Conference, Mallorca, August 2009.

Verloop, N. & Lowyck, J. (red.) (2003). *Onderwijskunde: een kennisbasis voor professionals*. Wolters-Noordhoff: Groningen.