

(Mis- ?) using the E-Delphi Method: An Attempt to Articulate the Practical Knowledge of Teaching

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Abstract

Teachers' practical knowledge is usually considered as deeply contextual and narratives or case studies are frequently used as tools for exploration. Less commonly applied to this area of study is the e-Delphi method which traditionally precludes the personal context. The article describes how the method was used in combination with e-mail and problematizes the method's potential for taking advantage of, as well as excluding, personal contexts. Attention is drawn to whether the method provides opportunities for professionals to extend and clarify formulations on practical knowledge. Ways of deviating from the structured process which is traditionally part of the method are discussed.

Introduction and objectives

In a recently initiated research-project (www.hik.se) concerning the relationship between practice and theory in the Swedish teacher-training program, the aim is to examine how school teachers express their practical knowledge and skills and in what form and to what extent such knowledge and skills can be transferred to and introduced into the university based part of the teacher education. In the initial phase of this project the object of investigation was teachers' practical knowledge – mediated through school teachers' formulations – a type of knowledge that is often said to be personal without generic implications.

In the article we are discussing the possibility to bridge the gap between the personal and the generic by finding a way to widen the personal and situational character of practical knowledge. In this effort the e-Delphi method was used and adjusted in order to entail the possibility to articulate practical knowledge detached from the situational but, at the same time, contain the personal and contextual. By (mis- ?) using the e-Delphi method our ambition was to design a professional, collegial, and virtual conversation without the presence of flesh-and-blood colleagues and away from the day-to-day practice. The research quest is to find out if this is at all feasible. Can and will teachers formulate and discuss their practical knowledge in a virtual "staff-meeting", without the direct connection to context and not knowing us or the other members of the "staff"? Can the e-Delphi method be used to instigate a virtual, professional conversation?

Theoretical framework

How practical knowledge is constructed, maintained and transferred has been described with the help of socio-cultural theories that emphasise learning and knowledge as participating in situated and social communities of practice (Lave & Wenger, 1991; Wenger, 1998; Wittgenstein, 1967/1998). In studies of such knowledge, the relationship between knowledge that is "tacit" and knowledge that can be articulated must be problematized. Janik (1991) argues that the concept "tacit knowledge" often is used to describe all knowledge that isn't articulated, but it is important to distinguish between underlying motives for this lack of articulation. He argues that aspects of tacit professional knowledge can, under certain circumstances, be articulated if we truly want to or have to do it. That this knowledge has remained unarticulated may be because it has been considered a powerful tool, made up of, for instance, trade secrets. That such knowledge is revealed or made public does not always enhance the status of the professionals as exclusive guardians of this knowledge. Another reason for knowledge to remain tacit can be that nobody

has ever tried to verbalise it. Crises or changes in living-conditions often constitute a motive for articulating what nobody has found interesting or important enough to attempt to catalogue before. Examples may be cookbooks (which were produced when women moved from house work to the professional field), or methods for teaching children to read (which are in demand when the old stock of elementary school teachers retires) or – as in our case – when teacher education seems to have lost connections to the practical aspects of the profession. But, Janik also argues, that there is a type of knowledge that *can not* and *shall not* be articulated.

Inviting professionals to verbalize and discuss their practical knowledge can consequently give rise to obstacles of various kinds. They may not want to put the implicit parts of their practice into words, they may not see the point of trying to express what seems self-evident, or the knowledge may be so deeply embedded in technical execution – that is, its “articulation mode ... is of a perceptual, action oriented or gesticular-expressive nature” (Johannessen, 2006, p 289) – that it simply cannot be verbalized.

In spite of the obstacles mentioned above studies of professionals and their practical knowledge have become more frequent (see Munby, Russel & Martin, 2001; Tom & Valli, 1990; Grimmet & MacKinnon, 1992; Göranzon, 2006) and researchers have shown an interest in finding ways of articulating practical knowledge (Elbaz, 1983; Russell & Munby, 1991; Conelly & Clandinin, 1990). In these studies the personal and situational character of the knowledge is in focus and concepts like “narrative unity” and “embodied knowledge” (Fenstermacher, 1990, s. 11) becomes important parts in their epistemological underpinnings. Knowledge is considered deeply embedded in the context and narratives or case studies are often used as tools to catch this kind of practice-related knowledge.

Listening to teachers descriptions of their personal experiences gives us insights into the profession but neither do they address the question what teachers’ collective and specific knowledge consists of, nor “what novices should be taught and how they should be prepared” (Clark, 2005, p. 179). Hence, the understanding of teachers’ knowledge as solely and deeply embedded in practice doesn’t always seem to rhyme with the ongoing parallel, systematic and political effort to request the development of a generic professional language as a collective tool and a starting point to reach a level of something called “effective teaching” (OECD, 2005) or to the more humble efforts of constructing a knowledge base for the education of new teachers on the basis of practical knowledge, the ongoing, inescapable (and perhaps unfeasible) effort of trying to write a cookbook for novice teachers.

The Delphi method

The name refers to the oracle in Delphi, known to be able to predict future events. The method was originally designed by the US military during the 1950s to allow them to coordinate statements by experts on a certain area, in order to predict likely war scenarios. Since then it has been applied both to industry, politics and to science. In particular, scientific studies using the Delphi method have been conducted within public health, social policy, nursing and education (Ziglio, 1996; Wiersma & Jurs, 2005). The point of the method is to establish communication between geographically dispersed experts so that they are able to systematically deal with a complex problem.

A definition of the Delphi-method that has been around for some time, but which researchers still rely on to a great extent, has been stipulated by Delbecq et al (1975).

The Delphi method is a method for the systematic solicitation and collection of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses (p. 10).

The main point of the method is to initiate a group process and at the same time avoid the peer pressure that participants of a physical group exert. The interactions in a Delphi group are

anonymous in the sense that a statement cannot be traced to a certain participant. All communication is mediated by the researcher who, after each round of questions, compiles the answers and returns them to the participants, allowing them to consider a compiled set of answers and a reformulated query and then return comments indicating whether the compilation agrees or does not agree with their understanding of the matter. This procedure is repeated three or four times until consensus is reached. In the figure below (Figure 1), as in the present study, we made use of three rounds of questions. In this case, consensus does not denote an “objectively correct” answer, but rather the attainment of a general reasonably reliable estimation.

It is primarily concerned with making the best you can of a less than perfect kind of information (Dalkey, 1968)

There has been modification of the classical version of the Delphi method during recent years. In these days, there are Delphi studies aiming not to seek consensus but to articulate contradictory and varied positions and outlooks, so called “policy Delphi” or “adversary Delphi” (Wiersma & Jurs, 2005).

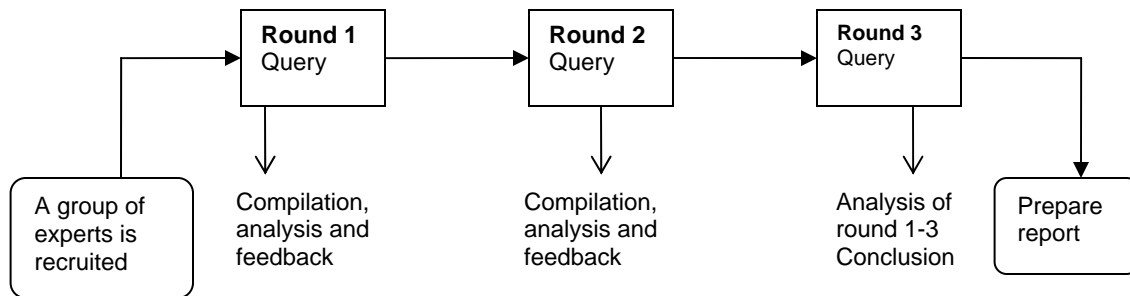


Figure 1. General schema of the Delphi study process

Keeney et al (2001), who have compiled critical voices, argue that the method has relied too heavily on “experts”. Questions have been raised on how experts are selected and who can truly be called an expert. That the assertions of an expert panel on a specific issue should automatically be considered valid is also seen as untenable and exaggerated.

Studies of professional knowledge have been conducted previously with help of the Delphi method. Reid (1988) carried out a study of the professional competence of nurses, Kreber (2001) studied university teachers and Covino & Iwanicki (1996) studied experienced teachers and their views of effective education. The method is however seldom tied to a deliberate theoretical perspective and is completely absent from studies that make use of a socio-cultural perspective or/and where the intention is to track down and formulate practical knowledge. Traditionally, the method has been used to treat qualitative data in order to arrive at quantitative results in a systematic and structured way (Wiersma & Jurs, 2005), but in our study we tried – or were forced - to launch a slightly more disorderly process than usual.

E-mail as a medium for Delphi-studies

In the original version of the Delphi method, questionnaires were sent out using standard mail. During recent years, e-mail has become more and more commonly used to mediate the process. Such studies are generally named “e-Delphi” or “Real-time Delphi” (Wiersma & Jurs, 2005; Chou, 2002). This environment is a user friendly medium for the informants since it enables them to chose *when* they want to formulate their answers, allowing the interviews to be combined with an often intense work-schedule.

In connection with our choice to make use of information technology, we need to examine the consequences of doing so. What does an e-mail interview entail and what sort of data can

actually be collected through such a medium? A research interview builds on and presupposes speech and text; language. In our case we want to differentiate between three different types of language: spoken language, written language and what we would like to term electronic language (for further discussion, see Kroksmark, 2006).

Electronic language is not planned in the same way as written language; it is much more spontaneous and uncontrolled (Mann & Stewart, 2005; Markham, 2004). It also seeks the confirmation typical of spoken language by making use of “right” or through an ellipsis. In this way, the terms of communication are transformed into something resembling spoken language, without actually turning into it. We expect an answer relatively quickly – not within a week or two. Such expectations make us write quick, informal and concise replies. This may in its turn result in less caution, restraint and precision in communicating.

An e-mail interview is anonymous in the sense that the physical presence of a “researcher” does not exert influence or establish a relationship of power between the interviewer and the interviewee. Anonymity is thus an integral part of electronic communication. In this situation, there is no trace of the nods, the smiles or the deceptive and urging utterances that characterize spoken language interviews. It should be noted, though, that e-mail interviews also establish a type of contract for social interaction (Markham, 2004). Where the interviewees try to answer the question in the way they assume the interviewer wants them answered. Each individual thus tries out what appears reasonable or desirable to express. In this medium – as in all others – we can never exclude the presence of power and adjustment.

But it should also be noted that there is no need for transcription. The text is in the original and builds on the conditions of the electronic text. This means that a potential source of error and manipulation, where the transcription is conducted by someone other than the interviewee, is eliminated and the phenomena “indistinguishable” does not exist at all in e-mail interviews, nor do words like “hm”, “uh huh”, “mmm”, “laughs” or “interruptions” which are all difficult to interpret.

Experiences from the e-Delphi study

In this section the teachers’ reactions, the researchers’ experiences and the methodological adjustments are presented in an intertwined design. In order to provide an answer to the research question – Can e-delphi be used to instigate a virtual, professional conversation? – we have to illuminate both the process and product of the study.

The quotes consist of the researchers’ questions or the teachers’ answers from the different rounds in the e-Delphi study and of the teachers’ comments from follow-up, face-to-face interviews. (In the broader study of the relationship between practice and theory the initial data collection via the Delphi method was followed up by “stimulated recall” and “dialogue-seminars”. For a discussion of these methods, see Calderhead, 1981; Göranson, 2006.)

Recruiting “the experts”

We wanted to tie skilful teachers with long work-experience to the current project, assuming that the assignment – to express and discuss practical knowledge in a virtual conversation – could be handled better by a selection of teachers with a considerable number of years of experience. In other studies, it is apparent that experienced professionals/experts are different from novices in precisely this area (Berliner, 2001; Krull, 2005). Experienced teachers make use of more and broader terms when they describe their profession. Compared to novices they speak more easily and more coherently about their practice, they become engaged more quickly and more profoundly and are better at moving from one perspective to another (Krull, Oras & Sisask, 2007).

With this in mind, an invitation was formulated to compulsory-school teachers and principals were asked to identify teachers “that are considered by the profession to be skilful”, and to give them our letter of invitation. Using that phrase proved to be unfortunate. It eventually became apparent that the teachers who were attracted by the study were repelled by the above formulation. Either

they did not perceive themselves as “skilful”, or they felt presumptuous to pose as such. A new invitation was designed and with the help of contacts with principals and colleagues, 16 teachers from the Swedish compulsory school system, teaching pupils from age 7 to 16, all having 12 to 38 years of experience in the teaching profession (Table 1), were (reluctantly?) recruited. Together they possess 426 years of teacher practice.

Table 1. The “expert” teachers teaching grade, sex and years of work-experience.

TEACHING IN GRADE:	SEX	YEARS OF EXPERIENCE
Handicraft (7-16)	Female	20
Intermediate (10-13)	Female	39
Intermediate	Female	33
Intermediate	Female	12
Intermediate	Female	30
Intermediate	Male	19
Intermediate	Male	27
Intermediate	Female	38
Junior (7-10)	Female	30
Junior	Female	30
Junior	Female	15
Junior	Female	32
Pre-school	Female	21
Pre-school	Female	33
Senior (13-16)	Female	13
Senior	Male	34

At this stage of the study all interaction was formal and mediated through E-mail or regular mail. We did not have a physical meeting with the teachers before the study began but promised them a meeting at the end of the Delphi study.

Can practical knowledge be de-contextualized?

In order to track down such a complex phenomena as teachers’ practical knowledge we needed tools more versatile than the questionnaire containing closed questions that is commonly used in Delphi studies. Our aim, using the method in a similar way to Ferri (2000), was to collect qualitative data with the intention of bringing out and developing the participants’ response to the problem in question, to discover fundamental similarities in the teachers’ professional knowledge and to give the teachers the opportunity to expand and clarify their formulations. We also wanted a process that would let us define and refine the statements made by the group and where the entire process could be likened to a problem solving conversation.

Round 1- Collecting examples

The first query was designed:

You are about to hire a new colleague whom you will have to depend upon a great deal. In other words, it is imperative that you find a good teacher. The procedure for hiring this teacher is somewhat different from that which you are used to. The person in question has submitted a film recording his/her work as a teacher over an entire working week. The teacher has documented herself/himself minute by minute. Because of lack of time (all teachers lack time, right?) you can only watch THREE short sequences from this film. The question is as follows: What three situations would you prefer to see and why would you choose them?

To avoid rhetorical statements based on normative notions on how teachers ought to work, we wanted to tie the first question to events and situations occurring in the daily work of teachers. To

present a scenario where the teachers must form an opinion about future colleagues with the aid of film sequences, we tried to make them focus on what actually takes place in the working day.

Our review of the answers from the first query resulted in a number of general situations that the teachers had identified. Although there was big differences between the teachers' working situations (e.g. big range of pupils age and subjects), there was a striking resemblance in the chosen situations. After our sorting, categorizing and compilation the main three situations described were:

- Starting up something (the entire week, the first minutes of a lesson, starting a new working procedure).
- Transferring (to a new lesson, finishing, gathering up a theme or a lesson).
- Passages from everyday teaching (a lesson from the middle of the week, how the humdrum of teaching is dealt with, knowledge of the subject, methods) etc.

Round 2- Adjusting the method

The situations were presented in the form above during the second query that was distributed two weeks after the first query. The intention was not only to convey a summary of the teachers' replies and ask them to comment on them, but also to follow up on the first question with a new, "broad" query. Accordingly, together with the presented situations, a new scenario was also presented. The teachers were asked to pick one of the situations that, in relation to the new scenario, best revealed professional knowledge, and with the aid of examples, indicate how they thought the filmed teacher in this situation exhibited a high degree of professional skill. The new scenario was well known by the teachers as it was built on a highly debated report on how to establish levels of teacher qualification.

New scenario:

"A few weeks ago, the former general manager of the now defunct National Agency of Education presented a report suggesting that there should be two levels of qualification within the teaching profession. After graduation, you become a "teacher". With time, you can improve your professional skills and become "highly qualified" and "very highly qualified".

This time, you need to choose ONE of the above sequences, the one to which you give the highest priority, and describe, with examples, HOW one may decide if the filmed teacher should be upgraded to "very highly qualified".

We would like you to speculate freely on this issue. Write down your thoughts and suggestions based on your own experience. Write precisely what occurs to you and in the way that you feel best mirrors what you want to say. Disregard the formal aspects of writing.

As we collected the answers to this second query, we noted that the teachers did not "quite recognize" the way we had sorted their description of the generalized situations in query one. Our compilation, which we had regarded simply as an obvious categorization, was seen as alien.

As I read through your compilation, I feel that other interviewees may not understand things in the same way.

My first reaction to the compilation was that none of the sequences I had chosen are there. Looking more closely, I see that they are there but in words other than the ones I used. It is difficult to *explain to someone else in words* what you feel since words *resonate differently* with different people. For my words to be *interpreted in they way I want*, you need to know a few things about *the work we do here*.

Before getting the first question, I thought we would get some kind of questionnaire containing alternative answers that we could cross. These questions that we have received have been a lot of fun to answer, but as far

as I understand it, we *interpret* the questions very differently and they are also compiled in different ways. My starting point when answering the questions is the work we do here. How you interpret what a person says or writes *is not always what that person means*.

The interpretation also has to do with what you are focusing on and what fills your mind *right now*. When I read the compilation, this is precisely what I see. I do not feel that this is in line with what I am thinking, but we will see.

(Our italics)

That the knowledge is context dependent is clearly stated by the teachers. In accordance with socio-cultural theory regarding practical and tacit knowledge, it seems that the knowledge is so deeply embedded in situated practices that it risks becoming meaningless when removed from its actual context. The researchers think that they have merely sorted the information, without having violated the information given by the teachers in any way, but the compilation cannot avoid separating the concepts from “reality”. It seems as if the complexity of the profession impedes attempts to rephrase concepts describing the competence in isolation of their immediate, physical and perhaps personal context.

Round 3 – Trying to establish a professional conversation

To counteract this feeling of “alienation” – that editing the teachers’ descriptions led to the descriptions becoming partly unrecognizable – we decided, in the third query and in future communications, to stretch the limits of the Delphi method significantly and make use of the teacher’s unedited texts in their entirety, using their own words. After having received permission to do so from all teachers all answers were submitted in the following query and distributed to the teachers three weeks after the second query.

We have now put answers from all teachers together under three themes: relations to pupils, cooperation with colleagues and teaching. The compilation, attached in the e-mail, is to a large degree composed of direct quotes from the answers in the last query.

Please read through the text and make comments on it. Which are the described central competencies, as you see it? These competencies are apparently central for a skilled teacher. This time we want you to focus on: when, where and how a teacher has learned this (or an aspect of it)?

Use concrete examples and episodes, in which you think you have learned or are still learning.

Write freely. Make comments. Reflect.

In the teachers’ comments three things are noticeable. The first is that the answers took much longer in coming back to us than during the first round. The second is that the teachers involved colleagues in the discussion this time, and the third is that the teachers long for the promised physical meeting to be able to develop the discussion. Many write that they find it difficult to formulate what they “really want to say”.

This is an outline of how we view the matter. Do you want more? We hope to find the time at Fredensborg [the place where we were to have the physical meeting] to develop our thoughts during discussion. This seems like the best way to do it.

Here’s my reply after much consideration and discussion with colleagues.

I have taken my time in replying because I had to think, and I have been very busy for some time [...] It was interesting to read the other teachers’ replies to query 2.

The answer is delayed because it requires consideration and I want to be able to defend what I write [...] It is difficult to express clearly and plainly what I

actually want to say. My thoughts form a tapestry with threads going in different directions. Because of this, I write freely from my heart and will look for a possible core thread after that.

At the same time, the reading of the unedited texts seems to have re-contextualized the content. The teachers recognize the descriptions and feel that they are now able to identify a common content in professional knowledge.

When I read the texts, I recognize my own situation in those of the others. It seems as if we all want to say the same thing but from different perspectives.

Of course teachers can understand each other! The core content in what we have all written about is actually the same.

To sum things up, it appears that data, to a large degree, is only understood to be relevant by the professionals when it retains its original, narrative form. Even slight changes seem to separate the statement from what has been experienced individually and jointly. The dream of being able to translate experience-based knowledge into a scientific, exact language maybe runs aground precisely here? All we can do is perhaps to try to widen the personal and situational character of practical knowledge with the intention of describing, encapsulating and transferring – what seems to be generic aspects of – it to novices. An adjusted form of the e-Delphi method might be a way to instigate a virtual, professional conversation for this purpose.

Conversation in writing

When reading the teachers' e-mails we could clearly see at the beginning of the project that the teachers still are pondering over what the project is all about and what is expected from them. A palpable need for the confirmation that physical presence allows during a standard interview situation is apparent in the answers. They are looking for a nod and a smile to assure them that they are on the right track.

I don't know if this is clear enough. Please let me know if this is not the case!

I hope I have understood the assignment correctly. Please let me know if this is not the case!

It is difficult to express and get all my thoughts down on paper. I don't know if the reader understands what I am writing in the way I want it to be understood, but if I need to clarify anything I hope you will let me know.

The unfamiliar and unclear expectations probably affect the teachers when writing. They worried about "expressing themselves in the right way", they also felt obliged to express themselves "in an academic way". All this, combined with the fact that they do not know us researchers or the others in the group, may explain why several of the teachers left fairly short or formal answers to the first query. They were hesitant.

Besides the short and formal answers in the set out of the e-mail communication we also noted with some concern that some participants took a long time sending their answers back to us. The fear of losing participants became obvious. The periods of waiting become longer. However, our concern about losing teachers was unfounded. Only one teacher jumped ship during the first part of the study (the reason being a change of jobs).

In order to get rich descriptions of practical knowledge we stretched the limits of the Delphi-method and tried to encourage the teachers to give concrete examples and describe whole episodes. This was stressed in the second query where they more explicitly were encouraged to write as freely as possible and to disregard the formal aspects of writing.

We would like you to speculate freely on this issue. Write down your thoughts and suggestions based on your own experience. Write precisely what occurs to you and in the way that you feel best mirrors what you want to say. Disregard the formal aspects of writing. [From second query]

However, this “researcher” request did not contribute to rich descriptions. The answers in the second query were just slightly more extensive than those in the first query. It was not until the third round, when the original and unedited texts from all teachers were sent out, that the answers became more personal, concrete and circumstantial. Using concepts from socio-cultural theory one might say that when the community of practice changed the language-game altered.

Although the answers were directed to the group and to the researchers the really big value for the teachers at the end seemed to be the intrinsic dialogue: that the virtual dialogue really could be perceived as beginning with a collective dialogue and ending up in a “conversation with oneself”. The individual thinking seemed to emanate from collective activities (cp. Vygotsky, 1978).

It was nervous, and a bit scary at first, to try to write your inner feelings down – knowing that other people (whom I didn’t know!) were to read and to listen to them. I have nothing to offer to that discussion was one of my first thoughts! But, to reflect in writing showed to be a very efficient way for me to get a grip of, and a structure to, what I am really doing, what I’m really thinking, what I really mean and what I really know - being a teacher. [From follow-up interview]

When we started the project, we had to write answers, think and express opinions without the demands of formalities. At first a big and scary feeling of desperation presented itself ... talking and conversations is ok ... but writing ... anyway I just started to “write in flow”- without thinking about what the others might think about it. I wrote a little here- and- then ... And suddenly there was this dialogue and the writing just continued. You could say I was really discussing with myself... [From follow-up interview]

Conclusion

Although the sample size and range of the referred study is limited it provides an example of how the Delphi-method can and - at the same time cannot - be employed in order to track down practical knowledge. In the figure below (Figure 2) we try to sum up and show our efforts to adjust the methodological processes to the teachers’ reactions and experiences.

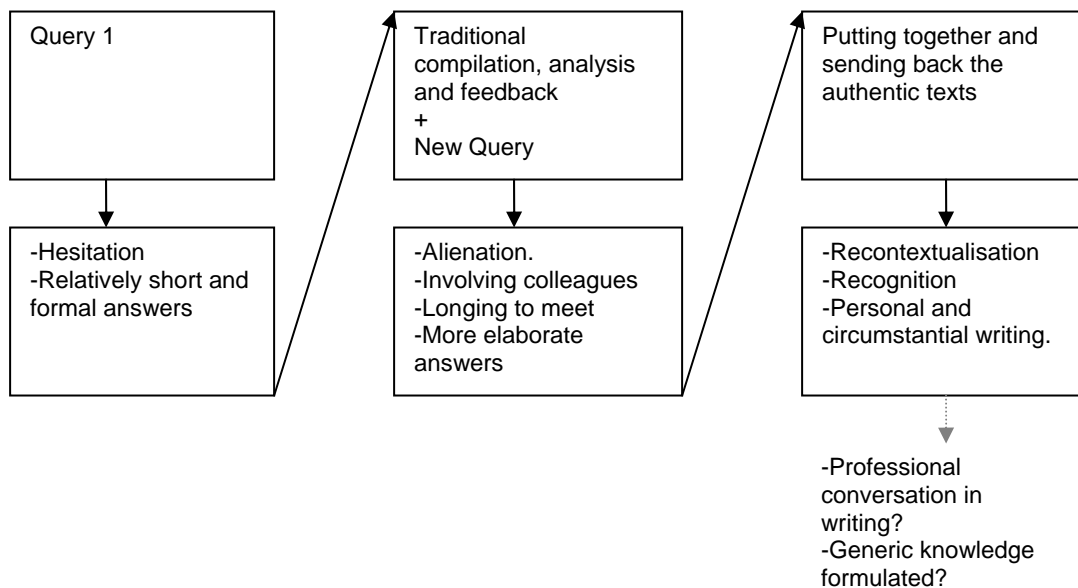


Figure 2. Schema of the process, experiences and adjustments

One can analyze e-Delphi as a tool to track down practical knowledge from two perspectives: from a researcher perspective using the method to collect data or from a teacher perspective trying to understand and develop a practice. As researchers we can assume that the traditional version of the method, with roots in positivism and objectivism has its obvious limitations. It isn't a perfect tool for widening of practical and deeply contextualized knowledge into general and de-contextualized knowledge. Apparently, this type of knowledge needs to be examined from a different epistemological perspective, in which the Delphi method, in an altered fashion, can be applicable.

Shulman (1992) tries to find such an epistemological perspective and distinguishes three forms of knowledge: propositional-, case- and strategic knowledge, where case knowledge is described as knowledge of specific, well documented, and richly described events. He argues that cases are a way to transform propositional knowledge into case knowledge, the latter being a type of practical knowledge. We tried to use the proposed bridge in the other direction. But prerequisites for this journey are that the practical knowledge can be "richly described" personal and exhaustive, something that turned out to be hard (though not impossible) to accomplish in an e-Delphi communication between teachers working in an oral culture.

I have reflected, orally, around thousands of questions around my work as a teacher, with colleagues, teacher students, headmasters and so on ... but I have never written down my thoughts and speculations this way. (From follow-up interview)

The criterion of verbal ability and motivation to share opinions with other was not included when we chose participants for the project. We assumed that the experts we were looking for were characterized by precisely the ability and motivation to speak eloquently about their practice (Krull, Oras & Sisask, 2007). Such an assumption can be questioned though. When making use of the Delphi method, the informants' ability and ambitions to formulate themselves become crucial. The method does not seem, despite the absence of peer pressure and our encouragement to write freely, to encourage the production of rich descriptions of professional knowledge. Something else must be added.

A way of facilitating the development of rich and fruitful narratives may be to encourage the informants to discuss the queries with colleagues. To begin with, this may help the informant bring concepts and examples to life. Another conceivable way is daring to use teachers' everyday language. In the study it is apparent that aspects of professional knowledge become diluted and lose power when it is translated and removed from the natural context. Even though researchers feel they have edited the relevant data with great care, the informants do not readily recognize this data. It may be the researchers' need to generalize the particular that makes it ineffectual as a basis for discussion. The teaching profession, as many other professions, can be described as an individual and situation-based occupation. To explain it in any other light may contribute to make it uninteresting. However, if it can be clearly related to the specific context the chances are good that it is recognized by the teachers as being "collective". The personal stories and the individual episodes seem to best describe the most over-reaching and general. To make use of unprocessed data – to retain the situational context of the text as far as possible as the basis for comments in similar studies – thus seems like a good idea.

However, that the Delphi method initially precludes identification of the situational context – that is the text is freed from its "physical" ties since the reader does not know who wrote it, what the writer does, how the person looks or speaks – appears to be an advantage during the first stages of a project. The teachers are not immediately caught up by pre-conceived ideas about each other as "first-grade teacher", "grammar-school teacher", "whining old lady" or "provincial teacher", allowing them to read each other's texts with less bias. It also seems that the absence of pre-conceived ideas such as "primary school has nothing to do with secondary school – they are two different things" allows for a much wider understanding of professional knowledge. The teachers themselves were often surprised by how similar the answers were and how easily they

could recognize their own situation in those described by others. In our opinion, the anonymous writing seems to pave the way for subsequent collections of data (Stimulated recall and Dialogue-seminars).

A great deal of the prejudice attached to different types of teachers had the possibility to be eradicated and there was no need to return to traditional misunderstandings and erroneous conclusions. Instead, we could focus on formulating professional knowledge together. One of the advantages of the Delphi method may be that it can allow the researcher to de-contextualize material that seems to be tied to a specific context, without having to sacrifice either the small details or the sense of being present in an actual professional situation.

To use only the Delphi method to track down professional knowledge has its obvious limits and yields relatively meager results. However, to make use of an adjusted version of the method during the first stages of such a study, before physical encounters or observations of individuals or groups begin, may prove a successful strategy. The essence of the method, to structure a group process without bringing in peer pressure, is in this context, a strength that should be made use of.

Last but not least, looking at the e-delphi method from the teachers perspective and putting the many research-dilemmas in brackets, we noted that "our teachers" somehow did seem to find a professional point using the Delphi-method and that the virtual conversation actually gave them time and some sort of opportunity to formulate and collectively develop their formulations around practice knowledge. All the teachers in the project expressed positive comments around this chance. One teacher writes

To be able to share my experiences and thoughts around the questions that interest me so much and have occupied such a large space of my working life, has meant a great deal to me ... that the others really have listened to what I have to say. And the fact that they have commented, filled in the blanks, strengthened me, valued my thoughts, wondered and questioned and so on ... has truly made me improve as a teacher. When the group seem to recognize my thoughts and reflections, a sort of mutual development occurs, you can really feel the collective strength we share as professionals. [From follow-up interview]

To sum up, the results from this study show that the teachers could and were willing to try to discuss and formulate practical knowledge in a decontextualized conversation. However, the unexpected side-effect of the study, that the teachers found the methods contributing to professional development and as a way of improving their own practice, may be regarded as the most important "finding" of the study.

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