

**A Proposed Typology Of Knowledge Sharing Within Communities Of Teachers: A
Comparative Case Study Focusing on England and Macedonia**

Dr James Underwood,
University of Northampton, UK

Majda Joshevska
Foundation for Education and Cultural Initiatives (Step by Step),Macedonia

Abstract

This article is a case study into the knowledge that is exchanged by teachers when they are engaged in professional communities that extend beyond the workplace, including internationally. The participants in this study were all teachers from England and Macedonia. The data collection method was via interview. This data was thematically coded and used to build towards the development of a typography of the different forms of knowledge that may be shared by teachers within such communities. In the first half of this article different ways of defining the professional knowledge of teachers, as presented in a range of research, are explored and critiqued. The second half of this article then explores the different forms of knowledge that the participants in this study perceived themselves to have shared as members of communities of teachers that extend beyond the workplace. Via this study it was found that the participants consistently problematised the possibility of directly transferring specific pedagogic strategies. However, stories about teaching were seen by all to be useful vehicles for enabling affirmation and for co-constructing professional purpose. It is argued that both of these outcomes are forms of professional knowledge in their own right. These findings have potential implications for policy and practice as they indicate that it may be significant for those organisations that support such networking opportunities to value and understand the significance of those forms of professional knowledge that are less concrete than the exchanging of specific classroom strategies alone.

Keywords: professional communities; professional knowledge, extended professionalism, communities of practice, pedagogical knowledge, knowledge sharing, implicit knowledge.

In many countries, there are a wide range of initiatives that link teachers from different schools within the same country. There are similarly a large number of initiatives that build communities of teachers from different countries. These may be arranged and funded by governments local and national or by non-governmental organisations. These organising bodies at some stage usually evaluate the success of these initiatives. The reasons various organisations have for supporting and promoting such community building is often described in terms of improving teachers' knowledge and expertise and in terms of sharing practice (Frost, 2015; British Council, 2018). These often become the success criteria that such communities are judged by.

However, a frequent criticism is that although engagement in extended communities is often a positive personal experience for teachers, they are sometimes not as effective at transferring practice as is hoped for. This has particularly often been the conclusion reached by research into the success of international initiatives (Oyewole, 2016). Another criticism, with the building of international communities specifically, is that: when the countries involved differ in terms of economic development, levels of investment in education or perceived teacher status that, the relationship between community members is inevitably an unequal one. The potential for inequality being most often demonstrated by an expectation from those from the more developed country, that they will have much to teach and less to learn (Steiner-Khamsi, 2014).

Both the writers of this paper are professionally engaged in developing extended and international communities of teachers. Through this role we have found that current models of teacher knowledge do not fit neatly when trying to understand these communities and especially when trying to evaluate their success. Some models emphasise the importance of the individual school (Frost, 2015) while others are culturally specific (Shulman (2013). These models do not enable a full understanding of knowledge transfer when the teachers in these countries teach very different subject knowledge and when the curriculum emphasises different aspects of student and teacher knowledge and expertise (Schulman, 2013). Therefore in this paper we explore the different forms of knowledge that the participating teachers perceived that they had shared and the value that they placed on these. This is within the specific context of knowledge sharing within extended and international communities.

Literature Review

Professional knowledge in many professions, is defined by a shared specialist language (Stickney, 2012). However, if professional knowledge is defined in this way, then this presents problems if trying to understand the distinct knowledge of teachers (Frost, 2013). Teachers certainly build through their career a canon of knowledge and skills. However, this is framed in language that is familiar language to most people (Taber, 2009), simply because most people have a deep familiarity with the language of teachers and of schools (Ball, 2006). In comparison in the medical and legal professions, the status of having distinct professional knowledge, defined by distinct language and enforced by unique social codes is easier to attain (Hui & Stickley, 2007).

Other potentially more valid models of teachers' knowledge identify and describe typologies that define the different forms of knowledge that teachers may acquire. Shulman (2013) built and refined a widely used typology of knowledge that defines teaching knowledge in terms of

pedagogical, subject content and contextual knowledge. This way of identifying different forms of knowledge is significant because it distinguishes between potentially mechanistic acts of classroom strategy and a deeper knowledge of practice, the latter of which enables innovation and responsiveness. It also distinguishes between the factual content knowledge of teachers and a simple knowledge of strategies, both of which can be easily shared and the tacit knowledge of: how to teach well in this context, which is much harder to share with others.

This tacit knowledge, a ‘wisdom of practice’ (Shulman, 2013), is a form of knowledge that is harder to transfer than either subject content knowledge or the mechanistic knowledge of individual classroom acts or strategies (Dogan, Pringle & Mesa, 2016). However, with Shulman’s model, the primacy given to subject content and contextual knowledge means that it cannot be used as a conceptual tool on its own for understanding the knowledge exchanged by teachers engaging in extended communities that reach beyond a single education system. This is because of the lack of content similarity and the differing curriculums in different contexts. This is exacerbated further if the community is very diverse such as an international community.

Another alternative way of understanding how teachers build and define the professional knowledge they possess, which has been widely used in theory building over the past twenty years, is by reference to arts and crafts traditions (Shimahara, 1998; Lupton, 2013). These analogies link teaching to other highly skilled roles that historically often lay at the heart of communities. This way of understanding teachers’ professional knowledge, especially reference to craft traditions, has had a deep influence on teacher training in England and Wales in recent years, which has progressively moved towards a way of training which is akin to an apprenticeship model.

One argument for using this analogy to understand teachers’ professional knowledge is based on acknowledging that once formal qualifications to enter the profession have been completed, further professional knowledge is almost entirely gained via experience (Hord & Sommers, 2008; Oancea, 2014). Teachers in professional practice understand situations via the context of and interpretation of previous similar experiences (Taber, 2009). These specific experiences are just as inaccessible to others as professional knowledge in other contexts is. However, teachers’ knowledge is more idiographic, likely to be expressed in less specialist language and the process of gaining it is done in the real world setting of the teacher’s classroom (Nyman, 2014). This knowledge is still highly specialised though and can only be accumulated by deeply committed professionals over an extended period of time (Parker-Katz & Bay, 2008).

Art and craft analogies are useful tools for understanding the types of knowledge that teachers may possess and share. This is because with these analogies a distinction can be made between teaching as craft and teaching as art, whilst defining teaching knowledge is a union of both types of knowledge (Lupton, 2013). Craft involves the accumulation of a broad set of skills, whilst art is the utilisation of these in innovative and unique ways by any given teacher. According to these analogies just as an experienced carpenter will make each piece in a distinct and unique way but based on prior experience of having dealt with a similar challenge before so will a teacher when designing lessons and teaching strategies (Black-Hawkins & Florian, 2012). As each challenge is resolved, the store of accumulated expertise and depth of knowledge is extended (Van Velzen, 2012).

Artists are interested in other artists work because of the creative discourse that is enabled by seeing and discussing it, not because they intend to replicate it entirely. Therefore, whereas in

other professional fields an exact equivalent case may inform the way to address the next, in teaching the myriad range of similar classroom experiences informs later decisions. However, this knowledge is used far more flexibly than it might be in other contexts. A different setting is not simply advantageous or disadvantageous but it leads to different but equally valid decisions being made (Gun, 2014).

Another distinct approach to understanding the knowledge of teachers, is the teacher leadership perspective as promulgated by Frost (2014; 2015) and others involved in the International Teacher Leadership Initiative. 'Teacher Leadership' is used as a term by various writers. However, two aspects of the teacher leadership approach that Frost (2015) puts forward are distinct from other conceptual models. These are the importance of the co-construction of knowledge by teachers, and the importance of knowledge validation by fellow professionals (Creaby, 2013; Frost, 2014). Albeit acknowledging that the idea of co-construction is implicitly present in models that use arts as an analogy.

According to this teacher leadership perspective, for knowledge to be relevant to teachers it must be co-constructed as a community (Bolat, 2013). The distinction between co-construction as opposed to simply sharing is important as it is through co-construction that teachers are able to be creative and to exercise leadership (Steel, 2014). Through this process, knowledge is shared through the stories teachers tell and it is then developed in innovative ways as a community. This then facilitates the process of building a positive professional identity and self-efficacy among teachers (Anderson et al., 2014; Frost, 2014), which in turn facilitates the enabling of embedded, long lasting changes in practice or underpinning viewpoints on education (Hill, 2014).

For this professional knowledge to be of value it therefore undergoes a process of 'knowledge validation' (Anderson et al., 2014; Frost, 2013, p.17) with the teachers in the role of expert practitioner and expert audience. The knowledge that is co-constructed and then validated in the dialogue of teachers may on occasion be specific knowledge relating to classroom strategies but it may also be knowledge of how to exercise leadership, knowledge of purpose, or knowledge of one's own professional significance (Hill, 2014; Frost, 2013). The emphasis in the context of this teacher leadership approach is on teachers being empowered to innovate. Through the confidence that this builds teachers then develop belief in themselves as leaders of change. The significance of emphasising the co-construction of knowledge rather than the direct transfer of practice has implications when teachers work together across national borders (Underwood & Kowalczyk-Walędziak, 2018). It reduces the risk of strategies being rejected because of an unquestioning acceptance of approaches brought in from other countries, especially wealthier ones (Ramahi, 2015). Ramahi (2015) in the context of Palestine writes about how the building of collective knowledge as opposed to only individual reflective knowledge enables forms of knowledge other than classroom practice to be exchanged by teachers. This in her experience includes knowledge of: personal agency, approaches to leading change and of teachers' own role as experts.

To some extent these interlinking definitions of professional knowledge, outlined above, would also be appropriate when defining experienced professionals in any profession including the traditional professions of law and medicine, which were placed in opposition to these models at the start of this section. However, it may be more significant for teachers than for those in other professions (Kuper and D'Eon, 2011; Frost, 2014). This knowledge of teachers, which once a teacher is qualified, is largely built experientially, is different from the more procedural knowledge of other professions and therefore is worth understanding in a distinct way (Eraut,

2007; Frost, 2015).

The purpose of this study was to explore the types of knowledge that teachers engaged in extended and international communities shared and the value that they put on these different forms of knowledge. There are two research questions that underpin this study, as follows:

- 1) What types of knowledge do teachers engaged in extended communities exchange?
- 2) In what ways do teachers value these different types of knowledge?

Method

The overall design for this study was as follows and divides into two stages (Newby, 2014). First, there was a preparatory stage which involved an exploration into literature in this field. This first stage built an initial conceptual understanding that would be used to guide the analysis of documents and the interviews. In the second stage ten interviews with two different groups of teachers were conducted. First, with five teachers, currently teaching in schools in England, who were all engaged in communities that extend beyond their workplace. In this case for all of them this involved working with teachers, and others in education, from the Balkans including Macedonia, via ‘the International Teacher Leadership initiative’. The second group was five teachers, teaching in schools in Macedonia who were members of similar communities that extended beyond their own workplace and in some, but not all cases, communities with an international dimension.

The participants from both countries were all teachers within the state system in either England or Macedonia. The five Macedonian teachers all taught in schools that had cohorts of children aged from 7 to 14. The teachers from England were all secondary school teachers (teaching children aged 11 to 16). All had taught for at least one year and none had taught for more than ten. The teachers from England were one English teacher two Humanities teachers, one science teacher and one dance teacher. Due to the age of the children the Macedonian teachers did not have a subject specialism.

All could be described as ‘extended professionals’ (Hoyle, 2008) in that they were proactive professionals, constantly seeking professional development opportunities within their schools, their country and beyond to make systematic and purposeful interventions in their teaching practice in order to improve it. In this way they also demonstrate a high level of ‘professionalism’ (Evans, 2008).

The participants were involved in a range of communities from formally structured projects to online communities that they had created for themselves. The one commonality these communities all had was that they extended beyond the school workplace. They were all also involved in at least one community that was part of the larger UK based ‘International Teacher Leadership initiative’. However, in no case was this the only extended community that they belonged to and the participants referred to a range of the communities that they were involved in, in their interviews.

The ‘International Teacher Leadership initiative’ provided gatekeeper access to the participants. It is a project that started at the University of Cambridge in 2011 and is now a fully independent initiative. It involves all the countries that have emerged from the former Yugoslavia plus the UK, Turkey, Portugal and Palestine. The participant’s involvement ranged from being central to the governance of this initiative, to being a teacher involved in local

initiatives inspired by it in England or Macedonia. In all cases though it meant that it might be expected that the participants would have a shared perspective on the ideals of ‘teacher leadership’ that this project puts forward (Frost, 2015). However, this study does not focus exclusively on this project but rather on the knowledge shared within a range of communities these teachers were involved with, whether formally or informally structured

Interviews were used because the aims and goals of communities of teachers that stretch beyond the workplace, articulated in the literature of the organisations that promote international networking tend to be strong, clear and hard to disagree with. This includes the documents produced via the ‘International Teacher Leadership initiative’. They variously combine an emphasis on the importance of: democratic participation, enabling civic society, empowering teachers and on building global communities of education professionals (British Council, 2016; Frost, 2008). All values and ideals that any teacher engaged in international networking via formal projects would be likely to concur with. We therefore decided to use interview because such deep data would reveal subtle differences in viewpoint and perception (Robson & McCartan, 2016).

The participants were interviewed in private. The interviews were held in English although both authors were present for the interviews with the Macedonian teachers (one of the authors speaks both English and Macedonian fluently). The same simple interview schedule was used with all the participants from both countries and consisted of four open questions, which would then enable a further discussion. These questions asked the teachers to: describe the communities that they had been involved in, their reasons for joining, the knowledge that they had shared within the community and what they valued most about community membership. From this starting point further discussion emerged. The shortest interview lasted 40 minutes, the longest lasted 70 minutes.

All the interviews were transcribed verbatim. They were then:

- carefully read by both authors with initial codes written in the margin by hand
- extracts with identical or related codes were grouped together in tables
- the codes were then reduced and categories identified
- these became the categories that shaped the writing of the second half of this article.

Findings and discussion

This section is a discussion of the forms of knowledge that were exchanged by the participants, when they were engaging in communities beyond the workplace. We also discuss the value the participants put upon the different forms of knowledge that were shared and on the process of sharing.

Knowledge of strategies and practice

All of the participants acknowledged the possibility that specific classroom strategies may be exchanged by meeting other teachers through a community that functions beyond the workplace. This reflects Shulman’s model of knowledge sharing, which describes how specific strategies are the simplest and most transferable form of knowledge that teachers share (Shulman, 2013). For the participants this included within international communities that they had been engaged with. However, none of the participants, from either England or Macedonia, felt that the learning of concrete strategies had been particularly significant for them. Therefore, an apparent tension regarding rejecting the simple and mechanistic learning of teaching strategies, whilst maintaining the goal of achieving concrete change through dialogue with

other teachers, was present in all the interviews.

The participants were very interested in how others taught and consistently described how hearing stories about teaching was a vital and stimulating aspect of engaging with teachers from other countries. This closely matches Frosts' (2015) and Ramahi's (2015) description of knowledge being present in the discourse of teachers. However, the participants were confident in their own skills as teachers and lesson designers, enjoyed the process of lesson design and were consistently looking for sources of inspiration rather than strategies that they could simply transfer. They were also interested in current trends and developments as expressed by the teaching of others. This again fits closely with Frost's (2014) teacher leadership model, which describes how experienced teachers perceive themselves as creative and individualistic and therefore seek forms of knowledge other than the direct copying of strategies. This is illustrated below by this quotation from one of the teachers from England.

I kind of just wanted to find out more about it. Colleagues have been abroad before and found it really interesting to hear about teaching in other countries but particularly the obstacles to teaching and how we take it for granted over here. I saw this as a form of professional development, a chance for involvement in something. I expected it to have some kind of influence on my teaching but that isn't the same as learning teaching strategies, it was something less direct that I expected to gain. The vast majority of your time is spent in your classroom by yourself and you are the identity in your classroom. The activities, the lessons have your stamp on them. My lessons have the stamp of other individuals who inspire me. Although I think you could come into my lesson and see a Ms xxxxx lesson, there are other ideas that have fed into that particular lessons and yes that is what I expected or at least hoped for (A secondary school geography teacher from England, engaged projects with teachers from the Balkans).

The knowledge that all the participants sought to build through engagement, in the more diverse communities of teachers that they belonged to, included and emphasised knowledge of the thought processes of other teachers when designing approaches to teaching; knowledge of the working culture that enabled or inhibited this, and a deeper understanding of the interaction between the wider community that they belonged to and the design of innovative lessons. All of these in turn were linked to improvements in teaching within their own schools and classrooms but in a more nuanced way than the simple importing of strategies. The participants saw the dialogue that international engagement, specifically, could bring about between teachers from different countries as ideally being critical, discursive and co-constructed. They also thought that it was important that such discussions would be empowering for the teachers engaged in them.

There was an initiative seven years ago, we were in that initiative, and they taught us that it is great to share your ideas and that was the aim of that workshop and they taught us how to film, to record our classes and to share and that is great, really inspiring, but it was the doing of it that inspired me, to be honest I didn't then copy a lot of lessons but I made friends, interesting people I still talk about teaching with (teacher from Macedonia: engaged in a pan-Macedonian project).

The quotation above is illustrative of how a perception of teaching as an individualistic or idiographic profession was expressed in all the interviews. It was also consistently emphasised that an individualistic approach to lesson design could potentially be positive and enabling. It could even promote greater self-efficacy than dependence on the strategies of others. However,

for this to be the case it was seen as important that these teachers still identified as members of a community, thus fitting with Wenger-Traynor and Wenger-Traynor's (2015) model of a community of practice. As with this community of practice model this emphasis on individuality and creativity did not negate the possibility of community membership, as long as the expectation was that the knowledge shared would not simply be mechanistic know-how.

Within several of the interviews, as the quotation below illustrates, there was also explicit reference to the idea of teachers' shared knowledge being similar to knowledge in the arts. According to this analogy it may be expected that techniques, approaches and perspectives are shared in order to then enable personal innovation (Lupton, 2013; Oancea, 2014). This may indicate that this is an analogy that these teachers were already familiar with. However, even if this is the case, it is clearly one that resonates.

Solutions are found more quickly if you can undertake reflection with other colleagues but the final design of a lesson needs to be something personal You get involved in designing a lesson, it is like an artist or a writer does (teacher from England: secondary science teacher: engaged with projects in Europe).

All of the participants saw the process of lesson design as highly personal and individual. One participant in particular was very active in presenting her ideas to others via the internet and had built a community beyond the workplace where she was a leader and innovator, presenting her practice to others. However, even in this case an appreciation of the role of others was still present. She acknowledged that she was often inspired by ideas from others within and beyond this community. However, in keeping with the analogy that lesson design is similar to the process of being an artist (Lupton, 2013) she never used these in their entirety without modifying and developing them further.

I never use the internet for ideas, because I record my lessons and I picture them. I publish them. So I need to always be creative (teacher from Macedonia: engaged extensively in online, international communities of teachers).

It was interesting that this emphasis on independence and creativity was still the case even though both countries, England and Macedonia, had seen political pressures emerge since 2010 in terms of an expectation of improving the teaching in the respective country via direct international borrowing. In England this has been diffuse and sporadic with various initiatives using China, Finland, Singapore and others as a potential model being promulgated (Frost, 2015). In Macedonia this has been more focused and concrete, specifically the national curriculum and assessment processes were, at the time these interviews were conducted, being re-designed by Cambridge International Examinations, with teaching towards this having already begun with children aged up to eleven (Joshevska & Kirandziska, 2017). Teachers in Macedonia at this time were also having to undergo a large scale government led assessment of their teaching and subject knowledge as part of this development.

On the few occasions where learning specific teaching strategies was mentioned, all the interviewees stated that it would be likely that teachers working in England would have more specific strategies to give to others and less to learn. However, these strategies were not those of classroom practice but rather were leadership strategies promulgated by the International Teacher Leadership initiative that they were involved in (Frost, 2013). This therefore reflected the greater depth of embedding of this specific initiative in England rather than a perception that education in England was superior in any more general sense. Contrary to a possible

expectation that classroom strategies may be imported from the West (Steiner-Khamsi, 2014; Oyewole, 2016) all of the Macedonian participants perceived there to be no significant difference in quality or approach to teaching between the two nations.

Knowledge of purpose

Eight of the ten interviewees, from both England and Macedonia, used the phrase ‘moral purpose’ in their interviews. This is language used by writers, who identify themselves as writing in the tradition of teacher leadership (Frost, 2015). This may therefore come from the participants involvement in communities that define themselves in this way. However, to the participants it was clearly a meaningful term even when defining other communities that they belonged to. When expanding upon it a common understanding emerged that linked this closely to ideas of collective-efficacy and empowerment in a similar way to that expressed by Wenger-Traynor & Wenger-Traynor, (2015). For all the teachers the experience of travelling, when this was possible, was connected to an ambition to work with fellow teachers with similar approaches and values. Indeed, what particularly impressed the teachers from England about those that they had worked with from Macedonia was their ambitions regarding and focus on improving the education system of Macedonia. These conversations where the teachers were able to find a commonality of moral purpose were particularly valued as a distinct positive that came from being part of this community.

Maybe different experiences and examples are going to inspire them because I think that philosophy is not inspiring teachers who are just listening to a lot of philosophy. I want to convince them that if I can do it, you can do it also (teacher from Macedonia: involved in pan-Macedonian projects)

There are so many involved and dear to me. The initiative gels people together but the individual relationship is more significant still. We synchronised about teacher leadership around having the same values, realising how important what we are doing was, but I definitely feel like I belong to a community of teachers that are seeking for an impact and a change in education (teacher from England: a secondary school dance teacher, involved in projects with the Balkans).

This was also connected for the participants to the establishing of democracy in The Balkans and the rebuilding of civic society. It was the fact that this initiative was working with these countries that drew some of the teachers from England to choose to become involved at an early stage. As regards their role as leaders of civic change, the perceptions of the Macedonian teachers were distinct from the teachers from England and also more homogenous. Some of the teachers from England did not perceive themselves as having a wider civic role beyond their school, while others saw this as a strong feature of their identity as teachers and educational leaders to the extent that they perceived this role as a global one.

We work with little kids we create in some way the future citizens. So we teach interaction in group cooperation, in groups that is the first way how to be a great citizen. What I am trying to achieve is that, I try to teach children to become good human beings (teacher from Macedonia: primarily engage in projects in the Balkans).

As this quotation above exemplifies the teachers from Macedonia all perceived themselves as having a role in terms of building civic society. This was also articulated in documents produced by Macedonian writers, linked to the ‘International Teacher Leadership initiative’ (Joshevska & Kirandziska, 2017). In all cases this was primarily linked to and focused on the local community. The Macedonian participants saw themselves as having a leadership role in

terms of building social cohesion. However, they saw this as being even more closely linked to teaching than the teachers from England did, with both being an aspect of a common process.

Knowledge that affirms

To all the teachers' recognition of their expertise by other teachers was significant to them. They emphasised a recognition of the unique skills set innovative teachers have, their role in building civic society and the importance of resisting becoming mechanistic as regards approaches to teaching. The interviewees strongly identified with the communities beyond the workplace that they belonged to as ones that they took considerable pride in being part of. One form of knowledge that they therefore perceived as being shared when working with other teachers, was knowledge of themselves as professionals and of their shared collective efficacy. This is a form of knowledge that has been previously described by Wenger-Traynor and Wenger-Traynor (2015). One thing that was consistently welcomed, was the opportunity to demonstrate expertise to a knowledgeable audience outside their own schools and to have this expertise recognised, something also noted by Frost (2013) when describing such communities. Thus one of the gains of working on initiatives with other teachers in this way was the process of being affirmed and of affirming others.

So one of the things we also do in the component is that we set up networking meetings in one school for several schools that are joined. They have a chance to show off, to celebrate their success, something that is very lacking in the teaching profession in general or in Macedonia specifically (teacher from Macedonia involved in projects across Macedonia and with England).

Teachers from both countries saw themselves as being engaged in a conversation between equals. However, both groups of participants identified that this was particularly possible because they identified with the commonality of being teachers and experts in education. From this therefore emerges the fourth type of knowledge that was shared within this community, which was, 'knowledge that affirms'. This is the knowledge that one is a skilled professional that can only be gained from the critique of other fellow professionals.

Thus although distinct, knowledge that affirms, also relates to the other three types of knowledge identified above. All the interviewees described how stories about teaching provided the opportunity to demonstrate expertise to a knowledgeable audience outside the school they usually work in and to have this expertise recognised. To the participants the stories that teachers tell are not simply informative but are more purposeful and inspiring than other types of discussion on pedagogy or practice. All the participants also understood the importance of being prepared to move flexibly between the role of expert and expert-audience.

Based on these findings a typology of knowledge is presented in the diagram below. The four types of knowledge illustrated by the four arrows that emerge are: *knowledge of strategies*, *knowledge of practice*, *knowledge of purpose* and *knowledge that affirms*. The distinction between the first two of these is that knowledge of strategies, refers to specific classroom-based actions which are both mechanistic and relatively easily transferred; while, knowledge of practice, is a term to describe perspectives on and approaches to teaching and lesson design rather than specific teaching strategies. In the middle of this diagram is a box that represents: communities that are personally significant, and in which knowledge is co-constructed. The arrow at the bottom of the diagram, shows how this knowledge is shared via community engagement but also creates community identity and cohesion. It is these forms of knowledge

that need to be understood if those that create, support and fund such projects are to be able to evaluate them effectively.

Community characteristics

The knowledge created

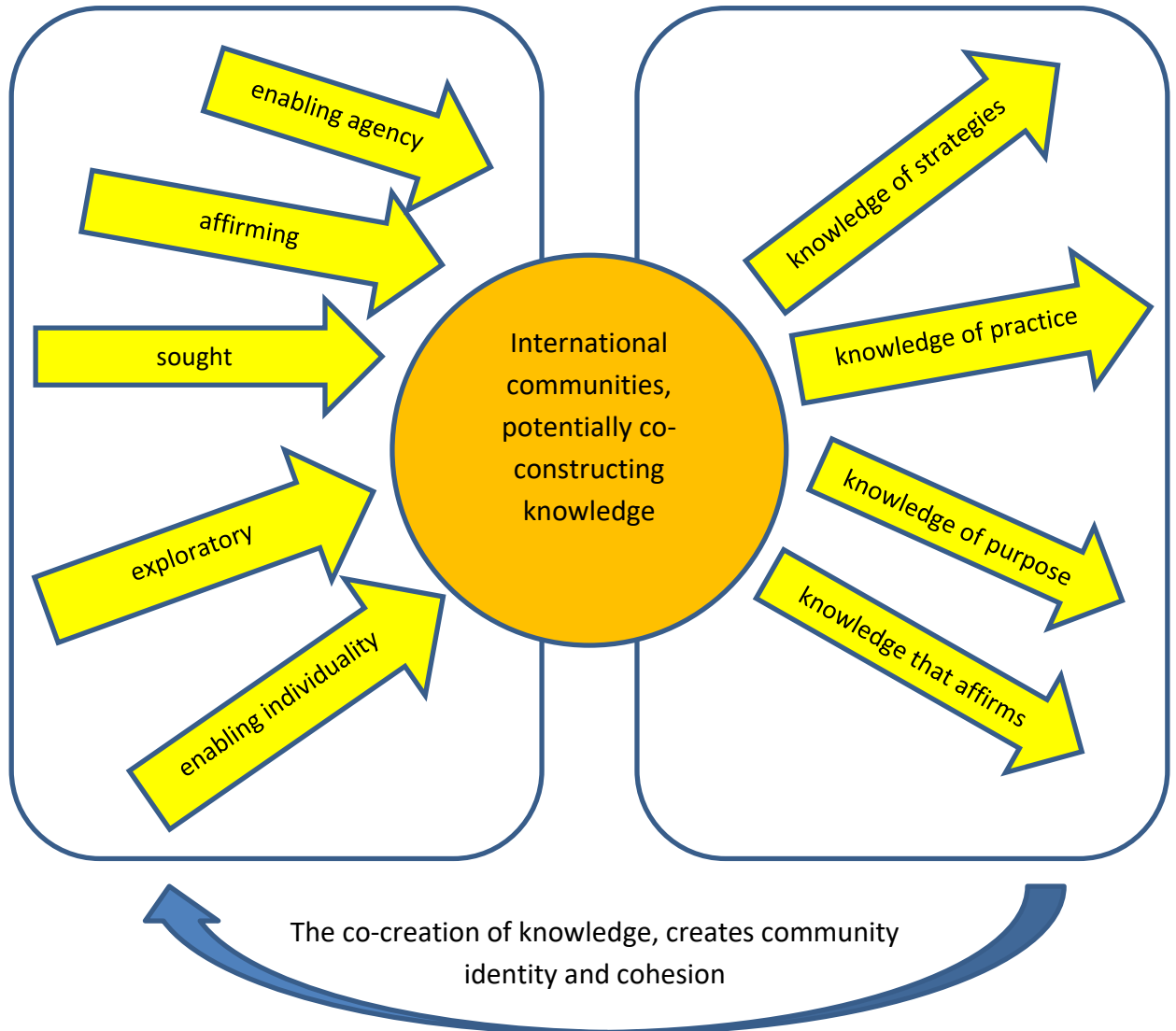


Figure 1: types of knowledge generated within extended communities of teachers.

Conclusion

The high regard these teachers put upon the experience of being able to network with fellow professionals suggests that there is value in government, local and national, supporting such processes. Teachers clearly described how being involved in diverse communities, including international communities, had improved their classroom practice and professional confidence. These are all aspects of teachers' professionalism that any school or country would want to develop. However, none of the participants placed any particular significance on the sharing of specific teaching strategies. Instead they stressed the importance of hearing about strategies for designing lessons and for exercising leadership as well as the co-construction of moral purpose. This know-why knowledge was seen to exist in the same discourse as knowledge about teaching strategies but was given far greater primacy. Indeed stories of know-how for these teachers were largely seen as a vehicle for these other deeper forms of knowledge. Therefore we would recommend that when such communities are evaluated, by those that lead or fund them, that the value of different types of knowledge is understood, with credence given to sharing knowledge other than the direct transfer of classroom strategies

References

- Anderson, C. (2014). Developing strategies to enhance students' autonomy as learners of geography. In D. Frost (Ed) *Transforming education through teacher leadership*. Cambridge, UK. University of Cambridge
- Ball, S. J. (2006). Policy, sociology and critical social research. In S. J. Ball (Eds.), *Education policy and social class: the selected works of Stephen J. Ball* (pp. 10-25). Abingdon, UK: Routledge.
- Black-Hawkins, K., & Florian, L. (2012). Classroom teachers' craft knowledge of their inclusive practice. *Teachers and Teaching: Theory and Practice*, 18(5) 567-584.
- Bolat, O. (2013, September). Introducing teacher leadership in Turkey. Paper presented at the *European Conference on Education Research (ECER) 2013*. Istanbul, Turkey.
- The British Council. (2016). *The connecting classrooms programme an overview*. Retrieved from: www.britishcouncil.org/learning-connecting-classrooms
- Creaby, C. (2013, September). Teacher identity and implications for educational improvement. Paper presented at *The European Conference on Education Research (ECER) 2013*. Istanbul, Turkey.
- Dogan, S., Pringle, R., & Mesa, J. (2016). The impacts of professional learning communities on science teachers' knowledge, practice and student learning: a review. *Professional Development in Education*, 42(4), 569-588.
- Eraut, M. (2007). Learning from other people in the workplace. *Oxford Review of Education*, 33(4), 403-422.
- Evans, L. (2008). Professionalism, professionalism and the development of education professionals, *British Journal of Educational Studies*, 56(1), 20-38.
- Frost, D. (2015, September). The role of teacher leadership in the transition to democratic society. Paper presented at *the European Conference on Education Research (ECER) 2015*. Budapest, Hungary.
- Frost, D. (2014, September). Non-positional teacher leadership: a perpetual motion miracle. Changing teacher professionalism through support for teacher leadership in Europe and

- beyond. Paper presented at *European Conference on Education Research (ECER) 2014*. Porto, Portugal.
- Frost, D. (2013). Developing teachers, schools and systems: partnership approaches. In C, McLaughlin & M. Evans (Eds.), *Teachers learning: professional development and education*. Cambridge, UK: Cambridge University Press.
- Frost, D. (2011). *Supporting teacher leadership in 15 countries. the International Teacher Leadership project: Phase 1 – A report*. Cambridge, UK. University of Cambridge, Faculty of Education.
- General Teaching Council of England (GTC(E)). (1993). *The continuing professional development of teachers*. London, UK: GTC(E).
- Gün, G. (2014). Making sense of experienced teachers' interactive decisions: implications for expertise in teaching. *International Journal of Instruction*, 7(1), 75-90.
- Hargreaves, A., Boyle, A., & Harris, A., (2014). *Uplifting leadership*. New York, USA: Jossey-Bass.
- Hord, S. & Sommers, W. (2008). *Leading professional learning communities*. California, USA: Corwin Press.
- Hoyle, E. (2008). Changing Conceptions of Teaching as a Profession: Personal Reflections. In D. Johnson & R. Maclean (Eds.), *Teaching: Professionalization, Development and Leadership* (pp. 285-304). Netherlands: Springer.
- Hill, V. (2014). The HertsCam TLDW programme. In D. Frost (Ed) *Transforming education through teacher leadership*. Cambridge, UK. University of Cambridge
- Hui, A., & Stickley, T. (2007). Mental health policy and mental health service user perspectives on involvement: a discourse analysis. *Journal of Advanced Nursing*, 59(4), 416-426.
- Joshevska, M., & Kirandziska, S. (2017). The rise and rise of teacher leadership in Macedonia. In D. Frost (Ed.). *Empowering teachers as agents of change: a non-positional approach to teacher leadership*. Cambridge, UK: Cambridge University Press.
- Kuper, A., & D'Eon, M. (2011). Rethinking the basis of medical knowledge. *Medical Education*, 45(1), 36-43.
- Lupton, M. (2013). Reclaiming the art of teaching. *Teaching in Higher Education*, 18(2), 156-166.
- Newby, P. (2014). *Research methods for education (2nd ed.)*. Abingdon, UK: Routledge.
- Nyman, T. (2014). The newly qualified teacher in the working community. *Teacher Development*, 18(4) 466-481.
- Parker-Katz, M., & Bay, M. (2008). Conceptualizing mentor knowledge: Learning from the insiders. *Teaching and Teacher Education*, 24(5), 1259-1269.
- Ramahi, H. (2015, September). Emancipatory education for Palestine: the power of teacher Leadership. Paper presented at *the European Conference on Education Research (ECER) 2015*. Budapest, Hungary.
- Robson, C., & McCartan, K. (2016). *Real world research (4th ed.)*. Chichester, UK: Wiley.
- Rots, I., Kelchtermans, G., & Aelterman, A. (2012). Learning (not) to become a teacher: A qualitative analysis of the job entrance issue. *Teaching and Teacher Education*, 28(1), 1-10.
- Rubin, H., & Rubin, I. (2012). *Qualitative interviewing: the art of hearing data (3rd ed.)*. London, UK: Sage.
- Shimahara, N. K. (1998). The Japanese model of professional development: teaching as craft. *Teaching and Teacher Education*, 14(5), 451-62.
- Shulman, L. (2013). Those Who Understand: Knowledge Growth in Teaching. *Journal of Education*, 193(3), 1-11.
- Smith, H. J. (2013). A critique of the teaching standards in England (1984–2012): discourses of equality and maintaining the status quo. *Journal of Education Policy*, 28(4), 427- 448.

- Steel, L. (2014). Strategies to develop literacy in science. In D. Frost (Ed) *Transforming education through teacher leadership*. Cambridge, UK. University of Cambridge
- Steiner-Khamsi, G. (2016). Standards are good (for) business: standardised comparison and the private sector in education. *Globalisation, Societies and Education*, 14(2), 161-182.
- Stickney, J. (2012). Judging Teachers: Foucault, governance and agency during education reforms. *Educational Philosophy and Theory*, 44(6), 649-662.
- Taber, K. (2009). Learning from experience and teaching by example: reflecting upon personal learning experiences to inform teaching practice. *Journal of Cambridge Studies*. 30(2), 82-91.
- Oancea, A. (2014). Teachers' professional knowledge and state-funded teacher education: a (hi)story of critiques and silences. *Oxford Review of Education*, 40(4), 497-519.
- Oyewole, A. (2016, March). An exploratory study of instructional practice in three Nigerian secondary schools, given student-centred recommendations in curriculum reform. *Proceedings of the 2016 STORIES Conference*. The STORIES Education Research Conference 2016. The University of Oxford.
- Stickney, J. (2012). Judging Teachers: Foucault, governance and agency during education reforms. *Educational Philosophy and Theory*, 44(6), 649-662.
- Underwood, J. & Kowalczyk-Wałędziak, M. (2018). Conceptualising Professional Communities Among Teachers. *CollectivED*. 1(5), 68-71.
- Van Velzen, J. H. (2012). Teaching metacognitive knowledge and developing expertise. *Teachers and Teaching*, 18(3), 365-380.