

Facilitating development of pedagogical content knowledge among in-service teachers of English in continuing education

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Abstract

The present qualitative study explores how continuing education courses within the national programme in Norway, *Competence for Quality*, can support the development of teachers' English pedagogical content knowledge. The courses under study had a specific emphasis on learner-centred teaching approaches. To gather data, questionnaires were distributed to former students from two tertiary education institutions in Norway, followed by three focus group interviews. The results reveal a strong correlation between learner-centred teaching in continuing education and Desimone's (2009) contextual framework of effective professional development. However, the study suggests an additional element to this framework: the teaching trial. Engaging in these practical trials allowed the teachers to experiment with new methods and strategies directly in the classroom. This hands-on experience was essential in enhancing their understanding and development of their pedagogical content knowledge of English. This, in turn, led to transformative changes in their teaching practices.

Key words: Continuing education, pedagogical content knowledge, learner-centred teaching, teaching grammar, teaching vocabulary

1. Introduction

In response to the school reform introduced in Norway in 2006, *The Knowledge Promotion*, and later revised in 2020, the Ministry of Education and Research (2008) established a national programme for continuing education of teachers in 2009. This programme, referred to as *Competence for quality*, offers in-service teachers the opportunity to participate in continuing education courses and obtain the now required formal competence to become subject teachers. In accordance with the guidelines set by the educational authorities, tertiary education institutions across the country designed tailor-made courses for in-service teachers to accomplish this purpose.

It was highly emphasised that these courses should feature a strong classroom orientation integrating theory, new subject content knowledge and innovative teaching approaches. The duality of being both teachers and students allowed the participants to consistently apply newly acquired knowledge and skills in their classrooms. It is within this context that the current study took place.

The effectiveness of continuing education for teachers has long been a much-debated issue. Earlier, the focus of effectiveness was primarily on the satisfaction of teachers while the processes that fostered their professional development received less attention (Desimone, 2009). In contemporary research, there is greater focus on exploring the typical features of effective continuing education and its underlying processes (Kennedy, 2016). The present study aims to deepen the understanding of the specific features in continuing education courses that aid English in-service teachers in applying new knowledge to their teaching practices. It explores how teachers integrate the content knowledge and pedagogical knowledge acquired from these courses to make subject matter accessible and understandable for their pupils. This integration of content and pedagogical knowledge forms the basis of pedagogical content knowledge (PCK), a concept established by Schulman (1987; 2013). Building on Schulman's framework of PCK, as well as insights from Holmbukt (2024), this study investigates the support mechanisms within continuing education that facilitate the development of English PCK among in-service teachers. The research question addressed is: How can in-service teachers' development of English pedagogical content knowledge be supported in continuing education courses?

2. Theoretical background

2.1 Pedagogical content knowledge

Pedagogical content knowledge (PCK) is a construct developed by Shulman (Schulman, 1987; Schulman & Schulman, 2004). As outlined in Holmbukt (2024), this construct represents the combination of the two knowledge domains 'content knowledge' and 'pedagogical knowledge' (Fig. 1). The first domain, content knowledge, concerns subject matter of a specific field (Mishra & Koehler, 2006; Schulman, 2013). Regarding English, grammar and vocabulary, among others, are required subject areas that need to be mastered for teaching English, see Fig. 1. With respect to knowledge of grammar, it encompasses understanding basic linguistic terms, the properties of different parts of speech, and the syntactic structure of English. Regarding vocabulary and collocations, it includes an understanding of theories related to the acquisition of a second language.

The second domain of PCK is pedagogical knowledge, which includes skills and knowledge on teaching and learning of the subject matter (Schulman, 2013). It directs attention to how individuals assimilate learning, thus involving an understanding of educational psychology and the mechanisms by which learners gain knowledge (Bransford et al., 2000), as listed in Fig. 1 below. Pedagogical knowledge encapsulates the teaching competencies that enable teachers to craft educational content, organise instruction, and apply teaching strategies that are productive for pupils' learning. Additionally, it encompasses the ability to manage the classroom effectively and understand pupils' pre-existing knowledge about the subject matter. It also includes the capacity to inspire pupils to continue learning (Etkina, 2010; Holmbukt, 2024; Karlsson, 2020; Schulman, 1987; 2013).

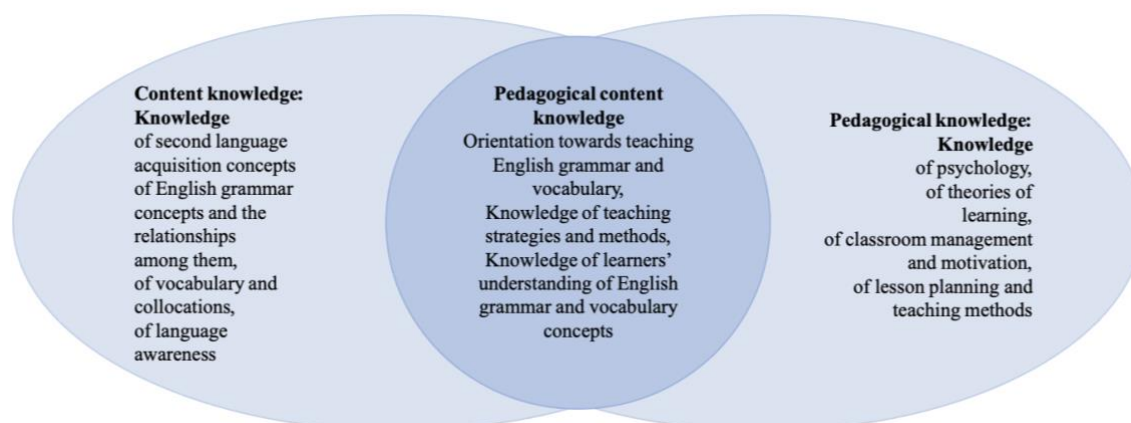


Figure 1 Teacher knowledge in English literature and language, based on Shulman, (1987), motivated by Etkina, (2010) and further developed by the authors.

PCK is thus a type of knowledge that exists at the intersection of content knowledge and pedagogical expertise (Etkina, 2010), as shown in Fig. 1. PCK implies clarification of content knowledge in student-friendly ways, incorporating examples and modelling activities that enhance students' learning outcomes (Holmbukt, 2024; Mishra & Koehler, 2006; Schulman, 1987; 2013).

Previous research indicates that PCK is a pivotal factor influencing the quality of instruction, potentially influencing students' learning achievements, and motivational growth. Ibrahim (2016) undertook classroom research to assess teachers' demonstration of PCK in teaching English and how they enhanced their knowledge of teaching. The results unveiled a deficiency in high PCK among the study's four participants, where the participant who demonstrated proficiency in both subject matter and pedagogical knowledge showcased the most outstanding performance regarding PCK. Ibrahim (2016) suggested that more workshops and training sessions should be organised to enhance English teachers' knowledge about PCK.

Bayram and Bikmaz (2021) undertook a case study involving four teachers teaching English as a foreign language (EFL) to investigate their engagement in collaborative professional development processes and their effects on professional growth. The study emphasised learner collaboration such as collaborate planning and reflective discussions throughout different phases of the professional development process. These activities allowed the teachers to share and refine their teaching strategies, directly enhancing their PCK, and gradually deepening their understanding of effective teaching methods and student learning processes. The findings underscored the beneficial influence of collaborative approaches on the teachers' development of PCK. These findings align with Coşkun (2017), who was involved with a group of EFL teachers in Turkey in similar collaborative work processes by critical reflection and investigation of their teaching practices. Coşkun (2017) argued that learning through collaboration, discussion, and reflection can extend teachers' PCK.

In another study, Gomez (2020) examined a group of in-service teachers enrolled in an English Language Teaching (ELT) master's programme. The study investigated the development of their PCK as they engaged in a research project which was highly collaborative and focused on reflective practices. The findings revealed that the collaborative approach was integral to the enhancement of the teachers' PCK. They developed a more profound understanding of content knowledge, such as increased awareness of language learning processes. In terms of pedagogical knowledge, the studies supported the teachers' skills in defining effective teaching strategies that benefitted their students.

Studies have also explored the development of PCK among pre-service teachers, who experienced similar learning processes as in-service teachers. These studies revealed that the active engagement of participants in the processes is important for the formation of PCK. Holmbukt (2024) and Hadjoannou and Hutchinson (2010) discussed how pre-service teachers' engaged participation in planning, implementing, and reflecting on teaching trials in English as a first or second language indicated growth of the pre-service teachers' PCK. Other studies indicated PCK development by pre-service teachers' microteaching as part of their teacher education (Karlsson, 2020; Uştuk & Çomoğlu, 2019).

The various studies mentioned here seem to share a feature of learner engagement. 'Learner engagement' refers to the level of involvement, interest, and participation exhibited by the learners in the learning process and encompasses active participation and interaction with the subject matter. Desimone (2009) used the term 'active learning', and the concept is one of the core features in her conceptual framework for studying teachers' professional development (Fig. 2).

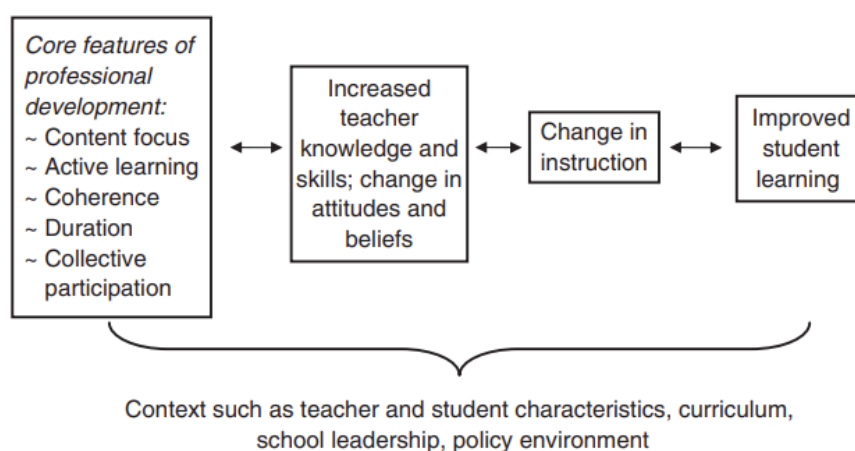


Figure 2 Core conceptual framework for studying the effects of professional development on teachers (Desimone, 2009, p. 185).

Desimone (2009) claimed the existence of five core features of teachers' professional development (Fig. 2). In addition to 'active learning', which is arguably important, 'content focus' appears to be an impactful aspect as it indicates a correlation between activities on subject matter and the enhancement of teacher knowledge and skills, leading to improvements in teaching practice (Desimone, 2009). Furthermore, the concept of 'coherence' pertains to the degree of alignment between teacher learning and teachers' existing knowledge and beliefs. 'Duration', as per Desimone (2009), implies that professional development courses should extend over a sufficient period and allocate an appropriate number of hours to effectively foster change. Finally, 'collective participation' supports impactful teacher learning as it facilitates group interactions and collaboration. Desimone's (2009) core aspects of professional development integrate elements of learner involvement and appear to embody the principles of learner-centred teaching.

2.2 Learner-centred teaching

Learner-centred teaching (LCT) is often discussed in constructivist and collaborative learning contexts (Jacobs & Renandya, 2016; Weimer, 2013), suggesting a shared understanding and definition of the concept. However, Paris and Combs (2006) argued that LCT lacks a clear definition, leading to diverse interpretations and misunderstandings. This ambiguity has led to inaccurate definitions of LCT, with examples including the "student-as-consumer perspective" (Paris & Combs, 2006, p. 572) with individualised instruction through interactive technology, and teaching methods focused on student interaction rather than content delivery (Paris & Combs,

2006). Despite the varying interpretations, some descriptions of LCT are highlighted within the educational community.

LCT is an approach to education that prioritises the needs, interests, and experiences of students (Paris & Combs, 2006; Weimer, 2013). As per Weimer (2013), LCT involves: 1) Engaging the learner in the intricate processes of learning, 2) motivating and empowering students by giving them autonomy in their learning journey, 3) encouraging collaboration and sharing of knowledge, 4) encouraging reflection among the students about what and how to learn, and 5) developing knowledge about skills needed for learning (see also Paris & Combs, 2006; Tangney, 2014; Wright, 2011). Learners are thus being active participants in their own learning, as opposed to conventional teacher-centred approaches where the learners are kept mostly as passive receivers of information. The core of the teacher-centred approach is often the expert-driven, content-oriented methods which focus on the transmission of concepts and skills, from the teacher to the students (Jacobs & Renandya, 2016; Tangney, 2014; Wright, 2011). In the learner-centred classroom, the teacher's role shifts from being the "sage on the stage" to the "guide on the side" (Wright, 2011, p. 93), serving as a facilitator of learners' intellectual and developmental journey (Tangney, 2014; Weimer, 2013; Wright, 2011). LCT thus acknowledges that knowledge is acquired through the learners' personal experiences made through active engagement in purposeful and meaningful tasks.

3. Method

3.1 Research design

This qualitative study explored how in-service teachers' development of PCK can be supported in continuing education courses in English. Data were collected using questionnaires, which were subsequently complemented by focus group interviews. Focus groups are typically conducted as group discussions or conversations where participants spontaneously build on each other's input, as noted by Sim & Waterfield (2019) and Stewart (2018). This approach enabled a deeper and more nuanced comprehension of the phenomenon under study (Creswell & Poth, 2018). The participants were practising teachers of English in Norwegian primary and secondary schools (Years 1-10), and their years of teaching experience ranged from a few years to approximately twenty years. These teachers had been studying English within the framework of the mentioned *Competence for Quality* programme (Ministry of Education and Research, 2023) in two Norwegian institutions of tertiary education. Questionnaires were sent out to teachers who participated in the English courses during the three academic years 2017-2018, 2018-2019 and 2019-2020.

3.2 Data collection

Before distributing the questionnaire and conducting interviews, the teachers received comprehensive information regarding the ethical guidelines of the research. This encompassed a consent form, details about the study's extent, assurances of participant anonymity, and acknowledgment of their right to withdraw from the study at any point. The questionnaire was distributed to the teachers on the platform Nettskjema¹, which allows for anonymous collection of information. A total of 51 teachers responded to the questionnaire. It consisted of five questions aimed at exploring the teachers' views on the contents and teaching methods of the courses, the teaching and learning of English in Norway today, and possible changes in their teaching practices after the courses. An additional question asked whether the teachers would be willing to participate in an interview following the questionnaire. Seventeen teachers responded positively to participating in the interview, and a purposive sampling method was utilised to select candidates for interviews. This sampling strategy involved a selection of interviewees based on responses in the questionnaires that seemed most likely to provide the information necessary to achieve the study objectives.

The interview questions were organised around two central topics: ‘Student-active² learning in the continuing education courses’ and ‘sustainability of the continuing education courses’. The scheduling of focus group interviews was coordinated with the selected teachers, and the interviews took place during the initial week of June 2023. This timing, while a couple of months following the questionnaire submission, was sufficiently proximate for participants to explore topics that were also addressed in the questionnaire. The interviews took place on a digital platform; three interviews were conducted, each with a group of three teachers. The length of the interviews was approximately 45 minutes, and they were carried out in the teachers’ mother tongue, Norwegian. The interviews served as a platform for the teachers to explore and reflect on various aspects of their experiences together with fellow teachers, with the researcher having the role of a moderator assisting in stimulating dialogue among them (Savin-Baden & Major, 2013).

3.3 Data analysis

The analysis of the questionnaires and focus group interviews utilised a qualitative content analysis, aiming to identify, analyse, and interpret meaning systematically through the generation of codes (Braun & Clarke, 2006; Savin-Baden & Major, 2013). Concerning the questionnaires, each researcher analysed those on their respective courses. They initially employed colour coding to pinpoint potential patterns and added comments about emerging themes within each colour. Subsequently, the researchers shared and compared the colour-coded responses from both institutions to identify similarities and differences. Following this, the two sets of responses were combined into a single data set. The researchers collaborated to identify themes within the amalgamated questionnaire material. These themes guided the formulation of the focus group interview guide, facilitating a deeper investigation into the identified areas of interest.

The focus group interviews were transcribed into Word, and the analysis procedure for the interviews was similar to the one applied to the questionnaires. The researchers analysed the transcribed interviews on their respective courses and, as previously, used identical colour coding. They then compared their coding to pinpoint both commonalities and disparities. Following this, the two data sets were merged into a unified set, enabling the researchers to collaboratively review and analyse the generated codes. This joint effort allowed them to assess how these codes could be integrated to form overarching themes (Braun & Clarke, 2006; Creswell & Creswell, 2018; Savin-Baden & Major, 2013).

4. Findings and discussion

Due to the interconnectedness between analysis and interpretation in qualitative research, the findings and discussion have been addressed simultaneously. The data revealed the following themes: *Cultivating learner-centred teaching*, *Extending knowledge and changing teaching practice*, and *Teaching trials impacting pedagogical content knowledge*. In the following sections, these themes will be presented and discussed separately.

4.1 Cultivating learner-centred teaching

The continuing education courses in English that these in-service teachers attended were typically blended courses comprising a combination of physical gatherings on campus and digital meetings, with a focus on LCT. This involved 1) modelling learning activities to the students and encouraging their active participation and 2) facilitating collaborative work and reflection among the students.

4.1.1 Modelling learning activities and active participation

The participants communicated that the lecturers' modelling of learning activities had a significant impact on their engagement by fostering an interactive and participatory learning environment. Engaging in various oral activities provided a sense of safety and comfort, which in turn motivated them to participate more actively. Additionally, it broadened their teaching repertoire, enriching their educational approaches. Thor and Helen explained:

Thor: I recall at the beginning of the course we did many oral activities. Even though we are teachers, there's always some uncertainty and nervousness the first time. I think this was very good because this allowed us to try out activities together with fellow students, and then we could take these back to school and try them out with our pupils.

Helen: When you become a student yourself, you understand better the situation that you subject your pupils to. You think about what works and what does not work so well, and what is safe. The way we experienced oral activities, walking around and talking to others, made us feel safe. I have used such activities a lot with my pupils.

Although the teachers initially felt somewhat uneasy with all the learning activities they were exposed to, they saw the value of their instructors' modelling of these. This allowed them to gain first-hand experience by trying out learning activities alongside their peers. They noted that this type of active, learner-centred classroom training made it easier to integrate the new methodologies into their own teaching later. This smooth integration process directly contributes to an enhancement of the teachers' PCK. Additionally, Helen's reflection on 'what works well' not only shows an increase in her pedagogical knowledge (Schulman, 1987; 2013), but also highlights her growing awareness of the learner's perspective, in this case, the emotional dimension of learning. Helen's awareness aligns with the principles of LCT, where a holistic teaching approach is closely related to consciousness-raising, (Tangney, 2014). The content focus, which in the excerpts above relates to the oral activities carried out by the participants, is particularly important as it shows a clear link between subject matter and the enhancement of teacher knowledge and skills – which ultimately leads to improved teaching practice (Desimone, 2009). This duality in navigating the roles of both *learner* and *teacher* was found to be particularly meaningful and educational by the participants, as Maria explained:

Being given the opportunity to be a student again was incredibly useful. Being the one trying out and testing is a very dynamic process of acquiring knowledge. Then I could try out these activities with my pupils offering them the opportunity to experience the same dynamic learning process. In a way, it felt so relevant and close to my own work.

Maria is highly conscious of the alignment between her personally experienced learning processes and those of her pupils. She refers to this kind of teaching approach where theory and practice merge as a method for fostering dynamic learning. This aligns with McCombs and Whisler's (1997, as cited in Paris & Combs, 2006) viewpoint that instructors need to "look *with* the learner at what learning means and how it can be enhanced from within" (p. 573). Maria experienced how active participation nurtured her engagement and helped her recognise the coherence between newly-

acquired knowledge and her English teaching practice. This resonates with Desimone's model (2009) of what features characterise effective professional development; active learning and coherence are two of the core components considered to be critical to improve the quality of continuing education, and, subsequently, to enhance participants' PCK (Etkina, 2010; Schulman, 1987).

The response from participants underscores the benefits of the LCT approach in continuing education for teachers. The enthusiasm for the modelling of language activities highlights that integrating new knowledge with teaching practices can enable teachers to develop their own unique methods and activities in their classrooms, thus leading to an enhancement of their PCK.

4.1.2 Facilitating collaborative work and reflection among the students

In the interviews, the participants were asked about possible benefits of collaborative work compared to individual work. The teachers expressed great satisfaction with the combination of the two; they emphasised that individual work should not be neglected because it allows for immersing oneself in one specific area. One teacher, Linda, elaborated on this and explained that individual work was important because it made her see her personal strengths clearer, which she could later bring back into collaboration with others.

As described above, collaboration and sharing of knowledge and reflection are considered key components of LCT. In the data material, collaboration with fellow students is primarily identified as an opportunity for reflection, exemplified in this conversation by the teachers:

Anna: You reflect more and better together with others than when alone. In a group setting, you encounter resistance from others, which leads to more comprehensive reflection. In this way, you gain diverse perspectives; although we have studied the same course literature, we may have read and understood it differently.

Helen: We learnt a lot from each other; we had to push ourselves and our competence improved. We all felt unsure, but all the way, there was strong support from fellow students, and it was not scary talking to the others.

Thor: Working together created engagement and reflection. In turn, that leads to deep learning; you gain a better understanding. So, collaboration and reflection foster more learning. Working together gave me a feeling of security, which also leads to learning.

This interview excerpt shows that the teachers perceived collaboration as a valuable source for development and learning. Additionally, they all viewed enquiry and critical questions from peer students as a positive factor, a kind of catalyst for further enhancement. As noted above, reflection is considered a key component of LCT (Paris & Combs, 2006; Tangney, 2014; Wright, 2011). However, reflection is far from a homogenous concept. It can take the form of descriptive reflection, which simply describes the teachers' practices; at the other end of the spectrum, you find critical reflection, which is considered a process in which practitioners examine and question their present practices. The latter kind of reflection contributes to developing the teachers' self-awareness and provides opportunities for change and growth (Ho & Richards, 1993). Anna pinpoints that differing viewpoints from fellow students generate a deeper reflection that leads to broadening her beliefs. Hence, it is evident that Anna indicates critical reflection taking place; she experiences growth and development. Thor communicates that through collaboration, he engaged in reflection that led to profound learning outcomes. This resonates with Larrivee (2000), who believes that practitioners need to possess two capacities to become reflective, namely critical inquiry and self-reflection. Combined, these two capacities constitute an on-going process, which Larrivee refers to

as a “a personal awareness discovery process” (p. 296), in which teachers’ pedagogical belief systems are questioned and examined.

Moreover, both Helen and Thor emphasise that working together with fellow students and having their support resulted in a safer learning environment. Desimone (2009) refers to Wilson and Berne (1999, as cited in Desimone, 2009) who speak of ‘critical collegueship’. In the conversation above, the teachers seem to appreciate this critical enquiring of each other’s teaching practices because they see the opportunities it provides for personal growth as teachers. Hence, collaboration and reflection, which are key components of the continuing education courses in question, can be seen as tools for helping students to participate in inquiry-based learning and taking more responsibility for their own learning processes. These are all essential elements of LCT, which is designed to facilitate learning activities that enhance student learning, empower students’ decision-making, and teach students how to learn effectively (Wright, 2011).

4.2 Extending knowledge and changing teaching practices

The two continuing education courses in English used as the basis for data collection were similar in design, as both were clearly classroom oriented. However, within the *Competence for Quality* programme, the institutions are allowed some freedom in determining the focus of content to include (Ministry of Education and Research, 2023). As described above, the courses in question cover central components of language work, specifically *teaching vocabulary* and *teaching grammar*.

4.2.1 Teaching vocabulary

Teaching and learning vocabulary is a much-debated issue within language learning. In Norway, along with many other countries, there is a long tradition of teaching vocabulary as individual words, often providing pupils with word lists to memorise (Flognfeldt & Lund, 2021). One of the English courses gave a special focus on the teaching of vocabulary. Alongside the essential learning theories, the participants were introduced to diverse methods of teaching vocabulary, with a strong emphasis on collocations, using picturebooks as an example of text materials:

Helene: Picturebooks create engagement, and they make it easy to differentiate. With picturebooks, you can include all kinds of tasks, like grammar and writing.

Thor: I think that in picturebooks, you find more everyday words and phrases; authentic texts provide you with more colourful language.

Anna: Yes, in picturebooks, you find the complete repertoire of grammar and intonation and everything else. The purpose of collocations is to help pupils achieve better fluency in the language. Knowing only individual words will make it difficult to construct sentences.

Thor: I believe that working this way increases your vocabulary. Your language becomes richer.

Helene: That’s right, I think it is motivating for the pupils to work with collocations and not just words. It is more exciting.

All three teachers have adopted the methodology of teaching vocabulary through the understanding and use of collocations. They have integrated this new knowledge into their teaching practices, highlighting that learning collocations not only enriches and adds colour to language but also enhances fluency. By motivating pupils and concentrating on collocations instead of individual words, they believe there can be a significant impact on language acquisition. Most of the teachers in this course recognise the importance of using authentic children’s literature to engage pupils in

language work. They highlight the unique qualities of picture books for scaffolding language acquisition and enhancing learning strategies. The teachers understand the necessity of robust content knowledge, including a thorough grasp of the target language and relevant text materials. They also recognise the importance of a deep understanding of pupils' language learning processes, which is an important aspect of PCK, see Fig. 1.

To further develop the teachers' PCK requires that they enhance an investigative and analytical approach to language. The interview passage above serves as evidence of such growth, which can be referred to as teachers' language awareness (TLA) (Mellegård, 2024). The concept of language awareness is often defined as *engagement with language*, referring to a genuine interest in and curiosity about language, as well as active involvement in language work (Bolitho et al., 2003; Mellegård, 2024; Svalberg, 2012). Therefore, teachers need to have a thorough understanding of language to cultivate their 'sensitivity to language – their linguistic radar' (Wright, 2002, p. 115). This sensitivity enhances teachers' language awareness, enabling them to be more attuned to learners' perspectives. By recognising the language structures that pupils find challenging, teachers can effectively support their learning (Mellegård, 2024; Wright, 2002). Therefore, it can be argued that TLA is "an additional component of PCK specific to the language teacher" (Andrews, 2010), see Fig. 1. Linda's example below illustrates the significance of awareness-raising, particularly in the context of teaching vocabulary:

If you include only individual words, you don't really learn how to use them in practice. You might be able to spell the words, but that doesn't give you the enrichment you need when you're learning a language. I use the words more actively now focusing on phrases, expressions, and collocations. It has to do with awareness-raising when it comes to collocations. This was a kind of aha-moment to me.

Linda has truly absorbed new content knowledge about second language acquisition and appears capable of implementing this insight into her teaching practice, demonstrating her development of PCK of English. She even uses the term 'awareness-raising' and thereby signals her continued commitment to her learning process. Her approach to teaching English vocabulary now has evolved to focus more on the functional use of words through collocations, thereby scaffolding her pupils' learning.

4.2.2 Teaching grammar

In the other English course, grammar and grammar teaching were the main components providing the students with solid content knowledge along with new methodology of teaching grammar. The students were introduced to a teaching methodology called *Grammar to go*, which is a typically inductive and holistic approach to grammar teaching (Hestnes, 2011). The acquisition of new knowledge about teaching grammar through the *Grammar to go* method has led to notable changes in their practices, as Lisa and Irene explain:

Lisa: I now teach grammar a lot more implicitly, and I integrate it more into thematic work. This is a very significant change for me.

Irene: The biggest change in my teaching practices was that all of a sudden, I actually found it really enjoyable to teach grammar. In a way, I had been a little scared of it; I felt unsure about what was right to do. I became acutely conscious of my own knowledge and what is important for the pupils to learn, where to start and how to proceed. It became easier for me to recognise the pupils' language levels and what they need to learn to progress in their language development. My grammar teaching is now more implicit, and I am a lot more conscious of it.

Lisa: I notice that the pupils think it is more fun as well. They love my English classes.

The teachers report that their grammar instruction has become more implicit and integrated within the broader context of language use, moving away from isolated teaching to a more holistic approach (Hestnes, 2011). They now teach grammar meaningfully and contextually, adopting the *Grammar to go* method, which is discovery-oriented and encourages learners to explore language independently and identify typical language patterns. This shift to teaching grammar in a context-driven, inductive, and holistic manner has notably increased pupil engagement.

This approach resonates with the perspectives of Svalberg (2012), who underscores the importance of contextualising language work. This advancement not only boosts the motivation of both teachers and pupils but also aligns with Svalberg's argument that such methods enhance understanding and necessitate a high level of TLA. This view is further supported by scholars like Bolitho et al. (2003) and Borg (1994). Building on this, the observed teaching strategies reflect the teachers' capability to enhance pupil learning and engagement, thereby improving their PCK, as evidenced by research from Shulman (2013), Karlsson (2020), and Etkina (2010). Broek et al. (2019) contend that pupil engagement with language is significantly dependent on the teacher's content knowledge and language awareness.

In the interview passage above, it appears convincingly that Irene and Lisa's newly acquired knowledge of grammar and grammar teaching methodology has equipped them with the tools necessary to develop their teaching practices accordingly. Irene, who previously felt insecure and less competent in teaching English grammar, communicates that with increased content knowledge and a deeper understanding of grammar teaching methodology, she is now prepared to focus on other specific language phenomena, such as phonology. She notes that her increased awareness of her knowledge allows her to better assist her pupils in their language learning and tailor her teaching to meet their needs.

4.3 Teaching trials impacting Pedagogical Content Knowledge

The LCT profile of both English courses required the teachers to create and carry out teaching schemes with their pupils integrating recently acquired content knowledge and new pedagogical approaches, related to either vocabulary or grammar. This interaction between theory and practice is considered essential in fostering professional development (Desimone, 2009; Ertsås & Irgens, 2012) and enhancing PCK (Karlsson, 2020). The research findings reveal various implications of the teaching trials:

Thor: Changing one's teaching practice is quite demanding. It's a lot of work engaging yourself in new things. But when we have tried out new methods several times, it leads to self-confidence. When we become confident about certain methodology, the pupils will become motivated as well.

Anna: You learn a lot of English. You are supposed to pass this on to your pupils. You also learn about new teaching methods. So, this creates a kind of duality in the English course by not only learning English, but also how to teach English. I feel considerably more skilled now than I used to be.

Thor expresses concern about the effort needed to modify teaching practices in the English subject. He communicates that applying theory to practice through trying out new methodologies in the classroom leads to increased confidence, thereby positively influencing the pupils' motivation. Therefore, Thor suggests that his proficiency and PCK of English improves through practical teaching experiences, aligning with the philosophy of LCT (Paris & Combs, 2006; Weimer, 2013). Similarly, Anna highlights the importance of simultaneously enhancing her English content knowledge and expanding her pedagogical knowledge. These steps are crucial for improving her PCK and are central to practicing an LCT approach in the continuing education courses.

In line with Thor's statement above, more teachers report strengthened self-esteem resulting from teaching trials:

Irene: *It's about becoming more confident; teaching English became fun, and somehow, I now understand the pupils' level better.*

Ingrid: *For me, I am no longer afraid to focus on grammar.*

Lisa: *I simply became a more confident English teacher. What really made me feel secure was trying out a new methodology.*

Irene points out the joy of teaching English arising from her increased confidence, which has enabled her to perceive the needs of her students more readily. Ingrid conveys that after the English course, she no longer fears grammar teaching. The teachers identify the key factor of becoming more confident when engaging in teaching trials, which the present study recognises as a vital component of developing PCK of English. Compared to Desimone's (2009) core features of professional development (Fig. 2), the two continuing education courses for English closely adhere to many of those features. The courses particularly emphasise the features 'active learning' and 'collective participation', which are crucial for fostering both individual and collaborative growth among the teachers. These features were further reinforced by the requirement for the teachers to implement personally-designed teaching schemes on collocations and the *Grammar to go* method with their pupils. This hands-on LCT implementation offered valuable experiences, leading to significant insights that motivated the teachers to modify their existing English teaching practices. Hence, while this paper recognises the strength and reliability of Desimone's (2009) conceptual framework and its alignment with the findings of this study, it identifies a gap in her model. This study shows that the active implementation of newly-acquired knowledge in the teachers' own classrooms is a crucial step that catalyses changes in teaching practices. Thus, Desimone's model framework in Fig. 2 above is suggested modified by the addition of 'teaching trials' as the sixth core feature of effective professional development (Fig. 3).

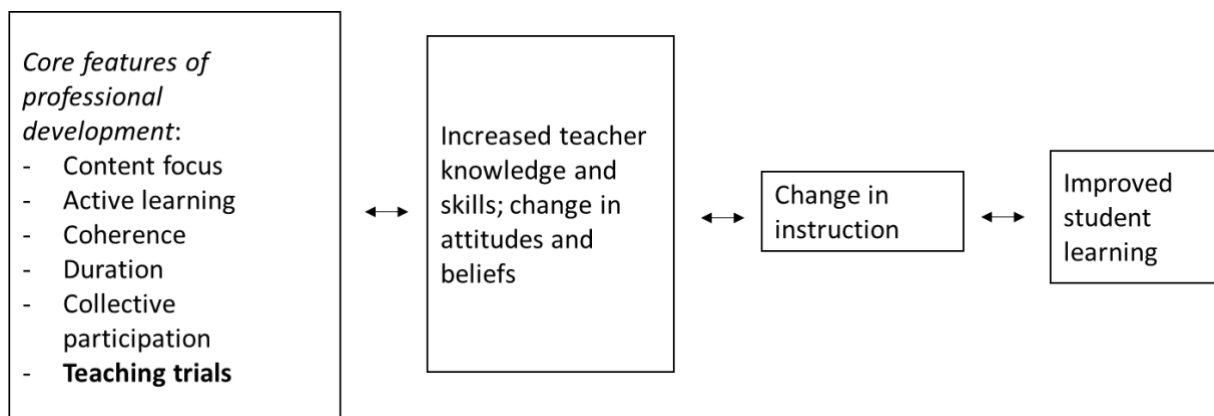


Figure 3 Desimone's core conceptual framework for studying the effects of professional development on teachers (Desimone, 2009, p. 185) with the authors' addition of 'teaching trials'.

Hence, a key factor in enhancing teachers' PCK of English is the process of applying and reflecting on new knowledge within real teaching scenarios. This integration of content and pedagogical knowledge is vital, as emphasised by Holmbukt (2024) and Hadjioannou and Hutchinson (2010). Through practical application and reflection, the teachers can deepen their understanding and effectiveness in teaching English. It is evident that LCT perspectives significantly contribute to the participants' progress in PCK. The interview excerpts highlight the core principles of LCT, emphasising the lecturer's role as a facilitator rather than a mere conveyor of information. LCT

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