

## Teaching financial literacy: Competence, context and strategies among Swedish teachers

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- Teachers' perception of financial literacy teaching pivotal.
- All teachers lack formal financial literacy training
- Experienced teachers use content knowledge and focus on future utility.
- Novice teachers use pedagogical skills and relate private finances to the economy.
- The social studies subject has pivotal impact on choices and teaching.

**Purpose:** The aim of this article is to compare if and how experienced and novice teachers differ from each other regarding teaching and expressed aims regarding their financial literacy education.

**Method:** Thematic analysis together with the PCK framework were used to analyse 21 teacher interviews.

**Findings:** Both aims and teaching differ between experienced and novice teachers even though none of the interviewed teachers has any formal content knowledge regarding financial literacy. This seems related to experienced teachers using their everyday financial knowledge when teaching where novice teachers use their pedagogical skills and refer to syllabus.

**Practical implications:** Both pre-service and in-service teachers should receive a financial literacy education. Teachers' experience from financial literacy instruction should be considered when designing teacher training in financial literacy.

**Keywords:** financial literacy, pedagogical content knowledge, experienced teachers, novice teachers, social science

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### 1 Introduction



In the aftermath of the 2008 financial crisis, the Organisation for Economic Co-operation and Development (OECD) increased its advocacy for introducing financial literacy as a competence taught in schools, and more than 110 educational systems responded favourably to this appeal in the subsequent years (OECD, 2005; OECD International Network on Financial Education [INFE], 2012, 2015). Sweden was no exception where ‘personal finance’ was introduced in curricula and syllabi in 2011 (Swedish National Agency for Education [SNAE], 2011a, 2011b). In upper secondary school (grades 10 to 12), education in financial matters was included as part of the Swedish subject of social studies and its first compulsory course (SNAE, 2011c). The main content features of ‘personal finance’ stipulated in syllabus correspond with general OECD characteristics of financial literacy (OECD, 2016; Xu & Zia, 2012) and in other literature (see for instance Retzmann & Seeber, 2016). Accordingly, the term *financial literacy* will be used in the remainder of this article.

However, the various stakeholders have not agreed on a uniform definition of what financial literacy is, should be, or could be (Davies, 2015; Lefrançois, Ethier, & Cambron-Prémont, 2017; Retzmann & Seeber, 2016; Willis, 2017; Xu & Zia, 2012). Therefore, even though the social studies syllabus describes some features of this segment, the question of exactly what financial literacy content and skills should be taught is quite unresolved in Sweden as well as in other countries that lack a detailed framework.

Consequently, the practical implementation of financial literacy education and essential parts of the interpretation of aims and definitions, is left to teachers. Previous studies have described teachers themselves as having poor financial literacy (Blue, Grootenboer, & Brimble, 2014; Hensley, 2011; Lee, 2010), leading to frequent calls for more in-service training from teachers, researchers and other stakeholders alike (Hensley, 2011; Otter, 2010; Way & Holden, 2009). In an Australian setting, Blue et al. (2014) described the situation as follows:

“This highlights the scale and complexity of the task and the significances of what is being asked of teachers. Given that exposure to an FLE [financial literacy education] course or courses during pre-service teacher education at university does not exist in Australia we question how teachers will be able to achieve the vision (or goal) set for them by ASICr [the Australian Securities & Investment Commission].

Although teachers teach financial literacy on a daily basis, educational research has thus far paid little attention to how teachers perceive and implement this responsibility. There are few studies of actual financial literacy teaching (Farsagli, Filotto, & Tracò, 2016; Tisdell, Taylor, & Forte, 2013), and even less is known regarding teachers’ understanding and framing of financial literacy (Leumann, 2017).

The aim of this article is to examine how Swedish social studies teachers in upper secondary school frame and plan financial literacy education with relation to their own financial literacy and the Swedish social studies subject. Furthermore, the aim is to compare if, and how experienced and novice teachers differ from each other regarding how they talk about their content knowledge, pedagogical choices and teaching aims. The data is analysed using Shulman’s (1986) framework of Pedagogical Content Knowledge, to construe if, and how, this interrelates to teachers’ framing of financial literacy. The following research questions are addressed:

- How do novice and experienced teachers describe their financial literacy content knowledge in relation to their financial literacy pedagogical content knowledge within social studies education?
- What aims do novice and experienced teachers express regarding their financial literacy teaching?

## 2 Previous research

The financial literacy literature has identified a variety of interests of concerned stakeholders in relation to many different economic and political contexts; which can explain why there is no consistent definition of financial literacy. The most common definition, though, derives from the OECD and the financial literacy PISA assessment (Bosshardt, 2016). This definition encompasses the individual ability and confidence to manage financial issues (OECD, 2016; Xu & Zia, 2012), and aim further ‘...to improve the financial well-being of individuals and society, and to enable participation in economic life’ (OECD, 2016).

From this definition of financial literacy, three different discussions become salient: The first discussion concerns individuals’ financial behaviour and capability (Antonietti, Borsetto, & Iannello, 2016; Henchoz, 2016; Marchetti, Castelli, Massaro, & Valle, 2016; Sherraden & Ansong, 2016; Siu & Koh, 2016). Here, financial literacy education aims to influence vulnerable groups’ financial behaviour. However, there are also concerns regarding what a financial education can accomplish in this regard. Financial aims and remedies vary for different groups of people; for example, some people may be in a position to save money, but for others reducing debts is the most feasible advice (Lusardi & Mitchell, 2013). This question is pivotal, especially in countries where individuals take on long-term debts secured by home ownership.

The second discussion concerns a broader focus on financial literacy which involves individual financial capability and how it relates to and interact with the economy (Retzmann & Seeber, 2016). This view often focuses on what households do or should be doing, which is an argumentation that often leaves the individual responsible, not only for their own financial situation but also for the financial well-being of society. Therefore, Davies (2015) suggested that financial literacy should also cover the financial and economic system so as to empower critical citizens.

The third discussion is relatively critical of financial literacy education in schools as well as of the general idea of financial literacy as a panacea. For these critics, financial literacy is seen mainly as a political practice used to normalise and legitimise the implementation of liberal financial policy, which empowers financial institutions and the wealthy at the expense of the general public. This will further socialise vulnerable and deprived groups into a financial system that made them poor in the first place (Alsemgeest, 2015; Arthur, 2012; Visano & Ek-Udofia, 2016; Williams, 2007).

These three strands of research provide background for the analysis of teachers’ framing of financial literacy and instructional aims.

### 2.1 The curriculum and the social science syllabus

In Sweden, teachers are supposed to interpret the national curricula and syllabi for each subject (Karlefjärd, 2011; SNAE, 2011a, 2011b, 2011c). Thus, it would be misleading to characterise a curriculum or syllabus as if it were a singular monolith that provides teachers with clear



and consistent guidance on what to teach and how to teach it. Instead, a multitude of interpretations (i.e. different curricula and syllabi) emerge (Bowe, Ball, & Gold, 1992; Goodlad, Klein, & Tye, 1979). Even though the stated syllabus should be considered an intent (Linde, 2012) rather than an imperative, a growing focus has been placed on assessment and measuring results in the Swedish school system, thus increasing the importance of both curriculum and syllabi (Mickwitz, 2015). Hence, the curriculum and syllabi affect what and how teachers teach, but still leave them with a variety of choices as to how they approach the topic.

In Swedish upper secondary schools, financial literacy is taught as a segment within social studies. The statement in the syllabus for the financial literacy of social studies course 1b is as follows:

Personal finance: Household income, expenditure, assets and liabilities. Consumer law and consumption in relation to needs and resources. How personal finances are affected by socio-economic changes.

Lefrancois et al. (2017) suggested that when financial literacy is taught within another subject, this subject will have a pivotal framing effect on financial literacy teaching. Research has shown that Swedish social studies teachers have a complex understanding of their subject where different aims and content are balanced in the teaching (Olsson, 2016), even though the Swedish social studies subject consists of many different disciplines such as political science, economics, sociology and law (SNAE, 2011c). Consequently, a 'subject tradition' is formed by social studies teachers, which is especially evident when teachers devise their tests (Odenstad, 2011). At the same time, standard attainment tests and textbooks treat social studies as a bundle of academic disciplines (Sandahl, 2015).

### **3 Theoretical framework**

#### **3.1 Pedagogical content knowledge**

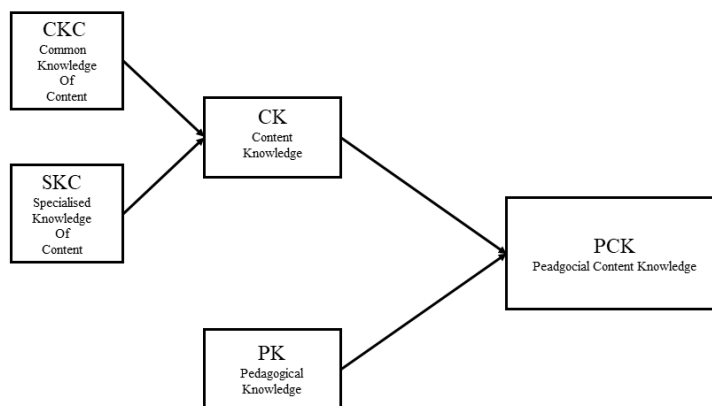
To analyse the relationship between Swedish social studies teachers' knowledge of financial literacy and their expressed financial literacy teaching, the framework of Pedagogical Content Knowledge - PCK (Gudmundsdottir & Shulman, 1987; Shulman, 1986) is used. The framework was developed to understand and analyse teachers' unique knowledge and proficiency. Two features within the framework are salient for the purposes of this study: teachers' subject-matter knowledge, also referred to as content knowledge (CK), and teachers' general, non-subject specific knowledge of instruction and learning theory, henceforth named pedagogical knowledge (PK) (Abell, 2007; Grossman, 1991; Magnusson, Krajcik, & Borko, 1999).

Even though Swedish social studies teachers lack financial literacy training and the associated formal disciplinary content knowledge, this study will use the construct of CK as an instrument to analyse what kinds of knowledge teachers draw on and how they use this knowledge. To properly analyse which knowledge teachers draw on to form their content knowledge, the use of sub-constructs of CK is pivotal. Ball et al. (2004) suggested that mathematics teachers draw on both common knowledge of content (CKC), or mathematical knowledge that virtually all adults possess, and specialised knowledge of content (SKC), or knowledge acquired through their study of the discipline, teacher education and classroom practice hence knowledge unique for teachers. These definitions have been applied in several



studies of mathematics teaching (Baumert et al., 2010; Hill, Schilling, & Deborah, 2004; Kleickmann et al., 2015; Schilling & Hill, 2007). Hill et al. (2004) and Schilling and Hill (2007) could not empirically distinguish CKC nor SKC (Baumert et al., 2010), but in this study a presupposition is that both sub-constructs are applicable to social studies teachers' financial literacy CK. See Figure 1 for a summary of the framework.

Figure 1: Model of applied PCK theory.



### 3.2 Experienced and Novice Teachers

The PCK framework implies a distinction between experienced and novice teachers, which also is applicable to this study. Early on, Gudmundsdottir and Shulman (1987) further developed the PCK framework by comparing an experienced teacher with a novice teacher. This study suggested that an experienced teacher can utilise a much more elaborated knowledge of teaching, such as segmenting and structuring of a teaching unit, compared to a novice teacher. Experienced and novice teachers may both have expert knowledge of a subject, yet Gudmundsdottir and Shulman suggest that it is especially important to have 'a point of view' regarding the subject in order to transform CK into PCK.

Several other studies have suggested that novice teachers differ from experienced teachers in almost every aspect of teaching. According to Bransford et al. (2005), it is crucial to educate pre-service teachers in a professional practice of teaching, which includes what knowledge is needed to teach, what skills are needed to provide productive learning and what professional commitments every teacher must make. Skott (2001) suggests that a novice mathematics teacher's view of teaching was deeply affected by a reform of mathematics education. Thus, we can expect different answers from teachers with different levels of experience regarding the research questions in this study.

## 4 Method

### 4.1 Interviews

Shulman (1986) suggests that teachers possess unique and interdependent competencies that equip them to teach. In relation to financial literacy teaching, where Swedish social studies teachers lack formal training, interviews proved to be a feasible approach to enable teachers to explain their views and choices. During four pilot interviews, teachers' uncertainty regarding financial literacy education became obvious. Accordingly, when the 21 semi-structured interviews were conducted for the main study, the aim was to empower the teachers to talk about their teaching material rather than just reflecting on their knowledge of core content. To facilitate this, the informants brought their own exercises and tasks with them to the interviews, and these materials were used as elicitation tools (Barton, 2015).

Due to the power relation between the interviewer and the informants, in which the researcher could be perceived as knowing the 'right answers', it was important to conduct the interviews as conversations with a reflexive approach (Thomsson, 2002), in which the informants were allowed to speak freely about their views and concerns (Kvale & Brinkmann, 2014; Mears, 2012). Each informant was also informed of the aim and nature of the interview before signing the consent form.

### 4.2 Participants

The evidence analysed in this study was drawn from 21 interviews with Swedish social studies teachers in upper secondary schools. The selection of interviewees followed the principal of opportunity – teachers that accepted to be interviewed were included in the study. The sample was about equally divided between urban and rural schools. Eight of the informants were women and thirteen of the informants were men. The seniority between the informants spanned from ten months to 23 years. The interviews lasted between 21 to 37 minutes and were conducted in Swedish at the participants' different schools during fall 2017. The interviews were later transcribed and translated from Swedish to English. Thus quotations in English inevitably involve interpretations, however, the intent is to reflect informants' use of either formal or colloquial language.

### 4.3 Procedure

The interview protocol contained 15 semi-structured questions (Kvale & Brinkmann, 2014). Questions concerned what financial literacy content informants' teaching consisted of, how and why this content was chosen, the planning of financial literacy teaching, and to what extent the syllabus and the social studies subject as a whole were taken into consideration when planning and teaching financial literacy. The aim with the interviews was to encourage the teachers to talk freely about their conceptions, their self-perceived competence and their teaching aims with regard to financial literacy.

At the end of each interview, the teachers were asked to reflect upon on financial literacy questions devised by Lusardi and Mitchell (2007). These questions concern three basic financial concepts: interest rate compounding, inflation and risk diversification. The first two of these three questions required mathematical skill; the third question required basic



knowledge of mutual funds and stocks. In addition, they were asked to answer original questions, devised specifically for this study, on how the economy affects personal finances—for example, how an increase in the inflation rate affects a household budget for someone with a mortgage. None of this latter group of questions required any mathematical skills.

## 5 Data Analysis

### 5.1 Thematic Analysis and Coding

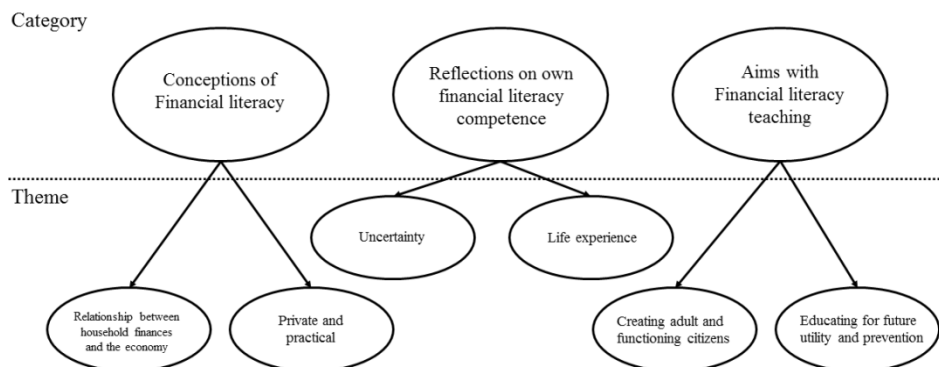
Data analysis in this study followed the thematic pattern suggested by Braun and Clarke (2006). This may be described as an abductive approach in which data and theory interrelate. Since thematic analysis is a rather flexible method, a more meticulous definition of the approach used in this study is warranted.

Coding began with an initial reading of the material in which salient features of answers to different interview questions were written on sticky notes. Answers were placed in three categories derived from the PCK framework: conceptions of financial literacy drawn from the construct of CK, reflections on one's own financial literacy competence drawn from CKC and SKC, and aims in financial literacy teaching as derived from PCK.

Within the category of conceptions of financial literacy two major themes could be identified: Financial literacy as a relationship between household finances and the economy, and financial literacy as something private and practical. Teachers' reflections regarding their own competence could also be classified into two themes: uncertainty and life experience. Finally, aims of financial literacy teaching could be divided into the two themes of creating functioning adult citizens and educating for future utility and prevention. These themes are displayed in Figure 2.

All themes were checked against each other and against the transcripts after relevant data extracts were transferred to an Excel file.

Figure 2. Model of applied method of data analysis using thematic analysis



## 5.2 Analysis

All teachers were at first treated as a single group. As a result of coding and initial analysis, no salient differences were found between female and male teachers, or between teachers working at rural and urban schools. By contrast, salient differences were found between novice and experienced teachers where each group could be associated with different themes through coding. Previous research has shown that it is difficult to establish how many years a teacher must work before becoming an 'experienced' teacher. Instead, several studies have focused on different features displayed by different teachers as a means to categorise teachers as either novice or experienced (Okas, Krull, & van der Schaaf, 2014; Pilvar & Leijen, 2015). In this study, the most eloquent examples of novice teachers' conceptions of financial literacy came from teachers with a seniority less than five years, yet in this group, which includes five teachers, there was one obvious exception. Among the experienced teachers, the most expressive examples came from teachers with more than ten years of teaching experience, although there was at least one outlier in this group as well. Despite the unusual cases within each group, it was still deemed feasible to divide teachers into novice and experienced teachers, where novice teachers have less than five years seniority and experienced teachers have more than five years of seniority.

Since age is correlated with seniority in most cases, age was quite hard to single out as an affecting factor. However, one teacher with only ten months of seniority was born in 1974, and this teacher's utterances aligned most closely with those of other novice teachers. Therefore, age was omitted as an affecting factor.

Swedish social studies teachers at the upper secondary level do not have identical academic backgrounds, but all teachers have training in political science, economics and sometimes sociology. Therefore, teachers' academic background was considered equivalent and was omitted as an affecting factor in the analysis.

The PCK framework was used to analyse the origin of and causal relations between themes associated with experienced and novice teachers. Furthermore, different use of CK and PK could be associated with the two groups of teachers. When CK could be associated with the teaching design, the sub-constructs of CKC and SKC were used to identify what knowledge teachers drew on as well as how teachers use their CKC and SKC. When PK could be associated with the teaching design, the relationship between PK and SKC in other disciplines as well as curriculum was used to understand the relation to PCK.

## 6 Results

### 6.1 Teachers' CK

All the teachers interviewed for this study confirmed that they did not receive any financial literacy training during their pre-service education or after becoming teachers. Even the novice teachers conveyed that they had only received formal training in economics yet nothing regarding financial literacy, even though they began their teacher education after 2011, hence after financial literacy had been implemented into the social studies subject. This lack of formal disciplinary CK indicates that none of the interviewed teachers possessed SKC regarding financial literacy teaching.





However, experienced and novice teachers seemed to relate to their lack of SKC in different ways which, in turn, seem to affect the different aims of financial literacy teaching, expressed by each group of teachers.

## 6.2 Experienced teachers' CK and PK related to their PCK

Experienced teachers seemed to draw mainly on financial insights and practical knowledge from their personal life when teaching financial literacy, and they also framed their financial literacy teaching as something that belongs to the private sphere. Salient content features included income (often related to occupation), expenditures, paying bills, buying a home, insurance, and mortgage and interest rates. This last topic was often discussed with reference to the short-term loans with high interest rates (called text-message loans) that have been hotly debated in Sweden in recent years. Teaching often seemed to focus on producing budgets and understanding financial concepts. The choice of subject matter and how to present it seemed to be derived directly from personal life, which also can be considered a compensation for the lack of SKC:

It is very much grounded in my own experience. Like, this is the way I planned when I moved or...It becomes very private almost, or at least very personal. I don't have any academic background to fall back on when it comes to financial literacy. In that sense it's harder, but at the same time easier in a way. A little bit of common sense and general knowledge make us able to understand, for instance, that we must have a home insurance in case of a fire.

(Experienced teacher, 11 years seniority)

I consider myself to be rather well-read, and that, I believe, is my biggest talent when it comes to [financial literacy teaching]. It's easier now when I am 45 than it was when I was 25; that's really my sentiment. That I have lived a little, a fairly long life. It's my own life, and I am probably someone who uses myself [as an example] pretty much. It doesn't threaten my integrity to tell how big my mortgage is, that we choose to amortise. ... But I don't have poor finances which perhaps makes it easier.

(Experienced teacher, 19 years seniority)

The tendency to draw on one's own life experience when teaching financial literacy was so strong that when experienced teachers lacked personal experience regarding a certain financial subject matter—even a rather unpleasant one—they viewed this lack of experience as a problem:

As a teacher, sometimes it can be a merit to have ... experience from the situations you're supposed to talk about, but I don't! I haven't dealt with the Swedish Enforcement Agency [High Court Enforcement Officers]. ... I haven't been unemployed either, really. But sometimes it's a good thing to have that experience, but unfortunately I don't!

(Experienced teacher, 22 years seniority)

When talking about financial literacy, experienced teachers referred to quite commonplace knowledge, such as the practical financial skills needed to manage a household. This type of knowledge can be considered CKC. However, some teachers did not express the lack of SKC to be a problem, since they considered financial literacy to be mainly of a practical nature. Since



they are adults who manage households and function in society, they considered themselves proficient enough to teach financial literacy. In contrast, other experienced teachers expressed concerns regarding their lack of SKC, both in terms of formal education and because the formal demands when teaching financial literacy were equivalent to those of other segments within the subject of social studies:

What the Swedish National Agency for Education expects is focus on social science methods and models and theories and those kinds of things, but I don't think that I possess the tools when it comes to financial literacy, so it becomes more of instructions, information. ... This is the way to think concerning income and expenditures.

(Experienced teacher, 11 years seniority)

Even though experienced teachers sometimes expressed doubts regarding their financial literacy teaching proficiency, many experienced teachers draw solely on their CKC to form their CK, thus using CKC as if it were SKC. Many experienced teachers use their CKC in this way without any further doubt or hesitation, hence making no distinction between the financial literacy segment and other segments in the social studies subject concerning their teaching proficiency, which one of the experienced teachers recognised during her interview:

I am starting to ponder that right now! But, I don't have any formal education to teach financial literacy ... and you don't consider that, because there's so much stuff that you're supposed to teach.

(Experienced teacher, 12 years seniority)

There were, however, exceptions among the experienced teachers. Two of the experienced teachers described their financial literacy teaching as encompassing micro economics where they used the flow-of-income model to explicate how households are affected by the economy, such as how a rise in interest rates affects household finances on a theoretical level.

The most salient exception regarding financial literacy teaching strategies was a teacher who claimed that she personally was not financially competent, making the financial literacy segment quite difficult for her to teach. Although she had 16 years of seniority, she did not express that she drew on CKC when teaching. Instead, she used her PK to design her financial literacy teaching:

I am no expert when it comes to these segments ... my strong side is perhaps not subject-specific, but on the other hand we can relate [this topic] to rather interesting discussions, and I am pretty good at creating interesting questions and discussions.

(Experienced teacher, 16 years seniority)

This teacher conveyed a quite different approach to her financial literacy teaching, expressing a clear view of what she considered her personal strengths and weaknesses. Yet her deliberative teaching approach can also be considered an elaborate framing of financial literacy instruction.



### 6.3 Novice teachers' CK and PK as related to their PCK

Novice teachers expressed that they lacked personal experience of financial issues altogether, or at least substantial aspects of the topic that are needed to deliver financial literacy teaching. This seems to be a concern.

I am just 26 years old and I haven't bought a home yet, and then they [the students] can be into borrowing money from a bank, and then it becomes complicated. Then you have to study all the time and try to keep up.

(Novice teacher 3 years seniority)

Even for novice teachers, it seemed natural to draw on their CKC to acquire CK regarding financial literacy, even though many novice teachers claimed that they lacked CKC and this alleged deficiency appeared to contribute to their difficulty in teaching financial literacy. At the same time, novice teachers quite freely admitted that they found several aspects of teaching social studies difficult, with respect to both content matter and instructional approach. When they doubted their CK, novice teachers seemed to resolve this predicament by two different measures.

Novice teachers turned to disciplines in which they considered themselves more proficient with regard to both CK and instruction—namely, the disciplines included in their pre-service teacher education, such as economics and political science. Even though novice teachers described the same financial literacy content as experienced teachers, novice teachers more frequently related issues of income, expenditures, mortgages and interest rates to the economy, both in terms of economics as well as politics.

I find it really important that when you work with economy, that you really acknowledge the relation between personal finances and the economy. Because if we have made a budget, still you cannot expect that this budget will last forever because things can happen.

(Novice teacher, 2 years seniority)

Thus, novice teachers related their financial literacy teaching to the interdependence between household finances and the economy. A desire to 'do the right thing' in teaching financial literacy seemed to influence novice teachers a lot, where novice teachers seem to relate many of their choices, both regarding content and what causal relations to focus on, to the social studies syllabus which they frequently referred to during their interviews.

I think ... I try to go by [the social studies syllabus] as strictly as I can concerning content. The financial literacy segment I consider to be the most transparent in the syllabus—what you should know about financial literacy.

(Novice teacher, 5 years seniority)

Regarding their actual teaching novice teachers expressed that they used their general pedagogical skills, or PK, to elaborate a task that became a way for them to handle the financial literacy segment. Novice teachers used this approach to compensate for their lack of discipline-specific CK, but when doing so, they also enabled learning in a different way and of a different kind than experienced teachers.



Another solution to novice teachers' expressed lack of financial literacy CK was collaboration with teachers of other subjects. For example, one novice teacher planned and carried out a financial literacy project together with a mathematics teacher. The societal segments of the project were covered within the social studies class, and all the calculations were taught and executed with the mathematics teacher.

So, whereas experienced teachers drew on CKC to teach financial literacy, hence treating CKC as if it was SKC, novice teachers instead drew on their SKC in other disciplines and consulted the social studies syllabus, hence enabling their PK to become a foundation for their teaching in a much more explicit way than experienced teachers did. These differences concerning how experienced and novice teachers related their CK and PK to their PCK seem to explain the quite different aims between the two groups with regard to financial literacy teaching. The differences became evident in discussions of the financial literacy segment's place and role within the social studies subject, which definition of financial literacy experienced and novice teachers subscribed to, and what financial knowledge was promoted in their teaching.

#### 6.4 Experienced teachers' CK and PCK as related to their expressed aims

When discussing financial literacy as a segment within the contextual boundaries of the social studies subject, experienced teachers most frequently mentioned the relationship between financial literacy and economics. Since economics has been an important part of the social studies subject for many years, many experienced teachers referred to economics as of great significance and a core topic around which much of their teaching revolved. They often described economics as a means to understand society and as a tool to discuss societal problems:

Financial literacy is one segment, and economics is one segment and the labour market is one segment, but still it should all lead up to one examination. And the focus of the examination is often on economics.

(Experienced teacher, 11 years seniority)

There is an intention that it [a general focus on economics through the social studies course] should motivate why economics is important for them as private citizens. Not just academically speaking or for some other special interest.

(Experienced teacher, 8 years seniority)

Financial literacy is a, a new feature within the social studies subject and economics has a ... much stronger position and root in the [social studies] subject. The content matter has been around for a longer period of time and it's more established in textbooks and in the [social studies] course.

(Experienced teacher, 14 years seniority)

On the other hand, since many experienced teachers related to financial literacy as something private and practical, they expressed difficulty in teaching financial literacy as a part of a broader of economy segment.

Financial literacy seems to be taught as a separate segment by experienced teachers, consequentially before or after the economics segment, from the perspective that financial literacy is a viable way to introduce economics or a good way to understand the personal conse-



quences of the economy and political decisions. Still, experienced teachers' main objective with the economy segment seems to be understanding of economics.

But still it is some kind of general knowledge, that you have understanding of the economy. If you do not understand the big picture, it can become difficult to manage your own finances.

(Experienced teacher, 10 years seniority)

As mentioned earlier, two experienced teachers choose to teach financial literacy as an aspect of micro-economics, with help from the flow-of-income model.

Almost all experienced teachers expressed an ambition to relate financial literacy teaching to economics, and especially the economy, yet many also expressed difficulty in doing so. Two relevant considerations were time limitations within the social studies course, since other segments also need sufficient time and attention, and the difficulty to understand how to really incorporate financial literacy in an economy section and further into the social studies subject.

It is not specified which problem, societal problem to address or social phenomena to explore. It can be economics, or politics, or social issues or something else. This segment of the syllabus is formulated as the individual's income and expenditures, and it is really hard to get that to work with any other segment of the subject.

(Experienced teacher, 8 years seniority)

If you know what a budget is and have some familiarity with it, and if you know your rights and the consumer laws and that stuff. Then it becomes somewhat like checking off a box... rather than some form of analytical knowledge like the other subject matter.

(Experienced teacher 9 years seniority)

Thus, even though understanding the relationship between private finances and the economy was expressed as an aim, few experienced teachers indicated having any explicit means by which to facilitate teaching this relationship. Instead, the overarching aim for experienced teachers with their financial literacy teaching was future utility, hence some form of adult proficiency.

In financial literacy, I find it important to include the commonplace things you need to enter adult life. ... I have interpreted financial literacy as such, that these tools are ... [so] that they can function for themselves when they have moved away from home.

(Experienced teacher 22 years seniority)

One question can be – You are in a family with two adults and two kids. What is reasonable to assume that you have to spend on food each month? A common answer may be about 1000 SEK, [krona, the Swedish currency] maybe 1500 SEK [laughing]. Then it's really necessary to work on these questions, because many [students] actually lack this understanding.

(Experienced teacher 12 years seniority)

Experienced teachers often stated that financial literacy is important to learn, yet many experienced teachers also expressed doubts whether financial literacy should be integrated with



the social studies subject. At the same time, experienced teachers have incorporated financial literacy in their teaching in social studies, hence spoke freely about their financial literacy teaching and presented their planning and tasks. Furthermore, several experienced teachers described the questions, devised by Lusardi and Mitchell (2007), as math questions indicating that their financial literacy teaching did not include calculations, yet they also expressed that they could see themselves using these questions in their teaching. On the other hand, more experienced teachers described the new questions devised for this study as typical of their teaching. Often, they added comments concerning their students' (and their own) struggles with numbers and calculations.

A definition of experienced teachers' aim in teaching financial literacy could be financial matters that concern the private and household sphere alluding towards future utility of this knowledge in enabling people to function as adults in society. This definition covers several salient aspects of financial literacy framed as an individual's financial behaviour and capability. But a greater number of experienced teachers expressed a desire to give students important financial experiences so that they could improve their future life, hence touching on the very core of the OECD definition of financial literacy.

### 6.5 Novice teachers' CK and PCK as related to their expressed aims

Novice teachers related their instructional aims and choices to what the syllabus stipulates regarding financial literacy and emphasised the relationship between private finances and the economy, with questions regarding income and expenditure as quite distal features.

[This concerns their] understanding regarding money and the value of money, and income and expenditures. How this connected to others' finances and the economy, I consider advanced understanding. I guess that this is really important to understand, together with an understanding of how the system works regarding mortgages, interest rates, taxes and also what we get back from society

(Novice teacher, 1,5 years seniority)

As this relationship between personal finances and the economy was a focal point, novice teachers looked for means to realise this aim in their teaching, in spite of their expressed lack of CK. The search for ways to relate theoretical discussions concerning income and expenditures to students' everyday life and the economy was sometimes conveyed as almost a search for the epistemology of financial literacy.

[The financial literacy segment] has been tricky. Now I am content with this [task], but until I devised this [task], this segment has been tricky. Earlier, my financial literacy teaching evolved into something ... that I constantly needed to rectify. But then, I have been working for only five years. ... I modified all the time. I taught a lesson, and what I really had planned to do I had to change, because I wasn't content.

(Novice teacher, 5 years seniority)

A common expressed practice for novice teachers was to elaborate financial literacy teaching from their PK skills and design teaching in which classroom activities, such as class discussions or students working together with a task, replaced lectures and teacher instruction.



One notable exception among the novice teachers described the aim of her financial literacy teaching as future utility for her students, where basic financial ability was promoted. The teaching was described as evolving around household budget discussions and tasks, resembling strategies associated with experienced teachers in this study. Also similar to more experienced teachers, this novice teacher expressed the difficulty of relating financial literacy, viewed as something private and practical, to society and the social studies subject.

I find it [financial literacy] important for every student to have knowledge of, and it's really good to have when you leave school. ... But when you ask what the social studies subject consists of in the upper secondary school, then it is more about how society works, and then all of a sudden you are supposed to talk about the private [sphere]. That feels a bit like, 'Okay, is that supposed to be included here? Is this really the right subject for this

(Novice teacher, 2,5 years seniority)

Yet this teacher also gave voice to a common feature among novice teachers, namely that the most important objective is to carry out financial literacy teaching in a correct way, i.e. according to syllabus. Novice teachers did not find financial literacy to be redundant or unimportant, but they seemed quite preoccupied with their actual teaching.

The aims of novice teachers' financial literacy teaching seemed to be predominantly grounded in income, expenditures and household budgeting. Yet this aim address the relationship between private finances and the economy, hence touches on several salient aspects of financial literacy, understood as the individual's financial capability related to the wider socio-economic context. At the same time, novice teachers emphasised the importance of making calculations when doing budget exercises; they expressed this concern even before Lusardi and Mitchell's (2007) questions were presented to them. This aim touches on several aspects of the OECD definition of financial literacy as well.

## 6.6 Differences between experienced and novice teachers

It was clear that Swedish social studies teachers' lack of SKC concerning financial literacy poses a problem for them. This concern was expressed mainly by experienced teachers, who primarily tried to use their CK explicitly to teach, thus using CKC as if it were SKC. These teachers did not tend to refer to, or make choices from, any underlying disciplinary rationale for financial literacy when drawing on their CKC. They often expressed having problems deciding what subject matter to choose and how to relate this subject matter to or integrate it with other social studies disciplines.

When experienced teachers use CKC to frame financial literacy and to design their financial literacy teaching, they draw on their personal knowledge and their ability to manage a household. Thus, financial literacy becomes something one does as part of managing a family, rather than to relate households' financial activities to wider economic or political aspects and prerequisites.

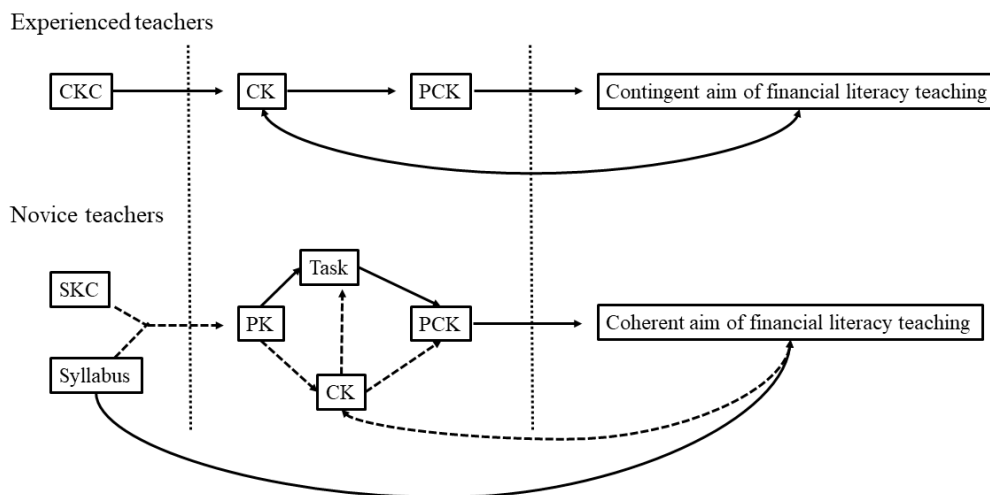
Still, experienced teachers seemed to teach financial literacy as an individual discipline within the social studies subject, even while drawing mainly on their CKC. This tendency, together with their rather practical definition of financial literacy, left most experienced teachers applying a quite contingent aim of financial literacy, hence regarded as a segment within the social studies subject yet experienced teachers presented a rather utilitarian view of the wider societal purpose of financial literacy.



For most novice teachers, on the other hand, the financial literacy segment does not seem to pose different problems compared to other segments of the social studies subject. This finding can perhaps be explained by the fact that they are quite new to the profession, without a perspective shaped by earlier curricula. However, novice teachers do express specific doubts and concerns regarding their financial literacy teaching. Their starting point for their instruction is their PK, supplemented by reference to the syllabus and their SKC (mostly in economics and political science). Their instructional preference is often to assign a particular activity or task, undergirded by instruction that draws on their CK in economics and political science.

The expressed aim of novices' financial literacy teaching is mainly influenced by the syllabus, which guides them to focus on the relation between financial literacy and the economy, including wider societal factors and prerequisites. This focus falls rather conveniently within the contextual boundaries of economics and political science, from which underlying rationales can be drawn to devise financial literacy tasks. Because novice teachers are attentive to the relationship between personal finances and the economy, their aim of the financial literacy segment within the social studies subject is rather comprehensive. At the same time, their presentation of the wider societal purpose of their teaching is skewed towards economic and political considerations. See Figure 3 for a graphical representation of the main approaches used by both groups of teachers.

Figure 3. Applied PCK model of how experienced and novice teachers relate their teaching to their instructional aims.



## 7 Discussion

This study confirms the suggestion by Lefrancois et al. (2017) that the subject within which financial literacy is taught will have a substantial effect on the aims and methods of financial literacy. However, Sandahl (2015) indicated that Swedish social studies teachers tend to treat the different segments within the subject as separate disciplines and the financial literacy



segment does not seem to be an exception in this regard, especially for experienced teachers who tend to use their CK as a basis for their financial literacy teaching.

As Skott (2001) and Bransford et al. (2005) have suggested, novice teachers tend to rely heavily on their pre-service teacher education, which seems to deeply affect their understanding and perception of their teaching commitment. One aspect of that understanding is the development of what Bransford et al. (2005) called professional practice, which for novice teachers seems to start with general pedagogical skills. Novice teachers have more limited CK in financial literacy than experienced teachers, but this study has found, in contrast to Gudmundsdottir et al. (1987), that both experienced and novice teachers can have a clear position or 'point of view' as to what to teach. Even though experienced and novice teachers differ in PCK, both experienced and novice teachers have found ways to apply their available knowledge so as to fulfil their commitment to teaching financial literacy.

This study also shows what knowledge teachers draw on. This factor, along with how the actual teaching is designed, affects how teachers conceive and present the aims of financial literacy. How teachers relate to and draw from curriculum and syllabus is also a pivotal factor. Here we can describe teachers' educational aims as both intrinsic and extrinsic (Husbands, Pendry, & Kitson, 2003; Olsson, 2016; Strandler, 2017). Intrinsic aims are related to the discipline and stipulated by the syllabus, so they change over time. Extrinsic aims are more of a political or societal nature, such as educating responsible or perhaps critical citizens. This study shows that teachers relate their financial literacy aims to both intrinsic aims of the social studies subject and extrinsic aims which can be described as supposed future benefits for young people and society. As shown, both the intrinsic and extrinsic aims differ between experienced and novice teachers. Yet it is reasonable to assume that other factors, such as the school's location and the students' abilities, background and age, affect teachers' choices. Thus, more research is needed regarding how teachers frame and motivate their financial literacy aims.

Within the wider perspective of Swedish social studies teachers' financial literacy teaching, the picture is rather complex and laden with a number of common questions and challenges for all teachers. It is important to note that many teachers teach what the syllabus stipulates with very small means at hand. For example, when shown the financial literacy questions devised by Lusardi and Mitchell (2007), a number of teachers expressed uncertainty regarding their ability to complete the requisite calculations and no teacher commented on the concept of risk. So that students can receive more advanced financial literacy education, financial literacy should be introduced in teacher training programmes and in-service teachers should be offered some form of financial education. However, any efforts to deliver financial education to teachers should be carefully assessed, and teachers' own experiences in teaching financial literacy must be included in this assessment. More research on actual classroom practices is needed to understand how financial literacy teaching plays out and how learners respond to different teaching approaches. What kind of financial literacy we want to promote and to what end we educate young people financially can not only affect the well-being of individuals and society but can also help to educate critical citizens.

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