Competence Learning Brought to Life: How Finnish Teachers Actualize a New Curriculum

Kathryn Picardo

Livingston High School, Livingston, NJ, USA





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Corresponding Author

Kathryn Picardo

kpicardo@livingston.org

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ABOUT THE AUTHOR

Kathryn Picardo

I am a 9th year social studies teacher at Livingston High School, in Livingston New Jersey, where I teach Modern World History, Gender Studies, and a two-year research program. In 2022, I spent the spring semester in Helsinki, Finland as a Fulbright Teaching Fellow, researching the actualization of competence learning curricula on a national scale.. Thanks to that experience, I came back inspired to better understand, and get more involved in, systemic change within American education. I am currently a first year doctoral student in the Teaching of Social Studies program at Columbia University. My research interests include teacher education and identity, difficult histories, transformative knowledge and competence learning. I hope to one day serve as a professor of Education, working with preservice teachers as they form their own educational philosophies and pedagogical "toolboxes". To reset outside of the classroom, I try to travel internationally. I've been fortunate to visit 34 countries across six continents, and love getting to know the everyday workings of a new culture, new place, and new landscape. Beyond this, I enjoy trekking, board games, kayaking, and really thought provoking would you rather questions.

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INTRODUCTION

In 2016, Finland revised its National Core Curriculum (NCC) to prioritize competence learning (Hakala & Kujala, 2021). In bringing together education specialists, teachers, parents and community members, the Finnish National Agency for Education identified seven competences. They are:

- 1. Thinking and Learning to Learn
- 2. Cultural Competence, Interaction and Self Expression
- 3. Self Care and Everyday Life
- 4. Multiliteracy
- 5. Information and Communication Technology
- 6. Entrepreneurship
- 7. Participate, Influence, Build a Sustainable Future

According to the NCC, a competence is an entity of knowledge and skills from various disciplines that can be applied to novel contexts (Finnish National Agency of Education, 2016). To implement competence learning, teachers must craft interdisciplinary learning experiences (Niemelä, 2022). They must create problem solving environments, in which students pose questions and work collectively (Symeonidis & Schwarz, 2016). Teachers must be open to instances of authenticity but recognize these are linked to student interests and cannot be planned. To handle learning that goes in indeterminate directions, teachers need a deep understanding of content (Rantala & Khawaja, 2021).

This combination of demands, however, is a tall order. While competence learning was not a new idea for Finnish teachers, the most recent iteration of the NCC "tipped the balance" towards competence learning more than ever. Following the new curriculum's rollout, Finnish teachers noted a disconnect between the methods prioritized versus the methods teachers knew (Lähdemäki, 2019). In other words, many teachers raised a similar question: How does one teach in a way never experienced as a learner? Because of this discrepancy, the competence learning outlined in the Finnish NCC is inconsistently actualized in classrooms (Vesterinen et al., 2017).

In 2022, I was awarded a Fulbright scholarship to observe this phenomenon. I arrived in Helsinki with a litany of questions, namely:

- 1. What are Finnish educators (and the system at large) doing to implement competence learning?
- 2. How has the curriculum's emphasis on competence learning changed the everyday work of teachers?

THE RESEARCH

Between January and June 2022, I observed classrooms in Upper Secondary Schools (grades 10-12) and comprehensive schools (Grades 1-9). I worked in seven schools throughout the Helsinki region, returning to each several times. Although my background is in the social sciences, I observed classrooms across a spectrum of disciplines- English, History, Art, Mathematics, Music, Philosophy, and Crafts. This variety allowed me to understand competence learning's holistic range rather than feasibility in one subject.

Nineteen educators ranging from Grades 1-12 allowed me to observe their classes. Each agreed to be interviewed about perceptions of curriculum change, teacher training, professional development, and the pressures they face. My interview protocol asked about sample projects, lesson or unit plans, curriculum materials used to craft lessons, and activities to illuminate what form competence learning took in their classroom.

While my research inquired into systemic factors, like school and government policies, it also highlighted pedagogical strategies that actualize competence learning. My observations emphasized pedagogy that was not country-specific nor resource-dependent, but instead, strategies that could be readily employed. For the purposes of this article, I seek to expand on those.

FINDINGS & IMPLICATIONS

Implementing Competence Learning- Leveraging the Nearby Community

Finnish teachers naturally and frequently leverage the nearby community. It is a regular practice to visit a local business

or organization using concepts students learn about. For example, English teachers bring their classes to English-speaking companies, like Nokia and Rovio Entertainment (the minds behind Angry Birds). A robotics class might visit Telia, a prominent AI company, to speak with employees about their roles and see robotics production globally. Other teachers make use of museums and galleries that have relevant displays, or historical locations (like Suomenlinna, a military fortress off the coast of Helsinki).

Teachers also invite "experts" to aid student learning and heighten topic relevancy. Art students visited Toyohiro Miyazawa, a Japanese interpreter living in Finland, who let students experiment with Japanese calligraphy. A creative writing class hosted authors who guided students in writing narratives, highlighting how experts become co-teachers. University professors, professionals, non-profits, and even global contacts are considered additional sources of feedback. In an Escape Room course, students built their own game alongside a university professor of game design. And for further afield resources, teachers capitalize on video platforms. A chemistry course spoke remotely with the manager of a nuclear power plant in Eastern Finland. In a global citizenship course, the UN Youth of Finland conducted a virtual human rights workshop.

Implementing Competence Learning-Interdisciplinary Learning

Finnish teachers also strategize interdisciplinary opportunities, sometimes designing courses around this premise. For context, most Finnish courses run for eight weeks and emphasize a singular theme, like a history class on "20th century Imperialism" or a math course in "game design." But, many teachers blend content into the completion of a course-long project. The game design class, for example, is built around creating an English-language, historically-themed escape room. Students learn mathematical concepts in chunks but immediately apply that information to their project. Simultaneously, they consult with English and history teachers- incorporating three subjects in one project. Likewise, an art teacher designed her course around producing creative, marketable, and ethically sourced hats. This tapped into students' artistic capabilities the ethics of fast fashion, and the bottom line of mass production.

For American teachers, the eight-week course model correlates to an individual unit- which could also revolve around an interdisciplinary application task. In many cases, teachers are already using such projects to "wrap up" a unit. With some tweaks, the project could be introduced earlier on as a means to tie all accumulating content to it instead of summarizing content at the back end.

Implementing Competence Learning- Changing Assessment Approaches

Project-based learning also reveals Finland's approach to assessment. Multiple choice is rarely used because it's not considered a test of knowledge, mastery or metacognition. Second, Finns believe that peer and self-feedback is crucial to developing lifelong learners. During projects, students regularly present to their classmates about what they are learning and what's been accomplished. Teachers end classes with reflection questions like "What went really well today? What was a struggle? As one teacher said, "Sometimes other kids will bring up, 'I noticed this source wasn't relevant, or I didn't get this topic as much as my classmates did'." To this teacher, these spaces "allow for natural self-reflection and for students to begin setting their own learning goals."

Many teachers provide eight or nine "learning goals" at the start of each unit, ranging from content-based ("I know how to use my environment to produce art") to skill-based ("I can plan my time and stay on schedule") to social-emotional development ("I am becoming more courageous and confident"). Additionally, Finland's version of parent-teacher conferences emphasizes student self-reflection. While these meetings include guardians and teachers, they are run by the student. Beforehand, students are given a diagram of the seven competencies of the NCC. With their guardians, students identify strengths and weaknesses. They then compare notes with their teacher, who has highlighted student strengths and weaknesses on a chart of their own. This becomes the basis of the conversation, which is directed by students even in elementary school, and results in identifying supports and agreeing on interventions students can employ.

American teachers can also approach assessments cyclically, building in opportunities for feedback before a final grade and "grading" revision processes. Many American teachers already devise learning goals for their units, but it's something that can be more widely utilized. Likewise, student-directed conferences can be employed in individual classrooms or more widely across departments.

Several teachers I observed use students' ability for self-feedback in differentiating inquiry learning. For example, a physics teacher provides his students with application questions towards the end of each unit. Students self-assess, and the teacher then gives feedback to discuss this self-assessment. When several students demonstrate mastery, they group together to turn the concept into a tangible phenomenon. In learning about laws of motion, students can choose from research questions like "Why does the skateboard go in the opposite direction when I jump off?" or "How do elevators work?" With these broad questions, students delve deeper into scientific concepts. They observe, hypothesize, and devise

a relevant experiment. Students grapple with inquiry, but the teacher differentiates the level of questions (and pacing) to create appropriate challenges.

PRACTICAL IMPLICATIONS FOR TEACHERS

In many ways, my participants for this research are self-selected. I was initially introduced to contacts through Fulbright Finland, meaning my first contacts were curious about new pedagogy enough to conduct research in the United States. These teachers then referred me to peers who were devoted to competence learning. Therefore, my research cannot apply broadly to every Finnish classroom. And while outside the scope of this article, my research also uncovered several systemic barriers that factor into competence learning's inconsistent actualization.

Despite these limitations, the strategies portrayed here affirm that competence learning, in large part, was actualized by the everyday strategies of teachers. Much of this research, therefore, does transfer to the American context. The Finnish example shows that while systemic change is gradual, the everyday work of teachers actualizes new goals. As Jari Salminen of the University of Helsinki said in conversation, "a curriculum doesn't change schools-teachers do."

Q & A WITH KATHRYN PICARDO

Question #1 Teacher's Question:

The first of the seven competencies of the Finnish National Core Curriculum (NCC) is thinking and learning to learn. Please explain how Finnish teacher, at a few selected grade levels would work to incorporate this competency into their instruction. Are there any specific principles or methods that the Finnish teachers learn in reaching toward this competency that could inform the instructional methods of American teachers?

Kathryn Picardo's Response:

In my experience, this competence was naturally built into the pedagogy of most teachers I observed, mainly through the emphasis and priority given to self and peer feedback. For example, the learning goals mentioned above are a staple of elementary school teachers. One such teacher recognized early on that kids may overestimate themselves. To combat this, she circulates the room while students work on this, often prompting them. For example, she might see a student who rated themselves particularly high and inquire, "I see you ranked this quite high. What have you done that makes you feel so confident in this area?" These conversations often lead the students to more accurate self-feedback, but over time, students learn to check themselves without their teacher's input. They begin to learn the thought process of metacognition, a skill in and of itself.

In another elementary school, students build digital portfolios, which are essentially websites to highlight their "best" work and skill development. Students add a new page for each grade level, so this site becomes a map of their learning across years. The work they highlight is entirely self-selected so students can show off a range of skills and knowledge they've accumulated. Plus, for each group project included, students have to add in a reflection on group dynamic- evaluating teamwork, what each group member accomplished, how time was managed, and what could be done better.

At the high school level, teachers make use of self-pacing and self-assessing. An English teacher, for example, has groups complete vocabulary and grammar challenges regularly. Groups work together in multi-step assignments or a more significant task like completing a scavenger hunt. This way, they must ensure that individual contributions are equally accurate. It means they have to call each other out when necessary and monitor each other's work. Additionally, students correct their own challenges, allowing them to evaluate what has been mastered and what they need additional help with.

In the 1980s, Finnish schools mandated courses like "Study Skills and Navigating Teenage Life" and "Future Working Life" for 8th and 9th graders. These classes feature a week-long internship at a local business or organization, an experience that is heavily reliant on self-reflection. Throughout the weeklong experience, teachers check in on their students both in person and via a WhatsApp group. They ask students to send photos of their most challenging task that particular day or a photo that captures their strengths in the role. Upon their return, a full week is devoted to processing the experience through self and peer reflection. Students deliberate on questions like "What was the biggest mistake you made? How did you handle that?" "How did you find working with others?" "Would you do

this job in the future? What other jobs might you enjoy if you had a good experience at this one? "What did you learn about yourself?"

In the weeks following, lessons will be thematically based on professional fields- like education, engineering, the arts, and accounting. And following the theme of self-reflection, students end each lesson by "grading" their interest and how well the field suits their perceived strengths.

Question #2

Teacher's Question:

What kinds of professional learning were they involved in to understand and work on the necessary revisions?

Kathryn Picardo's Response:

In planning the new curriculum, the cities of Vantaa, Helsinki, and Espoo recognized the need for accessible, free PD. To implement this PD, local teachers were hired to run workshops (usually several sessions) in the evenings. These workshops were held at nearby community centers and were completely free to enroll in. Course offerings vary, ranging from digital gaming platforms to inquiry learning activities. Individual schools also run their own PD throughout the year, but there is no requirement that it be tailored towards competence learning. Because of the structure of the Finnish educational system, there is no nationwide mandated training.

However, there are nationwide curriculum materials to make use of. The National Agency of Education (the government body that writes the curriculum in Finland) published, alongside the new curriculum, a support chart for each subject area. The chart breaks the subject down into a set of discipline-related skill sets. In history, for example, that looked like:

- 1. Acquisition of historical data/sources
- 2. Interpretation of sources
- 3. Understanding chronology and connections
- 4. Historical empathy
- 5. Understanding causation in history
- 6. Understanding change and continuity
- 7. Use and reliability of historical data (historiography)
- 8. Explaining human activity and motives
- 9. Production of historical data
- 10. Synthesizing multiple perspectives.

Each skill has a set of activities listed underneath as tangible means to foster it. For example, to develop historical empathy, the chart suggests diary or letter writing, where students take on a persona of that time period. The resource includes explanations of specific activities for each skill and, when necessary, the supporting materials. It's by no means a comprehensive guide to a class, but each skill comes with four to ten different activity ideas.

Beyond this, the National Agency of Education publishes a variety of support materials for teachers. They include links to relevant historical podcasts, databases on Finnish domestic and foreign policy, a compilation of relevant TED Talks, biography collections, and online games. Materials are separated by education level, with different tools for comprehensive, lower secondary, and upper secondary teachers. Additionally, the website includes best practices for teaching democracy and human rights education, entrepreneurship, working life, sustainable development, gender equality, cultural diversity, internationality, and learner welfare. These lists mix strategies, resources, and games for teachers to use.

Question #3 Teacher's Question:

Would you describe how your research experience in Finland led you to make changes in your own practice?

Kathryn Picardo's Response:

I've been back in my classroom for about a year now and have been able to employ a lot of the strategies mentioned above. One adjustment was slowing down project timelines to allow for revision to be a part of the process. I better

chunk "checkpoints" or build in mini-assignments that have students report progress and seek feedback (either in small groups or individually). Sometimes, this comes in the form of reflection journals, other times in peer workshops. Additionally, I now include, in all unit projects, a culminating self-reflection portion that asks about group work skills but also has students describe pivotal moments in their project design, aspects of the research process, and challenges they faced and corresponding interventions, and what can be improved in the future.

I've also been more intentional about bringing in interdisciplinary content, for example, building in the environmental impact of mass industry and fast fashion during a unit on the Industrial Revolution or exploring the concept of social enterprise in a unit on the Age of Exploration. I'm still working to create interdisciplinary projects like those I saw in Finland, but this is a long-term goal requiring the buy-in and time to collaborate with teachers outside of my department.

However, my teaching has been able to play off partnerships in Finland. I've been able to work with some teachers there to build projects that involve American and Finnish students, or create dialogue between our students. The time difference (Finland is 7 hours ahead of New Jersey) makes live collaboration tricky, but we've leveraged platforms like FlipGrid, Padlet, and Jamboard to chat about cultural differences, understand differences and add understanding about political systems, chat about cultural differences, and explore gender inequality in the American and Finnish contexts.

Question #4 Teacher's Question:

What hopes and dreams do you have for the US system? What did you learn from the Finnish context that you think could translate into the US context?

Kathryn Picardo's Response:

A stark contrast between Finnish and American schools is the relative equality. All schools I saw had well-kept facilities, big windows, equal resources, and high-quality teachers. No school is labeled a "bad" school. While high school students choose a nearby school to attend, it's often based on special programming or location as opposed to quality. But this isn't by happenstance. The national government provides equal funding to all schools in Finland. They also supplement schools with additional challenges. For example, schools with higher levels of immigrant students may require additional teachers to teach Finnish as a Second Language or other means of supporting these students. Likewise, wealthier communities with larger tax bases and revenue will provide additional funds to schools with greater challenges or lower tax income.

This mentality of taking care of all is evident in its inherent result—the fundamental trust that permeates all levels of Finnish society. When I first arrived in January, I was taken aback by seeing young kids on public transport by themselves. Seeing groups of teenagers walking around the city at midday was also jarring. It's important, therefore, to note how unique the permeation of large-scale trust is. Finland is consistently ranked one of the safest countries in the world according to the Global Peace Index, and the everyday routines of life and school embody that.

Because trust in overall society also carries into the professional life of teachers, formal observations were done away with in the 1980s. Instead, teachers have end-of-year discussions with administrators that mainly focus on what a teacher needs to feel supported in a work/life balance. Administrators don't observe lessons formally, but they are invited in by teachers who willingly seek support or feedback. Much of this system is built on how larger society views teachers- Teachers are seen as highly trained experts, which is evident in school policies. For one, teachers are only required to be at school for classes and meetings. So if a teacher doesn't have a class until 9 am, they aren't expected at school until then. The expectation is that their work will get done, but that they should be able to choose when and how. Of course, many teachers choose to utilize prep periods from the sanctity of their offices. But for some teachers, this allows more time with their kids in the morning or afternoon, to make appointments as needed, to sleep in, to attend more professional development, or simply do work in a location they prefer.

The Finnish culture of trust also extends to students. Because of the availability and affordability of public transport (which is free to those under 18), students are also only expected at school for their classes. The upper secondary schedule in Finland runs more like American universities, where class schedules change daily. So it's possible for students to have a late start or early end or have gaps in their schedule (when they can leave campus or hang out and get work done).

During this time, students make use of the many communal spaces in a Finnish school. Hallways are peppered with

couches, high-top tables, and other informal seating spaces. Students use this time to catch up on homework, study, or spend time with friends. They can also take advantage of a spectrum of activities—ping pong, foosball, and air hockey tables are the most common. These spaces are also utilized during the fifteen-minute break that is standard between classes. When those fifteen minutes are up, students and teachers simply move to their next class. There is no bell and no attendance, and yet, Finnish teachers don't note an attendance issue.

This vision of school relies heavily on long-term, systemic policy changes of overall society that eventually permeate into school culture. But I hope that one day, American schools can cultivate a society built on communal support and trust, allowing schools to operate more this way. And instead of leaning into accountability measures, my hope is that the Finnish system provides an alternative means and understanding of increased school performance. Because clearly, the Finnish system is working, and more importantly, every student I talked to in my research felt safe, cared for, and happy in their schools, often referring to it as a "second home."

Question #5 Teacher's Question:

To what extent do teachers' mindsets, dispositions, or expectations differ in Finland vs. in the U.S., and is there anything teachers might be able to learn from these differences?

Kathryn Picardo's Response:

Some of the teachers I worked with in Finland had visited, or even lived, in the United States. Because of that, it was fun to compare notes and "see" the American system through their eyes. Amongst this group of teachers, a common observation of American schools was the spirit of collaboration and open debate in American classrooms. This was an observation noted about the culture at large but also within the school culture. American teachers are often expected to, and willingly, collaborate within departments, grade level, or "team" settings. We co-plan lessons, activities, and projects, even if the specifics of those vary in our individual classrooms. But in Finland, teachers are more accustomed to working on their own, and this is largely due to cultural differences. The interdisciplinary courses I observed were not the standard, but collaboration was a key factor in their success. Given this, American teachers are well-primed to create interdisciplinary and competence-based learning activities.

Additionally, this type of learning runs on collaboration between students—a skill that American students are expected to develop. Many of our classrooms already encourage group projects, teamwork, presentation skills, and group brainstorms. So, it seems likely that American classrooms are well prepared to engage in competence learning as long as the end goals of assignments/projects are more skill-based instead of content-oriented. Plus, the culture of debate in our hallways frequently allows for the open dialogue and constructive criticism necessary in project-based, inquiry learning.

From the Finnish side, it was interesting to note the difference in how teachers viewed themselves in the classroom. While there was an inherent respect for teachers, teachers often saw themselves as "guides" and facilitators of learning rather than absolute knowledge holders. While I can't speak to systemic reasons behind this, there are some outward cultural factors that can explain this. For one, students call their teachers by their first names, and teachers call administrators by their first names. Throughout Finland, titles are rarely used. Hierarchy is flattened, purposely. This positioning, however, is helpful in establishing a classroom environment for competence learning, which is predicated on *student* questions and interests. It requires a teacher who can be flexible and adjust learning directions based on current events, student needs, and student knowledge. Adopting this understanding of a teacher's role could be helpful in American contexts.

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