“We can never close the book and say, ‘We’ll continue next week’” – The rhythms of cooking and learning to cook in Swedish Home economics

Ingela Bohm

Department of Food, Nutrition and Culinary Science, Umeå University, Umeå, Sweden

ABSTRACT

The Swedish school subject Home Economics (HE) covers complex content to do with cooking and sustainable development, but is allocated relatively few hours. I draw on observations of HE lessons and interviews with teachers to show how experiences of time poverty can be conceptualized as arrhythmia in relation to the requirements of the curriculum, scheduling, cultural expectations, and the unpredictable nature of student cooking. By viewing cooking and learning to cook as sets of rhythms, I illuminate the disjoint between the mathematical rhythms of scheduling and recipes on the one hand and the visceral rhythms of students and food on the other. As teachers struggle to translate the vague knowledge goals and linear progression of the syllabus into the cyclical rhythms of meal-centered lessons where cooking is organized as a group activity, they prioritize time-consuming recipes and cleaning over reasoning around sustainability, which may contribute to a feeling of not keeping up with the contents of the syllabus.

KEYWORDS

Home economics; time/space; food culture; sustainability; rhythm analysis; food culture; cultural sustainability; cooking education; ethnography; time poverty

Introduction

When I arrived at Vanja’s school at seven o’clock one April morning, I expected to help her with lesson preparations as part of my participant observations in her Home economics (HE) class, but she was already done. Looking around the classroom, I saw ingredients for the first couple of lessons already laid out, and I commented that she was quick. She laughed and said it was a good thing she was a morning person. “I’ve already been to [the grocery store] as well,” she added. “They open at six, which is really great.” After some chatting about grocery shopping, she told me she had to check for student absences. Three students had called in sick, so she reorganized the planned group work to reflect this. She also mentioned that one student had to take an oral test he had missed, which meant he would leave his group during cooking to answer questions on laundry. Mere minutes into my visit, several temporal peculiarities had emerged: Vanja started her workday long before the scheduled time, she used her planning time to prepare ingredients instead of delegating to students, she revised her lesson plan based on student absences, and she arranged for an individual activity to run parallel with the main lesson activities. Later, when the students showed up and started cooking, she commented to me
that they were a slow group and that she could not use the same lesson plan for quicker students. Having worked as a HE teacher myself, the change of plans, parallel activities, and different student paces were familiar to me. As I revisited Vanja’s school and gained access to others, I started detecting additional patterns of disjointedness that were all too familiar, but which I had lacked the theoretical tools to analyze when I was still a HE teacher: the frequent mismatch between scheduled time and planned activities, how difficult it was to predict how much time students needed to cook, some students finishing early and asking to be let go while others were still working, and the constant feeling of losing precious time that could have been spent on theoretical perspectives from the syllabus. As a researcher, I could finally delve deeper and ask what was happening here – why did these same old phenomena reappear in entirely new student groups, in schools where I had never worked?

**Home economics through a temporal lens**

Time poverty is a common complaint in schools, not least among HE teachers (Ronto et al. 2017; Gisslevik, Wernersson, and Larsson 2018; Höijer, Hjälmeskog, and Christina 2011). In Sweden, the subject is allocated a total of 118 hours and the teacher is expected to cover knowledge content related to food, meals and health; consumption and personal finance; and environment and lifestyle (NAE 2011). At first glance this is a lot, but time use can be maximized through pedagogic organization (Millot and Lane 2002), such that several areas are included in one lesson, for example cooking methods, environmental impact of food, and food traditions (NAE, 2011). Lesson length is not regulated, and HE lessons can vary between 60 and 160 minutes (Bohm et al. 2015; Gelinder, Hjälmeskog, and Lidar 2020), while some schools only schedule HE during certain weeks of the year (Nyroos 2008). Various researchers have argued that HE needs both longer lessons and more hours of instruction (Lindblom, Arreman, and Agneta 2013; Åbacka 2008; Nanayakkara et al. 2018; Haapala et al. 2014; Lindblom et al. 2015), but none of them have scrutinized the temporal complexity of HE cooking through a rhythm-analytical lens (Lefebvre 2004), which is the objective of this paper. The entire HE course represents a linear, mathematical timeline with specific knowledge content to include, while lessons and school years represent cyclical time through their constant renewal. The course has a beginning and an end, but the lesson format ensures that a similar chain of events happens again and again. This is no different from other subjects, but unique to HE is the goal to build students’ cooking skills and ability to make sustainable choices in the household.

If we view cooking as the manipulation of raw foods until they reach a state of culture (Lévi-Strauss 1983), rhythm analysis offers a conceptualization of these manipulations and the resulting transformations as a set of visceral rhythms. These rhythms may be fast or slow, they may overlap and require multitasking or take time and require waiting. Learning to cook, then, entails mastering these rhythms. Indeed, Begley and Gallegos (2010) include efficient time use in their definition of cooking skills, and Short (2003) found that home cooks saw a need for organizational skills to have different dishes ready at the same time and to fit their cooking into a day’s schedule. Traditionally, such skills have been learnt within an oral/imitation culture, but home mentoring is declining (Slater and Hinds 2014), giving way to recipes and cookbooks. This has been described
as a shift from cooking as an art form to a rational science of the idealized dish (Begley and Gallegos 2010), which makes sense from a temporal perspective: a recipe suggests standardized times for certain processes to take place, such as a dough to rise or for someone to chop an onion. Thus, the rhythms become a mathematical average rather than a visceral reality. Since HE teachers make extensive use of recipes (Höijer, Hjälmeskog, and Christina 2011; Granberg, Olsson, and Sydner 2017), they sometimes need to help students adjust certain steps to speed up the process, for example by cutting smaller pieces that boil quicker or reducing rise times for doughs (Lindblom et al. 2015). This shows that despite the idealized time requirements in recipes, cooking is a temporally unpredictable activity that fits a more traditional task orientation better than the clock orientation of most schools (Thompson 1967). Therefore, cooking may be difficult to schedule no matter the lesson length, especially for novices.

Additionally, HE cooking is typically organized in small groups, such that students with differing kitchen experience cook, eat, and clean together (Höijer 2013; Petersson 2007; Gisslevik, Wernersson, and Larsson 2017). This means that the time it takes to cook something is central to HE teachers’ planning, and any mismatch with reality can give rise to student stress (Lindblom et al. 2015). In this paper, therefore, I argue that teachers’ experiences of time poverty in HE can be conceptualized as a form of arrhythmia, where teachers struggle to match the visceral rhythms of students and food to the mathematical rhythms of recipes, schedules, and the requirements of the syllabus. I also illuminate how the organization of cooking as a group activity with a meal-centered approach can hamper the repeated practicing of methods needed for individuals to develop cooking skills. Finally, I show how the ambiguous contents of the syllabus can leave room for interpretation based on cultural norms, which may further exacerbate experiences of time poverty and also reduce time spent on sustainability aspects.

Documenting the mathematical and the visceral

Between April and October 2018, I interviewed eight formally qualified, female HE teachers from six schools in three Swedish towns, and conducted participant observations during their lessons. I recruited the teachers by contacting schools within traveling distance and by posting in a dedicated HE Facebook group. The study was approved by the regional ethics board (Dnr: 2010-255-31 M), and all participants provided written consent when I visited their schools. I entered the field with an interest in HE food culture, but after my first observation, my aim broadened and deepened to include time use and experiences of time poverty. I had already included questions about time in my interview guide, but all respondents discussed temporal issues without prompting, which indicated their relevance.

During observations, I recorded sound with mp3 players, but also took field notes on mathematical rhythms in the form of clock times for major shifts in activities, such as cooking, eating, and cleaning. While rhythm analysis does not usually involve counting minutes, this was analytically important since adherence to timetables is an essential aspect of the context. I also noted visceral rhythms in the form of teacher activities, my own emotional responses such as boredom or stress, and any sensory input. For example, scents and sounds marked different phases of cooking, but also disturbances such as burning food. Thus, my analysis started in the field as I lived the space in my own right
(Lefebvre 1991), and throughout the analysis phase, I listened to my mp3 recordings again and again to retain the memory. My analysis focused on how teachers reasoned around temporal aspects and also on their actions. I created codes for teacher talk about time, such as “too much knowledge content,” but also for their actions, such as “finishing a meal is prioritized over theoretical reflection.” Summaries of the lessons and transcriptions of passages where teachers discussed temporal aspects were merged with my field notes and then grouped into themes (Braun and Clarke 2006). These themes revealed a constant need for teachers to manage arrhythmia, but also that these problems partly stemmed from the ubiquitous focus on meals and cultural expectations on what should be cooked in HE. To understand the full scope of this, we must start by looking at the teachers’ experience of trying to fit too many activities into too little time.

**A difficult jigsaw puzzle**

Several teachers found it difficult to fit the knowledge content of the syllabus into the time available. Already a small subject with its 118 hours, HE was also vulnerable to time loss by virtue of its long lessons. Vanja’s semester overview revealed several days that disappeared because of national holidays, and Birgitte mentioned that her “Monday groups” had lost five lessons to events like sports days, national tests, and outings, equaling 7% of the total hours. Because of time constraints, Sofie sometimes avoided trying out interesting pedagogic methods because they used up too many lessons. Asta wondered if she should make her teaching more superficial to save time, but did not want to. Mette had been advised by the National Agency of Education to collaborate with other subjects, but found this difficult both because she needed time to plan and because other subjects were organized differently over the school year. For example, Science studies was taught in spring whereas HE was scheduled throughout the year. Recent studies in Sweden and Finland (Lindblom et al. 2020; Haapala et al. 2014) corroborate that lack of time and scheduling issues are barriers for cross-disciplinary collaborations. Teachers of practical-esthetic subjects – of which HE is a part – may also be afraid to lose even more of their already scarce time by participating in collaborations with higher status, academic subjects that threaten to marginalize them (Nyroos 2008).

The aim of the HE course was to help students develop cooking skills and the ability to make sustainable choices. To this end, teachers constructed an ideal, linear progression from easy to advanced cooking, where basic method training in earlier years laid the groundwork for more difficult cooking later. For example, pancakes and pasta with minced meat sauce were basic dishes to be mastered relatively early, but by the time students reached grade 9, they were expected to make more difficult dishes. Vanja offered a concrete example where grade 7 made apple pie with store-bought vanilla sauce and grade 8 made the sauce from scratch. However, there was a year-long jump between these lessons, so the planned-for progression was hampered by the fragmentation of teaching time (Gisslevik, Wernersson, and Larsson 2018). Also, Vanja said many students knew how to bake because they did it at home, which raises the question whether progression is always linear, with a handful of objectively easy methods and recipes that fit novices, or if any method or dish is a good starting-point. Interestingly, Alice mentioned that even pancakes could be difficult because of the required manual skills with a spatula and frying pan. Another potentially problematic aspect of the desired progression in difficulty was
that it seemed to coincide with more sustainable choices, such that relatively unsustainable, basic cooking in earlier years developed toward higher demands later. Indirectly, sustainable cooking was therefore constructed as difficult and not a pervasive aspect of all HE cooking.

The practical nature of the subject entailed time-consuming tasks (Gisslevik, Wernersson, and Larsson 2018). Aside from the planning, correcting, documentation, and grading that most teachers do, HE teachers also bought and organized groceries (Taar and Vant 2017), a reoccurring task that depended on the shelf life of food and the size of storage spaces. When students planned their own meals, shopping took even longer than buying in bulk for everyone. Mette pondered preparing a trolley with foods for students to choose from instead of buying from lists, but had not tried it yet. Additionally, teachers did maintenance work such as buying new utensils, reporting nonfunctioning equipment to the janitor, and washing aprons, dishcloths, and towels. The practical nature of HE also meant teachers needed time to prepare and tidy up before and after lessons. Vanja had two sets of ten minutes scheduled for this, but experienced it as too little. When two HE lessons were scheduled after each other with no break at all, her colleague had to prepare for her lesson while her students were working, a clash of rhythms that felt disruptive to them both. During observations, Mette had a 120-minute lesson followed by half an hour’s lunch and then two 100-minute lessons with a five-minute break in between. She experienced this day as extremely stressful, as did I:

I have a headache even though I’ve only observed one lesson. Now it’s lunch for half an hour before the next group comes, and there are still students left who haven’t finished writing their reflections. I sit down to eat, but Mette can’t since she’s helping the students and also preparing fish for the next group. The atmosphere is tense, and I find it difficult to enjoy my food or even eat my fill. (…) Mette says, “This isn’t working!” while stroking her forehead. It looks as if she’s checking for a fever. I feel like I have a fever. Perhaps it’s projection, but even though I’m only here as an observer, I can feel how tough it is, how stressful.

(Edited field notes, Mette’s lesson)

As Mette found a few minutes to join me at a student desk to eat lunch, she discussed the arrhythmic schedule with me, only to realize she still had to prepare for the next group:

I’m thinking, should we just put up with this for a whole semester just because they can’t make a schedule? And also, there’s always someone … it … No matter what, it always becomes our problem. You see? And we’re so stupid and just solve the problem, and I don’t actually think that’s fair … when you think about it. And now I have to prepare this ((sighs)) fish. That’s the thing, you can’t have all the food out all the time in Home economics. So you can’t prepare … Like, you can’t prepare all the things. (Mette, interview)

When it came to teachers’ total working hours, they could also lose time to nonscheduled things. Three teachers voluntarily taught extra classes for immigrant children, while some teachers had to substitute for sick colleagues or assist during their lessons, sometimes at the same time that grocery deliveries arrived. Vanja told me that substituting for colleagues during her planning time was “taxing,” and she “barely had time to breathe.” During observations, she supervised a national test during her own lesson and another teacher substituted for her. At another time she was scheduled to be in two places at once.
Apart from arranging a progression from easy to difficult and to manage their daily and weekly rhythms, teachers also struggled to fit knowledge content from the syllabus into individual lessons. Based on the idealized rhythms of printed recipes, they strove to choose fitting dishes for students with differing foreknowledge and skills. They also chose recipes based on the number of steps, since keeping students occupied and giving them opportunities to practice techniques was highly valued. A good recipe had many steps but not too much waiting time, while a bad recipe meant quickly stirring a few ingredients together and then waiting for it to cook. However, teachers could make use of such waiting time for theoretical assignments. Helene said pizza was “exemplary” because it included many steps and she could insert theoretical work while the dough rose or the pizza baked, but her lessons were relatively long with their 140 minutes. Other teachers mentioned lesson length as a major concern. Some wished for longer lessons, but knew this would make the subject more vulnerable to time loss. They also feared students might lose concentration if lessons were longer. Moreover, lessons could be too long for purely theoretical content, which meant some teachers inserted recesses that reduced the total lesson time. Thus, the same lesson could be both too short and too long depending on activities. Mette also mentioned that when principals changed lesson lengths, she had to reorganize the entire contents because she could not reuse the same lesson plan and “just do the same things slower.” In comparison, other school subjects might be filled with several minor tasks, and any task could be interrupted and taken up again later:

We have a subject that can take different amounts of time, but we have this amount of time and we can never close the book and say, “We’ll continue next week”, or put the lid on and say . . . which you sometimes feel you need to, because of all these things, like . . . having the time to clean thoroughly, to reflect . . . (Sofie, interview)

All teachers agreed that practical work took a long time, but they also had certain expectations on how advanced students’ cooking should be. For example, Alice joked that if time was too scarce, “You can just boil an egg,” indicating that this was too easy. Helene also mentioned the boiling of an egg as insufficient for a passing grade, and these oblique references to the complexity of student cooking went hand in hand with a typical HE dramaturgy that centered on the HE version of a “proper meal” (Bugge and Reidar 2006; Ekström and Jonsson 2009; Murcott 2019).

A meal-based dramaturgy

The observed lessons were between 80 and 120 minutes, and were all organized around a meal, either in the form of cooking or of planning a meal for next time. They followed a pattern with four to five overlapping phases I have named settling, introduction, student work, meal, and wrap-up. Before the lesson, teachers prepared by checking special diets and student absences. Some wrote recipes on the whiteboard while others distributed them on paper. They also put ingredients and utensils on a counter, a trolley, or in the students’ kitchens. Sometimes they divided the foods into portions, which used up teacher time and deprived students of an opportunity to learn (Höijer 2013). For example, Alice spent 17 minutes gathering ingredients from a pantry that was so full she could hardly fit in there herself. She might have done this quicker if I had not been present, but on the other hand I helped by putting the ingredients she handed to me in
the students’ kitchens, something she would normally have done herself. Alice commented on the luxury of having help, and said the routine was a waste of time. She wished the students had everything in their own kitchens so she could spend her time on better things. I did not ask why she used her own time to prepare, since the practice is so ubiquitous that its analytical relevance slipped my mind. One possible explanation is that it saved time for cooking, which was highly prioritized. It might also stem from a desire to keep students out of storage spaces (Höijer 2013).

During the *settling* phase, students entered the classroom and took their seats. Alice liked to open the door a few minutes early to avoid starting late, while other teachers opened on the dot. During settling, teachers answered questions about recipes and kitchen groups, enquired about absences and latecomers, asked students to take down the chairs from the tables, chatted informally, or prepared ingredients. Unless they waited for latecomers or had issues with order, the settling phase took between one and two minutes. Katja said she never waited for latecomers because HE lessons were too short to waste any time, while Birgitte was unsure of when to start because different clocks in the school showed different times. She also mentioned that some groups were “very hard to calm down,” which meant the settling phase took longer than planned, reducing her already “tight” 80-minute lessons. For example, some students spent time begging to be in a particular kitchen, which prompted Birgitte to create permanent groups that used the same kitchen every week.

The *introduction* started when teachers addressed the whole group rather than individual students. They presented the theme of the lesson, group constellations, expected time use, recipes, and important terms or concepts. They went through a recipe, focusing on ingredients, cooking terms, utensils, techniques, time use, procedures, and sometimes sustainability. Vanja showed the ingredients while she talked, and Birgitte showed utensils. Helene focused on techniques and utensils but did not show them until it was time to use them. Introductions that covered a recipe generally took between 2.5 and 7 minutes. The shortest introduction was 0.5 minutes, because the students had planned what to cook the previous lesson and Vanja only told them to start. The longest ones, around 15 minutes, occurred when teachers gave detailed instructions, explanations, examples, and tips, or when they devoted time to discussing practical topics like Ramadan. Sometimes unexpected events disrupted the introduction, as when Mette had planned test cooking for six students, but two of those students were absent. This meant too many students would do their test cooking the following week, and Mette spent several minutes trying to solve this problem and getting visibly stressed since time was already scarce.

A typical example of an introduction that touched on sustainability aspects was Vanja’s run-through of an apple pie recipe (three dots in a parenthesis signifies student talk):

So, the crust … there’s wheat flour, Swedish, “from Swedish fields” it says. Oats, also Swedish. Why do you think we use oats? (…) Why do you … You can just use flour if you want. But why do we use this as well? (…) Well, it can be … This isn’t ecological in this case, but it’s a bit heatherier, why? (…) What does it contain? (…) Oats, what do they contain? (…) Yes, a bit of fiber. Then we have the unhealthy sugar. ((Laughs, looks at me)) We need it for a bit … bit of sweetness. And you’re using margarine. The group that uses lactose-free products have theirs here. These things. And you take 100 grams, you know, these lines (on
Vanja went on to describe the rest of the ingredients – eggs, potato starch, half-and-half cream, and full fat milk – without referring to any sustainability aspects. This was typical of all observed run-throughs: sustainability was only referred to in a sporadic, brief way and sometimes not at all. In interviews, teachers gave examples of assignments based on sustainability, but observations indicated that when the recipe was not chosen for its sustainability, teachers did not discuss it. They might have reasoned around unsustainable choices in relation to cultural traditions and taste, but this would have made introductions longer, which was in itself a problem: some teachers struggled to keep introductions short to leave enough time for student work, but if they were too short, students did not know what to do. Mette and Asta had tried making their introductions shorter, but then their students worked slower, so they did not save any net time. Sometimes students could be confused despite detailed introductions, as in Birgitte’s case:

Someone reads [the recipe] aloud, so they read through what we need and we discuss that, and I bring out all the ((laughs)) things. And then we read again . . . read through the recipe, and . . . And there are a thousand words they don’t understand. Always. It doesn’t matter how easy the recipe is, there are so many terms they don’t understand. And no matter how I explain . . . I wish I had the time to . . . “Now we’re going to whip this until it’s fluffy”. Just a small thing like that. That I could just stand there and whip it until it was fluffy, so that everyone understood. Or, well . . . “This is . . . this is folding, this is stirring, this is . . . ” And there are a number of things . . . and so many of them don’t understand. And then, like I said, even if they . . . the ones you think should understand, they get to their kitchens and they think it’s such great fun, and suddenly they’ve just . . . they’re standing there like little cooks, and they’ve poured all the eggs and the butter and everything into the same bowl, and they look super happy, and I just . . . ((laughs)) I think, “What we did didn’t help at all!” (Birgitte, interview)

Thus, Birgitte wished for time to demonstrate techniques, but other observations revealed that this too could be difficult. For example, Mette showed her grade 7 how to bread and fry fish but struggled to keep their attention. This may have been exacerbated when she instructed them to lay the tables while the butter melted in the pan, thus adding another rhythm to the demonstration and contributing to the scattered atmosphere. Perhaps demonstrations might work better if they fit students’ rhythms, so that they all watched the task and then immediately carried it out themselves (De Ron and Feldt 2013). However, students’ lack of attention might also reflect a phenomenon that Asta had noticed, where modern students needed more individualized instructions than earlier generations and had short attention spans. Several teachers said students did not see the relevance of long-term learning and lacked the patience to spend time on what would become important later. Some teachers also thought the students were generally slow and had poorer motor skills than before. Asta remembered students during the 1980’s who could make potatoes au gratin, a pork fillet, salad, and bread during a single lesson, and said modern students would never achieve that in the same time. This ideal image from times past may have contributed to feelings of not keeping up with the curriculum, even though specific dishes were not included in the syllabus.
The student work phase was always the longest, between 30.5 and 81 minutes. Its length depended on lesson length, such that the longer the lesson, the more time-consuming the recipe. In most cases, the phase entailed students cooking, laying the table, and doing some cleaning, but during four observations they planned a meal for next time instead. While introductions were teacher-led and controlled, the student work phase was more chaotic in nature and characterized by polyrhythmia. Even when all groups cooked the same thing, students carried out the steps in a recipe at different paces. Birgitte said the time for cooking an identical dish could differ as much as forty minutes between groups, which meant she needed to add tasks to fill the time when groups were quick. In general, teachers valued recipes that involved many steps that kept the students occupied. Helene mentioned that with lessons as long as hers, she had to insert theoretical content to make time in HE efficient. This focus on filling idle time with work has roots in housewife norms of the 19th century, when the subject was first installed (Johansson 1987), but it is also a staple of modern society where time is money and time-on-task is connected to learning (Millot and Lane 2002). However, the twin focus on meals and group work meant time-on-task was not equally distributed. Instead of all students practicing all the steps, they divided the work between them such that one fried the fish and another boiled the potatoes. Vanja even said that the very students who felt unsure of their cooking skills took a step back and left it to more seasoned students to take charge (cf Lindblom et al. 2016).

Another rhythmical issue was the difference in cooking times for different ingredients. Mette had her students write the order they had to carry out tasks, such as boiling the potatoes before frying the fish. Vanja and Sofie said students who cooked at home knew the proper order to do things, while others struggled with this. Sofie repeatedly explained the concept of cooking times during one observation, but the students still cooked the meat before the potatoes. She thought the students might be afraid not to get their share of meat, which indicated a rhythm of competition rather than food chemistry. When it came to other tasks, some teachers expected students to tidy and clean during cooking. Vanja assessed students’ ability to clear things away while they cooked, and Helene said there were always additional tasks to carry out in HE, such as emptying or filling the washing machine. These tasks were often referred to as “extra” or “other,” marking them as unrelated to the dramaturgy of cooking and therefore possibly less relevant. Sofie found that if she gave detailed instructions at the start of a lesson, it was difficult to motivate students to do more, since “What isn’t on the whiteboard doesn’t exist.” In a previous study (Petersson 2007), students pretended to be busy while waiting for something to cook so as not to be asked to do something else. This difference in status is even reflected in the syllabus, which separates – and thereby prioritizes – cooking from other housework (NAE 2011).

While students worked, teachers helped with practical problems, supervised, assessed, gave encouragement and tips, and answered questions on cooking methods, techniques, temperatures, and utensils. They also kept track of time, advised students to use time efficiently, and reminded them of tasks to complete before the lesson ended. When students cooked different dishes, Katja pointed out how alert she needed to be because they asked a lot of different questions to do with different techniques. Students could also make the same thing but with different ingredients, such as wheat versus gluten-free flour. During one such observation with Helene, I was asked for help with teaching
because one student needed constant help. The request was denied, but it revealed that the polyrhythmia of cooking could be experienced as demanding. Even when only four students cooked and the rest worked on other tasks outside the classroom, Mette found it difficult to assess their cooking because of relentless questions that disrupted her observations and note-taking. She mentioned this to me after the lesson, but said she could not ignore students who needed extra help and encouragement. Because it was difficult to assess everyone as they worked simultaneously, Vanja sometimes photographed student activities and graded them after the lesson. Sofie solved the conundrum by constantly assessing, even during “training lessons,” since unexpected events such as nose bleeds could disrupt lessons meant for assessment. Moreover, students could show skills she wanted to consider for grading at any time. On top of the polyrhythmia involved in student work, teachers could also have additional tasks during lessons, such as organizing food deliveries and supervising individual tests while the rest of the students cooked. During observations, Sofie and Birgitte were visited by colleagues who needed to discuss different issues. Teachers could also solve problems to do with coming lessons. For example, Helene made several attempts to call the school canteen to ask to borrow some flour because she had run out.

The lessons devoted to planning meals were never stressful, since students always finished their planning on time, even though teachers could still face the problem of polyrhythmia when some students finished before others and needed additional tasks. During planning, students were instructed to focus on different sustainability aspects. For example, Sofie let one group of students use a 90-minute lesson to plan a sustainable fast food meal, but the bulk of the lesson was devoted to calculating the price of each ingredient. This strong focus on financial aspects was not matched by a corresponding calculation of, for example, carbon dioxide emissions. Despite the environmental theme, Sofie told me most students chose to make hamburgers with beef. She saw the freedom to “choose wrong” as the point of the examination: students had an opportunity to show their environmental knowledge by planning a sustainable meal, but they were not constrained to. Instead, they were prompted to reason around what they should have done to be more sustainable. A similar phenomenon occurred during Vanja’s planning lessons, where students planned a meal without meat, fish, or poultry. She recommended that they use Swedish products and “think about HEM [health, economy, and environment],” but students were free to choose what they wanted and were only required to calculate price. Several students chose to make pancakes, some with ice cream. Thus, the purported focus on health or the environment was overshadowed by the economical perspective in the form of adherence to a budget.

During the meal phase, students ate what they had cooked. This took between 4.5 and 18.5 minutes, and Vanja described the group that ate for longest as slow. Sometimes it was important that students eat at the same time, but this was not always possible due to the polyrhythmia of cooking. Some teachers saw the HE meal as an opportunity for reflection and discussion, such that they brought up the cooking process, nutritional aspects, or other knowledge content from the syllabus, but they could also tell students what they would cook next time or remind them how many weeks remained of the semester. Mostly they left the students alone to enjoy their food. It was important that the meal be “cozy” and “nice,” unless time was short and the teacher urged students to eat faster. Baking with yeast always used up the whole lesson, so students had to stay behind
to eat after it had officially ended. In one case, Birgitte instructed her students to come back after lunch to taste their bread. Thus, the meal was prioritized even when its rhythm extended past the end of the lesson.

During the wrap-up phase, anything left undone was finished, such as cleaning, washing dishes, reflecting, repeating terms and concepts, planning for next time, filling in question-and-answer sheets, and self-assessing. Teachers reminded students how much time was left, assessed their cooking and/or cleaning, asked about unwashed dishes, gave instructions on how to use the dishwasher, and sometimes washed dishes themselves. They could also prepare for the next lesson by wiping the whiteboard and writing new instructions for the next group. The phase took between 2.5 and 36 minutes depending on how many tasks remained and whether the teacher instigated reflections. If time was scarce, teachers prioritized cleaning over reflection. I did not ask why, but a possible explanation is that they would otherwise have had to do the cleaning themselves. Lessons could finish early or late depending on how much time was spent on cooking. For example, breading and frying a fish instead of just frying it added time both to the introduction and the student work phase. Similarly, baking with yeast was difficult to fit into 90 or 100 minutes. When individual students finished their tasks early, they were given extra tasks or were allowed to leave. Sofie avoided letting students go early because she did not want to create a “culture of leaving,” while Birgitte said she sometimes let students go because those who remained might benefit from the calm atmosphere of a half-empty classroom. Individual students could also be allowed to stay past the end of the lesson to clean or to write mandatory reflections.

From meals and reasoning to sustainable cooking skills?

HE teachers operated in a temporal landscape with competing ideals from the past, the now, and the future, apparent in attempts to conserve food traditions, allow student choice, and transform cooking to be more sustainable. Each decision in the classroom had consequences in the short or long term, with some rhythms ending with the lesson and others reaching far into the future. For example, the here-and-now of cooking a cheap, tasty meal contended with the slow, long rhythm of learning for life or making sustainable choices whose consequences might not be apparent for many years. A concrete aspect of this was money versus health or the environment: the budget for HE was a yearly allocated, limited resource that would impact teaching negatively if it ran out mid-semester, while health and the environment were more abstract, long-term resources where current choices had consequences long after the students left school. Thus, teachers grappled with at least two timelines (cf Thompson and Cook 2017), where the transitory, cyclical, and potentially stressful activity of producing a meal could conflict with the long-term, linear goal of building students’ sustainable cooking skills. The syllabus (NAE 2011) stipulates that students learn how to cook basic meals in earlier years, and then to further develop their ability to plan and to use methods, foods, and utensils in a functional way. However, it is unclear what is meant by, for example, being able to “plan and prepare meals” (NAE 2011, 45). How advanced methods are students meant to master? Based on the vague idea of a reasonably accomplished student in grade
9, teachers planned specific dishes and techniques to be practiced and learned, and devised activities that built toward that goal through the rhythms of individual students in collaboration with peers throughout successive lessons, semesters, and school years.

But perhaps, given students’ differing foreknowledge and background, it is impossible to devise a one size fits all progression? Some students may end up practicing skills they already have in HE, while others struggle to master those same skills. Worse, novice students may have to practice new methods at the same time that they carry out other difficult tasks such as deciphering a recipe (Granberg, Brante, Olsson, and Sydner 2017) and cooking a complex meal together with others (Lindblom et al. 2016) within a predetermined time frame (Lindblom et al. 2015). It is far from certain that they acquire the required skills under these circumstances, or that the “then” of the meal leads to the “then” of cooking skills. Of course, it can be argued that a good way of learning is by participating in a cultural, situated context where meals are made in a master/apprentice fashion (Lave and Wenger 1991; Granberg, Olsson, and Sydner 2017). But this is a time-consuming process, where a succession of many cooking situations builds long-term skills. In HE, with its mere 118 hours, this may be less feasible. The meal-centered lesson dramaturgy prioritized meals over individual method practice, and since students value cooking a tasty meal and finishing on time (Gisslevik, Wernersson, and Larsson 2019; Höijer 2013; Lindblom et al. 2015), they tend to leave difficult tasks to more experienced group members instead of practicing themselves (Lindblom et al. 2016).

The focus on meals also deprioritized theoretical perspectives such as discussions about sustainability. Applying sustainability to basic cooking from the very start might save time in the long run, and several HE researchers argue for an integrated approach where theory is applied in practice (Beinert et al. 2020, 2021; Palojoki 2003; Benn 2010; Øvrebø 2015). Similarly, many general theories of learning promote action, experience, and context-bound participation as central to learning (Illeris 2007; Kolb and Kolb 2005; Lave and Wenger 1991). But although the HE syllabus promotes “a process where thinking, sensory experiences and action are all interlinked” (NAE 2011, 43), teachers tended to separate theory and practice (Beinert et al. 2020). During cooking, they focused on helping students succeed with their meal rather than discussing environmental or health aspects of what was cooked (Höijer 2013; Lindblom et al. 2015; Granberg, Olsson, and Sydner 2017). Granted, it might seem counterproductive to add discussions about sustainability to the already pressing problems of what temperature the stove should be or where to find a specific utensil, especially if students are not experienced cooks. However, many comments could be inserted in passing, such as energy consumption for different cooking methods or the amount of water needed to boil potatoes. Sustainability could also be built into the choice of recipes, which was sometimes but not always the case. There was always freedom to “choose wrong” even during test cooking, which echoes the ideal of empowerment (Cullbrand 2003), where the individual is offered the knowledge and skills to make sustainable choices but is not constrained to. There is scholarly division when it comes to how normative HE education should be (Håkansson 2015; Øvrebø 2015; Gelinder, Hjalmeskog, and Lidar 2020), and it may be seen as normative to demand that students cook sustainably in a subject permeated by
sustainability perspectives. However, is this not because the overarching normative ideal is individualism, where freedom of choice is prioritized over the survival of our fellow animals and even the planet itself?

I suggest the theory/practice divide is deeply rooted in Western culture, and it would be disingenuous to lay the blame solely on HE teachers, since schools are not separate from the culture they exist in. In HE, as in the rest of society, cultural and economic concerns can eclipse health or environmental aspects (Øvrebø 2015; Höijer, Hjälmeskog, and Christina 2014). A meal has sensory, social, and symbolic meaning in itself (Douglas 1972; Fischler 2011; Sobal and Nelson 2003) and is not only a building block in the development of cooking skills or a sustainable future. Since HE lessons are based on meals, students naturally choose foods based on sensory preference even when the objective is to act sustainably (Gisslevik, Wernersson, and Larsson 2019; Gelinder, Hjälmeskog, and Lidar 2020; Bohm 2016). Because of these problems inherent in the meal-centered approach, researchers have suggested more experimental cooking in HE (Beinert et al. 2020; Lindblom et al. 2015). Learning in school is already chopped up to fit timetables, so it might be possible to take this form to an extreme and devote entire lessons to simply practicing methods individually before adding them together to make a meal. In that way, each student could spend more time on each step and have a chance to learn at their own pace, and teachers might have time to integrate theoretical discussions with practical tasks. For added impact, students could try out different cooking times and techniques to assess resulting sensory properties. For example, they might cook fish for three, four, and five minutes and note how taste and texture change with each minute. They might also compare boiled, fried, and grilled fish. Notes taken during these experiments could then be used as a basis for decisions on cooking times and techniques during lessons devoted to cooking an entire meal. This way, students would develop cooking skills based on personal preferences rather than always relying on a recipe.

However, it can be difficult to move away from the meal as a lesson goal because it is seen as the heart of the subject (Petersson 2007; Höijer 2013) and is probably what makes HE popular (NAE 2004). Cooking in HE is already somewhat deauthenticated, because it is scheduled according to mathematical rhythms and syllabus goals rather than visceral rhythms of hunger and satiety or the social norms and cues that normally guide eating behavior. Food in HE is a means to an end rather than an end in itself, which is partly why students find it “fake” compared to food in the home (Höijer 2013; Höijer, Hjälmeskog, and Christina 2011). To further strip it of authenticity by changing to a more method-centered approach in order to support the building of long-term cooking skills might deplete student goodwill entirely. Even teachers themselves might be loath to try this, since they base much of their teaching on cultural values and traditions. Then again, experimental cooking might awaken student curiosity and lessen inhibitions, since the end result is not as important and failure may not be as daunting. Hopefully, further research will reveal whether an experimental approach can mitigate the arrhythmia of student cooking, free up time for individual method practicing and sustainability discussions, and help build long-term sustainable cooking skills.

**Acknowledgments**

The author wishes to thank the participating teachers for sharing their time and thoughts.
Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Ingela Bohm is an Associate Professor at the Department of Food, Nutrition and Culinary Science at Umeå University, Sweden. Her research interests include food sociology, food culture, time/space, and social identity.

ORCID

Ingela Bohm [http://orcid.org/0000-0002-9898-7055]

References

Åbacka, G. 2008. “Att Lära För Livet Hemma Och I Skolan: Elevers Uppfattningar Av Kost Och Hälsa, Konsumtion Och Privatekonomi Samt Hushåll Och Miljö.” PhD diss, Åbo Akademi.

Begley, A., and D. Gallegos. 2010. “What’s Cooking for Dietetics? A Review of the Literature.” Nutrition & Dietetics 67 (1): 26–30. doi:10.1111/j.1747-0080.2010.01406.x.

Beinert, C., P. Palojoki, G. Åbacka, P. Hardy–Johnson, D. Engeset, E. R. Hillesund, A. M. Selvik Ask, N. C. Øverby, and F. N. Vik. 2020. “The Mismatch between Teaching Practices and Curriculum Goals in Norwegian Home Economics Classes: A Missed Opportunity.” Education Inquiry 12 (2): 183–201.

Beinert, C., P. Palojoki, G. K. Åbacka, N. C. Øverby, and F. N. Vik. 2021. “‘Is There Any Sugar in Bread?’ A Qualitative Video Analysis of Student Activating Learning Tasks in Home Economics.” Acta Didactica Norden 15. doi:10.5617/adn.8078.

Benn, J. 2010. “Home Economics in Development through Action Research.” International Journal of Home Economics 3 (1): 2–19.

Bohm, I., C. Lindblom, G. Åbacka, and H. Agneta. 2015. “‘Don’t Give Us an Assignment Where We Have to Use Spinach!’: Food Choice and Discourse in Home and Consumer Studies.” International Journal of Consumer Studies 40 (1): 57–65. doi:10.1111/i jcs.12213.

Bohm, I. 2016. “‘We’re Made of Meat, so Why Should We Eat Vegetables?’: Food Discourses in the School Subject Home and Consumer Studies.” PhD diss, Umeå university.

Braun, V., and V. Clarke. 2006. “Using Thematic Analysis in Psychology.” Qualitative Research in Psychology 3 (2): 77–101. doi:10.1171/1478088706qpp063oa.

Bugge, A. B., and A. Reidar. 2006. “Domestic Dinner Representations and Practices of a Proper Meal among Young Suburban Mothers.” Journal of Consumer Culture 6 (2): 203–228. doi:10.1177/1469540506064744.

Cullbrand, I. 2003. På Väg Mot Empowerment – Reflektioner Över Tre Studier Som Behandlar Undervisning I Hemkunskap. Gothenburg: Acta universitatis Gothoburgensis.

De Ron, L., and M. Feldt. 2013. Lära Och Bedöma I Hem- och Konsumentkunskap Lgr 11. Stockholm: Vulkan.

Douglas, M. 1972. “Deciphering a Meal.” Daedalus 101 (1): 61–81.

Ekström, M. P., and I. M. Jonsson. 2009. Food in Contemporary Society, edited by Hille Janhonen-Abruquah & Paivi Palojoki, 23–28. Helsinki: University of Helsinki.

Fischler, C. 2011. “Commensality, Society and Culture.” Social Science Information 50 (3–4): 528–548. doi:10.1177/0539018411413963.

Gelinder, L., K. Hjälmeskog, and M. Lidar. 2020. “Sustainable Food Choices? A Study of Students’ Actions in A Home and Consumer Studies Classroom.” Environmental Education Research 26 (1): 81–94. doi:10.1080/13504622.2019.1698714.
Gisslevik, E., I. Wernersson, and C. Larsson. 2017. “Teaching Sustainable Food Consumption in Swedish Home Economics: A Case Study.” International Journal of Home Economics 10 (2): 52.

Gisslevik, E., I. Wernersson, and C. Larsson. 2018. “Home Economics Teachers' Perceptions of Facilitating and Inhibiting Factors When Teaching Sustainable Food Consumption.” Sustainability 10 (5): 1463. doi:10.3390/su10051463.

Gisslevik, E., I. Wernersson, and C. Larsson. 2019. “Pupils’ Participation in and Response to Sustainable Food Education in Swedish Home and Consumer Studies: A Case-study.” Scandinavian Journal of Educational Research 63 (4): 585–604. doi:10.1080/00313831.2017.1415965.

Granberg, A., G. Brante, V. Olsson, and Y. M. Sydner. 2017. “Knowing How to Use and Understand Recipes: What Arithmetic Understanding Is Needed When Students with Mild Intellectual Disabilities Use Recipes in Practical Cooking Lessons in Home Economics?” International Journal of Consumer Studies 41 (5): 494–500. doi:10.1111/ijcs.12357.

Granberg, A., V. Olsson, and Y. M. Sydner. 2017. “Teaching and Learning Cooking Skills in Home Economics: What Do Teachers for Students with Mild Intellectual Disabilities Consider Important to Learn?” British Food Journal 119 (5): 1067–1078. doi:10.1108/BFJ-09-2016-0435.

Haapala, I., S. Biggs, R. Cederberg, and A. Kosonen. 2014. “Home Economics Teachers’ Intentions and Engagement in Teaching Sustainable Development.” Scandinavian Journal of Educational Research 58 (1): 41–54. doi:10.1080/00313831.2012.696213.

Håkansson, A. 2015. “Indoctrination or Education? Intention of Unqualified Teachers to Transfer Consumption Norms in Home Economics Teaching.” International Journal of Consumer Studies 39 (6): 682–691. doi:10.1111/ijcs.12180.

Höijer, K., K. Hjälmeskog, and F. Christina. 2011. “Food with a purpose”–Home Economics Teachers’ Construction of Food and Home.” International Journal of Consumer Studies 35 (5): 514–519. doi:10.1111/j.1470-6431.2011.01014.x.

Höijer, K., K. Hjälmeskog, and F. Christina. 2014. “The Role of Food Selection in Swedish Home Economics: The Educational Visions and Cultural Meaning.” Ecology of Food and Nutrition 53 (5): 484–502. doi:10.1080/03670244.2013.870072.

Höijer, K. 2013. “Contested Food: The Construction of Home and Consumer Studies as a Cultural Space.” Phd diss, Uppsala university.

Illeris, K. 2007. How We Learn: Learning and Non-learning in School and Beyond. New York: Routledge.

Johansson, U. 1987. “Att Skolas För Hemmet. Trädgårdsskötsel, Slöjd, Huslig Ekonomi Och Nykterhetsundervisning I Den Svenska Folkskolan 1842–1919 Med Exempel Från Sköns FörsAMLing.” Phd diss, Umeå University.

Kolb, A. Y., and D. A. Kolb. 2005. “Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education.” Academy of Management Learning & Education 4 (2): 193–212. doi:10.5465/amle.2005.17268566.

Lave, J., and E. Wenger. 1991. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.

Lefebvre, H. 1991. The Production of Space. Vol. 142. Oxford: Blackwell Publishing.

Lefebvre, H. 2004. Rhythmanalysis: Space, Time and Everyday Life. Oxford: Blackwell Publishing.

Lévi-Strauss, C. 1983. The Raw and the Cooked: Mythologiques, Volume 1. Vol. 1. Chicago: University of Chicago Press.

Lindblom, C., I. E. Arreman, C. Olsson, H. Landfors, M. Waling, and H. Agneta. 2020. “Challenges to Interdisciplinary Teaching for Nutrition and Health in Swedish Compulsory Schools.” International Journal of Home Economics 13 (1): 15–29.

Lindblom, C., I. E. Arreman, and H. Agneta. 2013. “Practical Conditions for Home and Consumer Studies in Swedish Compulsory Education: A Survey Study.” International Journal of Consumer Studies 37 (5): 556–563. doi:10.1111/ijcs.12027.

Lindblom, C., I. E. Arreman, I. Bohm, and H. Agneta. 2015. “The Importance of Time Frames in Swedish Home and Consumer Studies.” International Journal of Consumer Studies 40 (3): 299–308. doi:10.1111/ijcs.12256.
Lindblom, C., I. E. Arreman, I. Bohm, and H. Agneta. 2016. “Group Work Interaction among Pupils in Home and Consumer Studies in Sweden.” International Journal of Home Economics 9 (1): 35–53.

Millot, B., and J. Lane. 2002. “The Efficient Use of Time in Education.” Education Economics 10 (2): 209–228. doi:10.1080/09645290210126922.

Murcott, A. 2019. Introducing the Sociology of Food and Eating. London: Bloomsbury Academic.

NAE (National Agency for Education). 2004. Nationella Utvärderingen Av Grundskolan 2003 – Huvudrapport: Bild, Hem- Och Konsumentkunskap, Idrott Och Hälsa, Musik Och Slöjd. Stockholm: Fritzes.

NAE (National Agency for Education). 2011. Curriculum for the Compulsory School, Preschool Class and the Recreation Centre 2011. Stockholm: Fritzes.

Nanayakkara, J., M. Burton, C. Margerison, and A. Worsley. 2018. “Parents’ and Young Adults’ Perceptions of Secondary School Food Education in Australia.” British Food Journal 120 (5): 1151–1166. doi:10.1108/BFJ-10-2017-0554.

Nyroos, M. 2008. “Where Does Time Go? Teaching and Time Use from the Perspective of Teachers.” Teachers and Teaching: Theory and Practice 14 (1): 17–33. doi:10.1080/13540600701837616.

Övrebo, E. M. 2015. “How Home Economics Teachers in Norwegian Lower Secondary Schools Implement Sustainability in Their Teaching.” International Journal of Learning, Teaching and Educational Research 10 (2): 72–83.

Palojoki, P. 2003. “Food, Learning and Children–crossing the Boundaries between School and Home.” Barn 2: 51–66.

Petersson, M. 2007. “Att Genusappa På Säker Eller Minerad Mark: Hem–och Konsumentkunskap Ur Ett Könsperspektiv.” Phd diss, Gothenburg university.

Ronto, R., L. Ball, D. Pendergast, and N. Harris. 2017. “What Is the Status of Food Literacy in Australian High Schools? Perceptions of Home Economics Teachers.” Appetite 108: 326–334. doi:10.1016/j.appet.2016.10.024.

Short, F. 2003. “Domestic Cooking Practices and Cooking Skills: Findings from an English Study.” Food Service Technology 3 (3-4): 177–185. doi:10.1111/j.1471-5740.2003.00080.x.

Slater, J., and A. Hinds. 2014. “University Student Perceptions of Home Economics: Food and Nutrition Education.” International Journal of Home Economics 7 (2): 68–80.

Sobal, J., and M. K. Nelson. 2003. “Commensal Eating Patterns: A Community Study.” Appetite 41 (2): 181–190. doi:10.1016/S0195-6663(03)00078-3.

Taar, J., and T. Vant. 2017. “Estonian Multi-subject Teacher’s Competence and Experiences.” International Journal of Home Economics 10 (2): 99–108.

Thompson, E. P. 1967. “Time, Work-discipline, and Industrial Capitalism.” Past & Present 38 (1): 56–97. doi:10.1093/past/38.1.56.

Thompson, G., and I. Cook. 2017. “The Politics of Teaching Time in Disciplinary and Control Societies.” British Journal of Sociology of Education 38 (1): 26–37. doi:10.1080/01425692.2016.1234365.