

# FOOD DIVERSITY IN SCHOOL BASED FOOD EDUCATION

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Academy of Food Education Didactics

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DANISH SCHOOL OF EDUCATION

AARHUS UNIVERSITY



# BACKGROUND/CONTEXT

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- Food and meals evolve over time, place and occasion
- Personal identity is created through food and meals (among others)
- Our special focus: **Food diversity**
  
- Influence on Food Education (HHE)
  - The subject develops and changes due to the increasing food diversity
  - Some changes are uncomplicated and slip invisibly into teaching food at schools
  - Others are more complex and entail didactic challenges, choices and decisions.



# COLLABORATIVE RESEARCH PROJECT

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- Academy for Food Education Didactics (HEE Didactics)
- Research collaboration between the six Danish teacher-training University Colleges and the Danish School of Education (DPU), Aarhus University



# DEFINITION

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**Diversity:** versatility and difference

**Food diversity:** versatile and different taste preferences, different ways of eating on different occasions and at different times.



# PURPOSE

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To develop a scientifically informed teaching guide for compulsory school based Food Education with recommendations that can support teachers' didactic choices and justifications regarding **food diversity**.



# PRELIMINARY RESEARCH QUESTIONS

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- How and why do individual teachers handle food diversity in teaching food and meals?
- How do teachers act when students, for various reasons, do not eat certain foodstuff?
- What considerations do teachers take towards students, and what considerations do they think should be taken?
- How do teachers behave if there is food they do not eat themselves?
- How do teachers justify relevant and/or necessary student considerations, and how do they make related didactic choices?
- How do students – according to teachers – relate to various food and meal considerations?
- How do teacher students (in teacher training) reflect didactically on food diversity in teaching taste?



# MIXED METHODS APPROACH

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1. International literature review (11 selected studies)
2. Survey among Danish Food Education teachers at public and private schools (N=380)
3. Individual interviews with Food Education teachers from the five Danish regions (N=24)
4. Case descriptions from teaching food diversity in Food Education, in teacher training courses at the Danish University Colleges (N=5)



# 1. FOOD DIVERSITY IN THE RESEARCH LITERATURE

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- I. How is food diversity described in research and what understandings and assumptions about food diversity are emerging?
  
- II. What pedagogical or didactic challenges and/or opportunities are associated with food diversity in the research literature?





# LITERATURE DATABASES

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- Search string with overall keywords: **Home Economics Education**  $\alpha$  **Food Diversity**
  - Proquest
  - Goggle Scholar
    - Only few hits
- Snowballing
- New search string
  - Australian Education Index
  - Education Database
  - Eric
- 2010-2021





# INCLUDED STUDIES

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Forfatter	Titel	Land	Ramme
Block, Gibbs, Macfarlane & Townsend (2015)	Promoting appreciation of cultural diversity and inclusion with the Stephanie Alexander Kitchen Garden Program	Australien	Skolehave
Bohm, Lindblom, Åbacka, Bengs & Hörnell (2015)	“He just has to like ham” – The centrality of meat in home and consumer studies	Sverige	Madkundskab
Bohm, Lindblom, Åbacka, Bengs & Hörnell (2016)	Absence, deviance and unattainable ideals – Discourses on vegetarianism in the Swedish school subject Home and Consumer Studies	Sverige	Madkundskab
Bohm, Lindblom, Åbacka & Hörnell (2015)	‘Don’t give us an assignment where we have to use spinach!’: Food choice and discourse in home and consumer studies	Sverige	Madkundskab
García (2018)	Materialized Practices of Food as Borderlands Performing as Pedagogy	USA	Uden for skolens rammer
Höijer, Hjälmeskog & Fjellström (2014)	The Role of Food Selection in Swedish Home Economics: The Educational Visions and Cultural Meaning	Sverige	Madkundskab
Janhonen-Abuquah, Posti-Ahokas, Palojoki & Lehtomaki (2014)	Developing learning games for culturally responsive Home Economics teaching	Finland	Læreruddannelse
Johnson (2007)	Enemy Kitchen: An Interview with Michael Rakowitz	USA	Uden for skolens rammer
Jonsson, Ekström & Gustafsson (2005)	Appetizing learning in Swedish comprehensive schools: An attempt to employ food and tasting in a new form of experimental education	Sverige	Madkundskab
Lautenschlager & Smith (2007)	Beliefs, knowledge, and values held by inner-city youth about gardening, nutrition, and cooking	USA	Skolehave
Shin & Bae (2019)	Conflict Kitchen and Enemy Kitchen: Socially Engaged Food Pedagogy	USA	Uden for skolens rammer

# TWO PARADIGMS OF FOOD DIVERSITY

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Health  
and/or  
climate

How to eat  
healthy food

How to eat  
sustainable  
food

Cultural  
diversity

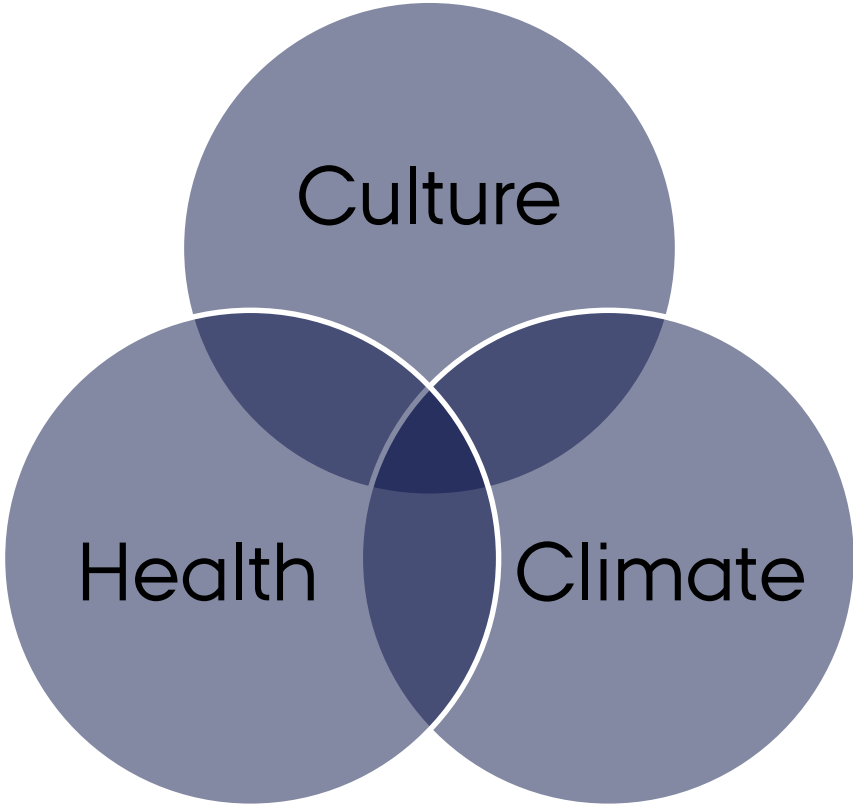
How to  
acknowledge  
other cultures

How to  
change  
cultural  
boundaries



# FOOD DIVERSITY IN AN INTERSECTION

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# BASIC DIDACTIC REFLECTIONS

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Difference in how the teachers deal with food diversity based on:

- The subject field, i.e. the **content** according to the curriculum
- The **conditions** for the teaching, i.e. the **framework factors**, e.g.:
  - Food selection (which foods should be prepared and learned about)
  - Organization of students in groups (eating the same or different foods)
  - Hygiene (in principle, always must be present)
  - Food allergies/health considerations
  - Religious considerations
  - ...



# SUMMARIZED LITERATURE REVIEW

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## Recommendations teaching food diversity

- I. Using food diversity as a starting point for changing the range of possibilities for students' food choices and cultural diversity
- II. Considering how students can work to represent societal food diversity increasing their knowledge and understandings of cultural diversity
- III. Considering whether Food Education can constitute an arena for active experimentation with reshaping of cultural food and meal boundaries.



# 2. SURVEY

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Data collection (spring 2021)

- Survey among Danish Food Education (HEE) teachers (N=380)
- 110 single items

Statistical approach

- Factor analysis
- Cluster analysis



# FACTOR ANALYSIS

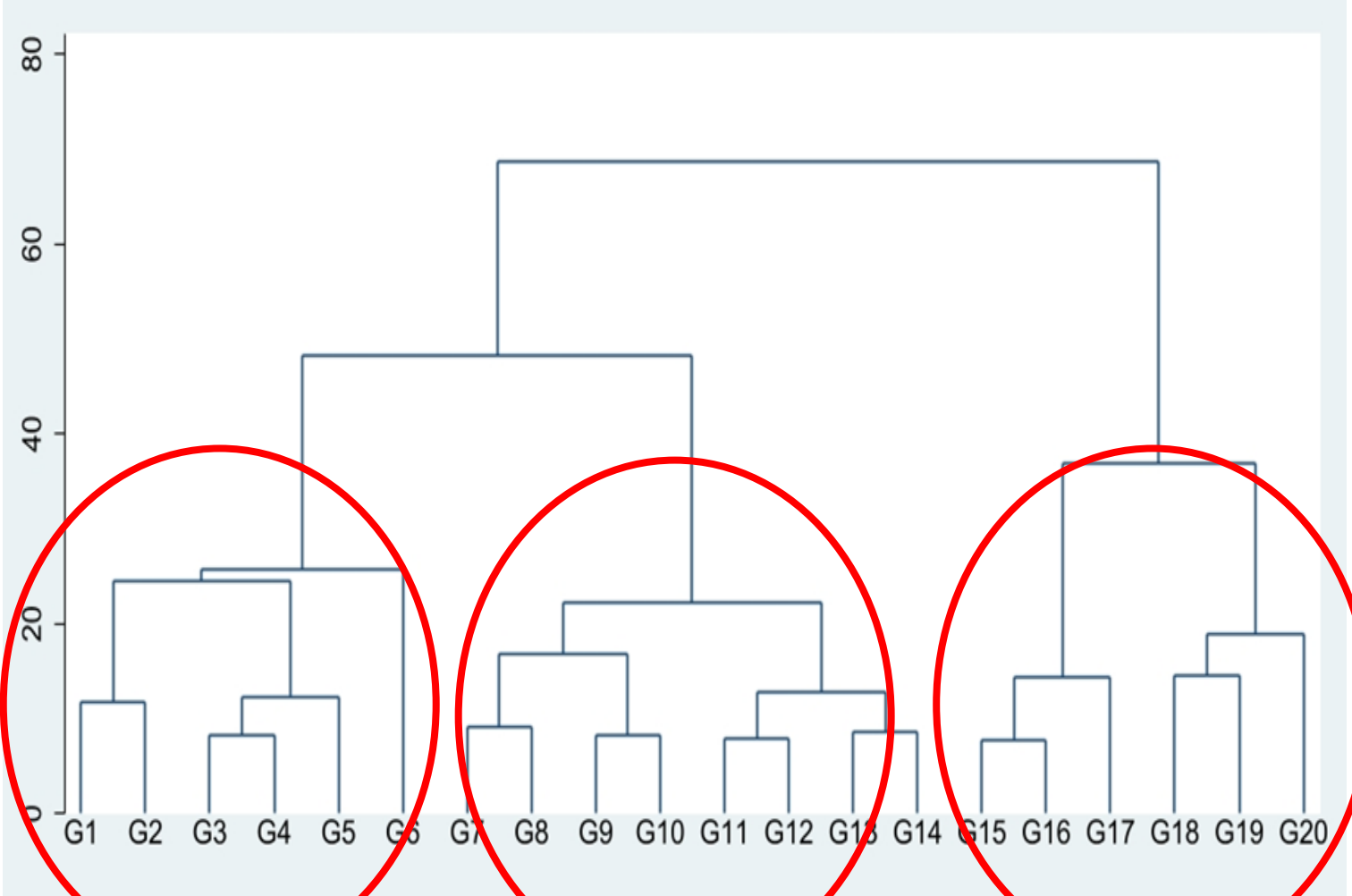
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<i>Latent constructs</i>	<i>Items</i>	<i>Alpha</i>
Didactic reflections upon food diversity	4	.86
Influence of own attitudes in teaching	4	.90
Attitude towards students expanding their taste competencies	4	.61
Consideration for the students	3	.71
Experience of challenges associated with food diversity	2	.76





# CLUSTER ANALYSIS





	Cluster 1	Cluster 2	Cluster 3
<b>Latent constructs</b>			
Teachers degree of:			
• Didactic reflections upon food diversity	.56	-.82	.37
• Influence of own attitudes in teaching	.52	-.81	.04
• Attitude towards students expanding their taste competencies	.66	.10	-.87
• Consideration for the students	.34	-.43	-.08
• Experience of challenges associated with food diversity	.32	-.52	.00
<b>Single items</b>			
Last lesson: To what extent did food diversity provide you with didactic opportunities?	.38	-.50	.12
To what extent is food diversity a subject that you generally teach?	.35	-.32	.15
<b>Background variables</b>			
Seniority of teachers	.20	.02	-.08
Gender distribution in % (M/F)	16/84	12/88	16/84
% teachers with HE as main teaching subject	73	79	72
% distribution public/private schools	77/24	77/23	74/26
n	112	70	89
%	41	26	33

N = 271

p = 0,000

# THE THREE CLUSTERS

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- Through our empirical analysis we identified three distinct groups of teachers: very different attitudes towards food diversity in the subject Food Education, as well as how they handle food diversity in their teaching.
- We relate these three groups to teacher profiles by using existing researchbased knowledge of good teaching practice in the subject of Food Education.



# CLUSTER 1

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- 41% - mainly experienced Food Education teachers
- They emphasized the students' work with both new and familiar foods
- They expanded the students' taste preferences combined with acknowledgment of the societal cultural realities such as divergence in religion, ideology, commitment to sustainability and health
- They had a professional view of the teaching, with a focus on gastronomy and creative cooking and foodstuffs
- They had a compulsory practice, compliant with the subject's purpose and competence goals.



# CLUSTER 2

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- 26% - mainly inexperienced Food Education teachers
- They had very little focus on taste challenges and competencies
- They did not work with developing new student experiences
- The students did not have much influence on the content or on the taste of different foodstuffs and meals
- In the practical execution, they worked according to recipes, without critically reflected food choices, no co-responsibility for issues such as religious food and meal cultures, sustainability, climate, health etc.
- Their teaching was not consistent with the subject's purpose and competence goals.



# CLUSTER 3

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- 33% - mainly 'young' teachers with few Food Education experiences
- They had an unclear teaching content with individual approaches
- They recognized the diverse reality in terms of food, apparently without the ambition of broadening the students' taste horizons.
- Food and meal communities were not important
- They showed no professional identity and didn't emphasize creative and gastronomic cooking
- They didn't expand students' knowledge or experience of food diversity, didn't focus on taste competence at all
- Their teaching was not consistent with the subject's purpose and competence goals.



# CONCLUSION OF THE SURVEY

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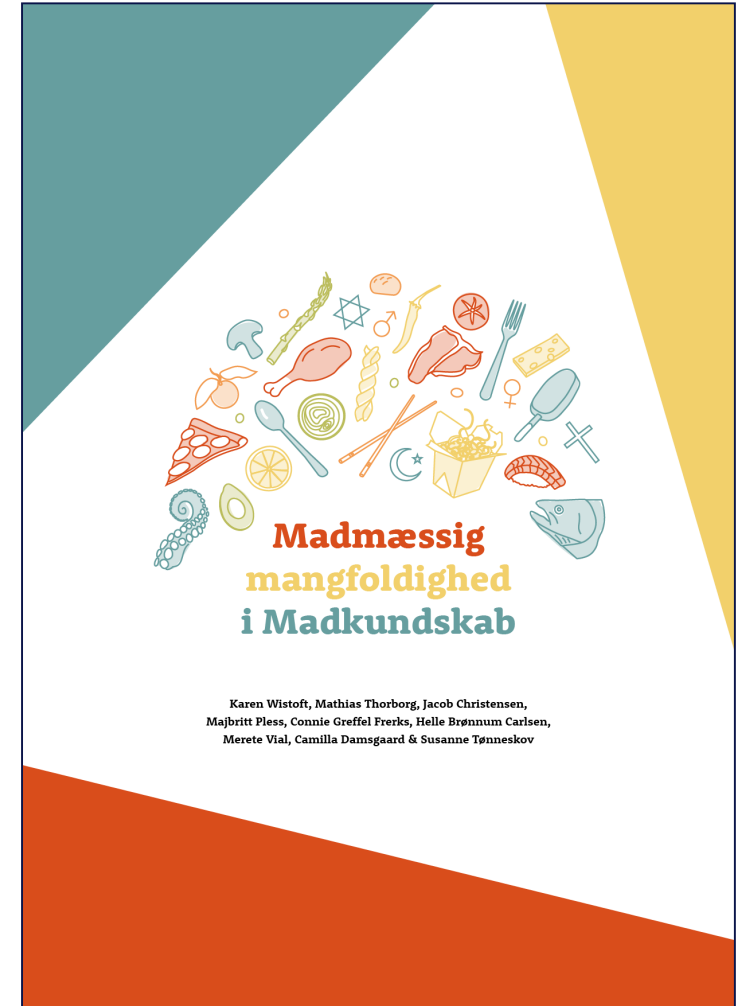
- The teacher profile in cluster 1 was the one which was worth following, since it turns out to be closest to the purpose, the curriculum and the competence and learning goals of Food Education in the Danish compulsory school
- However, the teachers in cluster 1 were not - for the most part - creative or forward-looking in their teaching
- They didn't allow students to work experimentally, e.g. developing own recipes and dishes
- They didn't invite students to decide what to cook or how to eat - with regard to students' own food diversity.



# RESEARCH REPORT (WISTOFT ET AL. 2022)

All results presented including:

1. Literature review
  2. Survey
  3. Interviews
  4. Case descriptions
- Recommendations for Food Education practice that didactically reflects food diversity
  - Questions og analysis strategies
  - Reference list





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