

Protecting and improving the nation's health

Food teaching in primary schools: A framework of knowledge and skills





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Introduction

This framework is a guide to the knowledge and skills expected of primary school teachers who teach children about food. It outlines the knowledge and skills that would be developed over time – resulting in exemplary food teaching.

The aim is to help primary schools implement the requirements for food within the new National Curriculum for Design and Technology (D&T) in England and the Core Competences for Children and Young People aged 5 to 16 years. These curriculum measures, together with the other action points of the School Food Plan, seek to promote a 'pro-food' ethos in schools and heighten awareness of the integral part that food and a whole school approach plays in children's health, wellbeing and attainment. School food provision and how children keep themselves healthy will be monitored by the Office for Standards in Education, Children's Services and Skills (Ofsted) from September 2015 as part of the new Common Inspection Framework.

The framework can be used to:

- review and plan courses for trainee teachers, and set out expectations for qualified teacher status
- audit current practice by existing teachers, supporting performance-related development
- support professional reviews with colleagues
- plan and run professional training courses to support best practice

The framework:

- sets standards, expectations and requirements for qualified teachers teaching food in primary schools
- highlights key areas for development, presented in a manageable, easy to convey way with clear expectations
- provides aspirational goals which will be developed over time (describing accomplished food teaching)
- stipulates distinctive descriptions of food teaching, rather than generic teaching standards (which they may be used alongside)

The framework is presented in nine sections:

- 1. Developing professional competence
- 2. Taking a whole school approach
- 3. Teaching the curriculum
- 4. Managing practical food classes
- 5. Teaching food preparation and cooking

- 6. Designing, making and evaluating food
- 7. Promoting and applying nutrition
- 8. Applying aspects of consumer awareness
- 9. Implementing good food safety and hygiene

The stem for each section starts with 'When teaching, accomplished teachers ...'. The term 'accomplished' is used to describe a highly trained or skilled professional in a particular activity.

Acknowledgments:

Public Health England (PHE), along with the British Nutrition Foundation (BNF), initiated the development of this framework in response to a meeting comprising the BNF, the Food Teachers Centre, Ofsted, the Department for Education and the School Food Plan to discuss the management and provision of food teaching. All participants felt that guidelines would be of benefit to support teachers who deliver food teaching in schools.

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1. Developing professional competence

When teaching, accomplished teachers:

- **1.1** Further their professional expertise by selecting appropriate professional development activities, such as observing experienced teachers, undertaking practical training in food skills or updating their subject knowledge (through face-to-face events and online training);
- **1.2** Develop an action plan for professional development (based on a needs analysis audit) and how this will be applied in school;
- **1.3** Ensure that they meet national standards for the subject, such as Level 2 Food Safety.

2. Taking a whole school approach

When teaching, accomplished teachers:

- **2.1** Contribute to whole school planning for food education. Work collaboratively with colleagues to enhance learning opportunities, secure consistency of key concepts and healthy eating messages (such as using the UK healthy eating model) and coherence (by sequencing when key concepts are taught across subjects, eg science, PSHE and physical education);
- **2.2** Use their expertise to support the *whole school approach to food* and the development of policies, understanding the position of food education in the health and wellbeing agenda of the whole school and work with school caterers where appropriate;
- **2.3** Use their food lessons to motivate change in behaviour, such as to influence uptake of healthier school lunch choices.

3. Teaching the curriculum

When teaching, accomplished teachers:

3.1 Develop schemes of work that take account of current educational thinking, best practice, national policies and statutory requirements, for example, the national curriculum programme of study, advice from professional associations (such as the Design and Technology Association), School Food Plan, Ofsted guidance, Public Health England and current healthy eating advice;

- **3.2** Ensure that the range of food, ingredients and recipes studied come from the major food groups and reflect the recommended guidelines for a healthy diet;
- **3.3** Set out a rationale for the scheme of work, including the aims, focus for each school year group, the anticipated starting point and differentiated learning outcomes for pupils, the key skills and knowledge that will be taught and the reason that these have been chosen. Review expectations against a nationally published progression framework or similar:
- **3.4** Communicate the aims and content of the scheme of work to a range of audiences, including parents/carers, other teachers and the pupils. Specify the key learning for each activity in terms of skills and knowledge rather than recipe or project;
- **3.5** Articulate and justify the resources that will be required to teach the curriculum effectively and inclusively, such as budget for ingredients, equipment (including cooking facilities), and learning support;
- **3.6** Develop an effective support network to provide a rich learning experience for learners, such as local food businesses, local chefs and food experts;
- **3.7** Prepare or know where to access stimulating and up-to-date resources that support effective learning.

4. Managing practical food classes

When teaching, accomplished teachers:

- **4.1** Set up safe food preparation and cooking space in the classroom, and know how to get pupils ready to cook;
- **4.2** Select and demonstrate appropriate teaching strategies during different stages of a practical lesson, such as spot demonstrations, individual support, group discussion review and tasting;
- **4.3** Organise safe and successful tasting sessions;
- **4.4** Use effective classroom systems for managing health and safety (such as cleaning and safe storage of ingredients and cooked dishes, allergens), resourcing practical work (such as shopping) and maintenance of equipment. Contribute to risk assessments;

- **4.5** Act as role models of good practice for food storage, handling, preparing, cooking and serving food and drinks, including the safe use of equipment;
- **4.6** Brief all those that work alongside them in the food classroom in the necessary systems and processes, eg teaching assistants, parents and carers.

5. Teaching food preparation and cooking (equipment, ingredients, food sources, functional characteristics, processes and skills)

When teaching food, accomplished teachers understand how children learn key concepts and skills, and use age/ability appropriate teaching strategies that engage learners, challenge a range of abilities, and build confidence and independence.

When teaching, accomplished teachers:

- **5.1** Name, taste and prepare a broad range of ingredients and healthy recipes, reflecting cultural diversity;
- **5.2** Exhibit a high level of competence in a wide range of food skills and demonstrate these for effective learning (Appendix 2: Skills);
- **5.3** Select and use an appropriate range of small equipment, safely and efficiently;
- **5.4** Show awareness of their own safety and of those around them when handling food and equipment. Ensure safe practices are always followed when using hot or sharp equipment, eg oven gloves;
- **5.5** Choose ingredients, taking into account their nutritional, functional and sensory properties, in addition to other factors (such as cost, seasonality, sustainability);
- **5.6** Apply skills and understanding to plan, prepare and cook simple dishes/menus safely and hygienically for a healthy, varied diet. Appreciate the value of eating together.

6. Designing, making and evaluating food

When teaching food, accomplished teachers understand how children learn key concepts and skills, and use age/ability appropriate teaching strategies that engage learners, challenge a range of abilities, and build confidence and independence.

When teaching, accomplished teachers:

- **6.1** Use research and develop criteria to inform the design of recipes, dishes and menus that are fit for purpose, aimed at particular individuals or groups;
- **6.2** Select from and use a wide range of ingredients, according to their functional properties and aesthetic qualities;
- **6.3** Taste, evaluate and refine their ideas and dishes against a specification, taking account the views of others to improve their work;
- **6.4** Investigate and analyse a range of existing food products.

7. Promoting and applying nutrition

When teaching food, accomplished teachers understand how children learn key concepts and skills, and use age/ability appropriate teaching strategies that engage learners, challenge a range of abilities, and build confidence and independence.

When teaching, accomplished teachers:

- **7.1** Apply current healthy eating advice, and understanding of people's needs, to developing diets for different individuals;
- **7.2** Are aware of the importance of a healthy and balanced diet, good oral health and being physically active for health and wellbeing;
- **7.3** Know that food and drinks provide energy in different amounts;
- **7.4** Know that a variety of food is needed in the diet, and that these provide nutrients;
- **7.5** Are aware that people's food requirements change through life and that some people eat or avoid certain foods (religion/intolerance);

7.6 Actively promote the benefits of a healthy diet and active lifestyle throughout their teaching.

8. Applying aspects of consumer awareness (food origin, food choice, food labelling)

When teaching food, accomplished teachers understand how children learn key concepts and skills, and use age/ability appropriate teaching strategies that engage learners, challenge a range of abilities, and build confidence and independence.

When teaching, accomplished teachers:

- **8.1** Understand where and how a variety of ingredients are grown, reared, caught and processed and know the basic steps in producing food;
- **8.2** Recognise the wide range of factors involved in food and drink choice, including influences such as preference, ethical belief, availability, season, need, cost, packaging, food provenance, culture, religion, allergy/intolerance, advertising, body image and peer pressure;
- **8.3** Understand and demonstrate how to make informed choices to achieve a healthy balanced diet (such as utilising food labels and nutrition information);
- **8.4** Are aware that it is important to choose appropriate portion sizes for their needs;
- **8.5** Understand how the look, aroma and taste of food influences the choices that people make. Use simple taste tests.

9. Implementing good food safety and hygiene

When teaching food, accomplished teachers understand how children learn key concepts and skills, and use age/ability appropriate teaching strategies that engage learners, challenge a range of abilities, and build confidence and independence.

When teaching, accomplished teachers:

9.1 Understand the principles of cleaning, preventing cross contamination, chilling, cooking food thoroughly and reheating food until it is steaming hot;

- **9.2** Apply food safety information on food labels when buying, storing and consuming food and drinks;
- **9.3** Know about food poisoning and its symptoms and undertake preventative measures to reduce the risk of illness through bacterial contamination and multiplication;
- **9.4** Are aware of common allergens and preventative measures to reduce the risk of contamination and allergic reaction;
- **9.5** Understand the importance of good food safety and hygiene, including knowing how to get ready to cook (such as having hair tied back, removing jewellery and nail varnish, thoroughly washing and drying hands before and after handling food, and wearing a clean apron);
- **9.6** Model exemplary practical skills and food safety and hygiene processes, including personal hygiene.

Further information

- British Nutrition Foundation: www.nutrition.org.uk
- Change4Life: http://www.nhs.uk/change4life/Pages/change-for-life.aspx
- Children's Food Trust: http://www.childrensfoodtrust.org.uk/
- Core Competences for children and young people aged 5-16 years: http://www.nutrition.org.uk/foodinschools/competences/competences.html
- Countryside Classroom: http://www.countrysideclassroom.org.uk/
- Design and Technology Association: www.data.org.uk
- FACE: http://www.face-online.org.uk/
- Focus on Food: www.focusonfood.org
- Food a fact of life: http://www.foodafactoflife.org.uk/
- Food for Life partnership:http://www.foodforlife.org.uk/
- Food Standards Agency: www.food.gov.uk
- Food Teachers Centre: http://www.foodteacherscentre.co.uk/
- National Curriculum (England)
 https://www.gov.uk/government/collections/national-curriculum
- NHS Choices:
 - http://www.nhs.uk/livewell/healthy-eating/Pages/Healthyeating.aspx
- OFSTED:https://www.gov.uk/government/organisations/ofsted
- Public Health England: https://www.gov.uk/government/organisations/public-health-englandx
- School Food Plan: http://www.schoolfoodplan.com/

Appendix 1: Needs analysis audit

For each section, reflect on each statement and rate your current competence. This will help to determine your training needs.

Name:		Da	ate:			
Developing professional	1	2	3	4	5	Comments
competence	(Low)				(High)	

competence	(Low)		(High)	
1.1				
1.2				
1.3				

Taking a whole school approach	1 (Low)	2	3	4	5 (High)	Comments
2.1						
2.2						
2.3						

Teaching the curriculum	1 (Low)	2	3	4	5 (High)	Comments
3.1						
3.2						
3.3						
3.4 3.5						
3.5						
3.6						
3.7						

Managing practical food classes	1 (Low)	2	3	4	5 (High)	Comments
4.1	(===:)				(*	
4.2						
4.3						
4.4						
4.5						
4.6						
4.7						
4.8						
4.9						
4.10						

Teaching food preparation and cooking	1 (Low)	2	3	4	5 (High)	Comments
5.1						
5.2						
5.3						
5.4						
5.5						
5.6						

1	2	3	4	5	Comments
(Low)				(High)	
	(Low)			1 - 1 - 1	

Promoting and applying nutrition	1 (Low)	2	3	4	5 (High)	Comments
7.1						
7.2						
7.3						
7.4						
7.5						
7.6						

Applying aspects of consumer	1	2	3	4	5	Comments
awareness	(Low)				(High)	
8.1						
8.2						
8.3						
8.4						
8.5						
8.6						

Implementing good food safety and	1	2	3	4	5	Comments
hygiene	(Low)				(High)	
9.1						
9.2						
9.3						
9.4						
9.5						
9.6						

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S	Signed:	

MY DEVELOPMENT RECORD				
Name				
Areas for development (where you have gaps, least confidence, need support or refresh)	Identification of specific professional development targets (to be addressed over the next phase of training)			

Appendix 2: Skills

Let's Get Practical!



Practical foods skills progression chart (for pupils aged 3-11 years)









Note:

This chart provides guidance regarding the food skills that most children should be able to undertake at a given age and the equipment they should be able to use. The skills build progressively and children should be able to undertake the skills in previous columns as well as those in the column within which they are working. The ages used are given for the purpose of organising the skills and should not be followed slavishly. Focus should be on the progression of skills. If you find that the children you teach are able to do more or less than the chart indicates for their age, look to the previous or next column and work from that point.

Remember:

Children's hands are smaller than adults. Use smaller sized equipment, e.g. knives and kitchen scissors. Use smaller ingredients to help children master techniques and gain confidence, e.g. small sized apples, peppers, or use softer ingredients.

Practical foods skills progression chart for pupils aged 3-11 years				
Food skills	Age 3-5	Age 5-7	Age 7-9	Age 9-11
	Pull - hull fruit, pick grapes from vine			
	Crush - soft fruit with a potato masher or fork, e.g. raspberries as a topping for yogurt or for a fruit drink	Juice - using a juicer to extract juice, e.g. orange	Press - using a garlic press	
	Peel - by hand, e.g. satsuma, banana	Peel - with a swivel peeler with adult support	Peel - with a swivel peeler with supervision	Peel - with a swivel peel to create food ribbons to be used in a dish, e.g. courgette/carrot ribbons with supervision
		Spread - soft ingredients, e.g. hummus	Spread - ingredients evenly over another food	
	Shape - foods by hand and with a rolling pin	Shape - with accuracy for a desired effect, e.g. basic bread roll - use a rolling pin	Shape and mould - to create visually appealing products e.g. mini cottage loaf or plait, wrap	

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Let's Get Practical!



Food	Age 3-5	Age 5-7	Age 7-9	Age 9-11
skills				
	Mix/stir - to loosely combine ingredients - mash ingredients together using a fork	Mix/stir - with increasing thoroughness to combine ingredients - whisk foods using a fork - rub in fat to flour - knead dough	Mix/stir - any ingredients thoroughly - whisk foods using a hand- whisk	Mix/stir - fold ingredients together carefully
	Spoon - ingredients between containers	Spoon - ingredients into different containers with increasing accuracy and minimal spillage	Spoon - be able to use two spoons to transfer ingredients into different size/shape containers with minimal spillage, e.g. liquid foods into baking cases (muffin mixture)	Spoon - be able to gauge the quantities spooned to ensure an equal amount of ingredient in each container
	Measure - using a spoon, e.g. dried herbs, dried fruit - count ingredients	Measure - using different size measuring spoons, e.g. liquids - refer to ingredients in simple fractions, e.g. half, quarter	Measure - using a measuring jug with support to obtain accuracy - using digital scales with support to obtain accuracy	Measure - using a measuring jug independently and accurately - using digital and analogue scales accurately and independently
	Cut out - ingredients with a cutter, e.g. dough for scones	Cut out - ingredients neatly with a cutter - use a table knife to cut dough in equal portions, e.g. cheese straws	Cut out - placing the cutter in positions to make good of the material available and avoid waste	
		Grate - soft foods, e.g. cheese, cucumber	Grate - firmer foods, e.g. carrots, apples	Grate - using the zesting part of a grater, e.g. lemon, orange - use a nutmeg grater
	Tear - fresh herbs	Snip - fresh herbs, spring onions	Snip - with greater dexterity and control, e.g. to shred lettuce or cabbage leaves for salad	
		sift - sift flour in to a bowl		
		Tread - thread soft foods onto cocktail sticks, e.g. fruit kebab – strawberries, Satsuma segments	Tread - medium resistance foods onto kebab sticks, e.g. mushrooms, courgettes	Tread - higher resistance foods onto kebab sticks, e.g. peppers, onions
	Cut - soft foods with butter knife, e.g. banana, canned peach slices	Cut - low resistance foods with a table knife in to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms - use a fork to secure foods	Cut - medium resistance foods with a vegetable knife, e.g. cucumber use a fork or the claw grip to secure foods - medium resistant or partly prepared foods using a bridge hold, e.g. cut half a tomato into a quarter, halve canned potatoes, halve large grapes	Cut - higher resistance food with a vegetable knife, using the claw grip, e.g. celery, carrots - higher resistant foods from whole using the bridge hold, e.g. halve an apple, raw potato

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Let's Get Practical!



Recipe instructions	Age 3-5	Age 5-7	Age 7-9	Age 9-11
	Follow - instructions given one at a time by an adult	Follow - a simple recipe supported by an adult	Follow - a simple recipe with guidance from an adult	Follow - a simple recipe independently
	Carryout - instructions with support	Carryout - instructions with a little support	Carryout - instructions independently	Carryout - modifications to recipes

Equipment	Age 3-5	Age 5-7	Age 7-9	Age 9-11
Crushing/squeezing	Potato masher Fork	Juicer	Garlic press	
Peeling	Peel by hand	Swivel peeler (adult support)	Swivel peeler (adult supervision)	
Shaping	Rolling pin			
Mixing	Mixing spoons	Whisk	Blender (adult supervision)	
Measuring	Spoons Cups	Measuring spoons of different sizes	Measuring jug Digital scales	Analogue scales
Cutting	Butter knife Cutters	Table knife	Vegetable knife (adult supervision)	
Snipping		Kitchen scissors (adult supervision)		
Grating		Grater (adult support)	Grater (adult support)	Grater (light adult supervision)
Heating			With adult support and under adult supervision use: Toaster Hob	Under adult supervision use: Kettle Grill Oven

The images in this chart are courtesy of the British Nutrition Foundation.

For recipes and recipe videos to support the skills in this chart, go to: www.foodafactoflife.org.uk

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