FOOD LITERACY, WELL-BEING, AND SUSTAINABILITY IN PRIMARY SCHOOL: A CASE STUDY

Gabriella Ferrara
University of Palermo, Italy
gabriella.ferrara@unipa.it

Rosetta Morreale
University of Palermo, Italy
rosetta.morreale@unipa.it

Carlo Rossi
University of Palermo, Italy
carlo.rossi@unipa.it

Double Blind Peer Review

Citation
Ferrara, G., Morreale, R., & Rossi, C. (2026). Food literacy, well-being, and sustainability in primary school: A case study. *Italian Journal of Health Education, Sport and Inclusive Didactics*, *10*(1).
https://doi.org/10.32043/gsd.v1i1.1702

Doi: https://doi.org/10.32043/gsd.v1i1.1702

Copyright notice:
© 2026 The Author(s). This is an open access, peer-reviewed article published by Cares S.r.l. – REN Press and distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

renpress.it/index.php/gsdj
ISSN: 3103-5744

ABSTRACT
This contribution examines the project "Fruit and Well-being – Food Education and Healthy Lifestyles", carried out at the "Andrea Camilleri" Comprehensive Institute in Favara within the framework of the national programme "Fruit and Vegetables in Schools", as an interdisciplinary educational experience aimed at promoting food literacy in primary education. Grounded in a pedagogical perspective that understands food education not as the mere transmission of nutritional prescriptions, but as a transformative practice capable of intertwining health, environmental sustainability, active citizenship, and social responsibility, the study explores the formative potential of a pathway based on active and inclusive methodologies. The intervention combined guided reflection on eating habits, direct experiences of mindful consumption, sensory and interdisciplinary workshops, environmental education activities, and a final authentic task focused on designing a "healthy snack." From a methodological point of view, the study is configured as a case study and draws on systematic observations, students' work, and assessment rubrics to identify emerging learning processes, attitudes, and behaviours. The evidence collected highlights a strengthening of knowledge related to the principles of healthy eating, greater awareness of seasonality, waste reduction, and the quality of food choices, as well as the development of collaborative and responsible competences. The project shows how food literacy, when framed within a broad pedagogical perspective, can function as an educational device capable of fostering well-being, inclusion, and citizenship competences in primary school.

KEYWORDS
Food literacy; food education; primary school; sustainability; active citizenship.

Received 2026-05-15
Published 2026-07-15

1. **Food literacy and food citizenship in primary school: the "Fruit and well-being" project as an interdisciplinary pedagogical experience**

Within the framework of the transformations affecting the contemporary food system, food education assumes a relevance that goes beyond the merely nutritional dimension and directly involves the fields of pedagogy, public health and democratic citizenship. The growing spread of ultra-processed foods, the pervasiveness of food marketing, the weakening of family practices related to conscious consumption, and the emergence of new forms of inequality in access to fresh and nutritious foods outline a scenario in which food choices cannot be interpreted as purely individual acts, but rather as the outcomes of complex cultural, social, and environmental processes (Monteiro et al., 2018; Swinburn et al., 2019; Willett et al., 2019). In this context, schools are called upon to perform an essential function not only in the transmission of knowledge, but also in the education of individuals capable of developing critical attitudes, ethical awareness, and practical competencies concerning their relationship with food (Contento, 2007; Dudley et al., 2015).

Indeed, nutrition is not simply an area related to care for the body, but a formative crossroads in which health, identity, relationships, sustainability, and social justice are intertwined. Educating for healthy eating means promoting lifestyles oriented towards well-being but also activating reflective processes concerning the origin of foods, seasonality, the environmental impact of consumption choices, the reduction of waste, and responsibility towards the community and the planet (FAO, 2019; Willett et al., 2019). From this perspective, food emerges as a cultural and pedagogical object through which the relationship between individual and environment, everyday experience, and active citizenship can be interpreted (Dewey, 1986; Kolb, 2014).

Within this horizon, the notion of *food literacy* is situated, understood as an integrated set of knowledge, skills, attitudes, and critical dispositions that enable individuals to plan, choose, prepare, and consume food in a conscious, sustainable, and responsible way (Cullen et al., 2015; Truman et al., 2017; Vidgen & Gallegos, 2014). This concept broadens the traditional idea of food education, moving beyond purely prescriptive and nutritional-informative approaches in order to recognise its educational, transformative, and social scope (Krause et al., 2018; Velardo, 2015). *Food literacy* is also connected to *health literacy*, translating the

principles of self-care and individual and collective well-being into everyday food practices.

Primary school represents, in this regard, a particularly significant context. It is at this stage that habits, preferences, representations, and routines are structured, which may shape the relationship with food in a lasting way (Birch, 1999; DeCosta et al., 2017). Early intervention means offering children opportunities to know, experiment, name, compare, choose, and reflect, within pathways that enhance the concrete dimension of experience and the integration between disciplinary knowledge and everyday life (Ares et al., 2024; Omidvar et al., 2023). In this sense, effective food education cannot be limited to communicating correct rules, but must promote meaningful, situated, and participatory practices capable of activating authentic learning processes (Contento, 2007; Dudley et al., 2015).

It is within this perspective that the project "Fruit and well-being – Food education and healthy lifestyles" is situated. The project was carried out at the "Andrea Camilleri" Comprehensive Institute in Favara within the framework of the national programme "Fruit and vegetables in schools". Although the initiative was embedded in an institutional framework aimed at promoting the consumption of fruit and vegetable products among primary school pupils, it developed into a broader interdisciplinary educational pathway aimed at fostering food awareness, environmental responsibility, collaborative competencies, and attitudes of active citizenship (Evans et al., 2012).

This contribution aims to analyse this experience as a case study, exploring its pedagogical value and transformative potential in relation to the promotion of *food literacy* in primary school. More specifically, the paper aims to: a) outline the theoretical framework within which food education can be positioned as an interdisciplinary pedagogical practice; b) interpret *food literacy* as a formative device capable of combining health, sustainability and citizenship; c) document the educational practice implemented at the "Andrea Camilleri" Comprehensive Institute in Favara; and d) discuss the educational implications of the experience concerning the development of learning, behaviours and attitudes oriented towards well-being (Stake, 1995; Yin, 2018).

2. Food literacy and food education in educational literature

In recent years, international literature has progressively broadened the meaning of food education, recognising the inadequacy of approaches that are exclusively transmissive or centred on the communication of nutritional prescriptions (Contento, 2007). In contexts characterised by the increasing complexity of food systems, the multiplication of media messages about food, and the coexistence of caloric abundance and nutritional poverty, the need has emerged to promote more

articulated competences capable of supporting conscious choices and everyday practices of well-being (Swinburn et al., 2019; Willett et al., 2019). The notion of *food literacy* fits within this framework, defining a multidimensional construct that includes knowledge, operational skills, critical capacities, and reflective attitudes connected to the relationship with food (Truman et al., 2017; Vidgen & Gallegos, 2014).

Food literacy is therefore not limited to knowledge of nutrients or to the simple distinction between healthy and unhealthy foods. It implies the ability to read food from a systemic perspective, understanding the link between production, distribution, consumption, sustainability, health, and social justice (Cullen et al., 2015; FAO, 2019). In this sense, food competence is structured as a form of literacy that brings together cognitive, practical, relational, and ethical dimensions, enabling the development of a more conscious relationship with one's lifestyle and with the environmental and cultural context to which one belongs (Velardo, 2015; Vidgen & Gallegos, 2014).

The connection between *food literacy* and *health literacy* appears particularly relevant. While the latter concerns the ability to access, understand, evaluate, and use information useful for health, the former represents a concrete expression of it within the sphere of everyday eating practices (Nutbeam, 2000; Sørensen et al., 2012). This connection makes it possible to interpret food education not as an isolated sector, but as part of a broader educational project aimed at strengthening decision-making autonomy, personal responsibility, and the ability to orient oneself within complex environments (Krause et al., 2018; Velardo, 2015). In this sense, food is not only an object of knowledge but also an opportunity to learn how to make decisions, evaluate alternatives, manage external influences, and develop a more critical relationship with consumption.

From a pedagogical perspective, the literature highlights the effectiveness of approaches that integrate direct experience, active participation, laboratory-based learning, and interdisciplinarity (Dewey, 1986; Dudley et al., 2015; Kolb, 2014). The most promising interventions are those that allow pupils to come into concrete contact with foods, observe their characteristics and origin, explore taste through the senses, reflect on their own habits, and connect food experience to scientific, linguistic, mathematical, environmental, and civic contents (Charlton et al., 2021; Varman et al., 2021). From this perspective, the school is not only a place of instruction, but a living environment in which practices, meanings, and value orientations are constructed.

The centrality of experiential learning appears particularly significant in primary school, where knowledge is strongly structured in relation to embodiment, concreteness, narration, and shared action (Dewey, 1986; Kolb, 2014). Speaking

about food with children means working on images, routines, preferences, emotions, family habits, everyday gestures, and cultural representations. It follows that food education, in order to be truly effective, must be able to activate processes of engagement that transform information into experience, and experience into reflection (Contento, 2007; Varman et al., 2021).

The literature also recognises the relevance of the environmental and civic dimension of food education. Choices related to food refer, in fact, to the sustainability of supply chains, the reduction of waste, the responsible use of resources, seasonality, and respect for human labour and the ecosystem (FAO, 2019; Willett et al., 2019). In this way, *food literacy* also takes the form of literacy for food citizenship, through which the subject learns to place personal choices within a broader horizon of responsibility towards others and towards the planet (Ares et al., 2024; Cullen et al., 2015). The promotion of well-being is therefore inseparable from reflection on the common good.

A further element that has emerged strongly concerns the need for assessment tools capable of capturing not only the acquisition of knowledge, but also changes in attitudes, practices, and awareness (Black & Wiliam, 1998; Wiggins, 1998). In educational contexts, this requires the adoption of qualitative and mixed tools, capable of interpreting the transformation processes that accompany food education pathways (Creswell & Clark, 2007; Omidvar et al., 2023). Systematic observations, pupils' productions, assessment rubrics, oral feedback, and authentic tasks can offer meaningful indicators of the development of food competence (Gulikers et al., 2004; Wiggins, 1998).

From this point of view, the present contribution is situated within a line of research that interprets primary school as a generative environment for *food literacy*, assuming food education as an interdisciplinary, inclusive practice oriented towards the construction of well-being, sustainability, and active citizenship (Ares et al., 2024; Omidvar et al., 2023).

3. From nutritional prescription to a pedagogy of well-being: food literacy as a formative device

3.1 Food as an educational experience between health, environment, and responsibility

Reinterpreted from a pedagogical perspective, food education does not coincide with the mere transmission of rules concerning what is correct to eat. An exclusively prescriptive approach risks producing superficial learning, which is difficult to transfer to everyday life and scarcely capable of influencing the deep representations that guide the relationship with food (Contento, 2007). On the

contrary, assuming nutrition as an educational theme means recognising its anthropological, social, and cultural density. Eating is an act that involves the body, desire, relationships, memory, contexts of belonging, and systems of values; for this reason, educating about food means working on a plurality of interconnected dimensions (Dewey, 1986; Velardo, 2015).

From this perspective, *food literacy* can be interpreted as a formative device capable of intertwining health, experience, and citizenship. Food becomes an object of learning not only because it is necessary to know its nutritional characteristics, but because it allows issues relating to self-care, responsibility towards the environment, waste management, food justice, seasonality, consumption, and social behaviours to be addressed (Cullen et al., 2015; FAO, 2019; Vidgen & Gallegos, 2014). Food competence is therefore located at the crossroads of health education, environmental education and civic education (Ares et al., 2024; Krause et al., 2018).

Nutrition also constitutes a privileged space for promoting forms of transformative learning. When food is explored through concrete activities, workshops, observations, tastings, comparisons, verbalisation, and authentic tasks, it ceases to be abstract content and becomes an experience (Dudley et al., 2015; Kolb, 2014; Varman et al., 2021). This experience, when adequately mediated at the didactic level, can activate processes of awareness and re-elaboration that affect everyday habits and the image that children construct of well-being (Charlton et al., 2021; DeCosta et al., 2017). In this sense, food knowledge is rooted in life and is configured as knowledge for living well with oneself and with others.

3.2 **Primary school as a generative environment for conscious eating practices**

Primary school represents a particularly fertile context for the development of *food literacy*. In this setting, the formation of habits is closely intertwined with concrete experience, adult mediation, peer relationships, and the structuring of meaningful routines (Birch, 1999; DeCosta et al., 2017). The school environment can become a place in which food is experienced not only as an occasion for consumption, but also as an element of shared reflection, discovery, narration, and responsibility (Contento, 2007; Dudley et al., 2015).

Assuming the school as a generative environment for conscious eating practices means enhancing the role of active methodologies and interdisciplinarity. Laboratory-based teaching, *learning by doing*, cooperative learning, and real-world tasks make it possible to construct accessible, motivating, and inclusive learning experiences, particularly suited to involving all pupils, including those with special

educational needs (Booth & Ainscow, 2002; Dewey, 1986; Florian & Black-Hawkins, 2011; Kolb, 2014). Through these approaches, children do not merely receive information but participate in formative situations in which they can observe, compare, choose, argue, and apply what they have learned (Gulikers et al., 2004; Wiggins, 1998).

In this sense, *food literacy* does not concern only what pupils know, but what they learn to do, think, and evaluate. It involves the ability to recognise the quality of foods, understand the value of fruit and vegetables in the daily diet, reflect on the issue of waste, grasp the link between seasonality and sustainability, design a balanced snack, and responsibly share consumption practices (Cullen et al., 2015; Krause et al., 2018; Vidgen & Gallegos, 2014). The school can therefore operate as a space that anticipates conscious food citizenship, in which individual well-being is connected to collective well-being (Ares et al., 2024; FAO, 2019).

In this direction, the project carried out at the "Andrea Camilleri" Comprehensive Institute in Favara assumes paradigmatic value, as it shows how an institutional initiative centred on the distribution of fruit and vegetable products can be pedagogically reinterpreted and transformed into a structured pathway of interdisciplinary education, capable of generating meaningful learning and practices of responsibility (Evans et al., 2012; Omidvar et al., 2023; Van Cauwenberghe et al., 2010).

4. The "Fruit and well-being" project at the "Andrea Camilleri" Comprehensive Institute in Favara

4.1 Context, aims, and recipients

The project "Fruit and well-being – Food education and healthy lifestyles" was carried out at the "Andrea Camilleri" Comprehensive Institute in Favara within the framework of the national programme "Fruit and vegetables in schools", promoted by the Ministry of Agriculture, Food Sovereignty and Forests. The intervention was mainly addressed to primary school pupils, with the possibility of vertical continuity with other school levels, and was developed from February until the end of the school year, becoming fully integrated into curricular activities.

In accordance with the agreement signed by the Institute, the project was not limited to the free distribution of fruit and vegetable products but was conceived as an interdisciplinary educational pathway aimed at promoting correct eating habits, awareness of product seasonality, attention to environmental sustainability, and the development of transversal competences. The use of food as a mediator of learning made it possible to articulate an experience capable of combining health,

active participation, responsibility, and citizenship (Contento, 2007; Dudley et al., 2015).

From an educational perspective, the project pursued a plurality of objectives: developing pupils' knowledge of the principles of healthy eating; fostering operational skills related to conscious consumption; promoting attitudes of care towards oneself and the environment; strengthening relational competences such as collaboration, respect for rules, and sense of responsibility; and enhancing the role of the school as a concrete and transformative learning environment (Ares et al., 2024; Cullen et al., 2015; Vidgen & Gallegos, 2014).

4.2 **Structure of the educational pathway**

The intervention was developed through a sequence of integrated activities, designed according to a logic of progressive awareness. In an initial phase, teachers guided pupils through moments of conversation and reflection on their daily eating habits, collecting representations, preferences, prior knowledge, and usual behaviours. This initial phase served to activate the reflective dimension and to lay the foundations for situated learning, anchored in the children's real experience (Dewey, 1986; Kolb, 2014).

This was followed by the operational phase involving the distribution of fruit and vegetable products, carried out according to the procedures established by the programme and under the supervision of teaching staff, in compliance with hygiene, health, and organisational regulations. The direct consumption of fruit and vegetables represented a meaningful educational opportunity, as it enabled a concrete experience of tasting, observation, and comparison, transforming the moment of distribution into a learning practice (DeCosta et al., 2017; Evans et al., 2012; Varman et al., 2021).

At the same time, the project included sensory and experiential workshop-based pathways aimed at stimulating pupils' curiosity, attention, and active participation. Through interdisciplinary activities, students explored the contents from scientific, linguistic, mathematical, and expressive perspectives, developing an integrated vision of the relationship between nutrition, health, and environment (Charlton et al., 2021). The plurality of languages used favoured the involvement of all pupils and made the experience accessible and meaningful (Booth & Ainscow, 2002; Boysen, 2024).

A further axis of the project concerned environmental education. Pupils were guided to reflect on the issue of waste reduction and proper waste management, with particular attention to the separate collection of packaging and to the relationship between food choices and environmental impact. In this way, the

pathway extended the discourse on food beyond the sphere of individual consumption, placing it within a broader ecological and civic perspective (FAO, 2019; Willett et al., 2019).

The project concluded with the creation of an authentic task centred on the design of a "healthy snack". This final activity represented the moment of synthesis and transfer of the knowledge and competences acquired, allowing pupils to apply what they had learned in an authentic situation. Designing the snack required them to select appropriate foods, justify their choices, reflect on nutritional balance, and consider elements of sustainability and responsibility (Contento, 2007; Vidgen & Gallegos, 2014).

4.3 **Methodologies, inclusion, and organisation**

From a methodological point of view, the project was based on active and inclusive approaches, with particular reference to laboratory-based teaching, cooperative learning, and *learning by doing*. These methodologies were chosen because of their capacity to promote engagement, participation, and situated learning, allowing pupils to learn through experience, collaboration, and shared reflection (Dewey, 1986; Dudley et al., 2015).

Particular attention was devoted to the inclusive dimension. The pathway was designed to ensure the participation of all pupils, including those with special educational needs, through strategies of personalisation, concrete mediation, the use of accessible materials, and the valorisation of multiple languages (Booth & Ainscow, 2002; Boysen, 2024; Florian & Black-Hawkins, 2011). Food, as an object close to everyday experience and rich in sensory and relational meanings, constituted a particularly effective didactic mediator for promoting accessibility and involvement.

The organisation of the project involved the School Principal, with a role of general supervision; the project teacher coordinator, responsible for coordinating the activities; and the class teachers, responsible for didactic management and supervision during the operational phases. The Institute also ensured the correct receipt, storage, and distribution of the products in accordance with the agreement.

4.4 **Assessment and observed indicators**

The assessment of the project was conducted through systematic observation of pupils, the collection of the materials produced during the activities, and the use of assessment rubrics aimed at detecting not only the acquisition of knowledge, but also the development of conscious attitudes and behaviours (Black & Wiliam, 1998;

Wiggins, 1998). In accordance with the perspective of *food literacy*, attention was directed towards dimensions such as understanding the principles of healthy eating, willingness to consume fruit and vegetables, the ability to recognise the value of seasonality, sensitivity to the issue of waste, and collaborative participation in the proposed tasks (Charlton et al., 2021; Omidvar et al., 2023; Vidgen & Gallegos, 2014).

The evidence collected showed a progressive strengthening of knowledge related to balanced nutrition and greater awareness of the quality of food choices. Pupils showed increasing participation in workshop-based activities, greater willingness to engage in discussion, and a clearer ability to justify their choices during the final "healthy snack" task. From an environmental perspective, more attentive attitudes towards waste management and waste reduction emerged, while at the relational level, collaborative and responsible behaviours were observed during shared activities (Charlton et al., 2021; Gulikers et al., 2004).

5. **Discussion**

The experience developed at the "Andrea Camilleri" Comprehensive Institute in Favara allows food education to be reinterpreted not in reductive terms, but rather as a pedagogical practice endowed with strong transformative potential. The "Fruit and well-being" project shows how an institutional initiative originally centred on promoting the consumption of fruit and vegetable products can be reinterpreted within a broader educational framework, in which food becomes a mediator of interdisciplinary learning, a device for awareness, and an opportunity for civic education (Contento, 2007; Omidvar et al., 2023; Velardo, 2015).

One of the most relevant elements concerns the pathway's capacity to integrate cognitive, operational, and value-based dimensions. Pupils were not simply informed about the benefits of fruit and vegetables; rather, they were guided through concrete experiences of tasting, comparison, reflection, production, and design. In this way, food knowledge was progressively transformed into experienced, reasoned, and socially shared knowledge. This appears consistent with a conception of *food literacy* as a complex competence constructed at the intersection of knowledge, practical skills, and attitudes (Cullen et al., 2015; Truman et al., 2017; Vidgen & Gallegos, 2014).

A second significant aspect concerns the interdisciplinary dimension of the project. Food, far from being confined to a sectoral didactic space, was assumed as a cross-curricular theme capable of connecting science, language, mathematics, creative expression, environmental education, and civic education. This approach made it possible to overcome the fragmentation of knowledge and to offer pupils a more

integrated image of learning, in which school contents are connected to everyday life and real problems (Charlton et al., 2021; Dudley et al., 2015).

From a methodological point of view, the centrality of active and workshop-based practices promoted situated and participatory learning. The use of *learning by doing*, cooperative learning, and the final authentic task made possible a non-transmissive form of teaching, in which pupils assumed an active role in the construction of meaning. This methodological choice appears particularly relevant in primary school, where knowledge takes shape through concrete experience, dialogue, and the collaborative dimension (Birch, 1999; DeCosta et al., 2017).

The inclusive value of the pathway also appears particularly important. The project showed how food education, when designed through concrete mediators, plural languages, and participatory strategies, can constitute a space of accessibility for all pupils, including those with special educational needs (Booth & Ainscow, 2002; Boysen, 2024; Florian & Black-Hawkins, 2011). In this sense, food is configured as a universally meaningful formative object, capable of generating engagement and belonging.

At the level of citizenship, the introduction of themes such as seasonality, waste reduction, and proper waste management broadened the meaning of food education, reconnecting it to issues of sustainability and collective responsibility (FAO, 2019; Willett et al., 2019). Pupils were guided to understand that choices related to food do not concern only personal well-being, but also the environment, resources, and the community. In this sense, the project can be read as an initial experience of food citizenship, in which health, environment, and responsibility are intertwined within a unified educational perspective (Ares et al., 2024; Cullen et al., 2015).

Despite its relevance, the experience presents some limitations that deserve consideration. As a case study, the results cannot be automatically generalised to other contexts (Stake, 1995; Yin, 2018). Furthermore, the assessment was mainly based on observations, pupils' productions, and rubrics: valuable tools, but ones that could be further strengthened through more structured research devices, including mixed or longitudinal approaches (Creswell & Clark, 2007; Omidvar et al., 2023). This does not diminish the value of the experience but suggests the need to develop further studies capable of exploring the medium- and long-term impact of *food literacy* pathways in schools.

Overall, the project clearly documents how food education, when interpreted pedagogically and not merely nutritionally, can constitute a formative device capable of promoting well-being, sustainability, inclusion, and active citizenship (Ares et al., 2024; Contento, 2007; Vidgen & Gallegos, 2014). In this sense, the

experience of the “Andrea Camilleri” Comprehensive Institute in Favara represents a significant and transferable practice, capable of enriching scientific reflection on the role of schools in promoting healthier, more conscious, and more equitable ways of living.

6. **Conclusions**

This contribution has proposed a pedagogical interpretation of the project “Fruit and well-being – Food education and healthy lifestyles”, carried out at the “Andrea Camilleri” Comprehensive Institute in Favara, highlighting how a food education pathway in primary school can be configured as an interdisciplinary experience with strong formative value. The analysis has shown that the promotion of fruit and vegetable consumption, when placed within an active and reflective methodological framework, can become an opportunity to develop *food literacy*, environmental awareness, responsible attitudes, and citizenship competences.

One of the main elements that emerged concerns the possibility of overcoming a reductive view of food education, often limited to the transmission of nutritional information, in order to recognise it instead as a complex educational practice capable of connecting health, sustainability, participation, and social responsibility. From this perspective, food is configured as a privileged mediator of meaningful learning, because it is rooted in pupils’ everyday experience and, at the same time, open to cultural, ecological, and civic issues.

The experience described also shows the decisive role of primary school as a generative environment for habits, representations, and competences oriented towards well-being. Through active, workshop-based and inclusive methodologies, the project enabled pupils to learn not only what it means to eat healthily, but also why and how food choices are connected to self-care, respect for the environment and responsible coexistence.

From a scientific perspective, this contribution is situated within the debate that recognises *food literacy* as having a strategic function in contemporary educational processes. It suggests that the promotion of conscious eating practices should not be considered a marginal or accessory task, but an integral part of the school’s formative mission, especially in a historical phase in which consumption choices are increasingly influenced by complex economic, media-related and cultural factors.

There is therefore a need to consolidate and further investigate these pathways through additional research capable of assessing their effects over time and exploring their transferability to different contexts. In particular, the development of longitudinal studies and mixed-method research designs appears desirable, as these would make it possible to capture more systematically the transformations

relating to knowledge, attitudes, practices and civic competences. In this direction, the experience of the "Andrea Camilleri" Comprehensive Institute in Favara represents a significant case, useful for showing how schools can concretely contribute to the construction of healthier, more conscious and more sustainable educating communities.

References

Ares, G., De Rosso, S., Mueller, C., Philippe, K., Pickard, A., Nicklaus, S., van Kleef, E., & Varela, P. (2024). Development of food literacy in children and adolescents: implications for the design of strategies to promote healthier and more sustainable diets. *Nutrition reviews*, *82*(4), 536-552.

Birch, L. L. (1999). Development of food preferences. *Annual review of nutrition*, *19*(1), 41-62.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: principles, policy & practice*, *5*(1), 7-74.

Booth, T., & Ainscow, M. (2002). *Index for inclusion: developing learning and participation in schools*. ERIC.

Boysen, G. A. (2024). A critical analysis of the research evidence behind CAST's universal design for learning guidelines. *Policy Futures in Education*, *22*(7), 1219-1238.

Charlton, K., Comerford, T., Deavin, N., & Walton, K. (2021). Characteristics of successful primary school-based experiential nutrition programmes: a systematic literature review. *Public health nutrition*, *24*(14), 4642-4662.

Contento, I. R. (2007). Nutrition education: linking research, theory, and practice.

Creswell, J. W., & Clark, V. P. (2007). Mixed methods research. *Thousand Oaks, CA*.

Cullen, T., Hatch, J., Martin, W., Higgins, J. W., & Sheppard, R. (2015). Food literacy: definition and framework for action. *Canadian journal of dietetic practice and research*, *76*(3), 140-145.

DeCosta, P., Møller, P., Frøst, M. B., & Olsen, A. (2017). Changing children's eating behaviour-A review of experimental research. *Appetite*, *113*, 327-357.

Dewey, J. (1986). Experience and education. The educational forum,

Dudley, D. A., Cotton, W. G., & Peralta, L. R. (2015). Teaching approaches and strategies that promote healthy eating in primary school children: a systematic review and meta-analysis. *International Journal of Behavioral Nutrition and Physical Activity*, *12*(1), 28.

Evans, C. E., Christian, M. S., Cleghorn, C. L., Greenwood, D. C., & Cade, J. E. (2012). Systematic review and meta-analysis of school-based interventions to improve daily fruit and vegetable intake in children aged 5 to 12 y. *The American journal of clinical nutrition*, *96*(4), 889-901.

FAO, W. (2019). Sustainable healthy diets–Guiding principles. Rome: Food and Agriculture Organization of the United Nations. *World Health*

Organization,. Rome, Italy,: Food and Agriculture Organization of the United Nations/World Health Organization.

Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British educational research journal*, *37*(5), 813-828.

Gulikers, J. T., Bastiaens, T. J., & Kirschner, P. A. (2004). A five-dimensional framework for authentic assessment. *Educational technology research and development*, *52*(3), 67-86.

Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.

Krause, C., Sommerhalder, K., Beer-Borst, S., & Abel, T. (2018). Just a subtle difference? Findings from a systematic review on definitions of nutrition literacy and food literacy. *Health promotion international*, *33*(3), 378-389.

Monteiro, C. A., Cannon, G., Moubarac, J.-C., Levy, R. B., Louzada, M. L. C., & Jaime, P. C. (2018). The UN Decade of Nutrition, the NOVA food classification and the trouble with ultra-processing. *Public health nutrition*, *21*(1), 5-17.

Nutbeam, D. (2000). Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health promotion international*, *15*(3), 259-267.

Omidvar, N., Doustmohammadian, A., Shakibazadeh, E., Clark, C. C., Kasaii, M. S., & Hajigholam-Saryazdi, M. (2023). Effects of school-based interventions on Food and Nutrition Literacy (FNLIT) in primary-school-age children: a systematic review. *British Journal of Nutrition*, *129*(12), 2102-2121.

Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., Brand, H., & European, C. H. L. P. (2012). Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health*, *12*(1), 80.

Stake, R. E. (1995). The art of case study research. In: sage.

Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., Brinsden, H., Calvillo, A., De Schutter, O., & Devarajan, R. (2019). The global syndemic of obesity, undernutrition, and climate change: the Lancet Commission report. *The Lancet*, *393*(10173), 791-846.

Truman, E., Lane, D., & Elliott, C. (2017). Defining food literacy: A scoping review. *Appetite*, *116*, 365-371.

Van Cauwenberghe, E., Maes, L., Spittaels, H., Van Lenthe, F. J., Brug, J., Oppert, J.-M., & De Bourdeaudhuij, I. (2010). Effectiveness of school-based interventions in Europe to promote healthy nutrition in children and adolescents: systematic review of published and 'grey'literature. *British Journal of Nutrition*, *103*(6), 781-797.

Varman, S. D., Cliff, D. P., Jones, R. A., Hammersley, M. L., Zhang, Z., Charlton, K., & Kelly, B. (2021). Experiential learning interventions and healthy eating outcomes in children: a systematic literature review. *International journal of environmental research and public health*, *18*(20), 10824.

Velardo, S. (2015). The nuances of health literacy, nutrition literacy, and food literacy. *Journal of nutrition education and behavior*, *47*(4), 385-389. e381.

Vidgen, H. A., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite*, *76*, 50-59.

Wiggins, G. (1998). *Educative Assessment. Designing Assessments To Inform and Improve Student Performance*. ERIC.

Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., & Wood, A. (2019). Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, *393*(10170), 447-492.

Yin, R. K. (2018). *Case study research and applications* (Vol. 6). Sage Thousand Oaks, CA.