

## **AN EXAMINATION OF PRESCHOOL TEACHER COMPETENCIES IN DIFFERENT REGIONS OF THE WORLD FROM A SUSTAINABILITY PERSPECTIVE**

### **Dünyadaki Farklı Bölgelere Göre Okul Öncesi Öğretmen Yeterliklerinin Sürdürülebilirlik Çerçevesinden İncelenmesi**

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#### **ABSTRACT**

The purpose of this study is to examine the qualifications of preschool teachers applied in different geographical regions of the world in a comparative manner and to reveal the similarities and differences of these qualifications within the framework of sustainability. In this context, the qualifications of preschool teachers determined by the competent authorities in countries located on different continents have been included in the scope of the research. The study systematically examined the early childhood teacher qualification systems in Australia (located in the Southern Hemisphere), the U.S. states of California, South Carolina, and Massachusetts, Southeast Asian countries (located in the Northern Hemisphere), as well as the European countries of the United Kingdom and Türkiye. The analyses revealed that the standards were largely concentrated around SDGs 2, 3, 4, 8, 11, 16, and 17. It was determined that the main themes of teacher competencies identified in the countries examined largely overlapped, but that the sub-competencies were structured differently in each country according to its cultural structure, social characteristics, and educational priorities. It was observed that the identified main competency themes aim to strengthen teachers' professional skills in a way that meets the requirements of the era, with the goal of providing quality education, and to enable teachers to effectively use their developmental knowledge to meet children's individual differences and developmental needs. It is evident that the identified core competency themes aim to strengthen teachers' professional skills in a way that meets the demands of the modern era, with the goal of providing quality education, and that they aim to enable teachers to effectively use their developmental knowledge to address children's individual differences and developmental needs. However, it has been revealed that approaches to how teachers will develop and maintain these competencies vary between countries.

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**Keywords:** Education, Pre-school education, Competencies of pre-school education teachers, Sustainability.

## ÖZET

Bu çalışmanın amacı, dünyanın farklı coğrafi bölgelerinde uygulanan okul öncesi öğretmen yeterliklerini karşılaştırmalı olarak inceleyerek bu yeterliklerin benzer ve farklı yönlerini sürdürülebilirlik çerçevesinde ortaya koymaktır. Bu kapsamda, farklı kıtalarda yer alan ülkelerde yetkili kurumlar tarafından belirlenen okul öncesi öğretmen yeterlikleri araştırma kapsamına dâhil edilmiştir. Çalışmada; güney yarım kürede yer alan Avustralya'nın, Amerika kıtasından California, Güney Caroline ve Massachusetts eyaletlerinin, Güneydoğu Asya ülkelerinin yanı sıra Avrupa ülkelerinden İngiltere ve Türkiye'nin okul öncesi öğretmen yeterlikleri sistematik bir biçimde incelenmiştir. Yapılan analizler sonucunda, sürdürülebilir kalkınma hedeflerinin SKA2, SKA3, SKA4, SKA8, SKA11, SKA16 ve SKA17 çevresinde yoğunlaştığı ortaya konulmuştur. İncelenen ülkelerde belirlenen öğretmen yeterliklerinin ana temalarının büyük ölçüde örtüştüğü, buna karşın alt yeterliklerin her ülkenin kültürel yapısı, toplumsal özellikleri ve eğitimsel öncelikleri doğrultusunda farklı biçimlerde yapılandırıldığı belirlenmiştir. Belirlenen ana yeterlik temalarının nitelikli eğitimi sağlamak hedeflenerek çağın gerekliliklerine yanıt verecek şekilde öğretmenlerin mesleki donanımlarını güçlendirmeyi hedeflediği ve öğretmenlerin gelişim bilgilerini etkin bir biçimde kullanarak çocukların bireysel farklılıklarını ve gelişimsel gereksinimlerini karşılamalarını amaçladığı görülmektedir. Bununla birlikte öğretmenlerin söz konusu yeterlikleri nasıl geliştirecekleri ve sürdüreceklerine ilişkin yaklaşımların ülkeler arasında farklılık gösterdiği ortaya konulmuştur.

**Anahtar Kelimeler:** Eğitim, Okul öncesi eğitim, Okul öncesi öğretmen yeterlikleri, Sürdürülebilirlik.

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## 1. INTRODUCTION

Education is defined as the sum of periods during which an individual develops attitudes and behaviors in their environment, is shaped according to their interests and abilities, and develops considering spiritual and socio-cultural values (Sönmez, 2009). Putting learning at the center inevitably requires the learner to be at the center and therefore requires the teacher to recognize their own competencies, abilities, planning skills, thinking processes, behaviors, and thinking patterns. Teachers' thinking skills—seeing how they progress, being able to explain what they do and why, being able to talk about their feelings, planning, problem solving, self-regulation, and control—in short, learning to learn skills (cognitive awareness) have become a necessity. In such a process, the responsibilities of the teacher, who takes on the task of centering the learner and bringing them to an independent position and acting as a cognitive coach, have increased (Kaya & Demir, 2014).

The success of the education system largely depends on the quality of teachers who engage with students through the system. The teaching profession has been entrusted with the important mission of preparing societies for the present and the future, which is why all developed and developing

countries consider teacher training to be one of the most critical elements (Erişen & Çeliköz, 2016). Teacher competencies are defined as the knowledge, skills, and attitudes that teachers must possess to perform their profession effectively and efficiently (Ministry of National Education [MEB], 2017). It is observed that teacher competencies are used by the countries examined as a tool that indicates and enhances the quality of education.

As a framework to guide teachers' professional development throughout their careers, sharing the definition of teacher skills and knowledge is also considered crucial for establishing clear objectives for learning activities and a common understanding of successful teaching (OECD, 2005). As teachers' competencies increase, they are expected to achieve more successful results by using existing human and material resources (students, classrooms, teaching tools, educational materials, class time, educational programs, etc.) more effectively. It is seen that the professionalization of teachers began with the establishment of teaching as a profession (Ekinci & Kaya, 2016).

Considering the areas of competence of the teaching profession, it is accepted as a profession carried out by individuals who teach at different levels of the education system, facilitate the learning process, and possess high-level qualifications in terms of general culture and professional knowledge and skills, in addition to subject-specific expertise (Bahşi et al., 2009). The existing and ever-increasing responsibilities of teachers are also changing the competencies they must possess. The level of teacher competence will affect student learning. The more competent the teacher is, the more student learning and the retention of that learning will increase (Karacaoğlu, 2008).

Early childhood education has a different structure compared to other teaching practices. For the learning-teaching process to be effective, teachers at this level, in particular, need to be able to blend and use the technical knowledge they have acquired during their academic education with their own personality traits. Since the profession of preschool teaching requires working with people, it is necessary to consider many variables that are specific to humans and cannot be easily controlled, such as values, expectations, attitudes, and resistance in the educational environment. In this case, it becomes necessary for preschool teachers to draw on their own internal resources in addition to their technical knowledge and skills, to seek support from their emotions, insights, past experiences, and their own philosophy of life, to obtain information by consulting with children's families, and to share this information with their colleagues at school (Şahin, 2005).

## **2. METHOD**

This study is a qualitative document analysis aiming to comparatively examine preschool teacher competencies across different countries. The data were obtained from official documents on teacher competencies published by authorized institutions in the selected countries.

### **2.1. Study Group and Selection Criteria**

The countries and regions included in the study were determined using criterion sampling, one of the purposive sampling methods. The inclusion criteria were defined as follows:

- Representation of different continents and hemispheres,
- Having education systems that are internationally recognized or provide influential examples in terms of educational policies and practices,

- Possessing a large and/or young population,
- Availability of official and up-to-date documents on preschool teacher competencies,
- Publication of the data on official websites of Ministries of Education or authorized institutions responsible for teacher competencies.

In line with these criteria, Australia from the Southern Hemisphere; England and Türkiye from Europe in the Northern Hemisphere; selected Southeast Asian countries; and the U.S. states of California, South Carolina, and Massachusetts were included in the study.

The exclusion criteria were determined as follows:

- Countries that do not present a clear and systematic framework for preschool teacher competencies,
- Documents that cannot be verified through official and reliable sources,
- Competency frameworks that are outdated or no longer in effect,
- Documents with restricted access or unavailable full texts,
- Documents that only cover general teacher competencies without providing specific details related to early childhood education.

## **2.2. Data Collection Process**

The research data were collected through the examination of documents published on the official websites of the Ministries of Education and authorized institutions responsible for teacher competencies in the selected countries. The documents were obtained electronically and systematically archived for analysis.

In addition, a data recording form was developed by the researchers to comparatively analyze the relationship between Sustainable Development Goals (SDGs) and preschool teacher competencies in the selected countries. In this form, teacher competencies for each country were categorized under specific themes, and their relationships with the SDGs were systematically matched. The data recording form was structured to include country/region information, competency areas, competency indicators, and relevant SDG dimensions.

The collected data were systematically recorded using this form and prepared for analysis in a way that enables cross-country comparison.

## **2.3. Data Analysis**

The data were analyzed using descriptive analysis. First, teacher competencies for each country were analyzed individually; subsequently, similarities and differences were evaluated comparatively within thematic frameworks. During the analysis process, teacher competencies were categorized based on knowledge, skills, and attitudes. Thus, the study aimed to present a holistic understanding of the core competency areas expected from preschool teachers across different education systems.

## **3. FINDINGS**

The findings regarding preschool teacher competencies in the countries examined within the scope of the study are discussed under the headings specified below.

### **3.1. Australian Early Childhood Teacher Competencies**

Australian teacher competencies have been developed as a framework program by the national council and do not go into detail regarding content. The explanations state that it would be more efficient for each region and school to elaborate on the details according to a competency framework table prepared in accordance with the conditions and infrastructure of the school and its environment. There is different competency frameworks prepared for each subject. According to the framework competencies prepared for the preschool period, the main competencies expected of teachers are defined under five headings: facilitating student learning, assessing student learning outcomes, participating in professional learning, participating in curriculum policies and program initiatives in an outcome-based environment, and forming partnerships with the school community. These headings are listed below.

#### ***Core Competencies***

- Facilitating student learning
- Student learning outcomes assessment
- Participation in vocational training
- Participation in curriculum policies and program initiatives in an output-based environment
- Establishing partnerships with the school community

Teachers are expected to have the competence to facilitate student learning by understanding children's developmental stages, mastering different learning styles, communicating with parents, managing student behavior, adapting play-based learning to educational activities, and designing and evaluating flexible, environmentally compatible programs that take into account individual needs, rights, and past experiences.

Within the scope of student learning outcome assessment competency, teachers are expected to be able to use both standard and non-standard assessment methods and to record assessment results. Teachers are expected to gather information about families to accurately determine their students' expectations, seeking support from field professionals and collaborating with them when necessary.

Teachers participating in professional development are expected to be able to self-assess their work, reflect on their strengths and weaknesses in their practice, and document the results of their practice. Teachers should strive to acquire knowledge by setting achievable goals and, when necessary, seek input from others.

In an output-based environment, teachers must be qualified to participate in curriculum policies and program initiatives and be part of a team that plays an active role in the learning environment. Teachers are expected to carry out appropriate work, considering the age group of their students and the culture in which they grew up, and to value all children and their parents and establish proper communication.

Teachers must be competent in forming partnerships with the school community; they should know their students well, respect different cultures, build good relationships, and manage their behavior appropriately. They are expected to make their students feel supported, valued, and respected. Teachers are expected to establish healthy communication with the school administration and make

joint decisions to ensure that the most appropriate educational program is prepared for their students. At the same time, they must listen to and implement the advice given to them (Maloney, C., et al., 2003).

As shown in Table 1, the ability to facilitate student learning aligns directly with the vision of inclusive and quality education targeted by SDG 4. Learner-centered approaches support students' active participation and deep learning, fostering not only academic achievement but also lifelong learning skills. This reflects the SDG 4 goal of "quality education for all" in classroom practices. The assessment of learning outcomes is one of the fundamental elements of quality assurance in education (SDG 4). At the same time, fair, transparent, and accountable assessment processes are linked to the principles of strong institutions and justice emphasized in SDG 16. This competency enables the monitoring and enhancement of equity of opportunity within the education system. Educators' participation in continuous professional development ensures the sustainability of educational quality (SDG 4). In addition, it supports economic growth and productivity by contributing to the development of a skilled workforce (SDG 8). In this context, teacher development is one of the key elements of both individual and societal development. Outcome-based curriculum approaches enhance quality by clarifying standards and learning objectives in education (SDG 4). Collaboration with various stakeholders (policymakers, academics, practitioners) during this process strengthens the dimension of partnerships emphasized by SDG 17. This makes comprehensive and sustainable reforms in the education system possible. School-family-community partnerships enhance the quality of education by enriching the student's learning experience (SDG 4). At the same time, they contribute to the empowerment of local communities, increased social solidarity, and the creation of sustainable living environments (SDG 11). This competency serves as a bridge that extends education beyond the boundaries of the school.

**Table 1.** Relationship between Australian Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
Facilitating student learning	SDGs 4: Quality Education	"Learner-centered teaching approaches significantly enhance students' engagement, deep understanding, and lifelong learning competencies (UNESCO,2017)."
Student learning outcomes assessment	SDGs4: Quality Education SDGs16: Peace, Justice and Strong Institutions	"Assessment of learning outcomes is essential for monitoring educational quality and ensuring equity in education systems (OECD. (2013))."
Participation in vocational training	SDGs4: Quality Education SDGs8: Decent Work and Economic Growth	"Continuous professional development of teachers is a key driver of educational quality and sustainable economic development (Avalos, 2011)."
Participation in curriculum policies and program initiatives in an output-based environment	SDGs4: Quality Education SDGs17: Partnerships for the Goals	"Outcome-based curricula aligned with national education policies contribute to coherent reform and sustainable education systems (Biggs, Tang, 2011)."
Establishing partnerships with the school community	SDGs4: Quality Education SDGs11: Sustainable Cities and Communities	"Strong school–community partnerships improve student achievement and foster social sustainability within local communities (Epstein, 2018)."

## **3.2. U.S. Early Childhood Teacher Competencies**

The teacher competencies developed by the states of California, South Carolina, and Massachusetts have been examined within the scope of early childhood teacher competencies for the U.S.

### **3.2.1. California Preschool Teacher Competencies**

Headings of California early childhood teacher competencies are given below.

#### ***Core Competencies***

- Child growth and development
- Learning environments and programs
- Positive relationships and guidance
- Family and community
- Health, safety, and nutrition
- Professionalism, professional development, and leadership
- Management and administration

When establishing preschool teacher competencies in California, opinions on the subject were gathered through publicly held meetings and online surveys, and the data obtained in this regard is explained under the defined core competencies. The core competencies developed were grouped into nine categories: child growth and development, child observation and assessment, learning environments and programs, positive interactions and guidance, family and community, health, safety, and nutrition, professionalism, professional development and leadership, and management and administration. The core competencies were first explained in general terms and then detailed by state. The general explanations are provided here.

For the core competency of child growth and development, teachers are expected to have knowledge about children's growth and developmental areas and to understand that these areas are interconnected and sequential. Teachers are expected to understand how important play is for children's development and to use it in their educational work. Teachers are expected to be aware of children's individual differences and students with special needs, and to understand that families, peers, and other caregiving adults play a key role in child development. For the core competency of child observation and assessment, teachers are expected to know the purpose and benefits of observation and assessment, to recognize assessment tools in line with these purposes, and to observe and assess knowing which tool to use in which situation. They are expected to assess their students' development, family situations, and even their own educational activities, and to continue their practices by using this data in their educational work. It is expected that they will collaborate with families, recognizing the importance of working together with them in the observation and evaluation processes. It is expected that they will respect the different abilities and cultures of each student and, when necessary, seek support from another expert in the field of assessment to avoid bias. They are also expected to conduct assessments to identify students who may have special needs and refer them to the appropriate services. It is expected that they will be aware of the need to repeat assessments periodically.

Teachers are expected to prepare their programs for learning environments and core competency by considering the conditions of their region, the cultural and socio-economic levels of their students' families, and the sub-competencies defined for that region. They should not forget that family factors affect the classroom environment and children's learning and should serve as guides in this regard. Teachers are required to conduct learning activities by carefully utilizing student interactions within the classroom.

For positive relationships and guidance as a core competency, teachers are expected to maintain guidance appropriately by using more acceptable forms of relationship or interaction rather than coercive discipline. Teachers must have realistic expectations regarding their students' behavior and use developmentally appropriate guidance techniques according to the children's age and developmental level. They should be aware of factors that may influence their students' behavior and find different methods to help children develop self-control, self-esteem, coping skills, self-soothing skills, and positive relationships with peers and adults.

Teachers are expected to be aware that parents play an important role in their children's growth and development for the sake of family and community competence. The community must recognize the importance of children and families and the role it plays and behave accordingly. Teachers are expected to establish a positive relationship with parents and to cooperate with them, recognizing that families are the primary influencers for children.

For core competency in health, safety, and nutrition, teachers are expected to ensure that children benefit from the health and safety practices provided, to know the nutritional values that students need, and to be aware of the importance of healthy meals and snacks. Teachers are expected to be knowledgeable about family safety and to provide a safe classroom environment.

Teachers must possess the core competencies of professionalism, professional development, and leadership; they must also be aware of the competencies required of preschool teachers, such as ethical behavior standards and professional guidance, professional development and reflective practice, advocacy, and collaborative partnerships. Teachers are expected to understand that their professional development must continue throughout their working lives and to strive to develop themselves accordingly. They are also expected to be able to reflect on the educational practices they implement.

Under the core competency of management and administration, early childhood educator competencies related to program operations, financial and personnel management, personnel relations, and other aspects of administration are included. Teachers are expected to understand the importance of managing people and financial resources and to know how to organize the regulations, policies, and quality standards necessary for program development work (California Early Childhood Educator Competencies, 2011).

As given in Table 2, children's physical, cognitive, social, and emotional development lays the foundation for raising healthy individuals (SDG 3) and for their participation in effective learning processes (SDG 4). Developmental support during early childhood is a key determinant of lifelong health and learning outcomes. Therefore, this competency lies at the intersection of both education and health goals. High-quality learning environments and well-structured programs directly support inclusive and quality education, which is the core objective of SDG 4. Enriched learning experiences

tailored to a child’s developmental level positively influence academic achievement and social skills in the long term. Safe, supportive, and responsive relationships with children strengthen their psychological well-being (SDG 3). At the same time, interactions based on respect, empathy, and justice lay the foundations for a peaceful and inclusive social structure (SDG 16). This competency bridges the gap between individual well-being and social cohesion. The active participation of families and communities in the educational process enhances the continuity and effectiveness of learning (SDG 4). Furthermore, strong social bonds and partnerships contribute to the formation of sustainable and resilient communities (SDG 11). This competency ensures that education is integrated into the social ecosystem. Adequate nutrition (SDG 2) and healthy and safe living conditions (SDG 3) are essential for children’s development and readiness to learn. This area emphasizes that care and education are inseparable components of early childhood services. The continuous development of educators’ professional competencies enhances the quality of education (SDG 4). It also contributes to the development of a skilled workforce and sustainable economic growth (SDG 8). Leadership skills, in turn, support the widespread adoption of this development at the organizational level. Effective management and administrative processes strengthen the quality and accessibility of education (SDG 4). A transparent, accountable, and inclusive approach to management forms the foundation of strong institutions (SDG 16). Furthermore, partnerships established with various stakeholders support the efficient use of resources and the development of sustainable education systems (SDG 17).

**Table 2.** Relationship between California Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
Child growth and development	SDGs 3: Good Health and Well-being SDGs4: Quality Education	“Early childhood development is foundational to health, learning, and well-being across the life course (Black et al., 2017).”
Learning environments and programs	SDGs 4: Quality Education	“High-quality early learning environments have lasting positive effects on children’s cognitive and social outcomes (OECD, 2018).”
Positive relationships and guidance	SDGs 3: Good Health and Well-being SDGs 16: Peace, Justice and Strong Institutions	“Warm, responsive relationships are critical for children’s emotional security and self-regulation (Shonkoff and Phillips, 2000).”
Family and community	SDGs4: Quality Education SDGs 11: Sustainable Cities and Communities	“Family and community engagement strengthens learning outcomes and social cohesion (UNESCO, 2011).”
Health, safety, and nutrition	SDGs2: Zero Hunger SDGs 3: Good Health and Well-being	“Nutrition, health, and safety are inseparable components of effective early childhood development programs (WHO, UNICEF and, World Bank, 2018).”
Professionalism, professional development, and leadership	SDGs 4: Quality Education SDGs 8: Decent Work and Economic Growth	“Well-trained and supported early childhood educators are essential for quality and equity in education (Urban, 2012).”
Management and administration	SDGs 4: Quality Education SDGs 16: Peace, Justice and Strong Institutions SDGs 17: Partnerships for the Goals	“Strong governance and leadership are key drivers of sustainable early childhood education systems (Kagan and Kauerz, 2012).”

### ***3.2.2. Early Childhood Teacher Competencies in South Carolina***

The competencies developed for preschool teachers in South Carolina are grouped into five core areas, each with three levels of expertise.

#### ***Core Competencies***

- Child development
- Curriculum
- Health, safety, and nutrition
- Leadership
- Professional development

These five competency areas encompass separate skills for educators and caregivers, as well as separate skills for program administrators. Level one includes the knowledge and skills expected of someone who is new to preschool work or has very little formal training in the field. The second level includes the skills expected of individuals who have the knowledge and skills of the previous level, as well as at least one year of work experience in the field. The third level includes the knowledge and skills expected of someone with at least two years of work experience in the field. The core competencies are defined as child development, curriculum, health, safety, and nutrition, guidance, and professional development. These competencies are explained below.

Under the core competency of child development, there are sub-competencies related to developmental characteristics and assessing development. For developmental characteristics, teachers and caregivers are expected to have all the information about child development, to know all areas of child development, to be supportive, and to inform parents about their children's development. Teachers and caregivers, who are expected to carry out activities that support their students' learning and development, should also cooperate with other teachers and caregivers. Program managers are expected to provide continuous support and training to their staff, identify children's unmet needs, guide parents and educational staff on training that will facilitate their practices, determine whether children's development is progressing normally, and make the necessary referrals. For developmental assessment competency, teachers and caregivers are expected to know and keep records of all children's daily routines, be aware of children's individual differences, and gather information on this subject. In addition, they are required to conduct assessment activities confidentially, continuously observe their students, and keep records. At the same time, being knowledgeable about and using different assessment tools that can be used in assessment work is also one of the competencies they must possess. Program administrators are expected to provide training to the educators they work with on assessment tools, observation techniques, and programs for developmental assessment; to ensure that programs are developed to meet the needs of students with special needs; and to provide support to educators and families regarding issues they encounter with assessment.

The core competency of the teaching program encompasses the sub-competencies of the teaching program and learning environment, supporting all areas of development, and promoting literacy development. Teachers and caregivers are expected to prepare daily and annual education plans, involve their students in the preparation process of the daily plan, and work to implement it effectively. Teachers and caregivers are expected to plan different activities to be implemented

indoors and outdoors that will support all areas of children's development. They must be aware of the importance of educational materials in the learning environment and prepare interest corners with this in mind. Developing awareness of students' emotions and supporting them in solving problems, collaborating, and developing friendships are among their fundamental duties. When planning activities that support gross and fine motor skills, teachers and caregivers are expected to consider children with special needs and provide active learning opportunities that support children's creativity, curiosity, exploration, problem-solving, and independent work skills. They should encourage their students to ask questions and expand their ideas by asking questions themselves. They should prepare materials for reading and writing activities for their students and support these activities, work to develop their vocabulary, guide them to develop their verbal and nonverbal communication skills, and identify any communication delays and provide the necessary guidance. Program managers are expected to provide the necessary materials for the educational activities they will carry out with their staff and families and to provide guidance on how to use these materials. Program managers, who are expected to provide training that supports the competence of the educational staff, should also evaluate the implemented educational programs. Managers who are required to provide support to families of students with developmental delays and problems must also guide teachers to make the necessary arrangements for children learning in different languages.

Health, safety, and nutrition core competency encompasses health, safety, and nutrition sub-competencies. Teachers and caregivers are expected to perform routine daily health checks on children, regularly record the results of these checks, and share this data with families when deemed necessary to provide guidance. They must set an example by practicing individual hygiene skills such as hand washing. Teachers and caregivers are also responsible for ensuring the cleanliness of the classroom environment, knowing the safety measures that must be followed in the school, and taking appropriate precautions against hazards. They are required to incorporate concepts related to safety and hygiene into the program. Teachers and caregivers are expected to set a good example by making healthy food choices and selecting appropriate foods for children. They are also required to provide suitable foods for children with food allergies or those on special diets. They are also expected to continuously observe their students to learn about their eating habits. Program administrators are required to provide ongoing training opportunities in these areas to the staff they work with, provide the equipment they will need related to health, safety, and nutrition, ensure the safety of the school environment and surroundings, and support the necessary safety measures for children with special needs. They are required to initiate legal proceedings in cases where they suspect child abuse or neglect and to conduct regular drills for situations such as natural disasters. They must monitor the menu planning and preparation processes carried out by teachers and caregivers.

The core competency of guidance encompasses the sub-competencies of interacting with individual children and group experiences. Teachers and caregivers are expected to establish positive, calm, respectful, and consistent relationships with all children, work to resolve conflicts children experience using age-appropriate solutions, and ensure children understand rules and boundaries. They are required to work with families on social skills, self-control development, attention span, and behavior development and regulation; support children in developing positive behaviors towards each other; intervene quickly in problematic behaviors; and ensure that children follow the rules. They are expected to be patient program implementers, treat all children consistently and fairly, provide positive guidance such as problem solving and negotiation, and organize group work according to the needs of all children. Program managers are expected to develop a written discipline policy that

promotes positive guidance, communicate with families about how to reduce and turn around problematic issues, work with staff and families to develop positive guidance, provide ongoing training, and develop positive guidance skills by attending conferences and training sessions and reading professional books and journals.

Professional development core competency encompasses the sub-competencies of family and community relations, advocacy and leadership, ethics, and professionalism. Teachers and caregivers are expected to be mindful of each family's culture and structure, to be aware that they are children's first teachers, to develop warm relationships, to share daily events at school with families, and to support family-child relationships. In program development efforts, they are expected to consider families' specific skills, talents, and cultures, and to organize training for families. They must join professional associations and be knowledgeable about advocacy issues, identifying aspects of society that affect children and their needs. They are expected to demonstrate ethical behavior at work, choose appropriate attire for the workplace, be proactive in pursuing their personal professional development, and engage in academic studies. They must examine their personal belief systems and recognize how beliefs affect education, and develop educational plans appropriate to this situation. Program managers are expected to respect cultural differences and develop positive relationships with families from different cultures, economic backgrounds, and languages. They must provide training to staff on family and staff relations, conduct family education to ensure families are informed about child development and parenting attitudes, and involve families in planning, problem-solving, and program management processes. They are expected to hold meetings with the staff they work with and ensure that staff reflect on their work, serve on professional boards and committees, know and communicate the NAEYC Code of Ethics to staff, know and use best practices in the field, and help staff achieve their professional development and goals (South Carolina Department of Education, 2022).

As given Table 3, child development forms the foundation of an individual's lifelong health (SDG 3) and learning (SDG 4) processes. Developmental support provided in early childhood contributes to both healthy living and quality education goals by strengthening cognitive, social, and emotional skills. This competency lies at the intersection of the two SDGs, focusing on the most critical period of human development. A quality curriculum is one of the key factors determining educational equity and the effectiveness of learning outcomes. The inclusive and quality education envisioned by SDG 4 is only possible through developmentally appropriate, flexible, and holistic programs. Therefore, curriculum quality is a direct determinant of educational quality. Adequate and balanced nutrition (SDG 2) is critical for children's physical development and readiness to learn. Ensuring health and safety conditions, meanwhile, supports children's well-being (SDG 3). This competency demonstrates that care and education form an inseparable whole in early childhood education. The guidance services provided to children and the positive relationships established with them support their emotional security and psychosocial development (SDG 3). At the same time, the development of self-regulation, empathy, and social adaptation skills contributes to the creation of more just, peaceful, and inclusive societies (SDG 16). In this regard, guidance bridges the gap between individual development and societal values. Educators' continuous professional development enhances the quality of educational services, thereby contributing to SDG 4. Furthermore, by supporting the development of a qualified workforce, it fosters economic efficiency and sustainable growth (SDG 8). This competency underscores the central role of teachers in the sustainability of the education system.

**Table 3.** Relationship between South Carolina Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
Child development	SDGs3: Good Health and Well-being SDGs4: Quality Education	“Early childhood development provides the foundation for lifelong health, learning, and well-being (Black, 2017).”
Curriculum	SDGs4: Quality Education	“Curriculum quality is a central determinant of equity and effectiveness in early childhood education (OECD, 2018).”
Health, safety, and nutrition	SDGs2: Zero Hunger SDGs3: Good Health and Well-being	“Nutrition, health, and safety are inseparable from early learning and development outcomes (WHO, UNICEF and, World Bank, 2018).”
Leadership	SDGs3: Good Health and Well-being SDGs16: Peace, Justice and Strong Institutions	“Supportive guidance and positive relationships are essential for children’s self-regulation and social competence (Shonkoff and Phillips, 2000).”
Professional development	SDGs4: Quality Education SDGs8: Decent Work and Economic Growth	“Continuous professional development of early childhood educators is critical for quality improvement and system sustainability (Urban, 2012).”

### **3.2.3. Massachusetts Preschool Teacher Competencies**

The pre-school teacher competencies for Massachusetts consist of eight core competencies. Instead of sub-competencies under the core competencies, explanations are provided. The core competencies identified for teacher competencies are understanding children's and youth's growth and development; interacting with and guiding children and youth; partnering with families and communities; health, safety, and nutrition; learning environments and programs; observation, assessment, and documentation; program planning and development; and professionalism and leadership. These competencies are described below.

#### **Core Competencies**

- Understanding the growth and development of children and young people
- Interaction and guidance with children and young people
- Partnerships with families and communities
- Health, safety, and nutrition
- Learning spaces and programs
- Program planning and development
- Professionalism and leadership

Under the core competency of understanding children's and young people's growth and development, teachers are expected to understand how their students learn. Adults are expected to understand how effective they are in children's individual growth and development, particularly in early brain development, and to approach children and young people with this knowledge in mind. It is expected that teachers provide a safe learning environment that is parallel to and supportive of children's development, aimed at imparting social skills and knowledge.

Teachers are expected to use guidance techniques appropriate for age and developmental stages to understand the behavior of children and young people under the core competency of interaction and guidance with children and young people. Teachers are expected to know the factors that influence children's behavior and to find ways to help them develop self-regulation, self-concept, self-soothing, coping skills, and positive relationships with peers and older individuals.

Teachers are expected to understand different family types and their impact on children, and to be culturally competent to support children and families and interact with them, under the core competency of partnership with families and communities. They should maintain relationships with parents based on understanding and respect and strive to develop family and community harmony and cooperation. They are expected to connect families to community resources and work in collaboration with community resources.

Under the core competency of health, safety, and nutrition, teachers are expected to ensure the safety of children and young people, promote proper health practices and be aware of child abuse and neglect and find appropriate solutions to these issues. They are expected to provide children with nutritious meals and healthy snacks.

Under the core competency of learning environments and programs, teachers are expected to recognize and prepare the characteristics of quality learning environments, establish regular programs and daily routines, and use materials appropriate to the needs of the age group they work with. Under the core competency of observation, assessment, and documentation, teachers are expected to understand the purpose, benefits, and methods of observation and assessment in early childhood and out-of-school settings. Teachers, who need to use observation, assessment, and related documentation to meet students' learning needs and adapt the curriculum to students, are expected to use observation and assessment strategies by collaborating with parents and other professionals who serve children.

Under the core competency of program planning and development, teachers are expected to understand the importance of positive interaction among colleagues and to collaborate to create a quality learning environment for children and young people. In their professional work, they are expected to use the necessary practices in the most appropriate way, make the most efficient plans, organize and implement the necessary stakeholders. It is important that they support the staff they work with through professional planning, interact appropriately with colleagues and families, and carry out developmentally consistent practices.

Under the core competency of professionalism and leadership, teachers are expected to know and adhere to ethical rules and professional standards, as well as to value confidentiality. Teachers who are expected to demonstrate leadership skills are also expected to share their knowledge, engage in reflective practices, make informed decisions, synthesize information from different sources, and utilize collaborative learning (Massachusetts Department of Early Education and Care, 2010 & NAEYC, 2020).

As given Table 4, understanding child and adolescent development forms the foundation for an individual's lifelong health (SDG 3) and learning and social adaptation processes (SDG 4). Accurate analysis of developmental needs enables more effective planning of education, health, and social services. This competency lies at the intersection of these two SDGs, with human development at its core. Positive, responsive, and supportive interactions foster children's psychological well-being and

self-regulation skills (SDG 3). At the same time, instilling values such as respect, empathy, and social responsibility contributes to the creation of more peaceful and inclusive societies (SDG 16). This competency bridges the gap between individual development and social order. Strong partnerships with families and the community enhance the continuity and effectiveness of learning (SDG 4). These partnerships also contribute to the formation of sustainable communities by strengthening social solidarity (SDG 11). The inclusion of diverse stakeholders in the process supports the strengthening of partnerships under SDG 17. This competency approaches education as a multi-stakeholder process. Adequate nutrition (SDG 2) and safe living conditions (SDG 3) are essential for the healthy development of children and youth. This area ensures that learning and development processes are built on a healthy foundation. Thus, education, care, and health services are addressed within a holistic framework. High-quality learning environments and well-structured programs support the cognitive, social, and emotional development of children and youth. This directly contributes to the creation of inclusive and effective education systems, as envisioned by SDG 4. This competency represents the practical manifestation of educational quality. The systematic planning and evaluation of programs ensure sustainable quality in education (SDG 4). Collaboration with various institutions and stakeholders during this process strengthens the partnerships emphasized by SDG 17. As a result, educational programs become more holistic, coherent, and effective. Educators' professional competencies and leadership skills are critical to ensuring quality and equity in education (SDG 4). By contributing to the development of qualified human resources, they support economic development (SDG 8). At the same time, an ethical, transparent, and effective leadership approach contributes to the establishment of strong and reliable institutions (SDG 16).

**Table 4.** Relationship Between Massachusetts Core Competencies and Sustainable Development Goals

Core Competencies	Relevant Sustainable Development Goals	Relevant Academic Research
Understanding the growth and development of children and young people	SDGs 3: Good Health and Well-being SDGs 4: Quality Education	“Child and adolescent development is a critical determinant of health, learning, and social outcomes across the life course (Sawyer, 2012).”
Interaction and guidance with children and young people	SDGs 3: Good Health and Well-being SDGs 16: Peace, Justice and Strong Institutions	“Positive, responsive interactions are essential for children’s self-regulation, well-being, and social competence (Shonkoff & Phillips, (2000).”
Partnerships with families and communities	SDGs 4: Quality Education SDGs 11: Sustainable Cities and Communities SDGs 17: Partnerships for the Goals	“Partnerships with families and communities enhance learning outcomes and strengthen social cohesion (Epstein, 2018).”
Health, safety, and nutrition	SDGs 2: Zero Hunger SDGs 3: Good Health and Well-being	“Health, nutrition, and safety are foundational components of effective child and youth development programs (WHO, UNICEF and, World Bank, 2018).”
Learning spaces and programs	SDGs 4: Quality Education	“High-quality learning environments support cognitive, social, and emotional development (OECD, 2018).”
Program planning and development	SDGs 4: Quality Education SDGs 17: Partnerships for the Goals	“Systematic program planning and evaluation are essential for sustainable education systems (Kagan and Kauerz, 2012).”
Professionalism and leadership	SDGs 4: Quality Education SDGs 8: Decent Work and Economic Growth SDGs 16: Peace, Justice and Strong Institutions	“Effective leadership and professional competence are key drivers of quality and equity in education systems (Fullan, 2014).”

### **3.3.Southeast Asia Preschool Teacher Competencies**

The UNESCO Asia-Pacific Regional Bureau for Education (UNESCO Bangkok) and the Southeast Asian Ministers of Education Organization (SEAMEO) have jointly developed Early Childhood Care and Education (ECCE) Teacher Competencies. The teacher competencies developed for Southeast Asia are classified into four main competencies. The first core competency is content knowledge, pedagogical practice, and assessment; the second is learning environment; the third is participation and collaboration; and the fourth is professional development. There are also seven sub-competencies associated with the core competencies. These competencies are described below.

#### ***Core Competencies***

- Content knowledge
- Learning environment
- Participation and collaboration
- Professional development

Content knowledge, pedagogical practice, and assessment are core competencies; teachers must possess the sub-competencies of understanding children's holistic development and facilitating child development and learning. Teachers are expected to understand children's developmental knowledge, place children at the center of the learning environment, and respect the learning journey. Teachers are expected to monitor their students' individual development, conduct educational activities with an awareness that all children have different needs, interests, and potentials, and ensure classroom management. Teachers are expected to know and apply the laws related to their field and children's rights, and to be able to identify children at risk of neglect and abuse or children with special needs. They are required to plan and implement educational programs taking developmental information into account and to use play for educational purposes. They are expected to use alternative teaching methods to develop creative and critical thinking, problem-solving, and decision-making skills in students. They must support children's development by using different teaching materials in classroom and outdoor education and activities, monitor and record their progress, and incorporate this into their work. They must be aware that supporting children's development is possible only in collaboration with families and the community.

Under the core competency of learning environment, there are sub-competencies that create a nurturing, inclusive, and safe environment and promote health, nutrition, safety, and protection. For these competencies, teachers are expected to ensure that children feel their needs are met, consider the developmental characteristics of all children, and design gender-sensitive environments for children. They must organize environments that encourage critical thinking, creativity, communication, collaboration, curiosity, empathy, discovery, problem solving, and decision making, and provide materials for this purpose. They are expected to plan activities that enable children to meet their own needs, thereby developing safe and healthy daily routines, and to set an example by modeling desired behavior patterns. Teachers are expected to listen to children and respond to their needs, striking a balance between the teacher-child-parent triad and creating an impression of affection. They are expected to monitor and document children's health, nutrition, safety, and protection needs, guide them in protecting themselves from danger, identify possible cases of neglect or abuse, and apply legal procedures. They are expected to know first aid and take emergency action to ensure safety in cases of natural disasters, accidents, fires, etc.

Under the core competency of participation and collaboration, teachers, parents, and caregivers should work together and collaborate with relevant stakeholders to support these competencies. Teachers are expected to communicate with families, develop relationships based on trust and collaboration, and support efforts to enhance children's learning experiences at home. Parents and caregivers should plan appropriate child development training, try to involve them in classroom activities as much as possible, and share information by involving families in the evaluation processes of the training. It is important to consider the attitudes of not only parents but all adults in the family who serve as role models for the child, to know the support the child will need according to their stage of development, and to inform families about this. It is necessary to collaborate with field experts to encourage the participation of students with special needs in classroom activities. It is desirable to communicate with national and international organizations to develop educational programs when necessary.

Under the core competency of professional development, there is a sub-competency that requires continuous personal and professional development. Teachers are expected to enjoy their work and take pride in their profession under this competency. They must respect people with different views and cultures and collaborate with colleagues to uphold ethical values. They are expected to plan activities that support their professional development, participate in such training, and collaborate with other colleagues by sharing newly acquired knowledge. They must improve their communication skills, actively use technological innovations, and adapt them to their field. They are expected to support the development of the field by conducting research on childcare and child development (ECCE, 2016).

As given Table 5, teachers' subject knowledge is one of the key determinants of effective teaching and student success. Strong content knowledge enhances the depth of learning, enabling students to achieve meaningful and lasting learning outcomes. This represents the most fundamental manifestation within the classroom of the vision for quality and effective education outlined in SDG 4. Supportive and inclusive learning environments foster not only students' academic success but also their well-being (SDG 4). Additionally, creating safe, inclusive, and sustainable learning spaces contributes to the development of sustainable communities on a broader scale (SDG 11). This competency highlights the connection between education and its physical and social environment. Collaborative learning processes enhance students' academic achievements while developing their social skills and understanding of democratic participation (SDG 4). These processes align with SDG 16 by supporting the internalization of values such as justice, equality, and inclusivity. Additionally, by fostering collaboration among various stakeholders, it contributes to strengthening the partnerships highlighted in SDG 17. Teachers' continuous professional development improves teaching quality, thereby enhancing student learning outcomes (SDG 4). It also supports economic growth and productivity by contributing to the development of a qualified workforce (SDG 8). This competency highlights the teacher's role in the sustainability of the education system.

**Table 5.** Relationship between Southeast Asia Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
Content knowledge	SDGs 4: Quality Education	“Teachers’ content knowledge is a critical factor influencing instructional / quality and student achievement (Shulman, 1986).”
Learning environment	SDGs 4: Quality Education SDGs 11: Sustainable Cities and Communities	“Supportive learning environments are essential for student engagement, well-being, and academic success (OECD, 2017).”
Participation and collaboration	SDGs 4: Quality Education SDGs 16: Peace, Justice and Strong Institutions SDGs 17: Partnerships for the Goals	“Collaborative learning promotes higher achievement and social skills while fostering democratic participation (Johnson & Johnson, 2009).”
Professional development	SDGs 4: Quality Education SDGs 8: Partnerships for the Goals	“Sustained professional development improves teaching practices and student learning outcomes (Darling-Hammond et al., 2017).”

### 3.4. UK Preschool Teacher Competencies

Early years teacher competencies in the UK have been developed by an institution called EYFS (Early Years Foundation Stage). Teacher competencies are defined as eight core competencies and 38 sub-competencies. The first core competency is that high goals should be set that will inspire, motivate, and challenge children. The second competency is that children's progress and positive outcomes (outputs) should be encouraged. The third competency is that knowledge should be provided to understand children's early learning and development. The fourth competency is that education and care should be planned taking into account the needs of all children. The fifth competency is that education and care should be tailored to the needs of all children. The sixth competency is to conduct accurate and effective assessments. The seventh competency is to protect and enhance children's well-being and provide a safe learning environment. The eighth competency is to fulfill professional responsibilities. These competencies are explained below.

#### *Core Competencies*

- High goals should be set that will inspire, motivate, and challenge children.
- Progress and positive outcomes in children should be encouraged.
- Information should be provided to understand children's early learning and development.
- Education and care should be planned to take into account the needs of all children.
- Education and care should be determined according to the needs of all children.
- It should be evaluated correctly and efficiently.
- It should protect and enhance children's well-being and provide a safe learning environment.
- They must fulfill their professional responsibilities.

Teachers are expected to set high expectations that will inspire, motivate, and challenge children. They are expected to create and maintain a safe and encouraging learning environment where children can develop self-confidence, learn new things, and improve themselves. Teachers are expected to set challenging and developmental new goals for children based on their past experiences, existing

abilities, and interests, and to set an example by demonstrating the positive values, attitudes, and behaviors expected of children.

Teachers should be encouraged to promote progress and positive outcomes in children. They should be knowledgeable and equipped with information about infants' and children's learning methods and development, understand the types of attachment, their importance, and how crucial it is to ensure secure attachment, and strive to achieve this. Teachers, who are expected to develop effective strategies and set an example to develop and support children's learning and thinking skills, must communicate effectively with children from birth to age five, listen to them carefully, and answer their questions. Teachers, who are expected to use group education to develop children's self-confidence, social development, and communication skills, are required to collaborate with families and caregivers to support children's well-being, learning, and development.

Teachers are expected to be aware that developmental knowledge is important for ensuring children's successful learning and development, and to work on ways to enhance children's learning experiences. Teachers are expected to critically evaluate information in the areas of learning and development and to ensure the continuity of the first and second competencies mentioned above in terms of curriculum and teaching. Teachers, who are required to ensure the systematic understanding of phonics as part of reading readiness activities, are also expected to provide clear instruction using teaching methods appropriate for children in early mathematics education.

Teachers are expected to plan education and care by taking into account the needs of all children. To plan subsequent educational steps, they must continuously observe and assess children and, based on these observations, current conditions, and the best interests of the children, develop balanced and flexible activities and plans. Teachers are required to collaborate with families and caregivers to carry out activities that stimulate children's curiosity and increase their interest in learning. Teachers are expected to organize different group activities according to the ages and abilities of the students and to continuously update activities and educational programs to increase their effectiveness.

Teachers are expected to identify factors that hinder children's learning and development and find solutions, support children at different stages of development with the right education and be aware of all areas of development and communication needs, under the principle that “education and care should be determined according to the needs of all children.” Teachers must use different educational approaches to correctly understand the needs of all children, whether they have special needs or not, and to include and support all of them in education. They must also collaborate with families, caregivers, and professionals for children who need support.

Teachers are expected to know and apply correct assessment under the competency of ‘conducting accurate and effective assessment’. When assessing children, it is important for teachers to collaborate with families, caregivers, and other colleagues, and to work together to ensure students achieve program outcomes successfully.

Teachers are expected to protect and enhance children's well-being and provide a safe learning environment. This means protecting and promoting the child's well-being, knowing the legal procedures related to health and safety, and acting appropriately. Teachers, who are expected to implement practices that safeguard children's health and safety and to create and maintain a safe learning environment, must learn the policies and legal procedures developed to protect children and

know how to protect a child when they understand that the child is in danger or facing an adverse situation.

Teachers are expected to fulfill their professional responsibilities by advocating for equal opportunities for all students and supporting anti-discrimination practices. Teachers are expected to lead in establishing a common vision among colleagues, parents, and other professional coworkers, serving as role models for effective educational practices and guiding other practitioners appropriately (Teachers' Standards Early Years, 2013).

As given Table 6, teachers' subject knowledge is one of the key determinants of effective teaching and student success. Strong content knowledge enhances the depth of learning, enabling students to achieve meaningful and lasting learning outcomes. This represents the most fundamental manifestation within the classroom of the vision for quality and effective education outlined in SDG 4. Supportive and inclusive learning environments foster not only students' academic success but also their well-being (SDG 4). Additionally, creating safe, inclusive, and sustainable learning spaces contributes to the development of sustainable communities on a broader scale (SDG 11). This competency highlights the connection between education and its physical and social environment. Collaborative learning processes enhance students' academic achievements while developing their social skills and understanding of democratic participation (SDG 4). These processes align with SDG 16 by supporting the internalization of values such as justice, equality, and inclusivity. Additionally, by fostering collaboration among various stakeholders, it contributes to strengthening the partnerships highlighted in SDG 17. Teachers' continuous professional development improves teaching quality, thereby enhancing student learning outcomes (SDG 4). It also supports economic growth and productivity by contributing to the development of a qualified workforce (SDG 8). This competency highlights the teacher's role in the sustainability of the education system.

Establishing high expectations fosters student motivation, engagement, and achievement. This directly supports SDG 4 by promoting high-quality learning experiences that encourage children to reach their full potential. Such an approach reflects a commitment to excellence and continuous improvement in education. Monitoring and supporting children's progress ensures that learning outcomes are both effective and equitable (SDG 4). At the same time, fair and transparent evaluation processes contribute to accountability and trust within educational systems, aligning with the principles of strong institutions emphasized in SDG 16. Understanding early development enables educators to design interventions that support both well-being (SDG 3) and learning (SDG 4). This competency highlights the interconnected nature of health and education in fostering holistic child development. Designing inclusive educational practices ensures that all children, regardless of their background, have access to quality learning opportunities (SDG 4). Addressing diverse needs also contributes to reducing inequalities (SDG 10), making education systems more equitable and accessible. Tailoring education and care to individual needs supports both learning outcomes (SDG 4) and overall well-being (SDG 3). Integrated approaches are particularly important for supporting disadvantaged children and promoting balanced development. Effective assessment practices enhance learning by informing teaching strategies and improving outcomes (SDG 4). Transparent and fair evaluation systems also strengthen institutional trust and accountability, aligning with SDG 16. Children's safety and well-being are fundamental prerequisites for learning (SDG 3). Safe and inclusive environments support educational success (SDG 4) and reflect the principles of protection and justice emphasized in SDG 16. Professional and ethical practice among educators ensures the

quality and credibility of education systems (SDG 4). It also contributes to the development of a skilled workforce (SDG 8) and supports the establishment of transparent, accountable institutions (SDG 16).

**Table 6.** Relationship Between UK Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
High goals should be set that will inspire, motivate, and challenge children.	SDGs4: Quality Education	“High expectations from educators are associated with improved learning outcomes and student motivation (Hattie, 2009).”
Progress and positive outcomes in children should be encouraged.	SDGs4: Quality Education SDGs16: Peace, Justice and Strong Institutions	“Monitoring progress and learning outcomes is essential for improving educational quality and equity (OECD, 2013).”
Information should be provided to understand children's early learning and development.	SDGs3: Good Health and Well-being SDGs4: Quality Education	“Understanding early learning and development is fundamental for effective educational and health interventions (Black et al., 2017).”
Education and care should be planned to take into account the needs of all children.	SDGs 4: Quality Education SDGs 10: Reduced Inequalities	“Inclusive education systems respond to the diverse needs of all learners (UNESCO, 2017).”
Education and care should be determined according to the needs of all children.	SDGs 4: Quality Education SDGs 3: Good Health and Well-being	“Integrated education and care approaches improve developmental outcomes, particularly for disadvantaged children (OECD, 2020).”
It should be evaluated correctly and efficiently.	SDGs 4: Quality Education SDGs 16: Peace, Justice and Strong Institutions	“Effective assessment practices support learning and inform instructional decision-making (Black & Wiliam, 1998).”
It should protect and enhance children's well-being and provide a safe learning environment.	SDGs 3: Good Health and Well-being SDGs 4: Quality Education SDGs 16: Peace, Justice and Strong Institutions	“Children’s well-being and safety are prerequisites for effective learning and development (WHO, UNICEF, & World Bank, 2018).”
They must fulfill their professional responsibilities.	SDGs 4: Quality Education SDGs 8: Decent Work and Economic Growth SDGs 16: Peace, Justice and Strong Institutions	“Professional responsibility and ethical practice are central to trust and quality in education systems (Darling-Hammond, 2017).”

### **3.5. Türkiye Preschool Teacher Competencies**

Early childhood teacher competencies in Türkiye were developed by the Ministry of National Education in 2017. The competencies are organized into three levels: A1, A2, and A3, with each level building upon the skills of the previous one. The competencies expected of teachers at the A1 level mainly cover the skills required for the traditional teaching profession. The A2 level competencies appear to be designed to help teachers develop skills such as being more active and finding new ways to interact. The A3 level competencies are closer to developing 21st-century skills and are designed to support learning with educators who are more in a guiding role. This work, consisting of seven core competencies, is enriched with sub-competencies. The main competencies are defined as: areas of development, communication with families, family participation and family education, assessment, communication, creativity and aesthetics, cooperation with schools and communities, and ensuring professional development. A1, A2, and A3 level skills are defined for each sub-competency. Explanations related to these competencies are provided below.

#### ***Core Competencies***

- Areas of development
- Communication with families, family involvement, and family education
- Assessment
- Communication
- Creativity and aesthetics
- Collaboration with schools and communities
- Ensuring professional development

The areas of development include planning the educational process, organizing the educational environment, selecting, preparing, and using materials, and conducting educational activities under the umbrella of core competency. The competencies required of teachers for planning the educational process are to plan and implement educational practices that will support all areas of development equally and take into account children's individual differences, interests, and needs. When organizing classroom application areas, teachers should take children's interests into account and ensure that the educational materials used are versatile, can be used in the long term, and do not pose a danger to children. Teachers are expected to create a warm and friendly learning environment where children actively participate in education, new teaching methods are used, they experience a sense of achievement, and they develop communication skills.

Teachers are expected to communicate with families, promote family involvement, and provide family education. In addition to being able to communicate effectively with families, they are also expected to organize training sessions and meetings for families to promote family involvement. Parents are expected to manage the topics of phone calls and correspondence, as well as organize social, cultural, and artistic activities for families to participate in. Furthermore, teachers are expected to guide the successful initiation, implementation, and completion of all these processes by informing families about the training they can receive from different institutions.

Within the scope of assessment competence, teachers' primary responsibility is to regularly review the effectiveness of the program they will implement throughout the term and to intervene appropriately when necessary. Teachers are also responsible for using standard tests and alternative

methods to assess children's developmental characteristics and their success in the learning process, and for sharing the results of these assessments with parents. Teachers are expected to make necessary adjustments to the educational program based on these evaluations when needed.

Teachers are expected to model the use of self-expression skills for their students and to play an encouraging role in using speech, body language, and artistic activities to do so. Teachers are expected to demonstrate active listening skills, devote individual time to each child, and show that they take their students seriously. In addition, teachers are expected to support their students in communicating within the classroom and their social environment, to show empathy themselves, and to ensure that children also develop this skill. Actively following technological developments, using them, adapting them to their lessons, and encouraging children to use them are also among the expected competencies.

Teachers are expected to develop their abilities to conduct research, explore, and generate alternative solutions under the umbrella of creativity and aesthetic competence. For these skills to develop in students, teachers must encourage students to ask questions, provide opportunities for them to find solutions by confronting them with problems, value their opinions, and allow them to conduct independent work and evaluate their own work. One of the expected skills is that teachers should support their students in doing original work that fosters their imagination. Teachers should create environments that develop children's aesthetic sensibilities and ensure that children benefit from these environments in the right way.

Teachers are expected to collaborate with schools and communities to obtain support from other stakeholders who play an important role in the learning process. Teachers are expected to ensure that their students understand the importance of national holidays and ceremonies, and to support their students' active participation by carrying out activities appropriate to these holidays. They must take responsibility for managing and organizing such celebration activities. They identify the needs and requirements for the school to become a center of culture and learning for students and collaborate with the community to meet these needs.

Within the scope of ensuring professional development, teachers are expected to conduct studies on what they need to do to perform their jobs more efficiently and effectively. At the forefront of these studies is the ability to evaluate oneself using self-assessment forms. Continuous communication and collaboration with colleagues is among the skills expected of teachers to perform their jobs more successfully. Additionally, teachers are expected to produce projects, articles, and other outputs using scientific research methods and techniques, and to conduct academic-level studies (MEB, 2017).

As given Table 7, addressing children's developmental domains (cognitive, social, emotional, and physical) supports their overall well-being (SDG 3) and readiness to learn (SDG 4). A holistic understanding of development ensures that both health and education outcomes are strengthened the life course. Strong family engagement enhances children's learning outcomes and supports continuity between home and school (SDG 4). It also fosters community cohesion and inclusive participation (SDG 11), while reinforcing partnerships among stakeholders (SDG 17). This competency highlights education as a shared responsibility. Effective assessment practices improve teaching and learning processes, contributing to educational quality (SDG 4). At the same time, fair, transparent, and accountable assessment systems align with the principles of justice and strong institutions emphasized in SDG 16. Effective communication supports inclusive and participatory learning environments

(SDG 4). It also builds trust, respect, and transparency within educational settings, contributing to stronger institutional structures and social harmony (SDG 16). Creative and aesthetic experiences enrich children’s cognitive and emotional development while fostering cultural awareness (SDG 4). These experiences also contribute to the development of culturally vibrant and sustainable communities (SDG 11). Partnerships between schools and communities strengthen social capital and improve educational outcomes. This supports the development of sustainable communities (SDG 11) and reinforces multi-stakeholder collaboration (SDG 17), which is essential for long-term impact. Continuous professional development enhances teaching quality and student outcomes (SDG 4). It also contributes to building a skilled workforce and supports sustainable economic growth (SDG 8), emphasizing the broader societal impact of education.

**Table 7.** Relationship between UK Core Competencies and Sustainable Development Goals

<b>Core Competencies</b>	<b>Relevant Sustainable Development Goals</b>	<b>Relevant Academic Research</b>
Areas of development	SDGs3: Good Health and Well-being SDGs4: Quality Education	“Holistic child development across domains is foundational for health, learning, and well-being (Black et al., 2017).”
Communication with families, family involvement, and family education	SDGs4: Quality Education SDGs11: Sustainable Cities and Communities SDGs17: Partnerships for the Goals	“Family engagement is a powerful driver of children’s learning and development (Epstein, 2018).”
Assessment	SDGs4: Quality Education SDGs16: Peace, Justice and Strong Institutions	“Effective assessment practices support learning and improve educational quality (Black & Wiliam, 1998).”
Communication	SDGs4: Quality Education SDGs16: Peace, Justice and Strong Institutions	“Effective communication fosters inclusive learning environments and positive relationships (OECD, 2017).”
Creativity and aesthetics	SDGs4: Quality Education SDGs11: Sustainable Cities and Communities	“Creative and aesthetic experiences enhance cognitive development and cultural awareness (UNESCO, 2006).”
Collaboration with schools and communities	SDGs11: Sustainable Cities and Communities SKA 17: Partnerships for the Goals	“School–community collaboration strengthens social capital and educational outcomes (Sanders, 2012).”
Ensuring professional development	SDGs4: Quality Education SDGs8: Decent Work and Economic Growth	“Ongoing professional development is essential for maintaining quality in education systems (Darling-Hammond, 2017).”

## Comparison of the Countries Under Review

When comparing countries, the analysis focused on thematic similarity, the scope of the curriculum, the level of emphasis, the degree of universality, the pedagogical focus, the social dimension, the professional dimension, alignment with 21st-century skills, and the policy and governance dimension.

The comparative analysis presented in the Table 8 reveals both converging and diverging patterns in preschool teacher competencies across different educational systems. Competencies such as professional development and knowledge of child development emerge as foundational and universally emphasized domains, indicating a shared global understanding of the essential qualifications required for early childhood educators. Similarly, learning environment design and collaboration with families are strongly represented across multiple contexts, reflecting a shift toward holistic and participatory educational approaches. In contrast, competencies such as leadership and management, policy participation, and content knowledge display more context-specific variations, suggesting that systemic structures and educational philosophies significantly shape expectations from teachers. Notably, certain competencies appear as distinctive to particular regions; for instance, creativity and aesthetics in Türkiye and high expectations and motivation in the United Kingdom highlight culturally embedded pedagogical priorities. Furthermore, the relatively limited emphasis on democratic participation and policy engagement in most systems points to an area that remains underdeveloped despite its growing importance within 21st-century educational frameworks. Overall, these findings underscore that while there is a strong common core of teacher competencies globally, regional priorities and policy orientations continue to produce meaningful differentiation in how these competencies are defined and implemented.

**Table 8.** Competency Comparison

Competencies	Similarity Status	Countries in Focus	Details
Knowledge of child development	Very powerful	California, South Carolina, Massachusetts, Türkiye	Child development is the foundation of all these systems. In Australia and Southeast Asia, it plays a more indirect role.
Learning environment and curriculum	Powerful	California, Massachusetts, Southeast Asia, South Carolina	The curriculum and learning environment are central components in most systems.
Assessment and evaluation	Upper-middle	Australia, U.K., Türkiye, South Carolina	In some systems (particularly in Australia and the United Kingdom), it is more pronounced and systematic.
Cooperation with families and the community	Powerful	California, Massachusetts, Türkiye, Australia	All modern approaches take education beyond the classroom and emphasize stakeholder participation.
Health, safety, and nutrition	Middle	California, Massachusetts, South Carolina	It is more prevalent in U.S. states; in Europe and Australia, it is addressed indirectly.
Counseling and relationships	Middle	California, Massachusetts, South Carolina	It is more pronounced in systems focused on social-emotional development.
Professional development and professionalism	Very powerful	All countries	It is a universal capability; it is present in all systems.

**Table 8.** Competency Comparison (*continue*)

Leadership and management	Different	California, Massachusetts	It is clearly defined in more formalized systems.
Content knowledge (subject matter knowledge)	Original	Southeast Asia	This is particularly evident in systems where a more academic or discipline-based approach is emphasized.
Participation, cooperation, and democratic processes	Limited	Southeast Asia, U.K.	It is emphasized as part of 21st-century skills.
Creativity and aesthetics	Original	Türkiye	It stands out as a distinctive feature unique to Türkiye.
High expectations and motivation	Original	U.K.	Teacher behavior and pedagogical attitudes have been defined more clearly.
Participation in policy and program development	Limited	Australia, Massachusetts	It defines the teacher's role at the system level.

#### 4. RESULTS

This study, which examines early childhood teacher competencies used in countries across different regions and in various states within those countries, identifies the skills expected of teachers who carry out educational activities. It was observed that the competencies examined consist of subheadings that vary according to the needs and culture of the country, while sharing similar main headings. For the core competencies, items were defined based on 21st-century skills and designed to enable educational activities aligned with the demands of the modern era. Among the requirements are that early childhood teachers possess sufficient knowledge of child development and monitor children's progress to implement appropriate activities. Competencies such as knowledge of child development, the learning environment and curriculum, assessment, collaboration with families and the community, and professional development are found directly or indirectly in all systems. This demonstrates that the teaching profession is grounded in a universal foundation of knowledge and skills.

It is evident that the points teachers should consider when communicating with children are a priority for all countries. It has been established that every country emphasizes the importance of programs and planning for children and has identified competencies aimed at guiding teachers in this planning process. Another key expectation for teachers is that they know and apply the techniques they will use during observations. Teachers are expected to maintain a dynamic classroom environment and utilize it effectively to enhance the quality and efficiency of education. Teachers are expected to collaborate with parents and other stakeholders in education to enhance the quality of their teaching. Teachers are expected to lead by example and play a guiding role in implementing proper practices regarding health, safety, and nutrition. Engaging in and participating in activities that contribute to their professional and vocational development is also listed as a skill that all countries expect from teachers.

There are also notable differences between countries. For example, while U.S. states (such as California and Massachusetts) have adopted a more systematic and comprehensive competency

framework, in Australia, teacher participation in policy and program development processes is emphasized. In the United Kingdom, pedagogical attitudes such as teacher behavior and fostering high expectations are defined more explicitly, whereas in Southeast Asia, content knowledge and collaboration skills take center stage. In Türkiye, however, dimensions such as creativity, aesthetics, and family involvement are strongly emphasized.

### ***Discussion***

The findings are largely consistent with the existing literature on teacher competencies. Research emphasizes that effective teaching is grounded in elements such as subject knowledge (Shulman, 1986), pedagogical skills, the quality of the learning environment (OECD, 2017), and continuous professional development (Darling-Hammond, 2017). The fact that these components are present, albeit at varying levels, in all the national frameworks examined in this study indicates that teacher competencies are grounded in a common theoretical foundation on a global scale. In particular, the central role that child development and a holistic understanding of learning play in many countries supports the developmental approach emphasized in the literature on early childhood and primary education (Black et al., 2017). Similarly, the widespread inclusion of the family and community collaboration dimension aligns with the critical role of school-family-community collaboration in learning outcomes, as outlined by Epstein (2018). Furthermore, the importance of assessment processes (Black & Wiliam, 1998) and the necessity of teachers' continuous professional development (Darling-Hammond, 2017) are consistent with the findings of this study.

Differences between countries can largely be explained by the policy priorities, cultural values, and governance structures of their education systems. Indeed, the comparative education literature emphasizes that teacher competencies cannot be considered independently of national contexts and are shaped by each country's socio-political priorities (Darling-Hammond, 2017; OECD, 2019). For example, in systems such as Australia and Massachusetts, the emphasis on teachers' participation in policy and program development processes positions teachers not only as practitioners but also as decision-making actors. This perspective aligns with contemporary models that conceptualize teacher professionalism within a framework of expanded professional autonomy (Sachs, 2016). In contrast, the more behavioral and performance-oriented definition of teacher standards in England reflects accountability-driven education policies and is commonly observed in systems where performance measurement and monitoring mechanisms are strongly emphasized (Day & Gu, 2010; OECD, 2013).

The relationship between these competencies and the Sustainable Development Goals (SDGs) is also noteworthy. Common competency areas appear to be largely directly linked to SDG 4 (Quality Education). UNESCO (2020) identifies teacher quality as a critical factor in achieving SDG 4. In addition, strong connections can be established with other goals, such as family engagement and community partnerships (SDG 11 and SDG 17), equity and inclusion (SDG 10), health and well-being (SDG 3), and strong institutions (SDG 16). This indicates that teacher competencies are not limited to educational outcomes alone; rather, they are directly related to social welfare, social justice, and sustainable development (UNESCO, 2017; United Nations, 2015). In particular, teacher competencies focused on inclusive education and equity play a decisive role in improving access to education for disadvantaged groups (Ainscow, 2020).

Finally, considering the relationship between teacher competencies and sustainable education systems as well as policy development processes, these competencies can be regarded as a fundamental

component of system-level quality assurance, accountability, and continuous improvement mechanisms. Effective teacher competency frameworks make a significant contribution to the development of sustainable education policies by ensuring that education systems are both responsive to local needs and aligned with global standards (OECD, 2020; European Commission, 2018). In this context, teacher competencies should be viewed not only as a means of individual professional development but also as a strategic tool that supports the holistic transformation of education systems (Darling-Hammond et al., 2020).

### **Recommendations**

1. Countries have a national qualifications authority to develop teacher qualifications. In Türkiye, qualifications are developed within the Ministry of National Education; having an institution dedicated solely to this field would make education much more efficient.
2. The national accreditation body's collaboration with all stakeholders in education and its regular collection of data will enable much more feasible studies to be conducted.
3. Regularly reviewing existing competencies will help establish clearer objectives for new competencies to be developed.
4. Conducting work in this direction to ensure that the established competencies meet the Sustainable Development Goals and much more will help us implement a much more sustainable education policy as a country.
5. It would be useful for researchers wishing to conduct studies in this field to measure preschool teachers' knowledge and attitudes regarding these competencies and to determine the extent to which they can be applied through observation.
6. It would be beneficial for researchers wishing to conduct studies in this field to hold discussions with families to ascertain their expectations regarding teacher competencies.

### **Author Contribution Statement**

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*The numerical values in the “Contribution to the Article” column refer to the contribution categories described below.			
1. Study Design 2. Data Collection 3. Data Analysis and Interpretation 4. Literature Review 5. Writing the Paper 6. Critical Revision			

### **Conflict of Interest Statement**

There is no personal and/or financial conflict of interest within the scope of the study.

### **Ethical Approval**

Ethics committee approval is not required for this study.

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